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India

Maharashtra: Reorienting Government to Facilitate Growth and Reduce Poverty

(In Two Volumes) Volume I: Executive Summary and Main Report

October 31, 2002

Poverty Reduction and Economic Management Unit
South Asia Region



Currency

<u>Currency</u>	<u>Rs/ US\$</u>		
	<u>Official</u>	<u>Unified</u>	<u>Market ^a</u>
Prior to June 1966	4.76		
June 6, 1966, to mid-December 1971	7.50		
Mid-December 1971 to end-June 1972	7.28		
1971-72	7.44		
1972-73	7.71		
1973-74	7.79		
1974-75	7.98		
1975-76	8.65		
1976-77	8.94		
1977-78	8.56		
1978-79	8.21		
1979-80	8.08		
1980-81	7.89		
1981-82	8.93		
1982-83	9.63		
1983-84	10.31		
1984-85	11.89		
1985-86	12.24		
1986-87	12.79		
1987-88	12.97		
1988-89	14.48		
1989-90	16.66		
1990-91	17.95		
1991-92	24.52		
1992-93	26.41		30.65
1993-94		31.36	
1994-95		31.40	
1995-96		33.46	
1996-97		35.50	
1997-98		37.16	
1998-99		42.06	
1999-00		43.33	
2000-01		45.69	
2001-02		47.69	

Note: The Indian fiscal year runs from April 1 through March 31.

Source: IMF, International Finance Statistics (IFS), line "rf"; Reserve Bank of India.

^a A dual exchange rate system was created in March 1992, with a free market for about 60 percent of foreign exchange transactions. The exchange rate was reunified at the beginning of March 1993 at the free market rate.

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ACRONYMS and ABBREVIATIONS

AED	Additional Excise Duty
CAG	Comptroller and Auditor General
EAS	Employment Assurance Scheme
EGS	Employment Guarantee System
GER	Gross Enrollment Rate
GoI	Government of India
GoM	Government of Maharashtra
GSDP	Gross State Domestic Product
GWh	Giga Watt per Hour
HLCS	High Level Committee of Secretaries
IAY	Indira Awas Yojana
ID	Irrigation Department
IDCs	Irrigation Development Corporations
IPPs	Independent Power Projects
JGSY	Jawahar Gram Samridhi Yojana
kWh	Kilo Watt Hour
MTFF	Medium Term Fiscal Framework
MTRFP	Medium Term Fiscal Reform Program
MKVDC	Maharashtra Krishna Valley Development Corporation
MSEB	Maharashtra State Electricity Board
MERC	Maharashtra Electricity Regulatory Commission
MJP	Maharashtra Jeevan Pradhikaran
MSRDC	Maharashtra State Roads Development Corporation
MSP	Minimum Support Price
NFHS	National Family Health Survey
NSDP	Net State Domestic Product
OBB	Off-Budget Borrowing
OD	Over Draft
O&M	Operation and Maintenance
PAC	Public Accounts Committee
PDS	Public Distribution System
PFF	Price Fluctuation Fund
PLA	Personal Ledger Account
PWD	Public Works Department
RBI	Reserve Bank of India
RCH	Reproductive and Child Health
RS	Reform Scenario
SERC	State Electricity Regulatory Commission
SFC	State Finance Commission
SGSY	Swarnajayanti Gram Swarajgar Yojana
SPVs	Special Purpose Vehicles
SQS	Status Quo Scenario
S&R	Stamp Duties and Registration Fees
T&D	Transmission and Distribution
TFC	Tenth Finance Commission
VIES	VAT Information Exchange System
WMAAs	Ways and Means Advances
WUAs	Water User Associations
ZPs	Zilla Parishads

INDIA

Maharashtra: Reorienting Government to Facilitate Growth and Reduce Poverty

Volume I

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Preface and Acknowledgements

This report is part of a program that was initiated in October 2001 at the request of the Government of Maharashtra (GoM). The program involves producing a formal Bank report and providing technical assistance to the GoM on public budget issues.

The background to this report lies in the Bank's Country Assistance Strategy for India, which is based on supporting reforming states. In response to a request from the GoM, the Bank agreed to do a major review of the state's fiscal situation. In view of a pipeline of large investment projects in Maharashtra, the report also serves as a major component for the Bank's own due diligence work.

The Report Process: This report has been prepared by the Bank through a consultative process with emphasis on information sharing along the way:

- First, in *October 2001*, the GoM and the Bank jointly organized a one-day workshop in Mumbai to exchange information on (a) lessons from experience in public budget management; and (b) Maharashtra's state finances in comparison to other Indian states. Seeking guidance from the GoM and other stakeholders, the Bank team presented a draft outline of the study. In brief, the one-day workshop provided the building block for an effective, trustworthy partnership between the Bank and the GoM.
- This was followed by an information collecting and sharing mission in *December 2001*. During this trip, technical assistance in the form of formal and informal seminars/workshops, was provided on topics requested by the GoM. These topics included public expenditure management, health sector issues, and creating incentives in the sales tax administration. The findings of the mission were presented to a team of senior officials at a meeting chaired by the State's Chief Secretary. Following this presentation, a number of GoM officials requested that a similar presentation be made to Maharashtra's Cabinet.
- During the *February 2002* mission, a presentation on the preliminary findings of the report was made to the Maharashtra Cabinet. The Bank team also prepared and discussed short technical notes to provide the GoM with timely assistance on select economic and fiscal topics. These were presented at a workshop on "Strategic Economic and Social Issues in Maharashtra," organized by the Finance Department.
- In *July 2002*, the team met with GoM to discuss the green cover report submitted by the Bank in end-June 2002. A workshop was organized by the Finance Department on July 30, 2002 to discuss GoM's comments of the green cover report as well as share an update on reform initiatives in Maharashtra since the last mission in February 2002.
- In *October 2002*, four report dissemination workshops were organized. The main objectives of these workshops were: (a) to present and discuss the findings of the report with a wide cross-section of Maharashtra's citizens; and (b) listen to what the participants had to say. The GoM also presented and discussed its reform agenda in the workshops. (the presentations in New Delhi and in Mumbai were made by the Finance Minister). Three of the workshops were held in Maharashtra and one in New Delhi. The workshops in Maharashtra were held in Mumbai, Pune and Nagpur. The one in Nagpur had a special significance as Nagpur is the major city in the State's Vidarbha Region - an area with very high poverty. The Delhi workshop was important because it allowed the representatives of the Government of India (in particular, the Ministry of Finance) to get first hand information on Maharashtra. All relevant stakeholders--NGOs, think-tank and academic institutions, bureaucrats, politicians, media, private citizens including representatives of the farm community--were invited and a good number of them attended the workshops. The workshops were organized by local organizations/institutions and part of the cost was shared by the Bank. Perhaps the most exciting experience of these workshops was the interaction with a wide array of Maharashtra's citizens. The general feeling was that they are part of the process and are being heard. The Executive Summary of

the report was translated in Hindi and Marathi (the local language of the State) and was made available to the workshop participants. This ensured a good understanding of the report. Having the GoM alongside at the workshops served two main purposes: First, it gave GoM an opportunity to publicly react to the report findings and present their reform agenda. Second, it showed that we were working together as development partners. The importance of the process was indicated by the presence of the Finance Minister, who made the presentations at Delhi and Mumbai. The findings of the report were also extensively covered by the media.

- This report was produced in close cooperation with the Bank's South Asia Region's Rural Development team, which has prepared a rural policy review in Maharashtra. In view of the critical rural/fiscal links in the State, several background papers were prepared for the two tasks, and the teams have interacted at various stages in preparing the reports.

Consultations with the GoM. This report draws heavily on contributions from GoM officials in the departments of finance, energy, irrigation, co-operation, education, health & family welfare, as well as from officials in Maharashtra State Electricity Board, State Cotton Marketing Federation and other quasi-government agencies of Maharashtra. In particular, the Bank team is grateful for the generous time and useful suggestions provided by, among others, Messrs. Jayant Patil (Finance Minister); V. Ranganathan (Former Chief Secretary); Mr. Anupam Dasgupta (Former Principal Secretary Finance); Mr. A. K. D. Jadhav (Principal Secretary Finance); Ms. Chitkala Zutshi (Principal Secretary Expenditure); Mr. Ravi Buddhiraaja (Principal Secretary Energy); Mr. Vinay Bansal (Former Chairman MSEB); Mr. Rajeev Agarwal (Secretary Textiles and Co-operation); Mr. Shrikant Shukla (Secretary Irrigation) and Mr. Sanjay Ubale (Secretary to Chief Minister). In particular, the team would like to thank Mr. Jatinder S Sahni, (Secretary Reforms, Finance Department), for his co-operation and untiring assistance during the preparation of this report. The team would also like to thank the participants at the four dissemination workshops in October 2002 for providing valuable comments.

The Bank Team: The report was written by a team led by Vinaya Swaroop and Paramita Dasgupta and comprising Deepak Mishra (growth and fiscal) and Priya Mathur (fiscal), Marc Heitner (power), Vikram Chand (institutional issues); Jeffrey Hammer (education and health), Shikha Jha (irrigation, sugar and cotton), Sudhir Chitale (civil service), Praveen Kumar (budget management), Pradeep Apte and Arindam Das-Gupta (tax policy and administration), and P. V. Srinivasan (poverty). The peer reviewers were Charles Humphreys and Helga Muller. The team is grateful to the following for their contributions and comments: Madhav Godbole, Penelope Brook, John Besant Jones, Sameer Shukla, Joelle Chassard, John Briscoe, Dina Umali-Deininger, R. S. Pathak, Valerie Kozel, Deon Filmer, Peter Lanjouw, Sajitha Bashir, James Keith Hinchliffe and Peter Heywood. Special thanks to Stephen Howes, who read several drafts of the report and provided constructive comments. This report was prepared under the overall guidance of Sadiq Ahmed and Sanjay Pradhan. Sarah Nedolast helped with editing the draft report. Production and organizational assistance was provided by Shunalini Sarkar.

This report was rated "Best Practice" by the World Bank's Quality Assurance Group in its quality assessment of economic and sector work done in the institution in FY02.

Executive Summary

INDIA

Maharashtra: Reorienting Government to Facilitate Growth and Reduce Poverty

1. A crisis is brewing in Maharashtra. A state known for prudent fiscal management has seen a steep deterioration in its performance since the mid-1990s. It is experiencing liquidity problems of an unprecedented magnitude, and is finding it increasingly difficult to meet its obligations.
2. The picture that has emerged since the mid-1990s is disconcerting:
 - After experiencing rapid and sustained growth for nearly a decade, the State economy has noticeably slowed down in recent years. Some evidence links this slowdown with deteriorating fiscal performance.
 - Despite significant progress, poverty in Maharashtra continues to be relatively high, and there is evidence that in many sectors the benefits of public spending are not reaching the poor due to inadequate targeting and/or governance problems.
 - Tax and non-tax receipts have fallen, total government expenditure has increased, and public borrowing has reached distressing levels. The composition of expenditure has worsened: interest payments and wages account for a major portion of the budget, leaving little for development activities.
 - A considerable amount of taxpayers' money is being spent on public services. However, on account of production inefficiency, be it systems losses in the power sector or inadequate operations and maintenance spending in the water sector, the citizens of Maharashtra are not getting value for their money.

Can Maharashtra undertake meaningful and lasting reforms?

3. Will Maharashtra be able to pull through these difficulties and remain the pre-eminent state of India? It must, as too much is at stake. Maharashtra has been a leading state in India with regard to economic and social development. The Government of Maharashtra (GoM) understands the nature of the problems. However, since the mid-1990s the corrective actions have not been taken due to governments' populist agenda and unwillingness to take tough actions. The GoM's most recent reform initiative is the fiscal program outlined in the Medium Term Fiscal Reform Program (MTFRP). The reforms proposed therein are comprehensive, could end the recent fiscal deterioration, and could help the State climb back on the path of high growth and poverty reduction. The GoM's budget for 2002-03—announced in March 2002—puts forward an implementation strategy in key reform areas.
4. However, if the recent experience of Maharashtra is of any guide, the implementation of the reform agenda remains a big challenge. A few simple reforms have been implemented, but most of the difficult actions that will have a lasting impact lie ahead. Much will depend on whether the State can achieve the necessary political consensus for implementing a difficult but doable agenda of economic reforms. One thing is clear though: the State needs support from all stakeholders to help its people, particularly the needy.
5. This report contributes to that process by providing an objective assessment of the fiscal situation in Maharashtra and suggests ways to strengthen the GoM's reform agenda. The Bank's ongoing involvement in the State has already provided some assistance to the GoM in the form of information on lessons from experience in fiscal policy and management through a variety of instruments including short notes and seminars/workshops. This report consolidates all of that information and synthesizes it. Being the first Bank-report of its kind on Maharashtra, it covers all the major fiscal issues in the State. While

issues of effectiveness, efficiency and equity of public services are examined in selected sectors, the dominating theme in those discussions is public finance.

6. The main audience of this report is the people of Maharashtra in general and the policymakers in particular. It also serves as due diligence work in support of the Bank's current and future assistance strategy in the State. In partnership with the GoM, the report's findings were disseminated to a wide array of stakeholders through seminars in New Delhi, Mumbai, Pune and Nagpur in October 2002. Dissemination is also planned internally within the Bank.

Until the mid-1990s: A state with an impressive development record

7. Maharashtra has a population of about 97 million and is the most industrialized State in India. With 9% of India's population, Maharashtra contributes more than 18% of India's industrial output, and 14% of India's GDP. With a per capita income of US\$ 616 in 1999-00, it is the second richest State in the country after Goa. The State also has a large pool of literate and skilled labor force, good investment climate, superior infrastructure facilities, and well-developed financial system.

8. The rapid growth rate and a number of successful anti-poverty programs, in particular, the Employment Guarantee Scheme, have led to a significant decline in poverty rates during the last two decades. In 1983-84, nearly 55% of its population was below the poverty line. Since then, the poverty rate has fallen to 28% in 1999-00. In terms of major social indicators—literacy rate, life expectancy at birth and infant mortality—Maharashtra ranks second behind Kerala. In 2001, Maharashtra had a literacy rate of 77%; life expectancy at birth during the period 1991-95 was 64.8 years; and the infant mortality rate in 1999 was 48 per 1000 of live births.

9. Historically, Maharashtra has been one of the better-managed states in India. During the first half of the 1990s, Maharashtra had the lowest revenue deficit—which finances current consumption—and the second lowest fiscal deficit to GSDP ratio among the 14 major Indian States. It also had a low stock of government debt. The government did not engage in off-budget borrowings and contingent liabilities, while growing, were modest. The government's net worth, as measured by the difference between the stock of its assets and liabilities, was positive and increasing.

Since the mid-1990s: Economic growth has slowed, poverty remains high, and the fiscal situation has deteriorated

10. Maharashtra's progress notwithstanding, it faces a number of major challenges. In recent years, economic growth in Maharashtra has slowed. While growth has declined for India as a whole, the sharpest decline, among the 14 major states,¹ has been in Maharashtra. The average annual growth rate has fallen from 7.8% (the average over 1984-85 to 1994-95) to 5.3% (over 1995-96 to 1999-00). There has also been a significant decline in the approval of Foreign Direct Investment (FDI) to the State, with Maharashtra's share of FDI approval in all of India falling from 24 % during the first half of 1990s to 15% during the latter half of 1990s. Notwithstanding this decline, Maharashtra remains the most preferred destination for FDI in India.

11. While the reduction in poverty rates has been fairly impressive, the number of people living in poverty is still too high. There are wide disparities within the state, with regions such as Vidarbha having very high rates of poverty.² Furthermore, the situation looks worse when compared with the progress made by other Indian states with the same per capita income level. Maharashtra, Punjab, and Haryana have a similar level of per-capita income, but Maharashtra's poverty rates in urban and rural areas are almost five times the rate of Punjab and three times that of Haryana.

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

² A participant at the October 2002 dissemination workshop in Nagpur noted that nearly 60 percent of districts in the Vidarbha region of Maharashtra have poverty rates of as high as 70 percent. A suggestion was made to study intra-regional income and poverty issues in the state as the presence of Mumbai distorts the official statistics of the state.

12. The State's fiscal situation also deteriorated sharply in the second half of the 1990s and has continued to decline. Like most Indian States, Maharashtra experienced a rapid and significant fiscal imbalance. The fiscal deficit to GSDP ratio rose for six consecutive years from a low of 1.7% in 1993-94 to an all time high of 4.8% in 1999-00. After falling in 2000-01, it again rose modestly to 3.9% in 2001-02. The revenue deficit rose from -0.5% of GSDP in 1994-95 to a record high of 2.7% in 1999-00, before stabilizing around 2% in the last two years. The government debt, inclusive of off-budget borrowings, which are guaranteed and serviced by the government, has risen from 12% of GSDP in 1995-96 to 23% in 2000-01.

13. All components of Maharashtra's revenue—own tax revenues, shared taxes and central transfers, own non-tax revenues—have exhibited a declining trend until very recently. Being one of the richest states in India, Maharashtra also has limited prospects for increased transfers from the central government.³

14. The composition of government spending changed significantly during the late-1990s, with cuts in capital and developmental outlays, non-wage operations and maintenance, and social sector spending. When viewed along with the government's increased deficit financing, this change in the composition of spending indicates that the State has borrowed primarily to finance its current consumption, that is to pay for the growing salaries, pensions, and increasing interest payments, which accounted for the entire revenue receipts in 1999-00.

15. Budget management has also come under increasing stress during the last several years. This has resulted in unrealistic budget estimates, poor fiscal marksmanship, and large supplementary demands. Weak processes have led to a loss of control over public spending, and a failure to channel spending into areas that are of social and economic importance.

16. In brief, Maharashtra, one of India's best fiscally managed states, has fallen to the ranks of the poorly managed states. Some of the long-standing defects (e.g., high transmission and distribution losses in the power sector, monopoly procurement of cotton, lack of transparency of Grants-in-Aid institutions, and absence of well-functioning institutions for effective fiscal administration), earlier camouflaged by high growth and good fiscal situation, have now been unmasked as major flaws. This report addresses these problems and their associated fiscal burden on the exchequer.

Plausible causes of this decline in overall performance

17. Although more analysis is needed to explain this decline in performance, particularly the decline in growth and the relatively high poverty level, a few factors have emerged.

18. *Growth slowdown.* While the reasons for the growth slowdown are not well understood and require further research, it is hard to believe that they are due to simple business cycle factors. Part of the explanation seems to be due to structural factors, such as the presence of powerful labor and trade unions, high real estate prices due to excessive regulation and taxation, declining quality of physical infrastructure (e.g., power sector problems, as discussed in Chapter 4) and the Dabhol fiasco. Furthermore, while it is difficult to prove causality due to limited information, there appears to be a negative correlation between economic growth and revenue deficit in Maharashtra. Since the early 1990s, the rate of growth has been declining and the revenue deficit to GSDP ratio has been rising. Borrowing to finance current consumption instead of investments in productive assets does little to boost growth.

19. *High poverty relative to state's income.* Maharashtra continues to have a disproportionately higher poverty rate. This is likely a result of its high level of income inequality as compared to most other

³ A state's share in central taxes is decided on the basis of a formula based on a weighted index of indicators including population, poverty ratio, tax effort, fiscal discipline, index of backwardness, and the geographical area of the state. The formula is revised every five years by the successive Finance Commissions. In recent years, many reforming states, which also happen to be relatively wealthier, have started to express concerns about the disproportionate emphasis on equity rather than efficiency indicators in deciding on the level of transfers to states. For more information, see Chapter 3, Box 3.1.

Indian States. The skewed distribution of income is most visible in the gap between urban and rural incomes and within Mumbai, the city, which is home to the largest number rich Indians and at the same time home to the largest number of slum dwellers in the country. The ever increasing flow of migrant labor coming from all parts of India in search of employment is a major contributing factor to Mumbai's high poverty rates. Unlike other Indian states, Maharashtra's growth has been driven mostly by industrial and service sectors, while growth in agriculture, the largest provider of livelihood to Maharashtra's citizens, has remained relatively low and its productivity below the national average.

20. *Fiscal deterioration.* Maharashtra's declining tax revenue to GSDP ratio is due to a number of factors including: a declining share from the Central devolution; a botched attempt to introduce the Value Added Tax (VAT) in the mid 1990s; inability to tax land, agricultural income, and the expanding service sector; failure to reduce large-scale tax exemptions, evasions, and avoidance; and poor cost recovery. On the expenditure side, responsible factors include: the large number of public sector employees; pay and pension revisions based on the recommendations of the Fifth Pay Commission; large scale commodity market interventions; the Dabhol power project impact; lax rules for and excessive reliance on off-budget borrowings; a large and increasing interest expenditure; and weak budget formulation, monitoring, and financial management systems.

Public services: A mixed record

21. Despite the large size of the civil service and its burgeoning fiscal impact on the State budget, there is widespread disenchantment with the functioning of public service providers. The analysis of public services done for this report presents a mixed record. On the one hand, a story of inefficient and costly provision and inequitable distribution of government subsidies emerges from several public service sectors. On the other hand, health and education departments have demonstrated the ability to implement policies and translate public spending into economic well-being. Furthermore, there are examples of municipalities and district 'collectorates' improving citizen interface and public services. The following are some of the gains the GoM has made and some of the challenges that still lay ahead.

22. *The power sector.* The Maharashtra State Electricity Board (MSEB), like most SEBs in India, suffers from financial and governance problems. The quality of service is poor, transmission and distribution losses (at close to 40%) are high⁴ and tariffs for different consumer categories do not reflect the cost of supply. These problems are magnified due to the Dabhol power plant, whose main sponsor is Enron. The private plant operated for two years (from May, 1999 to May, 2001) and is presently idle due to a dispute between the two parties. The fiscal impact of Dabhol remains unknown as the issue is currently being arbitrated. In 1999, consistent with the new central legislation, the Maharashtra Electricity Regulatory Commission (MERC) was established. As a result, the MSEB has been subject to closer scrutiny and a stricter performance criterion. In its tariff orders, MERC has required MSEB to achieve high performance standards, which would enable the utility to manage its finances without operating subsidies. As the GoM has not allowed MSEB to implement MERC approved tariff for certain consumer categories (power looms, agricultural consumers etc.), a subsidy in the range of Rs.500 to 700 crore per annum has been introduced. The MSEB is keen to commercialize its operations and has made progress on several fronts. Unfortunately, GoM has not fully supported these efforts.

23. There are problems on the equity front as well. GoM provides subsidized electricity to agricultural consumers and households at the expense of commercial and industrial users. Analysis done in this report shows that cash-crop farmers, particularly those who grow sugarcane, are the main beneficiaries of power subsidies. Since most sugarcane growers in Maharashtra are not poor, this subsidy does not accrue to the poor farmers. The evidence from household data also suggests that electricity subsidies tend to benefit the relatively better-off households.

⁴ The Central Electricity Authority of the Government of India has established the norm for T&D losses at 16 percent for SEBs. Given that MSEB's average cost of purchases in 2000-01 was approximately Rs. 2 per kWh, had losses been at the 16 percent level, MSEB would have economized nearly Rs. 3,000 crore, or roughly 1 percent of GSDP.

24. Several government studies have identified problems in the power sector and a number of reforms have been recommended. GoM has not acted on the suggestions yet, though its recent announcements suggest that a power sector reform program in Maharashtra may finally be on the horizon. The power sector's future performance in Maharashtra will depend to a large degree on the outcome of the Dabhol arbitration process. Major efforts are still required to improve the efficiency of MSEB's operations and the quality of service.

25. *The water sector.* The Irrigation Department spends a considerable amount of taxpayers' money to provide water—both irrigation and non-irrigation. The cost of water delivery is high due to a number of inefficiencies. Spending on operations and maintenance (O&M) of existing facilities is inadequate due to financial constraints; salaries account for 70% of total O&M costs. User charges cover a small portion of the high O&M cost due to problems in assessment and collection. Irrigation water subsidies accrue mostly to farmers with average farm holdings of more than two hectares, who are not the small and marginal farmers. While several important, though piecemeal reform actions have been taken, the sector has neither a clear strategy nor a sequenced plan of reform actions.

26. *Commodity market interventions—Cotton.* The GoM intervenes in the cotton market through a populist monopoly procurement scheme. On behalf of the government, the Maharashtra Cotton Farmers Marketing Federation procures all cotton produced in the State at a pre-announced support price. Since 1994-95, the scheme has accumulated large losses on account of falling market prices and high minimum support price—mainly due to populist policies. Despite the high procurement price paid by the scheme, the associated benefits are not going to the poor cotton farmers due to rent seeking activities of intermediate traders and corrupt government officials.⁵ The Federation is surviving through budgetary support from the government; delayed payments to farmers; and debt rescheduling from the co-operative banks. On several occasions, the GoM has tried to reform the scheme, but the political economy issues have always dominated the reform agenda and no action has been taken.

27. *Sugar Co-operatives.* The main objective of sugar co-operatives in Maharashtra is to promote rural development. There is evidence that this objective has been met in some areas, but it has come at a considerable fiscal cost. In setting up a sugar co-operative, the promoter contributes 10% of the total cost and the remainder is borne by the government—directly or through loan guarantees. While the factory owner is required by law to return the government's contribution, in practice very little has come back to the government coffers. Most of the sugar factories have become "sick" and need a new cash infusion to revive. In short, sugar co-operatives provide private benefits at public cost. Like the case of cotton above, the political economy issues scuttle any meaningful reform program in this area.

28. *Health.* Public spending on health in Maharashtra has led to improvements in economic efficiency and equity, but there is room for improvement. There appears to be a worsening of regional differences in infant and child mortality. Health budgets have stagnated with a shift of resources from rural to urban medical care in the early part of the decade. In conjunction with a much more rapid increase of incomes in urban areas, a result has been that urban areas have seen a significant improvement while rural areas have not. Public health services such as improved water access and quality, immunization, and control of infectious disease could effectively make use of more resources.

29. *Education.* In Maharashtra, primary school enrollment is no longer a problem but having children continue through to functional literacy is, particularly among the poor. Increased expenditure in primary education is well justified on economic grounds, disproportionately helps the poor, and effectively translates into education performance. Hence, it should continue to be a priority for the GoM. Arguments for secondary education are more ambiguous. On the one hand, relatively few secondary school students come from the poorer segments of the population, and increased public spending for secondary education displaces private spending, reducing the net effect of public spending on secondary enrollments. On the other hand, secondary education for girls is an important factor in improving infant mortality. Therefore,

⁵ GoM's Valluri Committee report on "Monopoly Cotton Procurement Scheme," May 2000.

categorical statements concerning the priority of secondary education are not warranted. GoM's intent as described in budget documents to limit the expansion of Grant-in-Aid institutions, which are overwhelmingly secondary schools, may be premature. The impact of any changes in policies such as increased fees or restricted geographical expansion should be evaluated carefully. Both equity and efficiency considerations argue against major public subsidies for university tuition. However, since borrowing unsecured loans for education is difficult in private credit markets, student loan programs in Maharashtra are justified. Over time, this will result in a substantial reduction of public spending in higher education, but cannot contribute to alleviating the short-term crisis.

30. *Improvement in general service delivery.* The GoM has initiated important reforms in three specific service areas: (a) payment of stamp duties and registration of documents; (b) district collectorates; and (c) urban service centers. Each of these services has its own importance. Stamp duty has become a significant revenue-generating instrument, with an annual stream of close to Rs.2,500 crore (roughly 10% of State's own revenue), at a time of fiscal stress. District collectorates are empowered to issue a large number of certificates (approximately 85) to ordinary citizens. Some of these, particularly caste, income and ration cards carry important benefits such as access to schools, jobs, government subsidy and credit. The GoM has made a serious effort to improve collectorates by focusing on four pilot districts. Like district collectorates, municipal wards perform a variety of functions in the urban areas that directly impinge on the lives of ordinary citizens: they receive payments for many services, collect property taxes, and issue licenses and certificates. The Greater Mumbai Municipal Corporation has taken major steps towards improving its capacity to respond to citizens' demands. The GoM has also made progress in promoting transparency and right to information. Overall, a good start has been made. What is needed is to sustain the progress made, to adopt similar improvements in a wider range of service areas, and to keep the momentum going.

GoM's Reform initiatives

31. Recognizing the problems noted above, the GoM has taken several reform initiatives. In particular, since coming to power in October 1999, the current government has taken a several bold steps. These include:

- A recruitment freeze has been put in place to tackle the growing size of the wage bill, in all but a few priority sectors. Furthermore, since July 2000, there has been a freeze on dearness allowance, which is compensation to civil servants on account of inflation. No annual bonuses were paid to civil servants in 1999-00.
- In the power sector, the MSEB has taken a number of efficiency measures to reduce losses and theft. There has been an aggressive drive to disconnect non-paying customers and disciplinary actions have been taken against officials involved in wrongdoing. A program towards universal metering is underway.
- Since September 2001, water charges have been designed to cover full O&M costs and up to 25% of the capital costs. These charges have the inbuilt provision of an automatic 15% increase every year for 5 years.
- User charges in public hospitals and some educational fees have been increased.
- A Board for Public Enterprise Restructuring has been set up for speedy closure, sale, and restructuring of public enterprises.

32. *The Medium Term Fiscal Reform Program.* Realizing that the above measures do not add up to a comprehensive reform program that is required to address Maharashtra's current fiscal problems, the

GoM has articulated its overarching fiscal and economic reform agenda through its MTFRP. This program has been submitted to the Government of India.⁶ Key elements of the program are:

- A commitment to reform the power sector, including restructuring the MSEB, implementing tariffs as awarded by the regulatory body, and gradually tapering subsidies;
- Implementation of the Cotton Monopoly Procurement Scheme on a no loss basis to avoid new financial burden on the state budget;
- A policy of no new government or aided institutions in the education sector, except in primary education, and a gradual reduction in non-salary grants;
- Continuation of the recruitment freeze, leading to a reduction in the civil service wage bill through attrition;
- No new financial liabilities to be incurred in setting up cooperative institutions and a phased reduction in off-budget borrowing; and
- A destination based, consumption type VAT on goods to replace the sales tax and other minor commercial levies on April 1, 2003.

33. The reforms outlined in the MTFRP were reinforced in the state's budget for 2002-03. Some important policy announcements made in the Budget include:

- A Fiscal Responsibility Bill, whereby citizens can force the government to follow a path of fiscal responsibility through fiscal targets, will be introduced in the legislature.
- Government guarantees will no longer be given to commercial enterprises in the co-operative sectors; fresh guarantees will be available to public sector undertakings only as a credit enhancement measure for loans and issues that are viable on the basis of revenue stream and user charges.
- Following discussions with stakeholders, including the workers' union a 'White Paper' on power sector reforms will be published in June 2002.
- The GoM will procure cotton at the Central government's minimum support price. It will advise prospective new entrants in the sugar factories to take over one of the ailing units rather than set up new units in the state.

Strengthening the GoM's reform program: A four-point agenda

34. The GoM's reform initiatives are comprehensive and, if implemented, could end the recent fiscal deterioration and improve service delivery to the citizens. This report suggests a four-point agenda that would strengthen the GoM's reform agenda and facilitate its timely implementation. (A set of suggested priority actions are provided at the end of this summary.)

35. *Ensuring political and bureaucratic commitments to reform.* In the last several years, the GoM has diagnosed many of its problems and outlined policy prescriptions to address them. However, for a variety of reasons, it has been unable to implement the tough reform measures. Without adequate political and bureaucratic support, the GoM's MTFRP may suffer the same fate. One way of demonstrating political commitment to reform is to introduce and pass a Fiscal Responsibility Bill (FRB) in the State Legislature that will help provide legislative backing to the reforms proposed in the MTFRP. While a FRB is neither a necessary nor sufficient condition to ensure prudent fiscal management, it can be a facilitator particularly in the Indian context where governments are under tremendous pressure to spend. (See Chapter 2 for lessons from experience with FRBs). As mentioned, the GoM has already announced its intention to move in this direction. The GoM should now move to announce a draft bill for public

⁶Prepared in December 2001, the MTFRP sought (and was given) funds from the Government of India's "Fiscal Reform Facility." The latter is an incentive fund that was created on the recommendation of the Eleventh Finance Commission to facilitate fiscal and economic reforms in states. For more information, see Chapter 3, Box 3.1.

consultation, together with a timetable for its passage into law. Furthermore, while the current MTFRP has been put together by the Finance Department and approved by the Cabinet, for future iterations, inter-departmental consultations need to be strengthened. Buy-in by all departments will be crucial to the successful implementation of the MTFRP. The High Level Committee of Secretaries should be given the mandate to ensure that the reform ownership exists across all departments and agencies. The MTFRP should also be made a public document.

36. *Monitoring reform progress.* Monitoring progress and sharing information in an open and transparent way are as important as the program itself. In their absence, the program loses credibility. To improve this function, several steps are suggested: First, indicators of several fiscal aggregates, including flow variables such as the consolidated deficit, and stock variables, such as debt and contingent liabilities, should be developed. They should be monitored on a regular basis and reported in a reference document at the time the budget is presented before the legislature. Second, as a measure towards improving transparency and legislative oversight, the Budget Estimates and supplementary demands should be put before the Estimates Committee of the Legislative Assembly. Finally, client surveys should be commissioned through non-governmental organizations to tap into user experiences and preferences for a few departments with important service-delivery functions. The reports of these surveys should then be made public.

37. *Improving public service delivery and governance.* Problems related to poor service delivery, corruption and collusion are not uncommon in Maharashtra. Stories abound of theft and inappropriate billing in the power sector, corruption in the management of the cotton monopoly procurement scheme, nepotism in the allocation of sugar mills, and impropriety in the assessment and collection of water charges. Inefficiencies have increased the cost of production and increasing user charges to reduce the financial gap is not a desirable option. A number of measures have been announced in the 2002-03 budget that indicate this Government could be serious in breaking with the “ways of the past”. While improving service delivery and governance will need to be a priority that extends well into the long term, in the immediate future there are several steps that can be taken. They include: legislating and enforcing anti-theft laws in the power sector; running the cotton scheme on a no loss basis and eliminating the rent seeking intermediaries; prohibiting new sugar mills; improving collection efficiency of water charges and enforcing prescribed penalties for delinquent users; adopting a credible Right to Information law; and increasing the independence of the Anti-Corruption Bureau.

38. *Concentrating on core public services.* Expenditures on commercial subsidies that include cotton, sugar, power, and irrigation have crowded out social sector spending. The GoM should create fiscal space to allocate resources to core public services where the private sector does not get involved. For example, public health services such as improved water coverage and quality, immunization and control of infectious disease can effectively make use of more resources. Increasing resources for primary education is an important priority for public spending.

Conclusion

39. Maharashtra’s leadership position in India is under threat. The State is facing several bottlenecks to development: the private sector is no longer embracing Maharashtra and the public sector banks are increasingly reluctant to assist Maharashtra in its off-budget endeavors. Thus, the status quo is not an option.

40. Regaining its leadership position is well within Maharashtra’s reach. Among its many strengths are: the large pool of literate and skilled labor force, well-developed financial system, talented bureaucracy, and willingness to break with the ways of the past. If the State can successfully implement its reform agenda, it can quickly rebound and be back on the path of growth and prosperity. The lessons of the past decade suggest two guiding principles.

41. First, the GoM needs to articulate the message that its reforms are not to hurt, but to help the farmers. If reforms are to succeed, they have to be pro-farmer and pro-poor. Maharashtra's fiscal stress, be it due to power and irrigation subsidies or due to the losses in cotton and sugar interventions, has a close connection with the rural sector. However, as analyzed in Chapter 4 of the report, the current rural interventions are imposing a huge and unsustainable fiscal cost on the state, and more importantly, the bulk of the benefits are accruing to the rural rich. The challenge for the government, therefore, is to provide more effective, equitable and sustainable assistance to the rural poor.

42. Second, the government's reform program needs to be designed and implemented with a medium- to long-term perspective. Piecemeal, short-term reforms can only bring short-term gains. For example, the power sector reforms adopted in Maharashtra in the early 1990s allowed entry to private generators, but the more difficult reforms in distribution to ensure a healthy revenue stream were not undertaken. Several large projects in roads and irrigation were undertaken with borrowing from the capital market, but the actions needed to ensure that these projects will be viable and the liabilities will be paid off were not taken. The GoM's announcement in the 2002-03 budget to table a Fiscal Responsibility Act is a good step in ensuring fiscal restraint in the long-term. The establishment of the electricity regulatory commission and the proposal to establish a similar regulatory agency in the water sector are other good examples of instilling discipline in the long run.

43. Only the future will tell whether Maharashtra is able to make a break with the past, and build on its strengths, or whether the challenges of reorienting its rural policies and strengthening its mechanisms of fiscal restraint will be too formidable to surmount. The GoM faces a simple choice: to try to succeed in a difficult reform endeavor, or, since the policies of the past no longer work, to give up without trying and condemn itself to developmental and fiscal failure. Through its 2002-03 Budget Speech, the GoM has indicated that it has chosen the former path. The quicker it moves along it, the greater the chances of success.

A summary of suggested priority actions

Based on the analysis done in this report, the following priority actions are suggested:

I. High priority for the near term (six months to a year)

- Reduce off-budget borrowings (for which interest and principal are paid from the GoM's Budget) over time and include such a strategy in the MTFRP. Furthermore, outline a strategy for providing government guarantees to public sector undertakings, which will pay interest and principal from their own earnings and consider an aggregate cap for these guarantees.
- Undertake a one-off review of programs in major departments to weed out non-performing programs and to rationalize the overlapping ones.
- Track and monitor fiscal aggregates including the consolidated deficit and debt liabilities; and present the information to the legislature prior to the annual budget presentation.
- Announce a draft Fiscal Responsibility Bill for public consultation together with a timetable for its passage into law.
- Ensure that the Sales Tax Department is administratively prepared so that the chances of a smooth introduction of the VAT on April 1, 2003 are improved.
- Ensure that the Cotton Monopoly Scheme runs on a fiscally sustainable basis and the GoM's procurement price is not higher than the GoI price.⁷
- No financial support to new or existing sugar-co-operatives is given and the sick units, that are unlikely to be revived, should be liquidated.⁸
- After consultations with all relevant stakeholders announce a power sector policy, prepare a reform strategy and outline a time-bound implementation plan.⁹
- Expand public health services such as improved water access and quality, immunizations and control of infectious disease.
- Increase primary education allocations in order to improve quality of education and to increase the number of school children that continue through to functional literacy.

II. Priority for the medium to long term (One to three years)

- Strengthen the ownership of the MTFRP by regular inter-departmental consultations and entrust this responsibility to the High Level Committee of Secretaries.
- Commission client surveys through NGOs to tap into user experiences and preferences for a few departments (e.g., primary and secondary schools) with important service delivery functions, and put the survey reports in the public domain.
- Unbundle MSEB into a transmission company and several generation and distribution companies. These companies should operate in a commercial environment under the regulatory framework of the MERC.
- All specific taxes, fees and penalties should be subject to an annual inflation adjusted revision; professional tax collection can be improved through selective outsourcing.

⁷ In early August'02, GoM has taken a decision to equate its guaranteed price of cotton to the Minimum Support Price of the Government of India. Moreover, other spinning mills—both private and public—along with the Cotton Corporation of India have now been permitted to procure cotton in the State.

⁸ Despite a tough stand taken by the GoM in its 2002-03 budget, there seems to be little progress on this front. New sugar factories, supported by the government, continue to crop up.

⁹ After extensive consultation with relevant stakeholders, a White paper on Power Sector Reform was prepared and approved by the Cabinet in August'02. Besides outlining a number of measures to reduce T&D losses, the paper envisages significant structural changes in the power sector.

- Develop a strategic vision and action plan for the water sector that includes (a) an institutional framework for resource management including regulatory responsibility; and (b) a framework for service provision that allows for competition among suppliers and accountability to users.
- Reduce off-budget borrowings by the Irrigation Development Corporations as laid out in the MTFRP, and ensure that any borrowing is applied towards capital spending generating the highest returns; and improve collection efficiency of water charges to 75 % over the next two years and enforce prescribed penalties for delinquent users.
- Disband the cotton monopoly scheme as recommended by the Valluri Committee.
- Progressively reduce subsidies for tuition in higher education and replace them with an expanded and credible student loan program with scholarships for the poor.
- In view of the success of pilot citizen facilitation centers, roll these out to municipal wards in Greater Mumbai and other major urban areas, including Nagpur, Pune and Nasik, and additional district collectorates.
- Present the draft Right to Information Bill for passage into law to the State Legislature.

Chapter 1

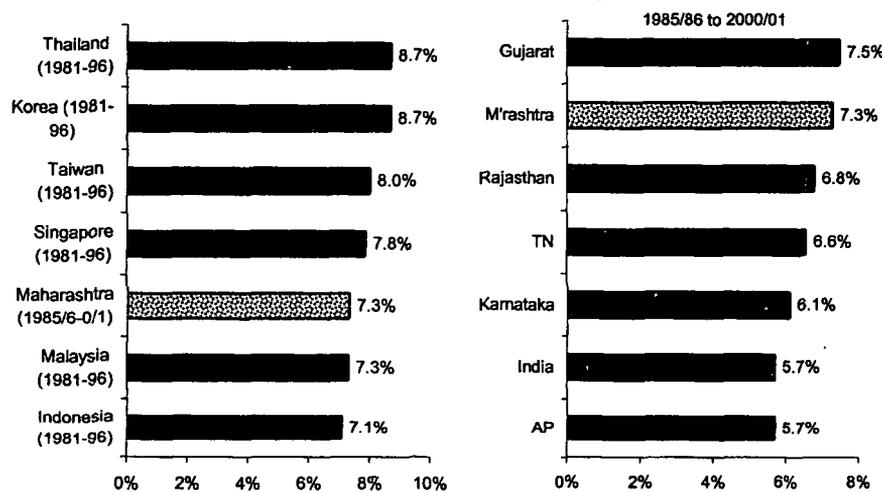
Maharashtra's Economic Development: Impressive Past but Uncertain Future

1.1 Maharashtra has achieved remarkable improvement in its socio-economic indicators during the last one-and-half decades. It has experienced rapid growth, large-scale industrialization, significant inflow of domestic and foreign investment, steady increase in per capita income, and considerable poverty reduction. The state economy has however significantly slowed down since the mid-1990s and its revival is crucial, if the state intends to successfully address its fiscal problems.

I. Impressive growth performance

1.2 The single biggest economic achievement of Maharashtra has been its ability to grow at an average rate of 7.3% during the last fifteen years.¹⁰ This compares favorably with some of the fastest growing economies in the world, such as Indonesia (7.1%) and Malaysia (7.3%) and is marginally lower than the growth rate achieved by Singapore (7.8%), Taiwan (8.0%), Thailand (8.7%), and South Korea (8.7%). Among the Indian States, Maharashtra's growth rate has been second only to Gujarat (7.5%), and is 1.6 percentage points higher than the corresponding growth rate of the Indian economy (Figure 1.1).

Figure 1.1: Maharashtra's Average Annual GSDP Growth Rate from International and National Perspectives



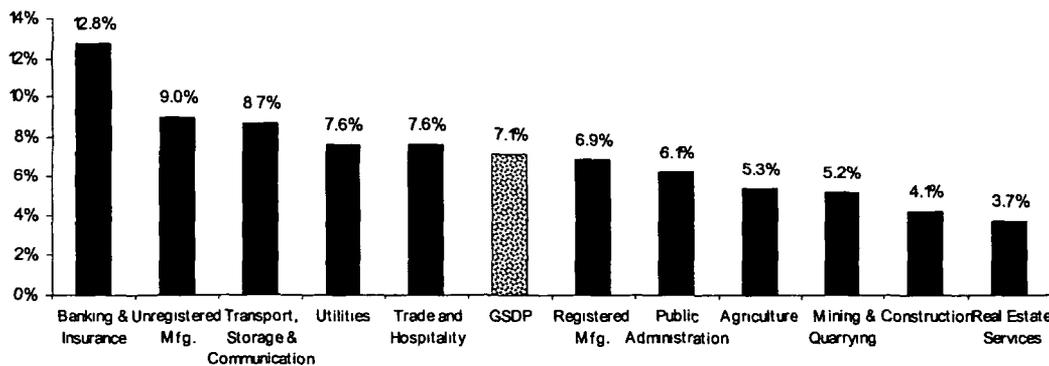
1.3 The State has also been known for its large pool of literate and skilled labor force, good investment climate, infrastructure facilities, and well-developed financial system compared to other Indian States. With only 9% of India's population, Maharashtra today, contributes more than 18% of India's industrial output, 15% of total service sector output, and as much as 14% of India's GDP. As a result of the high growth rate, the income of an average Maharashtra citizen is nearly one and half times the income of an average Indian citizen.

1.4 The remarkable performance of the aggregate economy, however, masks significant heterogeneity in the performance of various sectors. The fastest growing sector in Maharashtra has been the finance and banking sector, which has grown at an average pace of 12.8% per annum during the last 15 years. This is not surprising given that Mumbai, the commercial and financial capital of

¹⁰ The GSDP data used in this report are the new series based on the 1993/94 price index, obtained from the Central Statistical Organization (CSO). The GSDP for individual sectors are calculated from the aggregate GSDP by assuming that individual sectoral shares remained same in the new series as in the old GSDP series based on the 1980/81 price index.

India, is located in Maharashtra. In contrast, the real estate sector, which includes private and commercial dwellings, has been the slowest growing sector in Maharashtra with an average annual growth rate of only 3.7%. The construction sector has also experienced slow growth at an average annual rate of only 4.1% (Figure 1.2). Such low growth rates in the real estate service and construction sectors, while the rest of the economy is booming, is not only a matter of great surprise but also of grave concern. Recent studies have pointed out that, excessive regulation of real estate activities, including: rent control act; urban land ceiling law; high stamp duty; distorted property tax rates; and lack of clear land ownership records, is likely to have contributed to the large and growing underground market for real estate transactions. This has stifled the performance of this sector as well as the overall economy.¹¹ On the other hand, relatively less regulated sectors, such as the unregistered manufacturing, transport, storage and communication, and trade and hospitality sectors, have experienced rapid growth in past years.

Figure 1.2: Average Long-term Growth Rate of Various Sectors In Maharashtra (1985-86 to 2000-01)



II. Economic growth has slowed since the mid-1990s

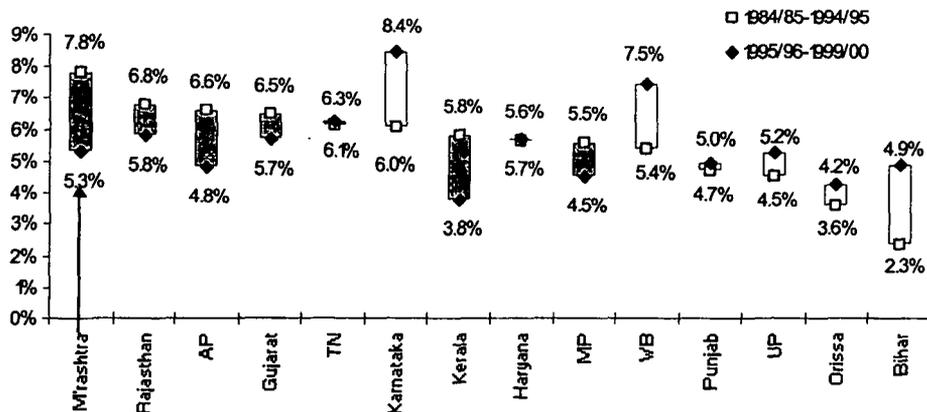
1.5 After experiencing a rapid and sustained growth rate for nearly a decade, the State economy appears to have noticeably slowed in recent years. Among the 14 major Indian states,¹² the growth slowdown has been the sharpest in Maharashtra, with the average annual growth rate falling from 7.8% between 1985-86 and 1994-95 to 5.3% between 1995-96 and 1999-00 (Figure 1.3). In contrast to Maharashtra, many States including Karnataka, Tamil Nadu, West Bengal, and even historically slow growing States like, Punjab, Uttar Pradesh, Orissa, and Bihar have either managed to maintain or grow above their long-term trend growth rates. There has also been a significant decline in the approval of Foreign Direct Investment (FDI) to the State, with Maharashtra's share of India's FDI approval falling from 24% during the first half of 1990s to 15% during the latter half of 1990s.

1.6 The current growth slowdown does not appear to be a cyclical downturn, but result of many structural constraints afflicting the State economy. The "trend" GSDP growth rate of Maharashtra has been on a steady decline since the mid-1980s (Figure 1.4). It has fallen from a high of 7.3% during the last 15 years to 6.8, 6.2 and 5.3% during the last 12, 8, and 4 years respectively. The GSDP grew by only 2.7% during 2000-01, one of the lowest in the history of the State.

¹¹ McKinsey Report (2001).

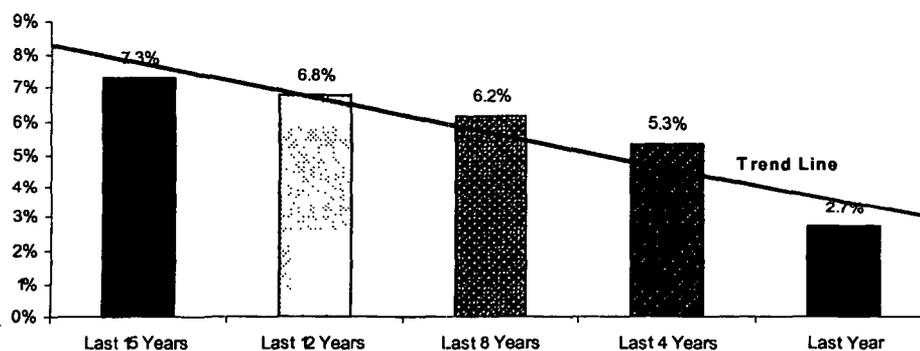
¹² The 14 Major Indian States are: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

Figure 1.3: Steepest decline in growth in Maharashtra among the 14 Major Indian States



1.7 While the reasons for such a systematic decline in Maharashtra's growth rate are not well understood, it is increasingly clear that they cannot be limited to cyclical factors alone or to aggregate or national level factors, as some of the Indian States, like Karnataka, have witnessed an acceleration in their trend growth rates during the same period. The explanation seems to lie in the recent poor performance of Indian industries, in general, the emergence of new growth sectors, like IT and pharmaceutical, in which Maharashtra has no comparative advantage over other States, and the reluctance on part of the political class and state bureaucrats to enthusiastically support reforms. Furthermore, there are structural impediments, like the presence of powerful labor and trade unions, high real estate price due to excessive regulation and taxation, declining quality of physical infrastructure (some of which have begun to be addressed only recently), and the Dabhol power project fiasco (details in Chapter 4).

Figure 1.4: Trend growth in Maharashtra



III. Linking economic growth with fiscal policy

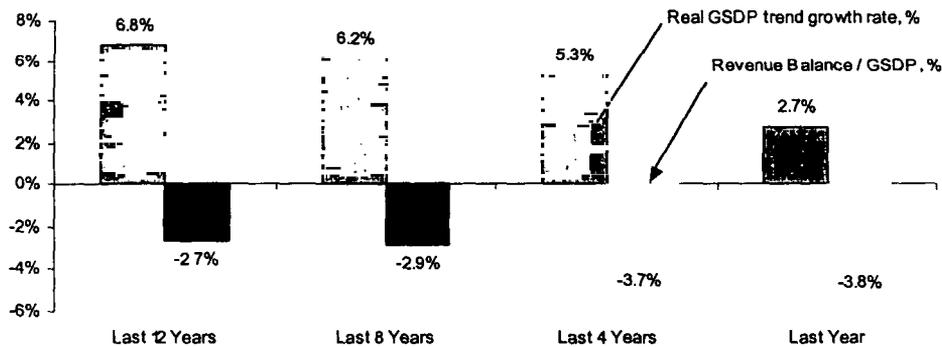
1.8 Both theory and evidence suggest that persistently large fiscal deficits could pose real threat to the stability and growth of any economy.¹³ The experience of the developing countries indicates that, while easy fiscal policies sometimes have stimulating effects on the economy in the short-run, its continuation invariably leads to a lower growth rate in the long-run. The negative correlation between deficit and growth is even stronger if much of the deficit is used for current consumption. At the sub-national level, large and persistently high fiscal deficits, when financed by external sources, have the same effect. In many Latin American countries, the inability of sub-national governments to bring

¹³ For a lucid treatment of this issue, see Fischer, S. and W. Easterly. "The Economics of the Government Budget Constraint." World Bank Research Observer 5, No. 2 (July 1990).

down their fiscal deficit has triggered external crises (e.g., Brazil, 1999) and/or worsened existing crises (e.g., Argentina, 2001). While the deteriorating fiscal situation in India at the sub-national level has not led to a crisis yet, the high level of sub-national deficit does pose a significant threat to the long-term growth prospects of the country.

1.9 As discussed later in Chapter 2, during the last several years, Maharashtra has been borrowing primarily to finance its current consumption, i.e., to pay for the growing salaries, pensions, and increasing interest payments. While it is difficult to prove the direction of causality due to limited data, there appears to be a negative correlation between economic growth and revenue deficit in Maharashtra. The economic growth rate of the State is on a declining trend and revenue deficit to GSDP ratio has been rising since the early 1990s. The average annual economic growth in Maharashtra during the last 12 years was 6.8% and corresponding level of revenue deficit, as a ratio to GSDP, was 2.7%. As the trend rate of revenue deficit to GSDP ratio rose overtime, the trend GSDP growth rate continued to fall, indicating that even the short-term stimulus impact of fiscal deficit has eluded the State (Figure 1.5). Thus, despite growing revenue and fiscal deficits to GSDP during the latter half of the 1990s, Maharashtra's economy is mired in a growth slowdown, and this indicates that growth cannot be sustained by indiscriminate increases in government spending.

Figure 1.5: Negative correlation between economic growth and revenue deficit



IV. Progress in poverty reduction

1.10 The goals of the Government of India (GoI) in the social sectors are clearly laid out in both the Poverty Reduction Strategy in the Tenth Five-Year plan as well as in its endorsement of the Millennium Development Goals (Table 1.1). The latter provides explicit numerical targets for the year 2015, including universal enrollment in primary schools, gender equality in primary education (by 2005), reducing child and maternal mortality by one half and three quarters respectively from their 1990 levels as well as reducing the rate of poverty and malnutrition. The GoI's own goals are somewhat more ambitious and aim to improve universal enrollment by 2003 and more than halving infant mortality by 2012.

1.11 The percentage of population below the poverty line has fallen steadily in Maharashtra. The rapid growth rate and successful anti-poverty programs (Box 1.1) in Maharashtra has led to a significant decline in poverty rates during the last two decades. From nearly 55% of its population being below the poverty line in 1983-84, the poverty rate has steadily fallen to 28% in 1999-00, with 28.1% rural population below poverty line and 29.2% of the urban population.¹⁴ However, when compared to other Indian states with comparable per-capita income, Maharashtra continues to have a

¹⁴ The poverty estimates for 1999-2000 are based on Deaton (2002), which corrects the per-capita consumption for change in the recall periods, but uses the GOI poverty lines. On the other hand, Maharashtra's official poverty estimates for 1999-2000 as reported by the Planning Commission of India are 23.7 percent for rural areas and 26.8 percent for urban areas.

disproportionately higher poverty rate. Despite having the second highest per-capita income among the 14 major Indian states, Maharashtra has the fifth highest poverty rate. Maharashtra, Punjab, and Haryana have similar level of per-capita income, but Maharashtra's poverty rates in urban and rural areas are almost five times the rate in Punjab and three times that of Haryana's (Figure 1.6).

Table 1.1: Millennium Development Goals in Maharashtra

Millennium Development Goals Target and Tenth Plan Targets	India's Performance	Maharashtra's Performance
Halve, between 1990 and 2015, the proportion of people whose income is less than \$1/day <i>Reduction of poverty ratio by 5 percentage points by 2007 and 15 percentage points by 2012</i>	Based on Government of India's Poverty Head Count estimates, 28.1% of India's population are poor.	Based on Government of India's Poverty Head Count estimates 25% (1999-00) of Maharashtra's population is poor.
Enroll all children in primary school by 2015 <i>All children in school by 2003 and all children to complete 5 years of schooling by 2007.</i>	79% of India's elementary school age-group children (6-14) are enrolled (1998-99)	114% of Maharashtra's elementary school children in the age-group 6-11 and 89% in the age group 11-14 are enrolled in school (1999-00)
Make progress towards gender equality and empowering women by eliminating gender disparities in primary and secondary education by 2005 and to all levels of education by 2015 <i>Reduction in gender gaps in literacy by at least 50% by 2007</i>	There is a 9 percentage point gender gap in elementary education (ages 6-14) in India (1998-99). 73.7% of females and 83.1 % of males are enrolled in elementary education (ages 6-14)	There are 3.5 percentage points gender gap in elementary education in the age group 6-11 and 16.4 percentage points in the age group 11-14. 112.3 % of female in the age group 6-11 and 80.4% in the age group 11-14 are enrolled in elementary education
Reduce infant and child mortality rates by two-thirds between 1990 and 2015 <i>Reduction of Infant Mortality Rate (IMR) to 45 per 1000 live births by 2007 and to 1 by 2012</i>	95 out of every 1,000 children born in India die before age 5. Between the two rounds of the NFHS, the IMR registered more than 10% decline at the national level. The Infant Mortality Rate in 1998-99 was 70 per 1000 live births.	58 out of 1000 children born in Maharashtra die before the age of 5. The Infant Mortality Rate in 1998-99 was 48 per 1000 live birth (All-India Average=70)
Reduce maternal mortality ratios by three-quarters between 1990 and 2015 <i>Reduction of Maternal Mortality Ratio (MMR) to 2 per 1000 live births by 2007 and to 1 by 2012</i>	407 in 1998 maternal deaths per 100,000 live births.	135 in 1998 maternal deaths per 1,00,000 live births.
Have halved by 2015 and begun to reverse the spread of HIV/AIDS, incidence of malaria and other major diseases	HIV/AIDS - prevalence 0.8% TB - 500,000 deaths per year	Not available
Provide access for all who need reproductive health services by 2015	52% of Indian couples do not use contraceptives (1998-1999). Use of contraceptives is on the rise.	39% of couples in Maharashtra do use contraceptives (1998-99)

1.12 High poverty rates along side high per capita income levels have resulted from the relatively high levels of inequality in Maharashtra as compared to most other Indian States. Some of this inequality is a permanent feature since in many ways, Maharashtra consists of two quite separate regions – prosperous urban centers comprising of Mumbai and Pune and a relatively dry rural interior. In addition, Mumbai's distribution of income is highly skewed with being the home to the largest number of rich Indians and at the same time the largest number of slum dwellers in the country. An ever increasing flow of migrant labor coming from all parts of India in search of employment is a major contributing factor to Mumbai's high poverty rates. This need not be the case since an increased demand for labor could induce migration to the city, raising wages in the rural areas or, alternatively, increased demand for agricultural produce could raise farm incomes and agricultural wages directly. Available evidence indicates that these effects do occur for the coastal and inland western regions but that much of the state does not share in the rapid growth of the urban economy.

1.13 Income disparities within the state appear to be getting worse. The disparities leading to Maharashtra's position in Figure 1.6 have been growing for a long time. Between 1960 and 1994, poverty rates in Maharashtra fell at about the median rate of change of major states – 1.01% per annum in comparison to 0.63 in Madhya Pradesh and 0.88 in Uttar Pradesh. However, it fell at a rate of 2.73 in Kerala and 2.55 in Punjab. Ravallion and Datt (2002) show that in comparison to non-farm income, this was either the slowest or the second slowest rate of poverty reduction in the country depending on the measure of poverty used.

Box 1.1: Major Anti-Poverty Programs in Maharashtra

A number of anti-poverty schemes funded by the Central as well as the State Governments are operating in Maharashtra. The major Central Government sponsored programs are:

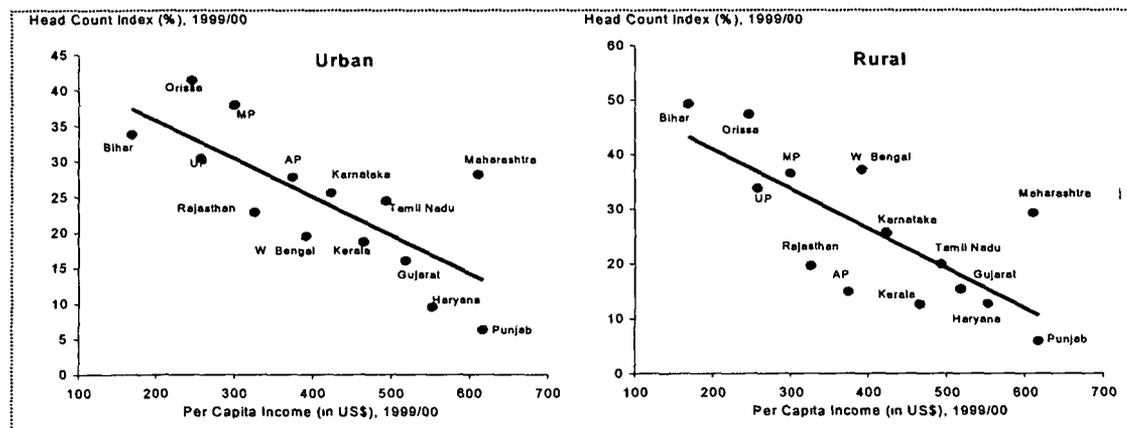
- *Jawahar Gram Samridhi Yojana (JGSY)*, a rural employment program to promote infrastructure development in rural areas. Until recently operated under the name of Jawahar Rojgar Yojana (JRY). JGSY was started from 1999-2000 with the primary objective of creating demand driven village infrastructure including durable assets at the village level to enable the rural poor to increase their opportunities for sustained employment.
- *Swarnajayanti Gram Swarajgar Yojana (SGSY)*, a self-employment program providing subsidy on capital and subsidized credit to acquire income generating assets. SGSY was launched in April 1999 by restructuring the IRDP and other schemes with the objective of bringing the existing poor families above the poverty line within three years by providing income generating assets through a mix of bank credit and government subsidy. In the new scheme, the benefits are being given to Self-Help Groups as opposed to individual households.
- *Employment Assurance Scheme (EAS)*. Under this scheme employment is provided in manual work during lean agricultural season to all able bodied adults in rural areas who are in need of work, but cannot find it. The secondary objective is the creation of an economic infrastructure and community assets for sustained employment and development.
- *Indira Awas Yojana (IAY)*, is a subsidized housing scheme for rural poor.
- *Swarna Jayanti Shahari Rojgar Yojana*, is an urban employment program started in December 1997 with the objective of providing wage employment to the urban unemployed poor as well as encouraging self employment ventures.
- *Public Distribution System (PDS)* is a food subsidy program for the rural and urban poor.
- *Integrated Child Development Services (ICDS)* provides nutritious supplementary food to children under age six and pregnant women and nursing mothers from poor families.

The following are the major anti-poverty programs sponsored by the GoM:

- *Employment Guarantee Scheme (EGS)* provides wage employment; unskilled rural employment on demand.
- *Employment Promotion Program*, educates the unemployed and provides training to help them acquire/upgrade skills, which will enable them to secure employment.

1.14 However, Maharashtra's growth has been driven mostly by the industrial and service sectors, while agriculture growth has remained low and its productivity below the national average. Limited agricultural growth is partly due to unfavorable agro-climatic conditions, with a large proportion of agricultural land being in the semi-arid and drought prone regions. Despite significant public investment on canal irrigation, only 16% of the net sown area in Maharashtra is currently irrigated. Moreover, a large part of the irrigation water (nearly 60%) is consumed by relatively rich farmers growing sugarcane. On the other hand, the majority of the small, marginal, and dry land farmers do not have access to irrigation. Therefore, while the agriculture sector has performed poorly compared to other sectors, three out of four citizens of Maharashtra continue to depend on this sector for their livelihood, giving rise to such large inequality in income among its citizens.

Figure 1.6: Poverty Rate versus Per-capita Income: 14 Major Indian States (1999-00)



1.15 Due to certain changes in survey methodologies, it has been argued that, the official poverty estimates for 1999-00 are not fully comparable with the estimates of the past years. However, several other indicators point to a growing disparity within the state over that period. Table 1.2 shows an increase in the share of agricultural wage laborers among the poorer segments of society between 1993 and 1999. While the share of the top quintile working as agricultural labor fell slightly, the share of the other quintiles rose, as much as five percentage points among the poorest. Consistent with this is the change in employment status among people in scheduled caste/tribes who saw an increase of eight percentage points rate of those working as agricultural labor in these years.

Table 1.2: Percentage of per capita consumption groups and social groups working primarily as agricultural laborers

Categories	1993	1999
Poorest	60.1	65.1
2	53.1	55.3
3	36.2	47.3
4	31.9	37.8
Richest	21.3	21
Scheduled Caste/ Scheduled Tribe	53.5	61.9
Majority	36.4	36.7

Source: National Family Health Surveys, 1993 and 1999.

1.16 Also disturbing and indicative of growing disparities between rural and urban areas is an increase in the differences in infant and child mortality rates. Urban areas experienced a dramatic improvement in infant mortality from 6.4 to 2.7% between the 1993 and 1999 National Family Health Surveys while rural infant mortality increased from 8.2 to 10.1%. Compared to other states and all-India averages, however, Maharashtra fares well on account of low infant mortality rates and high gross enrollment rates (Table 1.3).

Table 1.3: Social Indicators in Selected States

States	Unit	Year	All India	Maharashtra	Gujarat	Tamil Nadu	Andhra Pradesh	Karnataka
Per Capita Income	Rs. in 1993-94 Prices	1999-00	11,401	17,160	15,545	14,136	10,487	12,271
Infant Mortality Rate	Per '000 Live Births	1998-99	70	48	63	52	66	58
Total Fertility Rate (a)	Per Woman	1998-99	2.27	2.24	2.33	2.11	2.07	1.89
Malnutrition under Age 3 (b)	%	1998-99	47	50	45	37	38	44
Overall Literacy	%	2000-01	65.38	77.27	69.97	73.47	61.11	67.04
Female Literacy	%	2000-01	54.28	67.51	58.60	64.55	51.17	57.45
Gross Enrolment Rates (Class I-V)	%	1999-00	58.79	88.80	64.89	86.89	47.65	65.67
Gross Drop-out Rates (Class I-V)	%	1999-00	40.25	20.29	29.49	41.10	40.28	28.87

Notes:

(a) Number of children a woman would bear during her reproductive years (15-49) if she were to experience the age-specific fertility rates prevailing at the time of the survey

(b) Malnutrition among children under age 3 years is based on weight-for-age index of nutritional status, and represents percentage of children in that age group who fall below -2 standard deviation units from the median of the International Reference Population.

Source: Per Capita Income - GDP from CSO (GoI), GSDP for Maharashtra from Department of Economics & Statistics (GoM), and for other states from CSO (GoI), Population from Census 2001; Infant Mortality Rate - Registrar General of India, Sample Registration System, April 2001; Total Fertility Rate and Malnutrition under Age 3 - National Family Health Survey 1998-99; Overall Literacy and Female Literacy - Census 2001; Gross Enrolment Rate and Gross Drop-Out Rate - GoI, Ministry of Human Resource Development, Annual Report 2000-01

1.17 In sum, the structural features of Maharashtra are such that high levels of inequality and therefore, higher than expected levels of poverty for any level of income will tend to be the rule. The type of public expenditures that will have an effect in reducing this longer-term problem of poverty will be directed at increasing the productivity of the rural population. This may entail infrastructure investments in roads or communications to help integrate the rural areas with the urban economy or, if feasible, public goods that improve farm productivity. The extension of educational attainments to more of the rural population is also a longer-term strategic option.

Chapter 2

Maharashtra's State Finances: Retrospect and Prospect

2.1 Better known for its fiscal conservatism, Maharashtra is now faced with a fiscal problem of unprecedented magnitude. There has been an across the board deterioration in the State's fiscal performance in the second half of 1990s: tax and non-tax receipts have stagnated; total government expenditure has increased sharply, and its composition has worsened: interest and wages account for a major portion of the revenues leaving little funding for development activities; off-budget borrowings and contingent liabilities have reached distressing levels; some state enterprises have even defaulted on their interest payments; and large liability overhang and arrears have emerged.

2.2 The current fiscal situation is not sustainable. Evidence from sectors (Chapters 1 and 4) suggests that the fiscal profligacy of last several years has neither led to higher economic growth nor helped the poor. Time is running out and the State needs to act decisively now. A further delay in implementing significant fiscal reforms will make future options even more difficult and painful.

2.3 This chapter discusses the nature and possible causes of this fiscal deterioration. It examines how the economic composition of the budget has changed and how GoM is financing its increasing deficits. The chapter analyzes the recent policy announcements made by the government through its medium-term fiscal reform program and the 2002-03 budget. It shows that if the government can implement its own fiscal reform agenda, the state finances will be back on track. In closing, the chapter outlines a few measures that are likely to strengthen GoM's fiscal reform agenda.

I. From fiscal prudence to major fiscal imbalance

2.4 Historically, Maharashtra has been one of the better-managed states in India. During the first half of the 1990s Maharashtra had the lowest revenue deficit and the second lowest fiscal deficit to GSDP ratio among the 14 major Indian States and a low government debt to GSDP ratio. The government did not engage in off-budget borrowings, and contingent liabilities though growing, were modest.¹⁵ The government's net worth, as measured by the difference between the stock of its assets and liabilities, was positive and increasing. Furthermore, the State's real GSDP grew at an annual average rate of 8% and poverty fell significantly.

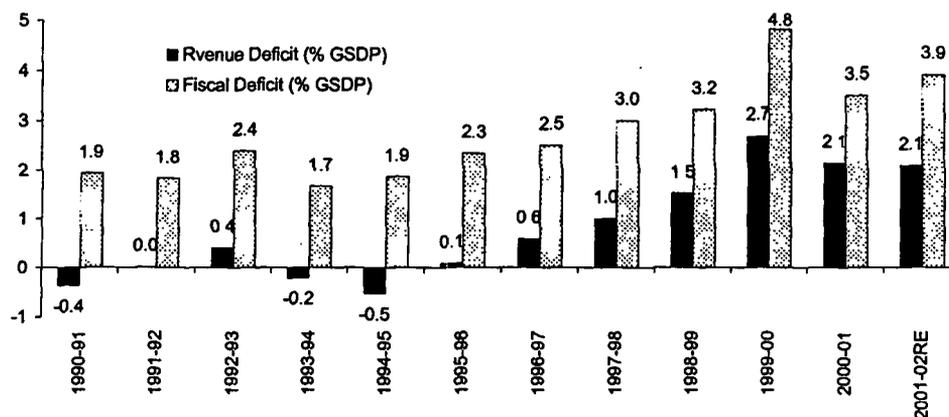
2.5 The situation changed dramatically in the second half of the 1990s. Like most other Indian States, Maharashtra's state finances entered a phase of a rapid and significant fiscal deterioration. Several indicators corroborate this decline (Figure 2.1):

- The fiscal deficit to GSDP ratio rose for six consecutive years from a low of 1.7% of GSDP in 1993-94 to an all time high of 4.8% in 1999-00. After falling in 2000-01, it again rose modestly to 3.9% in 2001-02. The revenue balance, which goes to finance current consumption, deteriorated from a surplus of 0.5% of GSDP in 1994-95 to a record deficit of 2.7% in 1999-00, before stabilizing around 2% in the last two years.
- The government debt, inclusive of off-budget borrowings that are guaranteed and serviced by the government, rose from less than 12% of GSDP in 1995-96 to 23% in 2001-02.
- The stock of debt which has been guaranteed by the GoM, including all the off-budget borrowing, grew at an annual average rate of 41% during the past five years, rising from Rs. 22,228 crore (11.4% of GSDP) in 1997-98 to Rs. 74,104 crore (26% of GSDP) in 2001-02.

¹⁵ All extra-budgetary borrowings, which are guaranteed by the GoM and serviced from the state budget, are called Off-Budget Borrowings (OBBs). Borrowings, which are guaranteed by GoM but serviced by the concerned agency, are called Guarantees or Contingent Liabilities (CLs).

- Budget management, particularly budget formulation and execution, came under increasing stress, resulting in unrealistic budget estimates, poor fiscal marksmanship and large supplementary demands. Weak processes led to a loss of control over public spending and a failure to channel spending into areas that are of social and economic importance.

Figure 2.1: Budgetary Deterioration



II. Why did it happen?

2.6 While trying to understand the causes of budgetary deterioration in Maharashtra it is important to bear in mind that almost all the Indian States have experienced similar imbalance, albeit of varying magnitude, during the 1990s. The factors underlying this budgetary imbalance (Box 2.1) have been a much-debated issue in the Indian fiscal literature. The declining tax revenue to GSDP ratio has been attributed to: the inability of States to tax land, agricultural income, and the expanding service sector; failure to reduce large-scale tax exemptions, evasions, and avoidance; poor cost recovery from public services; and inability to recover reasonable returns from large investments. On the expenditure side, increases have been due to the large size of the civil service; pay and pension revision based on the recommendations of the Fifth Pay Commission; proliferation of Centrally Sponsored Schemes; and a weak budget formulation, monitoring, and financial management system.

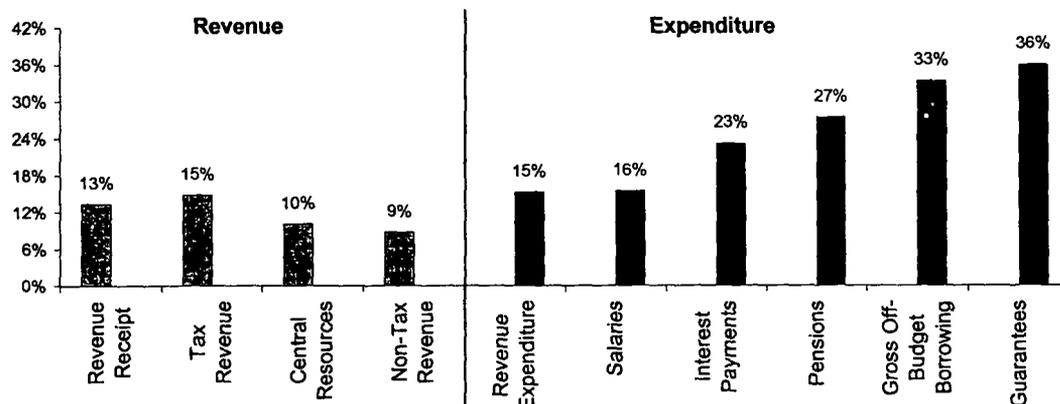
Box 2.1: Fiscal imbalance in Indian States: 1990/91- 2000/01

States in India play a prominent role in delivering public services to their citizens. Sectors critical for enhancing growth and reducing poverty (including education, health, power, transport, irrigation, drinking water, law and order) fall either exclusively or partially under the purview of the State Governments.

The combined fiscal deficit of the States has risen from a low of 2. % of GSDP in 1995-96 to an all time high of 4.7% in 1999-00, before marginally falling to 4.4% in 2000-01. The revenue deficit now accounts for nearly 60% of the States' fiscal deficit. In many states, salaries, pensions, and interest payments together account for as much as 80 to 90% of their total revenue receipts. States are increasingly resorting to 'overdraft' facilities with the Reserve Bank of India to tide over short-term liquidity problems, arrears between government agencies are rising, and in extreme cases, payment of salaries and pensions to government employees and teachers are being delayed. While the intensity of fiscal stress has varied across States, none has remained unaffected. Eleven of the fourteen major states posted a fiscal deficit in excess of 4% of GSDP by the end of 1990s.

2.7 During the last five years, Maharashtra's own-tax revenue, transfers from the central government, and own non-tax revenue grew at an average annual rate of 15, 10, and 9% respectively (Figure 2.2). On the other hand, during the same period, salaries, interest payments, pensions, off-budget borrowings, and guarantees each grew faster than the fastest growing item on the revenue side, namely the own-tax revenue.

Figure 2.2: Average annual growth rate: Selected Revenue and Expenditure Items (1997-98 to 2001-02RE)



2.8 The budgetary situation in Maharashtra is thus similar, only with varying intensity, to other Indian States. In addition, however, Maharashtra is faced with a declining share from the Central devolution,¹⁶ large scale commodity market interventions,¹⁷ a botched attempt to introduce VAT in the mid-1990s, significant growth slowdown compared to other reforming states in the country, and large power sector deficits. Most important of all, Maharashtra has the largest off-budget liabilities among all Indian States and these liabilities are growing more rapidly than its on-budget liabilities (see Section IV).

III. Budgetary deterioration has been extensive

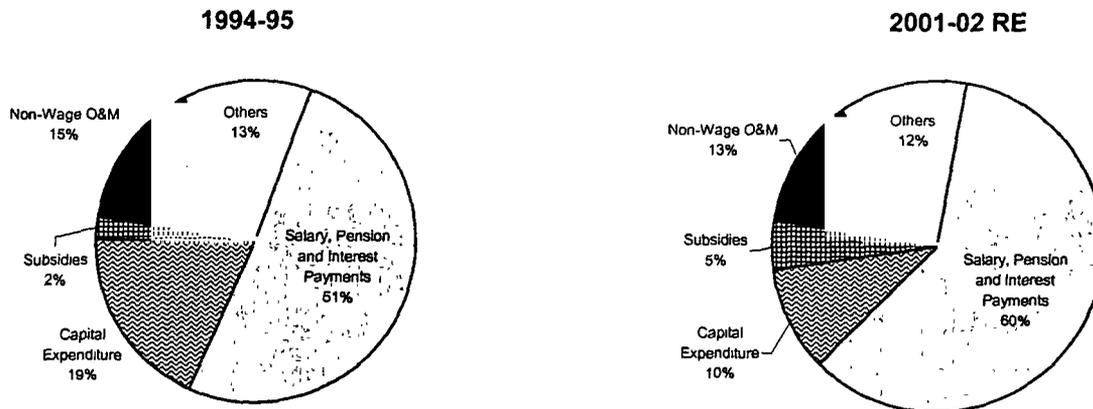
2.9 This Section looks at the changing composition of government spending, the evolution of salary and pension bill, interest payments, and subsidies, the slowdown in the revenue collection and various sources of financing the budgetary deficits over the last several years.

2.10 *Changing composition of spending.* The composition of government spending has changed significantly between 1994-95 and 2001-02 RE, with decline in capital and development outlays, non-wage O&M, reduction in certain social sector spending, and increase in subsidy (Figure 2.3). While the revenue expenditure grew at the average rate of 15% between 1994-95 and 2001-02 RE, the capital outlay grew at the average rate of 4% during the same period. When viewed with the increase in the government's deficit financing, this change in the composition of spending indicates that the State has borrowed primarily to finance current consumption, i.e., to pay for the growing salaries, pensions, and increasing interest payments, which together accounted for 80% of total revenues in 2001-02 RE. This is also reflected in the ratio of revenue to fiscal deficit, which reached 55% in 2001-02 RE.

¹⁶ The steep decline in Maharashtra's share of central transfers has contributed a lower revenue to GSDP ratio during the 1990s. From nearly 6 percent of the total central devolution during the period of the Tenth Finance Commission, Maharashtra's share has fallen to 4.6 percent during the Eleventh Finance Commission period. Accordingly, the share of central transfers in the state's total revenue has fallen from 16.1 percent in 1999-00 to 14.5 percent in 2001-02.

¹⁷ GoM procures a number of agricultural commodities (especially cotton) from the farmers at the minimum support price, which have been set well above GoI's minimum support price since 1994-95. The Maharashtra Cotton Farmers Marketing Federation, the largest of the government's procurement agencies, has accumulated losses of nearly Rs. 2400 corers, mainly financed by cooperative banks. (See Chapter 4 for details). Similar market intervention in onions in 1999-00 resulted in a loss of nearly Rs. 180 crore to the government.

Figure 2.3: Changes in composition of expenditure



2.11 *Rising salary and pension bill.* Maharashtra, like all other Indian States, experienced a sharp increase in its salary and pension bill following the implementation of the Fifth Pay Commission's recommendations and increased recruitment in grants-in-aid institutions (for details, see Chapter 6). The situation started worsening by crowding out development spending, particularly capital, as GoM began pay revisions in 1998-99, retrospective from January 1, 1996. However, significant payment was made only in 1999-00. The salary bill of GoM thus increased by 66% in one year, from Rs. 10,031 crore in 1998-99 to Rs. 16,635 crore in 1999-00 and pension bill by 63% from Rs. 1,249 crore to Rs. 2,034 crore in the same period. While the salary bill fell modestly in 2000-01 and 2001-02 RE, it remains above the trend level. The pension bill continued to rise even in 2000-01, increasing by 51% between 1999-00 and 2000-01, before falling marginally in 2001-02 RE.

2.12 *Growing interest payments.* The large stock of debt, much of which was borrowed during the period of high interest rates, has led to a steady increase in GoM's interest payments. In 2001-02, interest payments amounted to Rs. 6,739 crore, nearly 22% of revenue receipts (Figure 2.4). According to a recent report on Maharashtra's finances (NIPFP, 2001), the average effective rate of interest¹⁸ on state government borrowings has also grown to nearly 12% per annum. Given state government's limited ability to undertake any significant debt restructuring exercise (like retiring high cost debt owed to the central government by raising new debt from the market at a lower interest rate), and with many expensive off-budget borrowings in its portfolio (e.g., more than Rs. 1,000 crore was raised by one of the irrigation corporation through seven different bond offerings at an average interest rate of 17.5%), the share of interest payments in total revenue expenditure is likely to increase further in coming years.

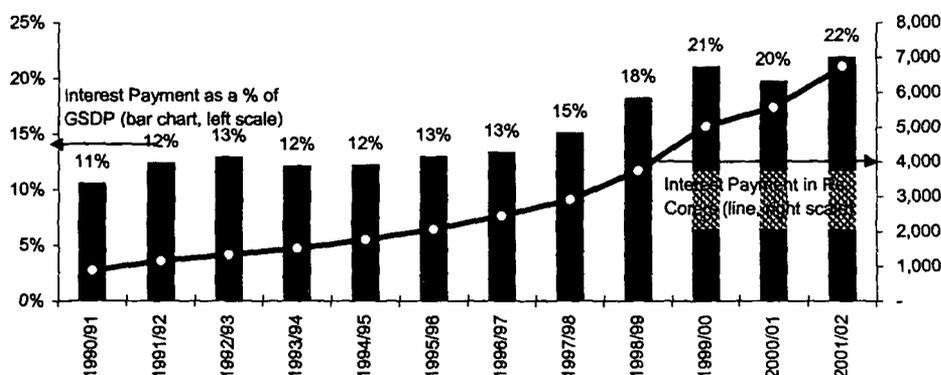
2.13 *Rising Subsidies.* Reliable estimates of budget-based and off-budget subsidies are not available for Maharashtra. However, information from several sources including various sectoral departments indicates that subsidies for public services are growing. According to GoM's own calculation, the subsidies that are administered through the state's budget has increased from Rs. 2863 crore in 1994-95 to Rs. 4853 crore in 1998-99. A Study by NIPFP (2001) finds that, the total value of explicit and implicit subsidies taken together is around Rs. 18,827 crore or 7.5% of the GSDP in 1998-99.¹⁹ The study estimates the share of merit to non-merit subsidy as 50% in social sectors and 33% in economic sectors. The sectors which have been major recipients of the subsidy

¹⁸ The average effective interest is estimated as a weighted average of various nominal interest rates associated with different sources of lending (e.g., small savings, market borrowings, etc.), where the share of each source of lending in the total is used as the weight.

¹⁹ The large difference between GoM's estimate and NIPFP estimate of subsidy is because, the former refers to only the cash subsidy while the latter includes both cash as well as implicit subsidy. They also use different methodologies to compute the subsidy amount.

include: power, agriculture (cotton, sugar and onion), irrigation, grant-in-aid institutions (particularly education), transport, industry, and food (milk).

Figure 2.4: Rising interest payments
(in rupees crore and as a % of revenue receipt)



2.14 *Revenue growth has slowed.* A steady decline in the revenue to GSDP ratio during the second half of the 1990s intensified the State's fiscal problems. All components of the revenues – own-tax revenue, shared taxes, own non-tax revenues and grants – exhibited a declining trend until 1999-00. The slowdown in revenue collection to GSDP ratio can be attributed to the slowdown of Maharashtra's economy, a narrow tax base, poor administration, and large exemptions. (See Chapter 3 for details.) During the last two years, however, the declining trend appears to have ended, at least for own tax revenue, on account of the introduction of floor rates on sales tax.

2.15 *Sources of Financing the Deficits.* Increasing portion of the growing deficit has been financed by funds from various public accounts, some of which are reserve funds earmarked for capital investments and poverty reductions schemes. In fact, Public Accounts, which consist of provident and insurance funds, civil deposits, various suspense accounts and reserve funds, became the most important source of deficit financing in 1999-00. The share of fiscal deficit financed using non-debt borrowing instruments and provident funds has increased from 30% in 1996-97 to 57% in 1999-00 (Table 2.1). Since borrowings from public accounts do not create any additional liability for the government, it can be argued that the reported fiscal deficit overstates the true fiscal liability of the government, especially in those years when large part of deficits are financed by non provident fund public accounts. Similarly, moderate improvement in the fiscal situation in 2000-01 and 2001-02 RE largely indicates less generous usage of public account funds by GoM than any significant measures to correct the fiscal imbalance.

Table 2.1: Sources of deficit financing
(Share in the total and in %)

	1990/91	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02 RE
Loans from the Center	78.4	55.9	54.1	59.5	35.2	51.7	57.9
Non-Debt Borrowing and PF (Net)*	5.6	30.4	34.9	30.3	56.5	32.7	29.7
of which: PF	12.6	9.2	6.0	9.5	18.0	7.5	5.1
Market/Institutions	16.0	13.7	11.0	10.2	8.2	15.5	12.4

* Refers to financing from the Public Accounts including Provident Fund (PF), Contingency Fund and through change in Cash Balances

(Source: Budget Documents, GoM)

IV. Situation is actually worse: Evidence from "Consolidated" Fiscal Deficit

2.16 The underlying fiscal position is actually worse than the budget numbers suggest. The traditional measure of fiscal deficit, the difference between total expenditure and revenue, underestimates the true fiscal position of Maharashtra for at least two reasons:

- First, to circumvent central government controls on state borrowings, several States including Maharashtra have resorted to significant off-budget borrowings through the creation of new public corporations called Special Purpose Vehicles (SPVs).²⁰ In Maharashtra, several SPVs have been created in recent years.²¹ Debt charges—interest and principal—of these SPV borrowings are paid directly from the state budget; therefore, these are really part of government’s own borrowings.
- Second, the traditional measure of fiscal deficit does not include the full operating losses and capital outlays of all the State PSUs. For example, in Maharashtra, while the fiscal deficit includes the power sector subsidy, equity contribution, and loans (net of recovery) from GoM to Maharashtra State Electricity Board (MSEB), it does not include those parts of operating losses and capital outlay of MSEB, which are financed by market borrowings with government guarantees. (See Chapter 4 for a discussion on power sector issues). While this problem is likely to exist for all PSUs, it is most acute in the power sector.

2.17 *Consolidated Deficit: A Definition.* The Consolidated Deficit, is a broader measure of fiscal deficit that can help reduce the underestimation noted above, and measures more accurately the fiscal health of the state. The Consolidated Deficit is estimated as follows:

$$\text{Consolidated Deficit} = \left\{ \begin{array}{l} \text{Primary Deficit (excluding Power Sector)} \\ + \text{Interest Payment} \\ + \text{Off Budget Borrowings (Net)} \\ + \text{Power Sector Financing Requirement} \end{array} \right\} \text{Fiscal Deficit (excluding Power Sector)}$$

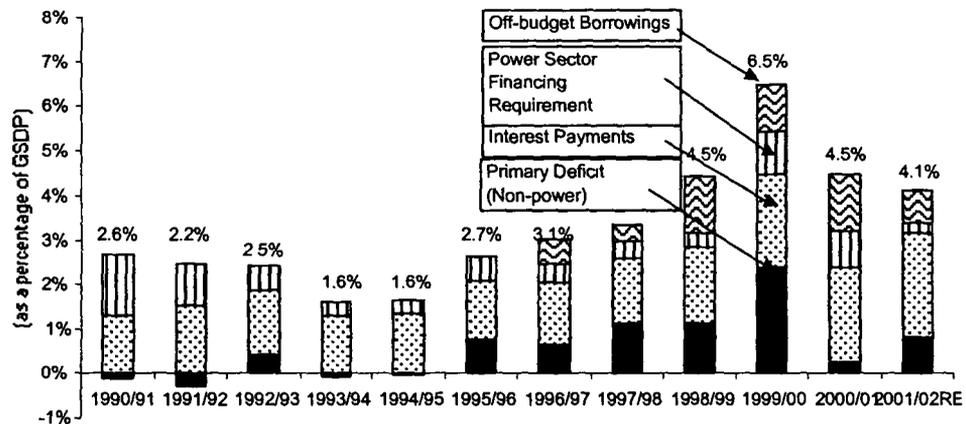
2.18 Primary Deficit—excluding the power sector—is defined as the difference between the Primary Deficit and the gross budgetary support to the power sector; the latter consisting of power subsidy, equity contribution, and loans net of recovery from GoM to MSEB. Interest Payments (IP) include payments on borrowings, both on- and off-budget. The Power Sector Financing Requirement consists of MSEB’s capital outlay and its net profit/loss before subsidy from GoM.

2.19 Due to the large and persistent increase in the primary deficit, growing off-budget borrowings, and deterioration in the power sector’s performance, the consolidated deficit of Maharashtra—as defined above—climbed from a low of 1.6% of GSDP in 1994-95 to 6.5% in 1999-00 (Figure 2.5). While the primary deficit declined sharply in 2000-01, the power sector deficit and off-budget borrowings remained high in 2000-01. Moreover, servicing of the highly expensive off-budget borrowings led to sharp increase in interest pay outs, with debt servicing accounting for 2.4% of GSDP or 58% of consolidated deficit in 2001-02 RE. The consolidated deficit though declined by 0.5 percentage points between 2001-02 RE and 2000-01, it remained high compared to its historic level.

²⁰ An important institutional constraint on State borrowing is implicit in Article 293: Clause (3) of the Indian Constitution. According to this clause, “A State may not without the consent of the government of India raise any loan if there is still outstanding any part of loan which has been made to the government of India or by its predecessor government, or in respect of which a guarantee has been given by the government of India or by its predecessor government.” But since borrowings through SPVs do not fall under the purview of the Article 293, they provide an easy way to bypass the GoI restrictions.

²¹ These include: five Irrigation Development Corporations, Maharashtra State Road Development Corporation, Maharashtra Jeevan Pradhikaran, Maharashtra Water Conservation Corporation, Maharashtra Cooperative Development Corporation.

Figure 2.5: Consolidated Deficit to GSDP ratio: Magnitude and Composition



2.20 In addition to the recovery from the sharp salary shock of 1999-00 (when most of the of the salary and pension arrears were paid), much of the recent decline in the consolidated deficit to GSDP ratio is due to a significant decline in the power sector financing requirement (PSFR).²² The PSFR has fallen from 1% of GSDP in 2000-01 to 0.2% in 2001-02 RE. However in the past, there have been large differences between Revised Estimates and Actual Estimates. Further, the consolidated deficit does not include the losses incurred by many state undertakings, including the losses of the Cotton Federation and the Sugar Cooperatives. As these losses have grown overtime (see Chapter 4 for details), the consolidated deficit is likely to underestimate the true fiscal deficit of GoM in recent years more than earlier years. For these reasons, it is too early to say that the consolidated deficit is on a downward path: for this to occur, more comprehensive and aggressive reform will be needed.

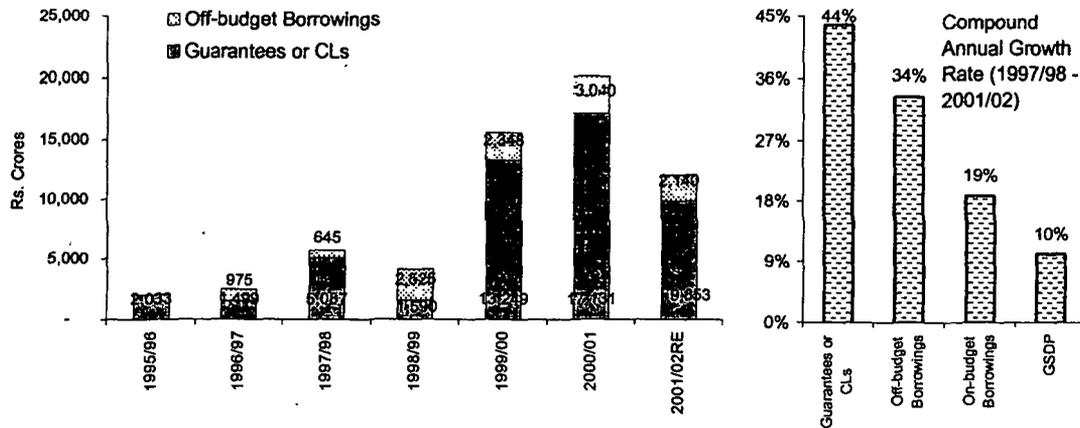
2.21 *Extra-budgetary operations have accelerated.* Many public sector undertakings (PSUs) in Maharashtra have raised money in the domestic capital market with an 'unconditional and irrevocable' guarantee from the GoM. These borrowings are kept outside the purview of the Budget, as they do not need the approval of the state legislature. These operations are mainly of two kinds: (i) Off-Budget Borrowings (OBBs), which are serviced through the Budget; and (ii) Guarantees or Contingent Liabilities (CLs), which are serviced by the borrowing agencies. OBBs are raised in the form of bonds and constitute a part of the consolidated deficit of the GoM (as defined above). The guarantees, on the other hand, are issued as bonds as well as loans from financial institutions. While the GoM did not engage in any OBBs prior to 1995-96, it has been issuing guarantees on extra-budgetary borrowings since the 1980s.

2.22 *Rising Off-Budget Borrowings and Guarantees.* Off-budget borrowings and guarantees are two of the fastest growing fiscal variables in Maharashtra. OBBs have been growing at an average annual rate of 34% between 1997-98 and 2001-02 RE (Figure 2.6), and they now account for nearly one-fifth of GoM's total liabilities. The main borrowers in this category are the five irrigation development corporations (IDCs), which account for nearly 80% of the total (details on irrigation and water are in Chapter 4). At the same time, guarantees have grown at a breakneck pace of 44% a

²² The Power Sector Financing Requirement is defined as the difference between capital outlays and the net profit/loss (before subsidy) of MSEB. (For details see Table A2.4 in the Statistical Appendix.) The latter is defined as the difference between Earnings before Interest, Depreciation, Tax and Appropriation (EBIDTA) and interest and taxation. EBIDTA, in turn is the difference between revenues (excluding subsidy), and cash operating expenditures (excluding depreciation). The subsidy here is taken as recorded in the MSEB Accounts (which are on an accrual basis), which tends to differ from the subsidy recorded in the GoM Budget (which is on a cash basis). For details on power sector finances, see Chapter 4.

year.²³ These guaranteed borrowings have generally been used to finance commercial enterprises in co-operative and infrastructure sectors, cover up operating losses of PSUs, and finance their capital investment.

Figure 2.6: Off-budget Borrowings, Guarantees, and On-budget Borrowings



2.23 With falling revenues and an increasing wage bill, GoM transferred some of its activities to newly created or existing public bodies like the Maharashtra State Road Development Corporation (MSRDC), the Maharashtra Jeevan Pradhikaran (MJP), the Maharashtra Water Conservation Corporation and the Maharashtra Cooperative Development Corporation. It is likely that the financial returns on some of these investments will fall far short of the interest and amortization payments due on their borrowings. The current economic slowdown is likely to exacerbate the problem. Thus, there is a real possibility that many of the guarantees given to these corporations will be invoked in the coming years.

2.24 The current borrowing spree by GoM agencies outside the purview of the budget is untenable. Compared to the 34 and 44 percent growth rate of off-budget borrowings and guarantees respectively, the corresponding average annual growth rate of on-budget borrowings and nominal GSDP are 19 and 10% respectively (Figure 2.6), indicating that the state's borrowing program is clearly on an unsustainable path. Containment of off-budget borrowings and guarantees should therefore be an integral part of any reform program that aims to restore fiscal balance in Maharashtra.

V. All signs lead to an impending fiscal crisis

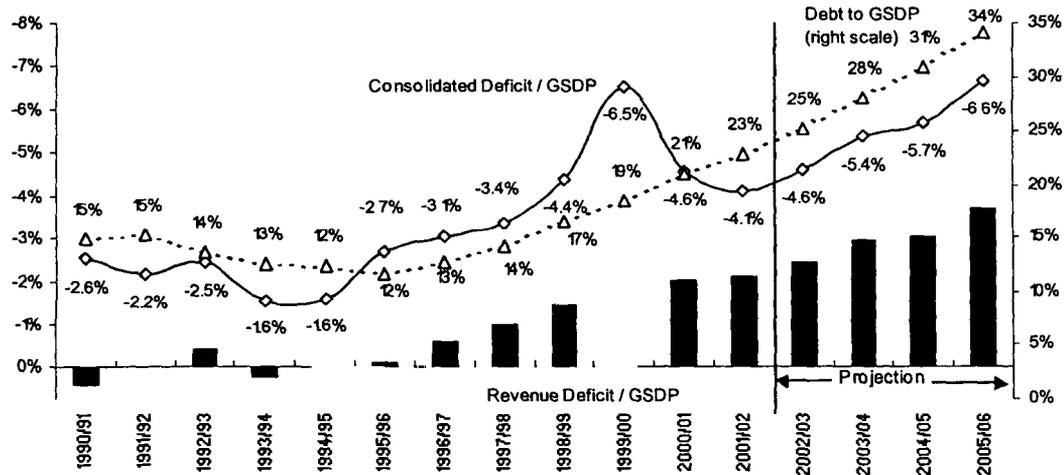
2.25 Is Maharashtra headed towards a fiscal crisis? Are its finances on an unsustainable path? Can the State plunge into insolvency in the near future? A simple answer to these questions is: in the status quo situation, Maharashtra will face a fiscal crisis. This is based on the following analysis:

A technical measure of fiscal sustainability. According to a technical definition, the amount of fiscal deficit that can be sustained, without leading to insolvency, in an intertemporal context depends on the relationship between the growth rate of the economy and the interest rate. Fiscal solvency requires that the rate of growth of nominal GSDP exceeds the nominal interest rate, a condition that Maharashtra's state finances fail to meet. While the nominal growth rate has sharply fallen during the second half of the 1990s, the average interest rate paid by GoM on its borrowings has gradually increased. So based on a purely technical definition, if GoM's state finances continue to exhibit a deteriorating trend and the growth rate does not rebound, the state may plunge into insolvency in the near future.

²³ The GoM has only recently begun to systematically compile a database on guarantees. There are some teething problems with this database and the data given to us by GoM were changed several times during the course of preparation of this Report.

A Maharashtra-specific analysis. In order to test whether the current fiscal situation is sustainable, the revenue and consolidated fiscal deficits are projected over the medium term. Assuming that GoM does not undertake any significant fiscal reforms during the next four years and the underlying revenue and expenditure items exhibit the same trends as in the past, the question is: What would happen to the revenue and consolidated fiscal deficits during the 2002-03 to 2005-06 period?²⁴ The analysis reveals an explosive time path of these deficits. The revenue deficit rises from 2.1% of GSDP at the end of 2001-02 to 3.7% by end of 2005-06. The consolidated fiscal deficit increases from 4.1% of GSDP in 2001-02 to 6.6% by the end of 2005-06 (Figure 2.7). In turn, the debt of GoM, including off-budget borrowing, more than doubles from Rs.65,250 crore in 2001-02 (debt to GSDP ratio of 23%) to Rs.149,370 crore by the end of 2005-06 (debt to GSDP ratio of 34%).

Figure 2.7: Revenue deficit and consolidated fiscal deficit under status quo



2.26 In most likelihood, GoM will not be able to cope with such a high level of debt and deficits. Even at the current levels, which appear low relative to what they could reach by 2005-06, GoM has found the going tough. The State is experiencing liquidity problems of unprecedented magnitude. The Reserve Bank's Ways and Means Advances (WMA) have been extensively used to tackle temporary cash flow problems and GoM plans to borrow to the tune of Rs.12,000 crore in 2001-02 as WMA. After breaching the limit for normal and special WMA, a State goes into overdraft (OD), which carries a higher rate of interest. OD accounts have to be liquidated within 12 working days. Maharashtra has been in OD for 118 days during the first 11 months of 2001-02, against 31 days in 2000-01 and only 7 days in 1997-98. The total amount of OD exceeded Rs.29,000 crore during 2001-02 against Rs.5,200 crore in 2000-01. According to GoM officials, a large and unsustainable liability overhang has also emerged. The treasury has been issuing post-dated cheques from revenues collected in the current year to pay for expenditures incurred in the past year. While no precise estimate of this liability overhang is available, the Finance Department put this number as high as Rs.4,000 crore at the beginning of 2002-03.²⁵ Moreover, there is evidence that market appetite to absorb GoM's own or guaranteed paper has waned, and some of its SPVs have technically defaulted

²⁴ The main assumptions underlying the projections are (for details see Appendix A): (i) real GSDP to grow at 6 percent; (ii) inflation rate is 5 percent; (iii) tax buoyancies are at their historic levels; (iv) employees of the State and the GIA institutions to grow at 2 percent and their annual increments in Basic salary will grow at 2 percent; (v) power sector and other subsidies, other recurring expenditures, to grow at an annual average of 20 percent; (vi) devolution to Urban Local Bodies grow at an annual rate of 25 percent; (vii) rate of interest on State Plan Loans, Small Savings, Market Loans, Loans from financial institutions are assumed to be 12, 11, 10, and 11.5 percent respectively; and (viii) new off-budget borrowings grow at 15 percent each year and the rate of interest is 12 percent per annum. Most of these assumptions are based on past trends or some form of weighted average of the growth rates of these variables during the last 5 to 7 years.

²⁵ There have also been news reports in recent months about teachers in certain *zilla parishad* aided primary and secondary schools and workers of various irrigation corporations not receiving their salary on time (The Times of India, April 1, 2002).

on their interest payments in recent days.²⁶ Thus, GoI and other agencies are increasingly reluctant to extend new loans or financial assistance to the State or its affiliated organizations.

VI. Issues in budget management

2.27 An effective system for budget management should be able to achieve the objectives of: (i) enforcing aggregate fiscal discipline over the medium-term by restricting budget totals to explicitly determined levels; (ii) allocating resources according to government priorities; and (iii) ensuring efficient delivery of public services. These objectives can be achieved through careful budget preparation, execution, and monitoring.

2.28 The Constitution of India provides clear responsibilities for planning, preparing, executing, and monitoring the budget of Indian states. State budgets are prepared on time and in compliance with well-entrenched financial management procedures, and public accounts are produced in a timely fashion. However, this framework is not very helpful in either promoting fiscal discipline or proper resource allocation, and the system fails to promote efficiency in public service delivery.

2.29 Reports of the Comptroller and Auditor General (CAG) of India confirm that significant inefficiencies exist in a vast number of government programs, as there is no systematic mechanism to prioritize among expenditure policies. Too many schemes/programs are chasing too few resources resulting in an unrealistic budget. Furthermore, quasi-fiscal expenditures, such as government-serviced off-budget borrowings of SPVs, are excluded from the budget. The execution of an unrealistic budget leads to problems during the course of the year, with the Finance Department having to match liquidity constraints through ad hoc cuts, or by sequencing and prioritizing expenditure on behalf of other line departments.

2.30 *Budget formulation: Problems of revenue projections and expenditure prioritization.* A common problem faced by most Indian States including Maharashtra, is that revenue forecasts for the annual budget are generally optimistic. This happens partly due to the pressure to provide adequate resources to the many competing, overestimated expenditures of the line departments, and also to enable a plan size that is bigger than the last year.²⁷ This process of formulating total revenue and total spending in the budget year inevitably leads to fiscal indiscipline.²⁸

²⁶ See Business Standard, April 18, 2002

²⁷ An *ex ante* plan size is a political statement that the government is allocating enough money for development expenditure. The final plan expenditure is another matter. Also plan size affects the amount of discretionary plan support provided by the Planning Commission.

²⁸ The Finance Department is in the process of developing a sophisticated methodology (rather than using past trend as is currently practiced) for revenue projections based on economic modeling (Annex 5 for details).

Box 2.2. Budget Preparation in Maharashtra

The annual process of budget formulation starts around September when each department submits the following information: (a) actual receipts and expenditure of the previous three years; (b) sanctioned and revised estimates (based on actuals at the time of submission) of the current year; (c) proposed estimates for the coming year; and (d) explanation for any proposed changes. The estimates are submitted by Detailed Heads (the lowest level of budget classification) organized by schemes/programs and presented on gross basis for both expenditure and revenues. Receipts are not deducted from charges.

Expenditure estimates. Expenditures are classified under several types of categories. First, they could be reported under the three divisions of the Consolidated Fund of the State – Revenue, Capital, or Debt. Second, the entire government spending has another overlay in terms of Plan and Non-plan categories. A clear distinction is also made between the programs/schemes that have been included in the previous years' budgets, and those, which are new. The expenditure estimates are submitted in two parts. Part I relates to fixed/standing charges, expenditure on continuing schemes that are not dependent on the volition of the head of the department. Part II relates to expenditure on 'new items' or items not provided for in previous years. Budget estimates for new items are required to show the recurring and non-recurring expenditures separately over a number of years.

Budget Collation. The first stage of framing the budget is preparing estimates of 'non-plan standing charges' and 'normal receipts' based on current level of expenditure and taxation rates. This part is essentially non-discretionary, committed expenditures and is compiled based on submissions by line departments on which no formal consultations are held. On the basis of these estimates, the 'standing charges budget' emerges and Finance Department takes up non-plan new items, which are settled, keeping in view their 'relative importance and urgency and resources available', by the Finance Minister in consultation with the concerned ministers. This completes the collation of the non-plan side of the budget and provides an assessment of resources available for financing the Plan expenditure. The size of the Annual Plan is decided by the Planning Department through iterative consultations with the Finance Department and Planning Commission of India and is based on the non-plan surplus and additional resource mobilization through new taxes and duties.

Budget Approval by the Legislature. After including Plan details with the Non-Plan estimates, the budget is approved by the Council of Ministers and sent to the legislature for approval. Seven days later, the general discussion on budget takes place, followed detailed discussion for each department and voting of grants. The maximum number of days allowed for discussion and voting are 18; any grants not discussed and passed by the legislature during that duration are 'guillotined, or put to vote without discussion.

2.31 In order to allocate available resources to programs that are most effective in advancing the government's priorities, a good process of budget formulation requires that: (i) the government's priorities are clearly articulated; (ii) there is a strategy to advance those priorities; (iii) there is good information about the cost and effectiveness of programs; and (iv) there is a competitive process by which more effective policies and programs are selected. From the perspective of this ideal, the process of incremental budgeting in Maharashtra, has several weaknesses: (i) There is no explicit statement of the government's development priorities to guide the budget strategy over the short or medium-term. (ii) The annual allocation process does not question the continuance of existing programs (standing charges).²⁹ Therefore, line departments have no incentive to carry out reviews of fixed sanctions, as set out in the budget rules. Programs never get dropped and the total stock grows, at times with significant overlap, causing a creeping increase in the budget allocations of the departments. (iii) There is limited competition between new programs in the budget and new programs that are approved during the year.³⁰ Furthermore, plan items are considered separately from new non-plan items. Comparison between competing programs is also difficult because: (a) criteria for comparison are not clear; (b) information, particularly on recurring costs of the new services, is often incomplete; (c) clear links between proposed expenditure and policy outcomes is not established in the proposals; and (d) the unit of comparison is the omnibus category 'new item', which includes

²⁹ The Directorate of Economics and Statistics carries out five to six evaluations of the ongoing programs at the request of the Planning Department each year. However, there is little indication that these evaluations play any role in the allocation of resources by the FD.

³⁰ New items of expenditure can be considered during the course of the year 'only if the items of expenditure are absolutely necessary or if their early implementation in the course of the year is likely to result in increasing or safeguarding revenues of the government'. The Budget Manual acknowledges that 'such proposals during the course of the year are dealt with individually and not in relation to other demands of new expenditure. There is, thus, every likelihood of an item being accepted which might have been rejected had it been considered in conjunction with the whole body of demands for new expenditure'.

both extensions/changes to an ongoing program and new policies and programs, with cost being the deciding factor.

2.32 *Budget execution: Problems of cash management and supplementary demands.* As a result of a rise in revenue expenditures and a slowdown in receipts, budget execution has been a difficult process in recent years. A mismatch in resources and expenditures early in the fiscal year is exacerbated by the large amount of supplementary demands during the year. This causes cash management to suffer; supplementary demands to rise and the number of days in overdraft with RBI to increase.

2.33 The Finance Department ensures cash availability by allowing expenditures on appropriations in stages. The first release is for the first three quarters during which the departments may spend 60% of their non-plan appropriation and 40% of their plan appropriation. However, the release has frequently not been honored and payments above Rs.50 lakh must be cleared with the Finance Department. The Department has reasonable budget information systems that provide information on actual cash expenditure and receipts, but overall cash management is poor, as it does not work with a cash management plan. The existing system manages to limit cash payments to available cash inflows but leaves the system vulnerable to sudden cuts, thereby discouraging planning of service delivery by the line departments.

2.34 Subject to some constraints, the budget rules allow re-appropriation, which is the movement of funds from one major, minor or subordinate head to another such head within the same grant/appropriation. However, when the amount included in the original grant is insufficient, irrespective of the causes, or when expenditure has to be incurred on a new service not contemplated in the budget, a supplementary grant must be obtained. In Maharashtra, supplementary demands have been historically around 18% of the initial budget estimates. However, during the years 1999-00 and 2000-01 they have risen to abnormally high levels.

2.35 Budget rules place some constraints on supplementary appropriations. They state that the government should not accept proposals unless it is convinced that the supplementary appropriation is not sanctioned, serious inconvenience will be caused to public services. There is also an indirect constraint that requires the expenditure to be unforeseen and unavoidable, for cases where supplementary demand is used to recoup advances from the Contingency Fund. Nonetheless, the existing constraints do not appear to have deterred the demand for supplementary expenditure during the past two years. An analysis of the supplementary demands for 2001-02 shows that a majority of them could have been foreseen or were not unavoidable. In 1999-00, the CAG noted that a provision of Rs.3,700 crore made in 73 supplementary grants was unnecessary and another Rs.3,100 crore was excessive.

2.36 While the principle behind supplementary demands is sound, indiscriminate use of this flexibility has led to the following consequences: (i) fiscal indiscipline, since additional expenditure is not matched by an increase in revenues or saving; (ii) weak links between budget and policy priorities, as new services included in supplementary demands do not compete with other services/programs for allocation of resources; (iii) resource uncertainty for other programs; (iv) a general atmosphere of indiscipline by creating incentives against framing initial estimates carefully and completely; and (v) a less transparent budget formulation and execution.

2.37 *Budget Monitoring: Problem of timely and accurate information on budget execution.* Timely information on budget execution, such as actual expenditure against budget provisions by line departments is important for designing an appropriate fiscal response during the course of the year. In Maharashtra, information systems for fiscal management are still largely manual and actual outturns are not known till about three weeks from the end of a month. Frequently, there are issues of reconciliation. The State has been working on computerization of the treasuries, but it is still in the early stages and will not be enough. In order to generate timely and accurate information for effective budget monitoring, the treasury sub-system needs to be integrated with a system for budget control,

which will maintain up-to-date data on budget provisions, supplementary allocations, and funds released by the Finance Department, at the level of controlling officers and below. This will allow control over transactions as they occur and timely reporting of spending and receipts against budget provisions. In the medium-term, the government should carry forward the process of computerization to other areas of fiscal management, such as payrolls, budget preparation, and cash management. A carefully costed plan that takes an integrated view of the financial management information system would be the first step towards such an extension.

2.38 The Comptroller and Auditor General of India conducts external audit of government accounts and financial transactions. The audit looks at compliance with rules and procedures rather than performance of the programs or outputs. The Finance Department require prompt attention to audit paragraphs at all stages – when Inspection Reports containing audit observations are communicated to the Departments, after audit paragraphs are included in the CAG’s audit report, and after some of them are discussed in the Public Accounts Committee (PAC) meetings. Yet, there is a general attitude of neglect and inordinate delays are not uncommon. At the end of June 2000, a total of 22,784 audit paragraphs sent in by CAG, involving irregularities of Rs.1,700 crore, were outstanding, and 2225 of these were at least ten years old. The PAC itself does not get around to discussing audit reports in a timely manner either. In November 2001, it was still discussing the audit reports for the year 1997-98.

VII. Problem recognition and reform initiatives

2.39 Maharashtra has not been slow in either understanding the nature of the problem or recognizing the corrective course of actions. However, due largely to governments’ populist agenda, corrective actions have not been implemented.

2.40 In October 1999, the fiscal problems of the State were quickly recognized by the new government. Within two months a White Paper on the State’s finances was presented and discussed in the State Legislature. The paper noted that “...Maharashtra’s finances have been showing widening imbalances, with rising revenue and fiscal deficits. This has led to mounting debt and consequently galloping interest burdens, thus feeding a vicious circle of even larger revenue and fiscal deficits because expenditures have shown no sign of containment.” It then outlined the broad actions needed to correct and reverse the fiscal imbalance. The National Institute of Public Finance and Policy (NIPFP)—engaged by the previous government to do a study of state finances—submitted its final report in September 2001. A one-man committee was then appointed to suggest ways to improve the transparency in budgetary processes (Godbole July 2001).

Box 2.3: Medium Term Fiscal Framework: Description and Experience

A Medium Term Fiscal Framework (MTFF) provides a coherent quantitative statement of a government’s three- to five-year fiscal strategy. It is a vehicle through which a government can commit to a targeted path of fiscal aggregates over the medium term in an uncertain environment, and thereby anchor expectations. In selecting a particular fiscal trajectory in its MTFF, the government should consider (i) its development priorities; (ii) the role it would play in shaping the economy; (iii) its initial fiscal position; and (iv) the existing institutional capacity and the likely improvements over the period. On this basis, the modalities and timing of major multi-year institutional reforms (fiscal management, pension, health, education, etc.) should be set. Alternative quantitative scenarios should be prepared to determine the size of cushion needed to enable the government to react flexibly to adverse cyclical developments or to deviations from assumptions used. The success of a MTFF requires wide consultations and support from all stakeholders. Therefore, in preparing the MTFF steps should be taken to ensure the program has sufficient political, bureaucratic and public support. Built-in incentive mechanisms are also needed to make sure that line departments adhere to their respective targets. In most cases, the institutional and legal backing for a MTFF is given through a fiscal responsibility law (see Box 2.4 for international experience on fiscal policy rules).

2.41 *Medium Term Fiscal Reform Program (MTFRP)*. GoM’s vision of a fiscal reform program is articulated in its MTFRP. This reform agenda has been prepared to seek assistance from the Central

Government's "State Fiscal Reforms Facility (SFRF)" (Box.3.1) and was discussed with GoI recently.³¹

2.42 The MTFRP defines a path towards fiscal sustainability and sets targets for broad fiscal indicators in the medium-term (Box 2.3). It is expected to provide stability and predictability to fiscal policy setting, and greater transparency and accountability in the budget making process. The MTFRP recommends: (i) improving efficiency in the revenue collection mechanism and processes; (ii) containing expenditure to generate budgetary surpluses; (iii) restructuring the role of the government by reducing involvement in a variety of activities; and (iv) building institutions with stakeholder participation to make the reform process durable.

2.43 To achieve fiscal sustainability over the medium term, GoM has agreed to take a number of policy and institutional reforms. Key elements of the program include:

- (i) Restructuring the Power Sector. The tariff awards given by the regulatory body (MERC) will be implemented. The budgetary subsidy, currently provided to several consumer groups, will be gradually tapered down to Rs.250 crores by 2004-05. The restructuring of MSEB will be completed by 2004-05.
- (ii) Halting Commodity Market Interventions. No commodity market intervention will be done until 2004-05, except in circumstances where intervention is consistent with the policies of the Central Government. From 2002-03, the Cotton Monopoly Procurement Scheme will be implemented in accordance with the provisions of the relevant Act, so that there is no loss and no financial burden on the state's budget.
- (iii) Reform in the Grant-in-Aid (GIA) Institutions. No new government or aided institution shall be permitted in the education sector, except primary education, until 2004-05. The non-salary grants to aided institutions (primary education) will be reduced in stages and discontinued by 2004-05. Salary grants in aided institutions (English medium secondary schools) will also be reduced starting in 2002-03 and fees will be increased, except for the targeted categories of BPL and EBC families.
- (iv) Reforming the Civil Service From April 2002, barring some essential sectors, vacant posts in the state government will not be filled, except by redeployment of persons in the Surplus Cadre Cell.
- (v) Reducing Subsidies. The existing government subsidies in public transport and public distribution of milk will be reduced by 50% of their present levels by the end of 2004-05.
- (vi) Restructuring PSUs. No new public sector units (PSU) will be established under any circumstances. All existing PSUs will be referred to the State PSU Restructuring Board for disinvestments and /or financial and managerial improvements.
- (vii) Controlling Guarantees and Co-operative Institutions. The state government will not accept any direct financial liability in setting up cooperative institutions except when the welfare of backward classes is involved. The amount of guarantees for loans to co-operatives from financial institutions during 2002-03, 2004-05, and 2004-05 will be restricted to 75, 50, and 25% respectively of the average amount of loans guaranteed during the last three years.

³¹ One of the crucial terms of reference of the Eleventh Finance Commission (EFC) was to review "the state of finances of the Union and the States and suggest ways and means by which the Governments collectively and severally may bring about a restructuring of the Public Finances so as to restore budgetary balance and maintain macro-economic stability." The EFC recommended the creation of an incentive fund, the State Fiscal Reform Facility (SFRF), and set broad parameters of fiscal correction that need to be met before an eligible State can access this incentive fund.

- (viii) Reducing off-budget borrowings: Off-budget borrowings through bonds shall be reduced in stages. By 2004-05, permission for such borrowings will be accorded only to PSUs that can pay the debt charges (interest and principal) from their own resources.
- (ix) Containing Capital Expenditures. Unless funded by external or Central assistance, no new capital expenditure projects will be undertaken before 2004-05, except those required for backlog removal or for development of tribal sub-plan areas. Projects nearing completion will get priority in the allocation of funds.
- (x) Reforming budgeting processes. The MTFRP will provide overall resource envelopes to line departments in the medium-term allowing them to prioritize competing demands over several years. The 2002-03 Budget has been prepared within the overall resource constraint provided by the program.
- (xi) Improving the capacity of the Finance Department. Actions include: (i) wider and deeper computerization of the budget process and treasury operations; (ii) creation of a “cell” within the Finance Department to monitor government debt, off-budget borrowings, and other contingent liabilities, and formulate strategies to minimize the fiscal risks arising out of these liabilities; and (iii) creation of a ‘Guarantee Redemption Fund’ to make adequate budgetary provisions for contingent liabilities.

Box 2.4: International Experience of Fiscal Policy Rules

Many developed and developing countries have resorted to different variants of Fiscal Policy Rules (FPRs) to address their fiscal problems. The list of countries with FPRs is long and increasing, and includes: Argentina, Australia, Brazil, Canada, Columbia, all members of the European Union, Indonesia, Japan, New Zealand, Switzerland and the United States. State (sub-national) governments have introduced FPRs in Argentina, Australia, Canada and the US. These FPRs have been introduced through various channels: legislature (New Zealand, UK), multi-country agreement (EU), government guidelines (Indonesia) and as part of the Constitution (Germany). While a FPR is neither a necessary nor sufficient condition to ensure prudent fiscal management, it can be a facilitator particularly in the Indian context, where governments are under tremendous pressure to spend. A few details of some of these FPRs are provided below:

Brazil's Fiscal Responsibility Law (FRL): Brazil's FRL, probably the most comprehensive and toughest in the history of FPRs, was introduced in 2000 to bring the State-level fiscal situation under control. The FRL applies to all level (Center, State, and Local Bodies) and to all branches of the government (Executive, Legislative, and Judicial). It targets debt stock, sets limit on expenditure as a percentage of current revenue, and prohibits credit operation to finance current expenditures. The FRL contains strong legal sanctions for defaulters, like fiscal sanctions, nullification, fines or penalties, impeachment and improvement. Following the FRL, there appears to have been some improvement, though it is too early to judge whether these improvements will last.

EU's Maastricht Treaty: Perhaps the most famous FPR of all, the EU's Maastricht Treaty, introduced in 1992, initiated the concept of 'convergence criteria' to gain membership into EU. The convergence criteria, among other things, included limit on gross debt to GDP ratio, fiscal deficit to GDP ratio, and inflation rate. Despite significant structural differences across many EU countries, especially in the labor market, the fiscal component of EU's Maastricht Treaty has been considered to be a success.

New Zealand's Fiscal Responsibility Act (FRA): New Zealand's FRA, the first of the modern FRA, was introduced in 1994 to restore and maintain state finances at prudent level. The FRA targets the public debt and government's net worth. It requires that a Budget Policy Statement is prepared 3 months before the Annual Budget to enumerate the Government's broad strategic priorities for the forthcoming budget, and short- and long-term fiscal objectives.

There are two lessons that emerge from international experience which are particularly relevant for India: (i) countries which established FPRs prior to fiscal adjustment taking place introduced rules which are prescriptive in nature, with quantitative and time-bound targets: in this regard, Brazil and the EU are more relevant examples for India and its states than New Zealand; (ii) when there are loopholes in the fiscal policy rules, they are exploited: this points to the need for FPRs to be comprehensive and, in the case of the Indian states, to put a cap on off-budget as well as budget liabilities.

Source: Howes and Jha (2002).

2.44 *Implementing the MTFRP.* The reform process began when GoM expressed its full commitment to implementing the reforms outlined in the MTFRP in the 2002-03 State Budget. Some important policy announcements made in the Budget include:³²

- A Fiscal Responsibility Bill, whereby citizens can force the government to follow a path of fiscal responsibility through fiscal targets, will be introduced in the legislature soon. An independent 'Fiscal Advisory Board,' will also be established to oversee the implementation of the Fiscal Responsibility Legislation and to keep both the legislature and the public informed about government finances. (See Box 2.4 for lessons of experience on fiscal policy rules.)
- Commercial enterprises in the cooperative sectors will not be given any more government guarantees; fresh guarantees will be available to PSUs only as a credit enhancement measure for loans and issues that are viable on the basis of revenue stream and user charges.
- Power sector reforms will be based on discussions on the Godbole Committee Report. Following discussions with stakeholders, workers' union, and government officials, a 'White Paper' will be published in June 2002, with particular emphasis on unbundling the SEB, privatizing distribution, and rationalizing the power tariff.
- GoM will procure cotton at the Central government's minimum support price, and also permit the Cotton Corporation of India and others to purchase cotton in the State.
- All fees and service charges levied by GoM will increase by 10% starting April 1, 2002.
- A new scheme of contributory pensions will be framed and made applicable to new recruits in government service.

VIII. Implementing the MTFRP can put Maharashtra's finances back on track

2.45 An analysis simulating the fiscal impact of the reforms programs shows that if the MTFRP is implemented as envisioned, Maharashtra's finances will return to sustainable levels.

2.46 The simulation is based on the assumption that GoM's revenue deficit will reach 0.5% of GSDP in the next 4 years, resource allocation under the MTFRP will be carried out such that expenditure on social sectors, like health and education, will be protected, capital expenditure to GSDP ratio will increase from its low level of 0.9% of GSDP to 2%, and the level of consolidated fiscal deficit of the State will be brought back to a more reasonable level (3% of GSDP). Further, the decline in the revenue and consolidated deficits will be large enough to stabilize the debt to GSDP ratio (including off-budget debt) of the State by 2005-06. And the pace of fiscal correction will be gradual, with larger correction occurring in later years.³³

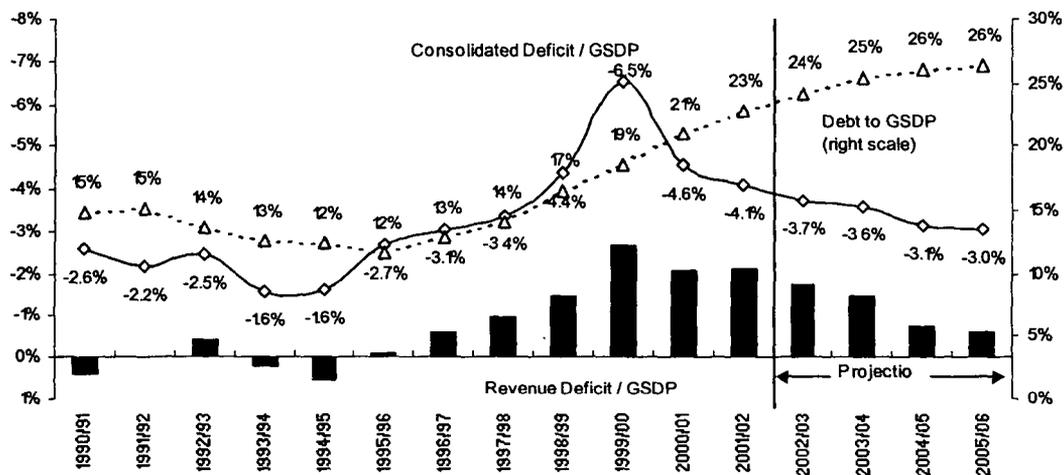
2.47 We find that, under the reform scenario, the revenue receipts to GSDP ratio is likely to be one percentage point higher under the reform scenario than under status-quo by the end of the projection period. This improvement is expected to come from improved tax administration, tax rationalization, and better compliance. The salary and pension bill as a percentage of GSDP is, however, unlikely to be significantly different between the reform and status-quo scenarios, as the MTFRP does not

³² The Speech of the Finance Minister, Government of Maharashtra, March 20th, 2002.

³³ While most of the assumptions underlying our reform scenario are consistent with the MTFRP (e.g. salary, pension, interest payments), to ensure that the reform program addresses growth and poverty issues adequately, we have made few deviations from it (e.g., allocation for capital expenditure, off-budget borrowings, and social sector spending). The report agrees with the Government of Maharashtra's stated position in its Medium Term Fiscal Reform Program that capital projects nearing completion—particularly in the irrigation sub-sector, where water storage has been done but the supporting canal systems have not been built—will get priority in the future allocation of capital expenditures. The report, however, does not make any specific recommendations as to where should the *marginal* resources on capital spending be allocated. In order to make such recommendations, one needs to examine the efficacy of capital expenditures across sectors and projects. This report, by design to ensure focused coverage, only looked at a subset of sectors and therefore can not address that issue. The report, however, does show that Maharashtra, like many other states, has been borrowing to finance current consumption and in the process has crowded out capital spending. In view of the existing poor (physical and social) infrastructure in Maharashtra the report takes the view that at the macro level, reviving capital spending—be it in power, roads, irrigation or health—is better than spending on current consumption items.

propose any significant restructuring of its civil services. Off-budget borrowings are expected to decline sharply under the reform scenario.

Figure 2.8: Revenue and consolidated fiscal deficits, and debt under the reform scenario (as % of GSDP)



2.48 The potential improvements in tax collections and compression of current expenditures generated by implementing the MTFRP would bring GoM's revenue deficit to 0.6% of GSDP by the end of 2005-06. More importantly, the consolidated fiscal deficit would fall to about 3% of GSDP (compared to 6.6% in the status quo scenario) and GoM's debt (including off-budget debt stock) to GSDP ratio will stabilize around 26% (Figure 2.8).

IX. Ways to make the MTFRP more effective

2.49 The reform initiatives outlined in the MTFRP are comprehensive and could bring an end to the recent fiscal deterioration in Maharashtra. Efficiency and equity of public spending will be enhanced and the citizens of Maharashtra will get more value for their money. However, if the recent experience of Maharashtra is any guide, the implementation of the reform agenda remains a big challenge!

2.50 *Technical Merits of the MTFRP -- An Assessment:* The MTFRP agenda is quite impressive. However, it will need political backing and bureaucratic support if it is to become a useful tool for addressing GoM's fiscal problems. In recent years, Maharashtra's politicians have not been able to take a tough stand against fiscally damaging populist policies.³⁴ Therefore, it remains to be seen if the government will be able to take the actions necessary for improving its fiscal health. The MTFRP has a well thought-out agenda and the program has been technically well formulated. This sub-section addresses a few ways that could enhance the program's operationalization.

(i) **Fiscal Responsibility Bill (FRB):** One way of demonstrating political commitment to reform is to introduce and pass a Bill in the State Legislature that will help legislate the targets proposed in the MTFRP. In the March 2002 Budget Speech, the Finance Minister announced that the government intends to introduce a Fiscal Responsibility Bill in the legislature. In view of the deteriorating financial situation, we would propose that a draft FRB be soon prepared and put forward for public consultations. The Bill should then be passed in the legislature and its implementation should begin with right earnest.

³⁴ Continuation of the loss-making populist Cotton Monopolist Scheme is one of several examples. See Chapter 3 for details.

(ii) **MTFRP ownership:** The success of the MTFRP crucially depends on whether the sectoral departments and other agencies feel that the reform program belongs to them as much as it belongs to the Finance Department. To facilitate ownership of the program, its cost and benefit should be discussed across all departments and agencies. The MTFRP will provide stability and predictability to the sectoral department budgets, as they will know their current year budget and for the next three years. The sectoral departments should also be allowed to identify, retain, and carryover savings made in one year to the next year. The budget envelopes of the sectoral departments needs to be determined through extensive consultations, rather than by a unilateral decision of the finance department. The next important step should be the preparation of sectoral or departmental MTFRPs, as is being done in other reforming States.

(iii) **Review of off-budget borrowings:** One way to bring off-budget borrowings to a sustainable level and to ensure proper utilization of funds is to strengthen the effectiveness of the High Level Committee of Secretaries (HLCS). To this end, the following actions could be taken:

- The HLCS could seek written inputs from all public bodies, including government departments, that would like to undertake off-budget borrowings. Prior to making its recommendations to the Cabinet, it could examine the medium-term fiscal costs of the proposals and their consistency with the MTFRP and the government's strategic policy priorities. The MTFRP has a cap on OBBs and one of the primary responsibilities of the HLCS should be to ensure that this cap is not breached.
- All public bodies seeking government guarantee could be 'pre-vetted' with a reputable credit rating agency and obtain 'in principle' rating under the following two scenarios—with government guarantees and without government guarantees. Both of these ratings could be placed before the HLCS.
- The HLCS could use the difference between the two ratings to fix the 'guarantee fee' for the concerned entity and advise the Cabinet regarding the suitability of allowing it to borrow from the market. A floor rating should be identified and entities who are rated below this floor rating without government guarantees should not be allowed to approach the market.
- Along with the dual ratings, the HLCS could also review requesting agency's past performance and recommend borrowings on the condition that there is increased internal efficiency and better financial management.

(iv) **Government guarantees:** To minimize the government's fiscal risk arising from future contingent liabilities, borrowings with Guarantees should be subject to as much scrutiny and control as other borrowings done by the government. The recent policy announcement, made in the March 2002 Budget Speech, that only commercial enterprises in the cooperative sectors will be denied government guarantees, while a step in right direction, does not adequately address the problem of spiraling State Guarantees. We propose that GoM should announce an aggregate cap on government guarantees rather than setting sectoral caps. The experience from other States may be helpful in this regard.

(v) **Potential fiscal risks:** The MTFRP does not make provisions for potential fiscal risks. Many of these risks, like temporary revenue slowdowns due to the introduction of the VAT, increases in power sector deficit due to the Enron imbroglio, slowdowns in economic growth, and so on, are likely to materialize during the life of the MTFRP. Explicit provisions for such risks in the MTFRP would give credence to the various fiscal targets it projects.

(vi) **Budget formulation.** The MTFRP does not address the weak link between the Budget and the Plan. This link is crucial to ensure that expenditures, as reflected in the Budget, are based on government priorities, which are usually outlined in the Plan document. The budget allocation processes do not ensure that funds are reallocated from less effective to more effective programs. In fact, enough information is often not available on effectiveness of the programs in meeting the

developmental goals. While the Department of Economics and Statistics undertakes evaluation studies of selected schemes/programs, these are not used for budget allocation purposes, and programs or schemes are rarely closed. GoM may want to consider the following options to improve the efficiency and effectiveness of government spending.

- A paper on the budget could be prepared a month before the launch of the budget preparation for the next year articulating GoM's budget priorities for the next year and in the medium-term and identifying new policies that will be implemented in the next budget year.³⁵ The priorities paper should be approved by the Cabinet and could be shared with the legislature.
- To start the budget preparation process, the budget circular could be used to provide guidance to the departments about economic assumptions underlying the MTFRP, and on issues such as, (i) identifying priority areas where efforts toward achieving higher efficiency are indicated, such as completing ongoing capital works and sequencing expenditure on major projects to minimize time and cost overruns; (ii) identifying priority areas where that would not bear the brunt of an expenditure cut, such as allocations for maintenance of infrastructure facilities; and (iii) planning for fall back measures in the event of revenue shortfalls.
- A one-off review of programs in major departments could be undertaken to weed out non-performing programs and rationalize the overlapping ones. This process would also help merge similar schemes running in parallel, thereby saving resources. Karnataka has recently undertaken a similar exercise.

(vii) Restrictions on Supplementary Demands: Supplementary demands provide the required flexibility during budget execution for meeting unforeseeable expenditures and minor reallocations. But unconstrained and indiscriminate use of this flexibility could lead to fiscal indiscipline, can undermine the link between budget and policy planning and make the budget formulation and execution process less transparent. The following restrictions on supplementary demands could be considered: (i) as a general rule, increase in original grant should be matched by savings or additional revenue, so that supplementary demands would not affect the overall fiscal targets set out in the MTFRP; (ii) the department seeking supplementary demand should explicitly list the reasons for seeking an increase and why this expenditure was not anticipated at the beginning of the year; (iii) as a general rule, no new services/schemes should be allowed during the course of the year, even through re-appropriation of savings, with exception to state or national emergencies and natural disasters.

(viii) Monitoring and reporting on the progress of MTFRP: One of the objectives of the MTFRP is 'high quality monitoring and transparency in reporting.' This objective could be achieved by strengthening internal monitoring of targeted fiscal variables and providing transparent and credible information to stakeholders, such as the legislature, the central government, potential investors, and civil society. A key step in monitoring would be to develop a benchmark in terms of several fiscal aggregates, including flow variables such as consolidated deficit, and stock variables, such as debt and contingent liabilities. Monitoring would be facilitated by producing a reference document at the time the budget is presented before the legislature, as suggested by the Godbole Committee. The Government has already implemented some of the recommendations of the Committee such as producing a 'Budget in brief', and 'Budget at a glance'. The reference document referred to as 'Finances of Government of Maharashtra – Some Significant Pointers' (FOGOMSSP), by the

³⁵ This could be based on a vision plan that articulates the long-run political agenda of the government. For example, in the UK The Code of Fiscal Stability requires that the government publish a pre-budget report three months prior to the budget. This would also be the time to update the medium term fiscal plan. An update of the medium term plan will provide the affordable total expenditure in the coming year and economic assumptions that the departments may use in developing their estimates.

Committee, could provide information on debt stock, contingent liabilities, off-budget transactions, and so forth along with the movement of various variables during the past years.

- Transparency and Legislative Oversight: As a measure towards improving transparency and legislative oversight, the Government could put the Budget Estimates and supplementary demands before the Estimates Committee of the Legislative Assembly. While the Maharashtra Legislative Assembly rules (206-208) allow such a committee 'to scrutinize the budget estimate of expenditure...and tender advice so as to ensure that Government's objectives are carried out in the most economical and efficient manner', in practice, this has not been used. If the Government decides upon scrutiny by the Estimates Committee, it will need to provide enough time and resources to the Committee to do the job.
- Monthly Reporting: The Godbole Committee suggests a quarterly reporting on budgetary trends. This would be an essential instrument for sharing information with the interested stakeholders. Karnataka reports similar data on the web on a monthly basis. Monthly publication of budgetary trends by the Treasuries and Accounts department should be introduced.
- Client Surveys: The Government could commission client surveys through NGOs to tap into user experiences and preferences for a few departments with important service-delivery functions. The reports of such client surveys should be made public.Public Accounts Committee (PAC): GoM along with the CAG and the legislature should explore ways to make the PAC more effective. Publishing government's responses to the audit report would allow the PAC to discuss the latest audit report rather than discussing them in sequence. The Government should reinforce the disincentives for replying to audit paragraphs through fixing personal responsibilities and other actions.

Chapter 3

Improving Maharashtra's Own Revenue Performance

3.1 Maharashtra's revenue collections have stagnated over the past two decades. As discussed in Chapter 2, this has contributed to the sharp deterioration in the State's fiscal condition, particularly since 1994-95. Being one of the richest states in India, Maharashtra has limited prospects for increased Central funds transfers to ease the fiscal strain. (See Box 3.1 on sub-national transfers.) Improved own revenue performance is, therefore, the only viable course of action. In this chapter, the structure of Maharashtra's own revenues and its administration are described and their performance reviewed. Suggestions are then made for strengthening the revenue structure and administrative effectiveness and efficiency.

State Taxes in India

3.2 A prerequisite to assess the revenue performance of Maharashtra is to have an understanding of the system of state taxes in India (Box 3.1). The power of Indian states to levy taxes, excises, duties, fees or royalties are specified in the Seventh Schedule of the Indian Constitution. Residuary powers to tax items not specified in the state list or concurrent list in the Seventh Schedule lie with the Centre and there are several federal constraints impacting the tax systems in Indian States. Under these provisions, states can collect revenue on land and buildings; succession in the case of agricultural land and on agricultural income; mineral rights; alcohol and narcotic substances; entry of goods into a local area for consumption or sale; electricity consumption or sale; sale of goods; motor vehicles, boats, transport of goods or passengers, and road or inland waterway tolls; professions tax (professions, trades, callings or employment); luxuries, entertainment and gambling; and stamp duties and registration fees on documents.

Box 3.1. Sub-national fiscal transfers in India

Under the Constitution of India, divisions of powers and functions among different levels of government are asymmetrical, with pronounced concentration of revenue raising powers in the Center while States are entrusted with functional responsibilities that entail larger expenditures than they can meet out of their own resources. Anticipating the inadequacy of the State's own revenues to meet their expenditure requirements and the need for sub-national fiscal transfers from the Center, the Constitution has a provision for the creation of an independent panel—the Finance Commission (FC). Appointed for a period of five years, the Commission's function is to ensure orderly and judicious devolution deemed necessary, while avoiding fiscal imbalances at the Center and in the States, simultaneously maintaining a measure of autonomy for the States in the discharge of their responsibilities.

Transfers mediated by the FC, known as statutory transfers, are made up of tax devolution and grants-in-aid. A state's share in central taxes is decided on the basis of a formula which is based on a weighted index of indicators including population, poverty ratio, tax effort, fiscal discipline, index of backwardness, and the geographical area of the state. The formula is revised, as deemed necessary, every five years by the successive FCs. In recent years, many reforming states, which also happen to be relatively wealthier, have started to express concerns about the disproportionate emphasis on equity rather than efficiency indicators in deciding on the level of transfers to states. The grants-in-aid recommended by the FCs are based on FC's own assessment of the revenue gap of each State.

State Fiscal Reform Facility. Created on the recommendation of the Eleventh Finance Commission, this fund provides incentives for States undertaking fiscal reforms. The reforms include deficit targets, formulation of a medium-term fiscal restructuring policy, and other sectoral reforms. The facility is funded from two sources: resources withheld from grants to states and contributions by the central government. The first part comprises 15% of the withheld part of the grants recommended to cover the deficit on non-plan revenue account. The withheld amount is released on the basis of a state's performance. The second part is equivalent to 15% of the revenue deficit grants recommended by the EFC. The total corpus of the SFRP has been pegged at Rs. 10, 608 crore.

3.3 There are several federal constraints impacting the tax systems in Indian States. While the States have power to tax sales of goods, they have only limited power to tax services. Consequently, though some services, listed above, are taxed by states, this prevents states from levying a broad-based VAT on goods and services. The Central Sales Tax Act, which provides for Centrally set tax rates on inter-state sales and on goods declared to be of national importance ("declared goods"), the

Center's power to collect "additional excise duties" in lieu of sales taxes on sugar, textiles and tobacco, constitutional ceiling on the professions tax under Article 276, and centrally set rates of mineral royalties on major minerals, have limited the maneuverability of State governments on tax matters and prevented the introduction of a uniform, destination based, VAT.³⁶

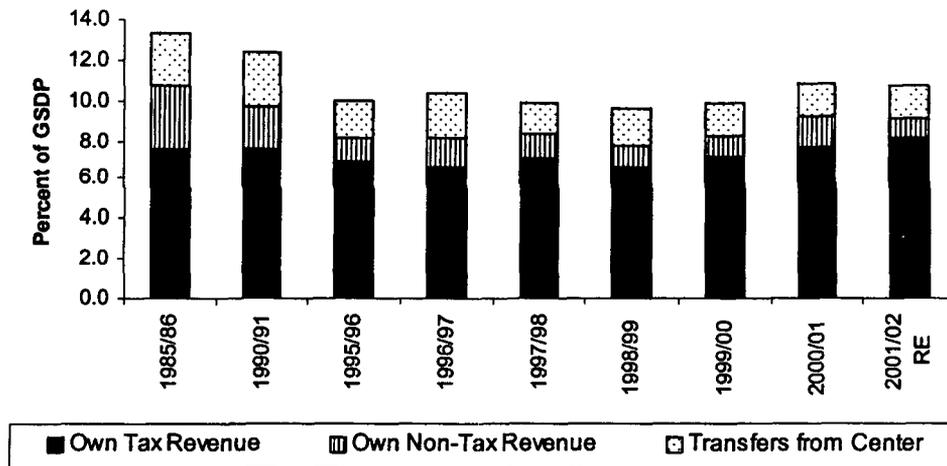
3.4 In practice, this has resulted in most States having four major tax sources (sales tax, state excises on alcohol, stamp duties and registration fees and motor vehicles, goods and passenger taxes), several smaller levies and non-tax revenues. The latter include mineral and forest royalties, fines, and fees or user charges for publicly provided goods and services.

I. Maharashtra's revenues: Trends in size and composition

3.5 All components of Maharashtra's revenues—own-tax revenues, shared taxes (i.e., transfers from Center), own non-tax revenues and grants— as a percentage of GSDP have, exhibited a declining trend since mid 1980s (Figure 3.1). The total revenue to GSDP ratio declined from 13.2% in 1985-86 to a low of 9.6% in 1998-99, before increasing modestly in 1999-00 and 2000-01. While own revenue to GSDP ratio has declined from a peak of 14.6 % of GSDP in 1986-87 to under 10.5% in recent years, the fall in non-tax revenue has been particularly dramatic—from 3.3% of GSDP in 1986-87 to less than 1.4% in the last couple of years.³⁷ Maharashtra's own-tax to GSDP ratio has been declining steadily by around 2% annually since 1986-87, while the own non-tax revenue to GSDP ratio has fallen by almost 5% annually. The last couple of years has shown a reversal in the trend, particularly in the own tax revenue category, due to the introduction of floor rates on sales tax.

3.6 *Size and composition of own revenue.* The structure of Maharashtra's own taxes in relation to GSDP is shown in Figure 3.2. The figure shows that revenue from sales tax, excise and stamp duties account for the bulk of own revenue. After reaching its lowest level of 6.6% of GSDP in 1996-97, collection of own tax revenue has moderately increased in recent years. Much of this recent increase is on account of an increase in sales tax, stamp duty revenues, and increase collection of professional taxes.

Figure 3.1: Composition of Maharashtra's Revenues

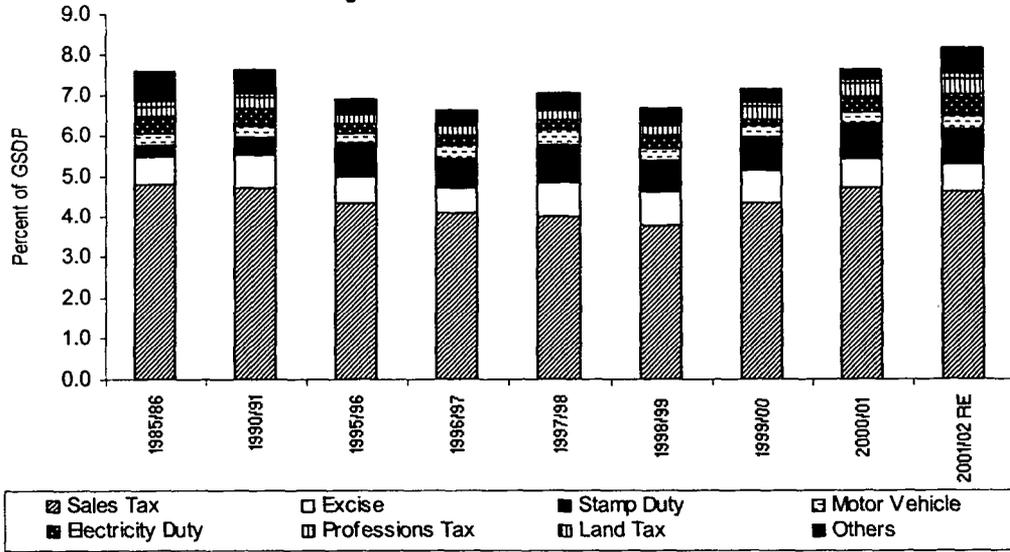


Note: Own non-tax revenues exclude interest receipts from irrigation (contra entry)

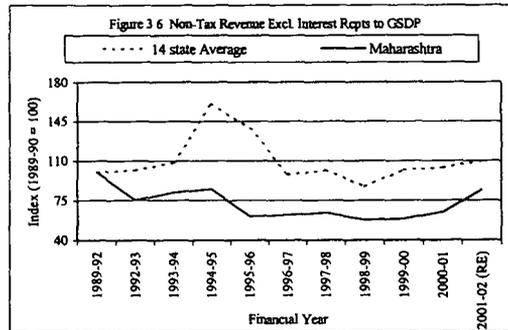
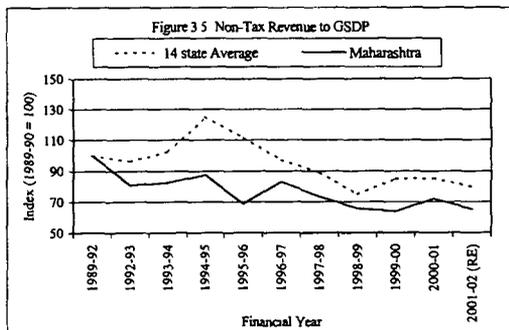
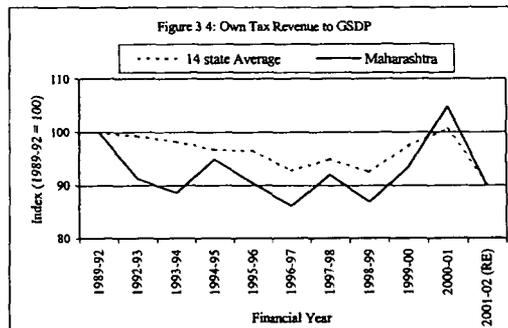
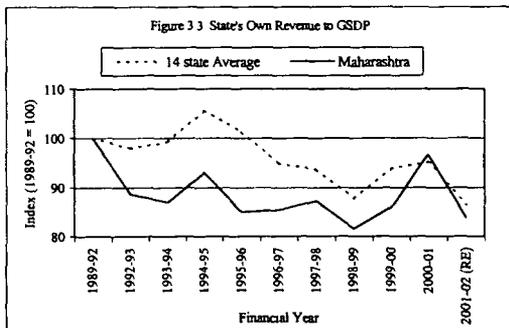
³⁶ Fortunately, many of these restrictions are under review and additional taxation powers for states are being proposed in the current Central Finance Bill, due to be passed by Parliament

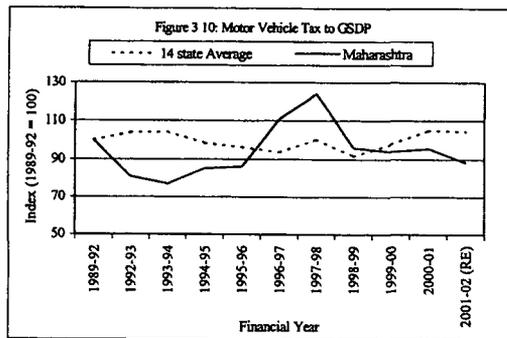
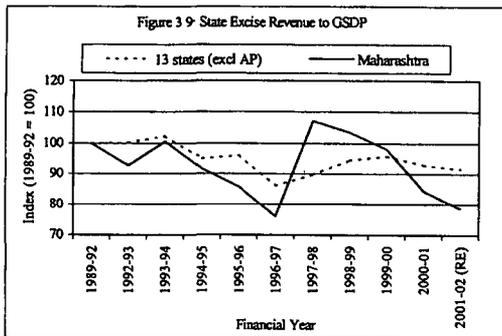
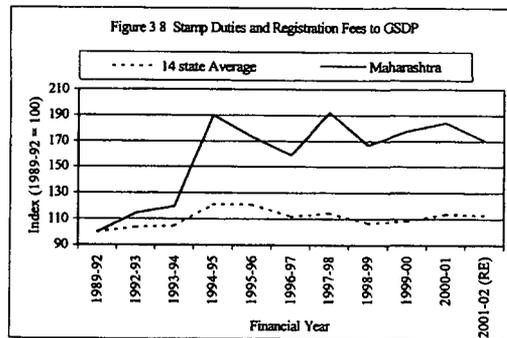
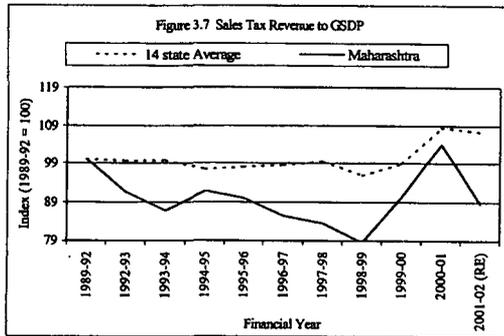
³⁷ This has also been pointed out by the NIPFP Study of Maharashtra's Finances, September 2001), which singled out cost recovery in economic services as the main reason for the decline in non-tax revenue.

Figure 3.2: State's Own Tax Revenue



3.7 *Comparison with Other Indian States:* Maharashtra's tax performance relative to other major states is depicted in Figures 3.3-3.10. These figures suggest that Maharashtra's revenue performance has deteriorated during the past two decades even relative to other major Indian states. The sole exception to this is collections from Stamp Duties and Registration Fees (S&R). A boom in housing demand supported by attractive housing loans and tax exemptions explains the high recent S&R buoyancy. Moreover financial institutions, which now dominate housing finance, insist on registered documentation, which leads to more realistic property valuation.





3.8 Explaining revenue performance: The poor performance of other taxes is due to large exemptions (sales taxes), tax evasion (sales taxes), and low specific tax rates coupled with poor base growth (motor vehicles). Maharashtra's own revenue decline has been matched by declining central tax devolution and grants relative to its GSDP.³⁸ There was a sharp deterioration in own revenues in 2001-02, even in nominal terms, primarily due to the poor revenue realization from the sales tax, the major own revenue source of Indian states. While specific reasons for the decline in 2001-02 include recessionary conditions in Maharashtra and India as a whole, the long-term secular decline has been much more pronounced in Maharashtra than in other major states.

3.9 The tax base in Indian states is narrow due to the inability of states to tax agriculture and services. Tax concessions erode as much as 10% of this narrow tax base and contribute to reduced buoyancy. In several instances, inability to raise tax rates is due to their being determined by the Government of India. Large scale tax evasion due to administration problems and, in certain cases, weak legislation, further reduces tax collections. While increasing taxation of agriculture may not be feasible in the near term, current policy trends makes it likely that states will be given the power to levy a broad-based tax on services in the near future. Poor cost recovery for publicly provided goods and services and poor returns on public loans and investments are the major causes of declining non-tax revenues.

³⁸ Buoyancies in Maharashtra show a great deal of variability as shown in Table A3.3. Consequently, though the EFC's estimates of the tax effort of states are presented in Annex 1 Table A1, these should be treated with caution as they are sensitive to the selected base year. Recent buoyancies, computed for the 1990-2001 period, using ARMA models where required, are: Stamp Duties and Registration Fees: 0.965, Professions tax: 1.097, Sales tax: 0.912; State Excise Duties: 0.858, Motor Vehicles Tax: 0.865. The overall buoyancies of states own tax revenue and non-tax revenue are 0.928 and 0.722 respectively.

II. Maharashtra's Revenue Structure

A. Tax revenue

3.10 Maharashtra's main tax instruments, their revenue shares and bases are given in Table 3.1.

Table 3.1: Maharashtra's own tax revenues

State tax	Share of state's own tax	Levied on
Bombay and Central sales taxes (BCST) and surcharges	Sales tax is about 62% of own taxes (BCST accounts for 88% of total sales tax)	BCST is levied at the first point of manufacture or import except for selected commodities like alcoholic beverages where it is a multi-point levy. A partial set-off (or rebate) of Bombay sales tax in excess of 3% is allowed on inputs to manufacturers or dealers selling goods locally, while out of state sales are entitled to a full rebate of Bombay sales tax on inputs ^[1]
Professions tax	4%	The tax is levied on salary earners, self employed and business persons at graduated specific rates, with a Constitutional ceiling of Rs.2500 per year. Ceilings in Maharashtra are reached at incomes of Rs.1.2 lakh (salary earners) and Rs 2 lakh (non-salaried).
Stamp duties and registration fees	10%	Registration fees are essentially for establishing legal title to property and recognition of contracts, including marriage licenses and wills. Stamp duties are basically a wealth transfer tax on the transferor, though there is some blurring of the distinction between a fee for legal recognition and a tax since unstamped documents are not recognized in certain legal proceedings (although a large list of instruments are subject to stamp duty, 90% or more of cases are for transfers of property)
State Excise duties	10%	State excise duties are levied on the production of alcohol and other narcotic substances and via license fees for permits for liquor wholesale and retailing.
Motor Vehicles Tax	About 6%	Motor vehicles taxes are levied quarterly or annually at specific rates linked to vehicle capacity. However, small privately owned, vehicles, pay an ad valorem purchase tax instead.

[1] Instead of a set-off, dealers may elect to purchase inputs paying a lower net tax rate against declarations. This subtraction method of allowing concessional tax on inputs is difficult for the administration to monitor. Were the sales tax not due to be replaced by the VAT in a few months, removal of this provision would have been worthwhile.

Sales taxes

3.11 Sales tax is the most important source of revenue for Maharashtra (Table 3.1). Several different taxes are levied by the Sales Tax Department. Taxes on sales or purchases include the Bombay Sales Tax on local sales, the Central Sales Tax on inter-state sales, special sales taxes on leases and goods used in works contracts, a luxury tax on hotels and tobacco, an entry tax on motor vehicles purchased from other states, a sales tax on motor spirits and a purchase tax on sugarcane. However, the bulk of revenue (88%) is from the Bombay and Central sales taxes and surcharges.

3.12 There are eight ad valorem Bombay sales tax rates (0, 2, 4, 8, 10, 12, 13 and 20 percent). Most commodities are taxed at 13% and 10%. The average tax rate on non-exempt commodities in 1998-99, the latest year for which data are available, was 8.17%. Small dealers may pay a presumptive turnover levy in lieu of sales tax at 1% of turnover. There is also a 10% surcharge levied on dealers with turnover greater than Rs 1 lakh.

3.13 The major exemptions are by way of zero rating (41 groups of commodities), exemptions under Section 41 of the Bombay sales tax, and via the package scheme of industrial incentives for industrial location in specified backward areas. Package scheme incentives were granted either as an outright tax holiday or as an interest free 10 year deferral. Estimates of revenue sacrifice due to zero rated goods are not available. For Section 41 exemptions and package scheme incentives, estimates are available for 2000-01. The revenue sacrifice from exemptions and package scheme incentives is estimated at Rs 835.7 crore and Rs 2166.7 crore respectively, together amounting to 24.6% of sales

tax collections.³⁹ While the package scheme of incentives has been discontinued following an all-state consensus, revenue sacrifice from concessions to existing industries will continue to 2008-09, falling gradually to Rs 560 crore as concession periods end for different units. The impact of tax incentives on the actual pace of industrialization is open to question with some commentators claiming that incentives exceed, in many cases, the quantum of investment made.⁴⁰

Box 3.2: VAT design⁴¹

The sales tax is slated to be replaced by the VAT on April 1, 2003 in all major Indian states. The exact VAT design is still uncertain given that the Centre has yet to decide on outstanding issues including those relating to taxation of services, declared goods and additional excise duty (AED) goods. However, rates of tax (0, 1, 4% a basic, state specific, "revenue neutral rate" and a 20% floor rate on alcoholic beverages) have been fixed as have commodities that are to be taxed at these rates. Among outstanding issues at the state level are integration of minor levies like the turnover tax, surcharge, the luxury tax (except on tobacco, an AED good), the tax on motor spirits and the system of rebates if the sugarcane purchase tax continues. An additional issue is the desirability of integrating taxation on alcoholic beverages with the VAT, keeping them outside the VAT or having dual state excise duties and VAT, as at present. Expanding the entry tax on all imports from other states and of the Centre permitting state VAT levies on international imports also needs resolution. Important transitional issues, the registration threshold and the revenue neutral rate also remain unresolved. The GoM is aware of these issues and is working to resolve them.

Professions tax

3.14 Though it contributes only 4% of own taxes, the professions tax, collected by the Sales Tax Department, is the major direct tax levied by several states including Maharashtra. The professions tax is also the one broad-based levy on service providers available to states and is likely to facilitate a smooth transition to a comprehensive VAT on goods and services if it becomes a reality. The tax has considerable revenue scope. Since the profession tax is allowed as a deduction from the central income tax, any increase in the profession tax results partly in reduced shared taxes. Given Maharashtra's 4.6% share of shared central taxes recommended by the Eleventh Finance Commission, and the 29% share of states in central shareable taxes, Rs 100 of professions tax will result, even at a marginal income tax rate of 30%, in a loss of shared revenue of Rs. 0.40, resulting in a net gain of Rs 99.60 to the government at the cost of a net increase in the taxpayer's total tax burden of Rs 70. Consequently when the tax ceiling is raised to Rs 7200, as announced by the Government of India, across the board tripling of Maharashtra's professions tax rates would be a prudent step.

Stamp duties and registration fees (S&R)

3.15 S&R is governed by central acts with variations that are incorporated in local acts in different states. There are Central, State and concurrent rate setting powers for different classes of documents. Registration fees are fees paid, in principle, for establishing legal title to property and recognition of contracts, including marriage licenses and wills. However, the current Registration Act only covers the registration of documents and not of property title *per se*, a serious weakness with regard to the recognition of property rights. The current list of registerable documents is long and contains several redundant items, and the rate structure should be updated to at least reflect departmental costs. Stamp duties, on the other hand, are basically a wealth transfer tax on the transferor. However, there is some blurring of the distinction between a fee for legal recognition and a tax since unstamped documents are not recognized in certain legal proceedings. Though there is a large list of instruments subject to stamp duty, 90% or more of stamp duty is on transfers of property ("conveyances and property transfers").

³⁹ The estimate of revenue foregone due to Section 41 incentives is by Ishita Gupta, IGIDR. Package scheme revenue loss figures are from the Maharashtra Sales Tax Department. Details are in Annex 3, Tables A2-A4. An estimate of package scheme revenue cost for the period 1988-89 to 1998-99 is in the NIPFP Study (2001).

⁴⁰ Moreover, a recent study of the impact of industrial incentives in Madhya Pradesh concludes that "...tax concessions have had a statistically insignificant impact on large and medium investment in the state." See "Fiscal Industrial Incentives of the Government of Madhya Pradesh: Costs and Benefits", New Delhi: NIPFP, 1999.

⁴¹ Maharashtra briefly flirted, between 1995 and 1999 with a largely subtraction type VAT. Due to several design infirmities, the state reverted to a single point VAT in 1999, though partial set-off continues. See (a) Chelliah and Rao (1999), and (b) Report of the Expert Group to Review Value Added Tax in Maharashtra, 2000.

3.16 The general rate of stamp duty on commercial property sales is 10% of the property value. Furthermore, as many as 8 rates prevail for different areas, a situation that can be easily rationalized. For residential properties, the current progressive rate schedule with 5 slabs (0.5% to 8%) should be replaced by a single proportional rate equal to that the rate on commercial properties. In the opinion of the S&R Department and from the experience of some other states, a 10% rate of stamp duty is unduly high, leading to extensive non-registration or under-valuation. They estimate that nearly 70% of documents are undervalued by around 20%. Additionally, low duty rates on gifts, sales via General Power of Attorney, and transfers within co-operative housing societies lead to revenue loss. Lease deeds are also undervalued due to high local property tax levies.⁴² The concessional S&R rate for housing co-operatives is a major channel of tax avoidance for residential sales. Despite the low rates many transactions do not get registered. Revenue loss due to concessional rates is likely to be substantial but no formal estimates have been prepared.⁴³ The S&R department is attempting to curb non-registration via meetings with officers of the department of co-operation to educate them about the importance of registration and to elicit their cooperation in closing this loophole. Since Maharashtra has a policy of promoting cooperatives, immediate withdrawal of concessional stamp duties is not on the agenda, but withdrawal of concessional rates for registration are under consideration.

State excise duties

3.17 Alcohol is a commodity with considerable revenue potential, and Maharashtra is the largest producer of alcohol in the country. In addition to its current uses, alcohol will soon be used as supplementary motor fuel. Future demand for this is estimated at 400 million litres, compared to present alcohol production of around 30 million litres.

3.18 State excise duties are levied on the production of alcohol and other narcotic substances and via license fees for liquor wholesale and retailing permits. Around 32% of excises on sales are from "country liquor" and 68% from IMFL ("Indian Made Foreign Liquor"), wine and beer. Fines and fees contribute 10%. Tax rates are specified "per proof litre" or "per bulk litre" and vary in proportion to the manufacturing cost declared by the manufacturer. Since the Maximum Retail Price (MRP) is administratively fixed at 200 percent (beer and wine) or 400 percent (spirits) of the declared manufacturing price, this is an "ad valorem excise" tax. However, for each category, specific floor rates exist. Even here, a permanent government order permits floor rates to be revised by up to 10% per year without further legislative approval.⁴⁴ There are separate tax regimes for liquor exports and imports leading to a problem of tax evasion through mis-declaration of origin or destination. These separate regimes should be removed. License fees for liquor retail and wholesale outlets are set by the Excise Department on the basis of demand estimates.

3.19 Despite ad valorem taxation leading to substantial revenue gains on introduction, the trend in excise collections has been downward. *Unit* realizations have fallen by between 18% (beer) and 33% (country liquor) since 1997-98 according to Excise Department data. There has also been limited growth of beer sales.

The motor vehicles tax

3.20 There is both a Central and a State Motor Vehicles Act governing motor vehicle regulation and taxation and associated rules for both. The revenue implications of the Central Act are minor, with the Act setting uniform fees for transport department services like issuance of licenses and

⁴² These problems have been documented in several earlier studies, and are also the subject of recommendations by an all-state expert committee, which has drafted revised stamp duty legislation.

⁴³ For other documents, the electronic, 'De-mat process' of share transfers has resulted in revenue loss, which is estimated to be approximately Rs.50 crore by the Department. However, this is possibly inevitable given the government's policy of encouraging e-commerce.

⁴⁴ A government committee (the Makhija Committee) has been appointed to look, inter alia, at the question of revising the basis and rates of excise duty on liquor

permits. The major revenue raising powers are in the state Acts. Broadly speaking, motor vehicles taxes are levied quarterly or annually at specific rates linked to vehicle capacity. However, small privately owned, vehicles, pay an ad valorem purchase tax instead. Specific rates, except on trucks, were last revised in 2001. Nevertheless, there is scope for further revision to improve revenue collections exists.

3.21 In the case of commercial vehicles registered in other states a system of bilateral taxation agreements exists that supersede local tax provisions in the Motor Vehicles Taxation Act. There is also a scheme of National Permits for which different states have their own issuing rules and procedures, though out-of-state National Permit vehicles have rates set. The rate structure and tax basis for inter-state vehicles can be rationalized as is being considered in some other states.⁴⁵

3.22 The motor vehicles tax contributes far less tax as a proportion of GSDP than it does in some other states.⁴⁶ Besides rate problems, lack of adequate collection from state road transport undertakings is one cause of low buoyancy. A second cause is limited on road manpower to check illegal and clandestine operations and limited supervision of road inspectors generally.

3.23 Both these problems arise from the existing regulation and control of vehicle and route permits that lead to regulatory inefficiency and revenue problems. Passenger and goods transport vehicles must obtain permits to ply on specific routes, which tend to be difficult to enforce. For buses, regulatory restrictions are designed to protect the Maharashtra State Road Transport Corporation (MSRTC). Except for inter-state services, bus passenger routes in the state are reserved for MSRTC. Within city "stage carriage" bus routes are also a public sector monopoly. Enforcement of these monopolies is extremely difficult on long distance routes, especially for violations by relatively nimble smaller vehicles, given the limited number of mobile ("flying") squads (38) with the Department. To improve motor vehicles tax collection and, more generally, to improve the position of road transportation services, a thorough re-examination of the functioning of state provided public transport services is required.

3.24 The second issue is that of equity versus environmental effects of older vehicles. In Maharashtra, only old light goods vehicles pay additional taxes. Given the pollution costs of older vehicles, further broad basing of taxes on older vehicles should be explored.

3.25 Third, Centrally set fee rates for services provided by Road Transport Offices (RTOs) have recently been revised, these are still priced low. Coupled with largely manual services, economic rent margins are exploited by armies of touts at every RTO. As in, for example, Andhra Pradesh, enhanced fees for speedy, automated, services (while retaining basic service charges) should be explored once further computerization is introduced.

Tax structure: An evaluation

3.26 The tax structure, as it exists, consists of multiple indirect and cascading levies. Furthermore, with a mixture of specific and ad valorem rates, multiple rates of tax, and cascading, effective tax rates on different production sectors and consumer goods are nearly impossible to estimate. What is certain is that effective tax rates on agriculture and services are lower than on other sectors of the economy. On *a priori* grounds, therefore, the tax structure is likely to have an appreciable negative effect on production and allocative efficiency with negative implications for economic growth. While no assessment of taxpayer compliance costs has been possible, effective tax rates on taxpayers, inclusive of compliance costs, are likely to be much higher than existing tax rates would suggest due to administrative procedures.⁴⁷ Thus, a move to an integrated VAT on goods and services is likely to

⁴⁵ See the Government of Karnataka (2001) *First Report of the Tax Reforms Commission*.

⁴⁶ A comparison of value added by the road transport sector, and, for privately owned vehicles, new registrations would be more informative. However, despite the wealth of information in the annual *Maharashtra Road Transport Statistics* (Mumbai: Transport Commissioner's Office), data do not permit this comparison to be made.

⁴⁷ Income tax compliance costs vary between 5% and 300% of income tax payments by individuals averaging around 55%. See S. Chattopadhyay and A. Das-Gupta (2002).

have appreciable growth benefits, provided tax administration is also streamlined and taxpayer compliance costs are held in check.

B. Non-tax revenues: Cost recovery

3.27 Cost recovery contributes around 0.1% of GSDP or around 1.1% of Maharashtra's own revenues. The NIPFP Study (2001) reports cost recovery rates in Maharashtra at between 0.0% and 15.5% for social services and between 1.9% and 48% for economic services in 1993-94. For non-merit services (services lacking public goods characteristics and without any spillover effects), they found a decline in recovery rates from 18.2% in 1993-94 to 16.9% in 1997-98. This issue is also highlighted in the sections on power and irrigation in Chapter 4. While no additional examination of cost recovery was made for this study, it is clear that greatly decreased provision of non-merit services and increased cost recovery are important to improve state finances (See Annex 4 for a description of some other sources of own revenue in Maharashtra).

III. Tax Administration

Institutions for accountability, transparency, efficiency and effectiveness

3.28 While properly designed business procedures, automation and management control are important in tax administration, sustainable revenue performance can only be ensured by a proper institutional framework. Such an institutional framework has a sequence of five components outlined in Table 3.2 (details in Annex 5).

Table 3.2: Institutions for Effective Tax Administration

Objective	Operational implementation
Clarity of goals	(a) Mission and Vision statements. (b) Citizen's Charter. (c) Medium range modernization plan
Measuring goal achievement or performance	Performance Indicators
Enabling performance	Operational autonomy for tax departments. Functional organization
Communicating performance	(a) Annual Reports to government and (b) Performance Reports for individuals, functional units and field offices based on performance indicators
Rewarding and motivating performance	Administration budgets linked to performance and positive and negative individual and unit performance incentives

3.29 Such an institutional framework is absent in all major tax departments in Maharashtra:

- No Department has a mission or vision statement or a long-term plan.
- Citizen's Charters exist in the Sales Tax Departments but inadequate publicity is given to it.
- No department has systems of performance indicators, and Annual Performance Reports of departments provide limited information on the effectiveness and costs of administration functions. Complete restructuring of annual reports of tax collecting departments is required.
- Current department budgets are based on simple extrapolation of past budgets. Other aspects of budgeting and expenditure control have several weaknesses as discussed in the next section.
- Currently, no department has internal vigilance units, which should ideally report directly to the heads of departments. Furthermore, existing, external vigilance operations are weak and ineffective. This facilitates continued corruption.

Box 3.3: The Institutional Reform Program of Maharashtra's Sales Tax Department

With the personal encouragement of the Finance Minister of Maharashtra, the Sales Tax Department held two all day seminars of senior officials from all over the state in January and February 2002. In the seminars, draft proposals for institutional strengthening were discussed. Between the first and second seminars, the proposals were discussed with department staff throughout the state to ensure wide participation. Proposals covered:

- Mission and Vision statements;
- Numerical performance indicator systems for individuals, organizational units and the department;
- Functional reorganization of the department;
- Increased managerial autonomy; and
- Reward and incentive programs for the department and staff.

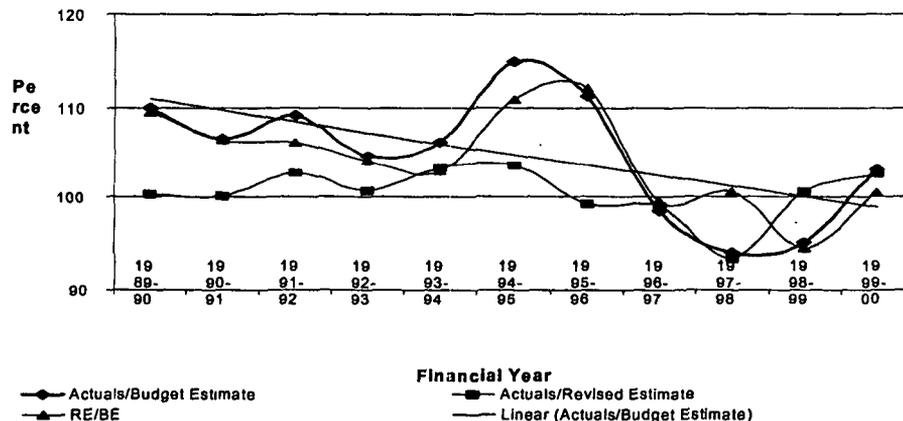
Translation of these proposals into operational plans is now under way. The World bank provided technical assistance at the initial stages, though current plans are locally owned, as Bank proposals have been extensively modified and adapted.

3.30 The process of institutional strengthening has commenced (Box 3.3) and bodes well for future revenue performance. In the rest of this section, the focus shifts to current tax administration problems, the effectiveness of different administration activities, and the effectiveness of management control.

Revenue forecasting

3.31 At the macro level, an important issue for cash management, budgeting and medium term fiscal planning is accurate revenue forecasting. While this depends on the adequacy and timeliness of performance monitoring information of revenue departments,⁴⁸ translation of these into revenue projections requires additional, technical, inputs. Currently, both budget and revised estimates by the government are largely based on historical growth rates or GSDP buoyancies and limited, ad hoc utilization of information on current revenue performance. The accuracy of these projections is limited (Figure 3.11).

Figure 3.11: Fiscal Marksmanship in Maharashtra:
State's Own Tax Revenue 1989-90 to 1999-00



3.32 Forecasting accuracy for monthly cash monitoring can be improved by employing autoregressive moving average (ARMA) models based on monthly revenue collection data for past years.⁴⁹ However, trend forecasts via growth rate or GSDP buoyancies in Maharashtra do not hold out much hope for accuracy. There are two important issues for budget estimation and medium term forecasts. Improved budget estimates, econometric models for different taxes, which take into account

⁴⁸ Actual cash collection figures, however, are obtained from the state Treasury.

⁴⁹ The approach and its implementation are illustrated via an ARMA model for sales tax department monthly collections which is available with the Indira Gandhi Institute for Development Research (IGIDR), Mumbai.

rates and exemptions besides market determinants of the base, need to be developed. The second issue concerns additional resource mobilization (ARM) from tax structure changes and also administrative reforms. Currently, only revenue effects of ARM measures from tax structure changes are estimated. Furthermore, once again, historical projections are generally used. This needs to be improved by instituting systematic procedures and calculating ARM effects of administrative reforms.⁵⁰

Tax collection costs

3.33 Maharashtra's tax departments have low tax collection costs in relation to two other large states (Table 3.3). This partly reflects Maharashtra's higher per capita GSDP which leads to higher per taxpayer collections even given the poor revenue performance discussed earlier.

Table 3.3: Cost of Collection of Major Taxes in 3 States*

	1996-97	1997-98	1998-99	1999-00	2000-01	2001/02 RE
ANDHRA PRADESH						
Stamps & Registration	5.14	6.07	6.3	6.38	7.44	5.61
State Excise	9.59	7.59	8.13	7.7	7.69	6.98
Taxes on Sales, Trade, etc	1.64	1.31	1.32	1.44	1.42	1.33
MAHARSHTRA						
Stamps & Registration	1.71	1.52	1.75	1.95	2.66	1.65
State Excise	1.53	1.1	1.14	1.65	1.6	1.47
Taxes on Sales, Trade, etc	0.84	0.84	0.9	1.28	1.25	0.91
UTTAR PRADESH						
Stamps & Registration			3.62	2.35	2.6	2.08
State Excise			1.5	1.14	1.19	1.08
Taxes on Sales, Trade, etc			2.51	2.61	2.3	2.8

Source: Budget Documents, except Maharashtra Sales Tax, 00-01 and 01-02: Department Estimates

*Data provided in government accounts, at the level of major heads, do not necessarily reflect actual budgetary costs of departments. For example, for sales taxes, budget head 2040 in Maharashtra includes transfers to the Road Fund since the professions tax, collected by the Department, is partly earmarked for this. While this has been netted out, detailed information on other states is not available at this time. For this reason, figures on transport taxes have not been reported.

A second problem with the data are that actual economic costs of tax collection are not reflected, merely budgetary outlays. Some budgetary costs, such as construction costs of new buildings, are not even reflected under the head of tax collection costs.

Internal organization and staffing of tax departments

3.34 Commissioners or other heads of major tax collecting departments, as well as Secretariat supervisory posts are reserved for the Indian Administrative Service (IAS). Other, subordinate posts are largely filled by personnel recruited for state services by the Maharashtra Public Services Commission, though key posts are often entrusted to junior IAS officers. This ceiling on promotions for state cadre officers is a cause of resentment and low morale among these officers. It also results in state tax administrations having top management who are generalists with limited familiarity with the taxes they administer.

3.35 The four major revenue earning departments have three tier geographic hierarchies, with headquarters, regional units and district or field level units. Nomenclatures vary. In addition, there are internal and border check-posts falling within different districts for excise and transport administration, mines and forest departments. Mobile enforcement squads are used in state excise and transport departments. Tax recovery from delinquents is entrusted to District Magistrates.

⁵⁰ A suggested procedure and a Proforma for use in medium term forecasting exercises are in Annex 6.

Budget allocations for revenue departments

3.36 As discussed, classification of expenditures in government accounts does not permit the actual budgetary cost of tax collection to be ascertained, preventing assessment of the efficiency of tax administration. First, to provide realistic cost of collection figures, the government should notionally recover rent at market rates on owned premises occupied by tax administrations. Second, to provide an incentive for increased inter-departmental coordination, a cost based system of interdepartmental charging should be instituted, whereby one department charges another for services provided on a cost plus incentive basis. This should not be limited to inter-tax-department services alone, but should also be applied to police protection and enforcement, the Accountant General's office, the Public Works Department, etc.

3.37 There are also several other weakness in budget procedures. New service components requiring additional budgetary allocation are not presented with adequate projections of costs and benefits to enable future zero-base monitoring. Furthermore, there are no laid down criteria for acceptance/rejection of additional budgetary support proposals by the Finance Department. These points suggest that proposals which can result in substantial net revenue gains – easing the deficit position of the government – can sometimes be rejected. These procedures require rationalisation. Third, department heads have inadequate flexibility to decide on operational expenditure, with excessive control being exercised by the Finance Department. This can be remedied by consolidating (line item) heads of expenditure to provide department heads greater discretion in operational matters.

3.38 In the medium term, there should be separate multi-year capital budgets linked to the department's written long-term modernization and service provision plans. Second, current budgets should be linked, via a formula, to performance indicators reflecting revenue potential and improvement in citizens' services.

Workload arrears

3.39 There are significant workload arrears in Sales Tax Department assessments, where around 24 lakh assessments were pending on April 1, 2000, compared to around 5 lakh dealers. An overhang of pending assessments will seriously hamper administrative ability to ensure a smooth VAT transition. Pending sales tax appeals are also a cause for concern, with only 30 to 40% of annual appeals workload being disposed and over 30,000 pending appeals. For S&R, a backlog of over 10 lakh documents exist, awaiting completion of registration procedures, compared to a workload of around 13 lakh documents in 2001-02. However this backlog is soon likely to be cleared.

The Sales Tax Department

3.40 Given the importance of the Sales tax, and the need for it to be ready for VAT implementation in April, 2003, the focus in this section is on the administrative performance of this department. However, much of the analysis is also relevant for the administrations responsible for other taxes. The root cause of several problems and inadequate management supervision identified here is the inadequate institutional framework described above. Current institutions cannot identify, let alone reward, good performance or penalize poor performance, at either departmental or individual levels.

3.41 *Work allocation to divisions:* In terms of geographical divisions, the department is organized into 4 zones headed by Additional Commissioners. Each supervises between 2 and 8 Deputy Commissioners (DCs) who head divisions in different parts of Maharashtra or suburbs of Mumbai. This variation in the span of control across zones suggests a need for reallocation of divisions – or creation of at least one more zone, to increase the effectiveness of management supervision. Similarly, the revenue contribution of different divisions varies by a factor of 4. Revenue gains are also likely from rationalization of divisions. By functions, though 53% of the Department's 7138 staff are assigned to assessment duties (and 9% to the professions tax), fully 22% are assigned to general

administration, while only 8.5% are assigned to enforcement. Given the high relative revenue contribution of enforcement DCs, this staff allocation appears lopsided. At present, the Department has no Large Taxpayer Units, which have been found highly effective from a revenue standpoint in consumption tax administrations in other developing countries.⁵¹ This is a major drawback, since, for example, a mere 0.4% of dealers (or 490 dealers) contributed 72% of revenue in Mumbai, while 4.6% of dealers contributed over 90% of revenue.

3.42 *Collection arrears:* Given the conventions followed for arrears accounting, uncollected arrears of the Sales Tax Department stood at 54 percent of collections or Rs 6608 crore in 2001-02. Further examination shows that this is merely due to non-transparent arrears accounting, with only around 13% being recoverable or in the process of recovery. Furthermore, the recovery percentage by district administrations has shown a declining trend while little control is possible by the sales tax department. To facilitate arrears tracking and management, norms for arrears recognition and information for management monitoring need review. It is worth mentioning that, in the case of the sugarcane purchase tax, collection arrears are reported to be large due to political intervention.

3.43 *Registration:* The Department's taxpayer identification and registration requirements and procedures are complex, and imply significant time and money costs for dealers. These will need to be streamlined and modernized to facilitate VAT collection. Management monitoring currently does not relate registrations to subsequent registration cancellations and stop-filers, and there is no system of post-registration inspections. This leaves open a major channel for collusion between dealers and department employees and for fraud. Consequently, registration cancellations and subsequent re-registration, breaking continuity of assessment records, are reported to be common. No information is compiled from non-department sources on the incidence of non-registration.⁵²

3.44 *Return filing:* Maharashtra is reported to be the only Indian state with a streamlined procedure which combines tax payment by dealers with their monthly filing of returns (annual for small dealers). However, the impact of poorly planned automation and inadequate pilot testing in the sales tax department is clearly visible in relation to filing sales tax returns. Dealers may file returns in any nationalized bank branch. From there, returns are sent to the Bank's main branch in the city or area. From the main branch, in turn, returns are sent to the government treasury and the concerned sales tax DC. After manual verification of bank "scrolls" with returns ("challans"), these are sorted and sent to the actual assessment units or wards. In Pune and Mumbai, where verification and sorting are computerized, returns reach wards after 2-3 months, compared to 8 weeks elsewhere. This delays assessment proceedings, identification of stop-filers and reduces the effectiveness of revenue monitoring. The percentage of stop-filers in 2000-01 (or filing gap) stood at 21% for the Mumbai sales tax. An additional 2.2% did not fully pay taxes due. Assessment and tax recovery are also hampered by the complexity of the tax return, with according to department sources, around 50% of returns being incomplete or incorrect.

3.45 *Tax audits:* The heavy workload arrears have been discussed earlier. Part of the reason for this is the high case load of officers coupled with almost 46% of cases being "regular assessments" or tax audits compared to between 2% and 10% internationally. Selection on the basis of modern risk assessment, which is not employed in the Sales Tax (or any other) Department.⁵³ Consequently, case disposal per officer has been declining over the past 3 years, while additional demands made per case have also been falling sharply, in real terms. Additional procedural problems arise because audits are entirely desk audits with no field audits. Coupled with the fact that penalties for widespread non-attendance of dealers at scheduled audit hearings are not applied, audit proceedings can take up to 3 years to complete. Furthermore, if dealers cannot produce 'C' Forms on out of state sales, additional

⁵¹ Detailed analysis and design suggestions for LTU's are in Paulo Dos Santos (1994)

⁵² A sales tax official reported that "fabulous" revenue gains were made when an Assistant Commissioner, at his own initiative made special efforts to identify unregistered dealers. However, this was not followed up elsewhere in the Department.

⁵³ Current criteria include random selection plus cases of closure of business and the presence of "high seas sales", a major method of evasion.

tax demands are made, which get subsequently overturned on appeal when these forms are eventually obtained from out-of-state dealers. This increases the appeals workload curtailing time available for genuine appeals. Both of these procedural hurdles need to be addressed.

3.46 *Investigation and enforcement:* Besides relying in some cases on information from informants backed by raids or inspections, no systematic tapping of third party, institutional, information exists. Nor is there systematic sharing of information between state tax departments and between state and central departments. There is also no systematic program of document matching. Thus great scope to improve the information base for enforcement exists.

3.47 *Check posts:* Check-posts, constitute a barrier to internal trade in India. To facilitate phasing out of check posts in the future, improvements are needed in business accounting and auditing standards and procedures, a shift towards incorporated and larger businesses and greater development of formal financial services are also needed. Nevertheless, they are a necessary evil at the current stage of India's economic development. Since Maharashtra has no state-border sales tax check posts, imports from out of state in the names of non-existent parties ("benamis") and "fake" imports from out of state are major methods of sales tax evasion. Given zero-rating of exports under a VAT and the likely taxability of imports, the risk of revenue loss through tax evasion is substantially greater with a VAT (see Annex 7).⁵⁴

3.48 *Appeals:* Besides assessment procedures which force taxpayers to appeal, appeals can be filed or contested by taxpayers as a delaying tactic or by the Department even when there is little probability of success. To reduce the incentive to file appeals, department performance targets should specify expected success rates of around 90 % in appeals filed or contested by it. Second, a fee should be introduced, payable to the opposing party, for delays caused by seeking adjournments of appeal hearings. Third, appeals should be made equivalent to reopening of assessments so that no appeal could result in either an increased or a reduced demand, independent of whether the department of taxpayer files the appeal.

3.49 *Progress of Computerization:* Though several major functions, including dealer master lists, return data capture, issue of demand notices to delinquents are done with the help of computers in divisional offices, full induction of computers is still in the planning stages, with ongoing technical assistance. No procedures manuals or training has yet commenced. This needs to be stepped up to ensure successful VAT implementation.

3.50 *Overall assessment of administration information:* Given the existing information, in no area of activity is it possible to judge revenue effectiveness even in crucial areas like registration, assessment and tax recovery.⁵⁵ Without extensive improvement of the existing management information system, and integration of information generated by ongoing automation, monitoring of effectiveness by the department's top management will remain inadequate.

3.51 *Other areas of administration:* Several other important areas of administration are either inadequate or non-existent. These include: regulation of tax practitioners (no provisions or practices); taxpayer grievance redressal (inadequate); taxpayer education and assistance (almost non-existent); and anti-corruption institutions (inadequate internal systems and management supervision).

3.52 *VAT preparations:* The Department's current pace of implementation of VAT administration requirements and an inadequate implementation plan are a cause for serious concern. Among urgent, short term measures are implementing automated dealer registration procedures and responsibilities, invoice design to prevent counterfeiting, taxpayer education, check posts and setting up Large Taxpayer Units.

⁵⁴ A detailed design for integrated check posts is also made in Government of Karnataka (2002) *First Report of the Tax Reforms Commission*. Also see Annex 7.

⁵⁵ The effectiveness of tax audits depends on the ultimate direct (additional demand) and indirect (induced compliance) contribution to revenue. Workload arrears and additional demands are suggestive but incomplete, and possibly misleading.

The State Excise Department

3.53 The focus in this sub-section is on problems of excise evasion, control of illicit distillation, and regulation of liquor outlet licenses, which are the main causes of declining excise revenue (additional information on excise enforcement and administration are in Annex 8). Currently inadequate resources and weak institutions, lead to the Excise Department being unable to adequately deal with the first two of these problems. Improvements in MIS data on enforcement activities need to be urgently introduced to improve manpower deployment and monitoring. Improvement in the area of inter-state data exchange and inter-departmental cooperation with trade tax and transport departments to improve intelligence on cross-border smuggling is also urgently required.

- Alcohol production data does not show any decline. Since there has also been no decline in alcohol prices, the decline in per unit duty realization indicates a rise in duty evasion.
- There is wide-spread smuggling from neighbouring states (mainly Goa, Madhya Pradesh and the Union Territory of Daman) which have largely specific, low duty, excise regimes. For example, duty per case of IMFL in Goa is Rs. 108 as against Rs. 990 in Maharashtra. This difference makes arbitrage profitable even when it is illegal. A study to harmonize duty rates with other states to limit revenue loss is, therefore, essential.
- Alcohol production in Maharashtra is largely molasses based. Due to lack of firm data on quantity and quality of molasses with the Excise Department, there exists considerable scope for under reporting of alcohol recovery by distilleries particularly distilleries operated by sugar factories. There are no firm data on use and disposal of molasses. In the last three years, major distilleries have been reporting low recovery of alcohol from molasses. This is suggestive of either general uniform decline in quality of molasses or potential evasion through under reporting.⁵⁶
- Distilleries produce rectified spirits (RS), extra neutral alcohol (ENA) and industrial alcohol (SDF). Excise duty on RS is at Rs. 1.25 per litre while that on ENA (used for IMFL) is Rs. 3.00 per litre. Distillers have separate storage capacities for both these products. However, the Excise code assigned to RS and ENA is the same (2204.90) and unless detected by excise inspectors posted at distilleries, removal of ENA and RS cannot easily be distinguished. Trade circles admit to misclassification of RS or ENA, which have substantially higher market prices, as industrial alcohol. Such unreported ENA and RS is sold to producers within as well as outside the state. Given low alcohol availability in recent years, unreported sales command a premium, adding to evasion incentives.
- In 1993-94, there were some cases of deaths due to adulteration of country liquor, following which their sales by the barrel were banned. This led to higher prices of country liquor which can now only be sold in bottles. This encourages evasion and diversion of demand to illicit liquor.
- To prevent thriving illicit distillation ('hatbhatti'), the GoM recently attempted to regulate trade in Kala Gur (black jaggery), which is the principal material used in brewing of 'hatbhatti'. Kala Gur is imported in large quantities from adjacent states, mostly as raw material for cattle feed and diverted to brewing of 'hatbhatti'. The proposed regulations require traders in Kala Gur to maintain accounts of volume sold and the identity of buyers. Though this was approved in the legislature, 'concerned parties' successfully petitioned the government and staying its implementation.
- The number of licensed outlets for county liquor per region has not been increased since 1973 since licensees are largely permanent. This has given rise to economic rents earned by

⁵⁶ Data compiled from co-operative sugar factories reports (Annex 9, Table A5), show that, on average, out of every 100 tons of sugarcane crushed, production of molasses varies between 3.5 to 4 percent. Alcohol recovery depends on quality of molasses (primarily sugar content) which is rated into grades A, B and C. There are no easy ways for eliciting such technical data unless the Excise Department expand its own laboratory facilities to test for molasses quality.

licensees, which are not absorbed by the Department. Inquiries suggest that licenses command a price of Rs 11 lakh to Rs 15 lakh per region compared to an average license fee of Rs 90,000 realized by the Department.⁵⁷ License fees vary by region and are largely dependent on population. However, urban sales have been stagnating while consumption in rural areas is increasing rapidly. To increase revenues, easing the restrictions on transferring licenses across regions would enable outlets to move to high demand areas. Secondly, instead of population, data on actual past sales in a region, could be used to set license fees.

- In several other states, country liquor vends are auctioned in lieu of excise duty leading to buoyant revenues. Though auctions have been proposed several times during the past two decades and though a detailed proposal to introduce such a system has been in place in Maharashtra since 1997, they have never been implemented.⁵⁸ Reportedly, this is due to political pressure. Given the risks of capture of auctions by existing vendor networks, auctions should be tried in some regions on a pilot basis.

The Stamps and Registration Department

3.54 S&R is collected by, (a) the Treasury directly from the sale of stamps and stamp paper through an archaic system of authorised vendors; and (b) the Inspector General of S&R. For the former, this leads to weaknesses in enforcement and to cases of forgery. There is also a problem of coordination between production, sale and demand for stamps and stamp paper leading to shortages. Moving away from large scale direct registering of documents and the use of stamps and stamp paper is suggested in the medium term. If the current experiment with outsourcing registration (also see Box 6.1) proves successful, the S&R Department can then perform primarily an enforcement and valuation role (See Annex 10 for a note on improving property right protection and property valuation in Maharashtra). The logical step is to move to account-based payment of stamp duties for transactions currently requiring stamp paper or stamping. Karnataka has recently passed an enactment providing for discontinuation of stamp paper.

3.55 *Valuation of properties:* The process of valuing documents has now been streamlined. As in some other states, a ready reckoner is prepared by a Joint Director of S&R. This has led to reduced opportunities for under valuation and corruption by making registration values predetermined.

The Transport Department

3.56 The Department of Transport regulates the road transport sector and collects motor vehicles and passenger taxes, and fees for transport sector related services. Below we review the main administration problems having a bearing on revenue buoyancy.

3.57 *Enforcement difficulties:* Without a huge increase in transport department mobile squads, ensuring 100 % compliance with licensing, roadworthiness and environmental regulations and plying in accordance with permits is impossible. Allegedly, there is extensive flouting of permits, particularly by smaller passenger vehicles, who ply with little risk of being detected on unauthorized routes. Furthermore, many contract carriages which are mainly buses for hire, ply as stage carriages, or buses with specified routes and passenger stops, with little fear of detection. Enforcement difficulty is partly due to the sharp demarcation of jurisdiction of the police (traffic violations) and transport department staff and limited cooperation between them. Furthermore, check-posts and mobile squads of other departments do not engage in reciprocal checking of violations each is responsible for.

3.58 Issuing licenses and permits: While seven Regional Transport Offices (RTOs) are computerized and in communication with the Commissioner's office in Mumbai via e-mail, registration and licensing data bases are still not networked. Without computerization of the remaining 31 RTOs and networking of registration, license and permit records, control of fraudulent

⁵⁷ This comparison may be biased as separate data on license fees for country liquor and IMFL were not available.

⁵⁸ The recent move in Uttar Pradesh from auctioning to allotment of vends is atypical, and reportedly due to the growth of a cartel with the connivance of government servants.

licenses (e.g. in case of suspension of a license) is currently not possible (see Annex 11 for additional issues).

IV. Improving Maharashtra's revenue performance: Some suggested next steps

Improving tax structure

3.59 The package of reforms needed to reverse declining revenue performance includes, replacing the sales tax and other minor commercial levies by a destination based, consumption type VAT on goods slated for introduction on April 1, 2003. Besides positive effects on productive efficiency giving rise to improved buoyancy of the domestic tax base, the consensus design likely to be adopted by Indian states will lead automatically to reduced exemptions and abolition of tax-based investment incentives. If the states are also given the power to levy the VAT on services, this will add to the tax base and its buoyancy.

3.60 VAT specific suggestions are:

- The VAT law should require all prices to be quoted on invoices/printed on products on a VAT inclusive basis with rate of tax mentioned.⁵⁹
- Immediate action to prepare an implementation calendar and make good lost implementation time is needed.
- Areas of base shrinkage and broadening in moving from the sales tax to VAT must be accounted for in *RNR calculations*.
- A field visit to a country with an efficient VAT is needed to ensure proper design of procedures including registration, returns processing, field audits and taxpayer services.
- Functional reorganization of the sales tax department is to be strongly recommended prior to the VAT launch. Continuation of the current, single officer per taxpayer, system will result in missing a key opportunity to increase efficiency and reduce corruption through functional reorganization as in most developing country VATs as well as in progressive Indian states.
- Transitional provisions, not yet specified in the draft VAT Act, will reportedly allow for full rebate of Sales Tax on stocks of goods on the date of VAT launch. This should be reviewed as without any safeguard for fraudulent claims, this will pose a serious revenue risk in the year of the VAT launch.
- VAT information exchange system (VIES) is a computer based system adopted by the European Union (EU) for exchange of information on cross border exports and imports of member countries. This is the major means of checking cross-border tax evasion in the EU, which has much greater effectiveness than unilateral, check-post based checks. Such a system is essential in the medium term to curb leakage of VAT revenue on cross-state sales in India. It may be set up with external technical assistance, perhaps from the EU.

3.61 Other important tax reforms include:

- As has been done for floor rates of excise, automatic, blanket, permission should be granted for annual revision of all specific taxes, fees and penalties. However, instead of 10%, the ceiling on revisions should be linked to inflation in the previous year.
- *Professions tax* collections can be improved through selective outsourcing of collections and urging the central government to raise the tax ceiling, as committed, soon.
- The major reform to *improve road transport services* and improve *passenger tax* and *motor vehicle tax* collections is the removal of the monopoly position of the MSRTC and other public undertakings.

⁵⁹ Quoting tax exclusive prices led to consumer resistance when VAT was implemented in some other countries.

- In coordination with other states, *fees for RTO services* need increasing under the Central MVT Act.

Improving tax administration

3.62 Inadequate administrative preparation for the VAT in Maharashtra and the lack of an adequate implementation timetable pose serious risks to successful VAT implementation. Therefore, a thorough reform and modernization of Maharashtra's tax administration is needed. In the short term, steps are needed to reduce workload arrears, rationalize business processes and step up the pace of ongoing automation to improve taxpayer information and permit more effective management control. In the medium term, institutional reform is vital in the allocation of budgetary resources, staff incentives and deployment, management flexibility and the internal organization of tax departments. Several short-term suggestions for reform have been made above. Additional suggestions are listed below:

- Monitoring of sugarcane production for the *purchase tax* can be improved through improved information sharing.
- Steps should be taken to make recruitment and transfers more transparent and subject to independent external review.
- The creation of internal vigilance cells reporting directly to Commissioners/the Inspector General Stamps should be considered.
- There is an imperative need for Inter-State tax administration coordination: Strengthening or establishing of inter-state coordinating institutions for tax administration is urgently required, especially in view of growing inter-state and international trade in India and the increasing sophistication of the business and transport sector.
- To improve inter-departmental coordination, consolidation of all major state taxes, except for motor vehicles taxes given the importance of their additional regulatory functions, within a unified revenue department (or the Finance Department), should be seriously considered.
- Instead of separate check-posts and mobile squads run by different departments a move to integrated, (multi-Department) electronically equipped check-posts is recommended, as is being implemented by Andhra Pradesh and Karnataka and as exists in Gujarat. Common mobile enforcement squads are also an option worth considering.

Chapter 4

Sectoral Spending and Commodity Market Interventions

4.1 Maharashtra spends a lot of its taxpayers' money on several activities that are difficult to justify on economic grounds. Furthermore, there is little evidence that these activities help the poor and vulnerable. In a tight fiscal situation, like the one faced by Maharashtra now, the opportunity cost of imprudent spending becomes very high.

4.2 This chapter looks at four areas—power, irrigation, cotton and sugar production—where the state is involved in a variety of ways. The analysis suggests that resources spent by State in these areas are fiscally unsustainable and/or unproductive. In some cases (for example, sugar) they may be associated with an increase in private production of goods, but the benefits are private and the costs are public. None of these interventions is correcting any market failure and very few benefits are reaching the poor. Resources withdrawn from these areas could be used to reduce the fiscal deficit of the State. Since many of these interventions have been designed to help the farm sector, the GoM needs to think of a new strategy to facilitate rural development: some generic lessons and pointers in this regard are outlined in the concluding section.

4.3 Besides imposing a high fiscal burden, government involvement in these areas is associated with inefficiency and poor governance. There are high systems losses in the power sector and a large portion of this loss is due to theft and inappropriate billing. The water sector presents a case of massive shortfall in non-wage operation and maintenance expenditures and incomplete projects. There are major governance related problems in cotton and sugar procurement/production. The GoM has announced a series of reform measures, but in the absence of a track record, the real test of these measures is in their timely implementation.

I. The Power Sector

4.4 Serving a population of 91 million people, Maharashtra has the highest installed capacity, the largest market and the second largest (after Gujarat) per capita consumption of electricity (in excess of 500 kWh per annum) among Indian States. Overall, some 80% of the population has access to electricity, about 100% of the households in towns and villages, but considerably less in rural areas.

4.5 Outside the state capital Mumbai, the Maharashtra State Electricity Board (MSEB)—a public body created under the Electric Supply Act (1948) of the Government of India—is the sole supplier of power in Maharashtra. Three power utilities—TATA Electric Company, Bombay Suburban electric Supply (BSES) and Bombay Electric Supply & Transport (BEST)—serve the Mumbai area.⁶⁰ The first two are private, and the third one is municipality-owned but operates with considerable autonomy.

4.6 While the three utilities serving the urban Mumbai area provide adequate service, are profitable and do not face exceptional problems, MSEB is facing the common issues confronting large government-owned power utilities.⁶¹

4.7 Maharashtra has a relatively large market for industrial power. Nearly 40% of its total sales are to industrial customers, compared to the national average of 30%, and 23% are agricultural consumers, which is well below the national average of 30%. The State has ample power for base load, but faces a shortage of peaking capacity. The quality of supply remains poor with voltage drops, frequency fluctuations and load shedding. Consumers bitterly complain about electricity service

⁶⁰ The Mula-Pravara Electric Co-Operative Society Limited serves parts of Ahmednagar District. MSEB also serves Bhandup and Mulund areas of Mumbai.

⁶¹ Given that TATA, BESE and BEST serve urban areas, while MSEB predominantly serves rural areas including agriculture, their financial and operational performances are difficult to compare.

whose unreliability has adverse consequences for the economy. Trends in service quality are unclear.⁶²

Maharashtra State Electricity Board: Financial Performance

4.8 With an installed capacity of approximately 10,000 MW; 13 million connections; and a staff of 108,000, the MSEB is by far the largest Electricity Board in India. As is the case of most state electricity boards in India, the MSEB is currently in a serious financial crisis. This crisis has largely been a result of high T&D losses (that are not fully recognized by the regulator for setting allowable revenues) and the high cost of power from the Dabhol project. In the past several years, MSEB's performance has been analyzed by various government committees (Rajyadhyaksha [1996], Upasani [2000], Godbole [2001]). These committees have invariably concluded that, consistent with international practice, the power sector should be restructured and ultimately privatized.

(i) *Transmission and Distribution (T&D) Losses*: No reliable data seem to exist on MSEB's power market on account of sizeable amounts of unaccounted for electricity resulting largely from a combination of illegal connections, unmetered connections and unreliable meter readings. In its first tariff filing for 1999-00 with the Maharashtra Electricity Regulatory Commission (MERC), MSEB estimated its T&D losses at 31.8%. Subsequently, in connection with its second tariff filing for 2001-02, estimated T&D increased to 39.4%.⁶³ The Central Electricity Authority of the Government of India has established the norm for T&D losses at 16%. Table 4.1 provides a comparison of T&D losses in other Indian states as well as in other countries. Given that MSEB's average cost of purchases in 2000-01 was approximately Rs.2 per kWh, had losses being at the 16% level, MSEB would have economized nearly Rs.3,000 crore.

Table 4.1: Transmission and Distribution losses in 2001: A Comparison

T&D losses	(in percent)
In Maharashtra	
MSEB	39
Other companies average (TATA, BEST, BES)	11
In other Indian States	
Andhra Pradesh	35
Haryana	47
Karnataka	37
Uttar Pradesh	41
Gov guideline for state electricity boards	16
Other countries	
Korea	4
Bangladesh	35
Kenya	22
Mexico	16

(ii) *The Dabhol Independent Power Plant*. Phase I of the Dhabol power plant, sponsored by ENRON, came into operation in 1999. MSEB is bound to purchase power from that plant under a 20-year power purchase agreement (PPA). Given the high level of fixed charges and the type of fuel being used (naphtha), that power is particularly expensive. MSEB was able to meet its financial obligations until December 2000 at which time it started to fall behind. In May 2001, MSEB rescinded the contract. Effective 2001-2002, MSEB ceased to provide in tariff orders for resume, the financial burden of purchasing its power on MSEB will be considerable. The issue is in litigation (see Box 4.1 for more details).

⁶² Over the April-November period, energy losses amounted to 124 GWh in 1999-00, 1,226 GWh in 2000-01 and 711 GWh in 2001-02

⁶³ MSEB clarified that T&D losses did not increase from 31.8 to 39.4%, but that they had been better estimated through better sampling techniques. Most power looms, public water works and roughly 19 lakh agricultural pumps are on un-metered supply. Moreover, MSEB has stated that based on energy audits of 5,500 feeders currently underway, T&D losses could be revised upward to 50 - 55 percent.

(iii) *Financial Performance of MSEB.* Until 1999-2000, MSEB's financial performance was guaranteed by the State thanks to a 4.5% guaranteed return on assets calculated on a retroactive basis. Effective 2000-01, MERC, established in August 1999, sets electricity tariffs based on tariff filings submitted by MSEB. This has resulted in MSEB financial and other data becoming public and subject to considerable scrutiny under a public hearing process. MERC has set strict performance targets for MSEB, and has issued tariff orders predicated on efficiency improvements together with tariff adjustments such that the State will no longer have to subsidize the utility.⁶⁴

Box 4.1. Dabhol Power Plant: A project ridden with controversies

In 1991, the Government of India decided to alleviate power shortages by inviting developers to invest in independent power projects (IPPs). In this context, the Dabhol Power Company (DPC)—a largely foreign entity domiciled in India—agreed to establish a 2,184 MW power plant in two phases in Maharashtra. Along with MSEB, its shareholders are three US based companies—Enron Corporation, Bechtel Enterprises Inc. and General Electric Company. DPC entered into a Power Purchase Agreement (PPA) with MSEB for sale of power on Build, Own and Operate basis for a period of 20 years.

Initial problems: In May 1992, the project was defined, the site was selected and a MoU was signed.* A draft PPA was initiated in November 1993, and concluded the following month. Financial closure was reached for Phase I in March 1995. Soon thereafter, doubts began to be expressed about the rationale for the project and in August 1995, MSEB was instructed by GoM to repudiate the transaction and to request DPC to stop construction. Following extensive negotiations involving GoI, GoM and MSEB, an agreement was reached on a revised PPA (which this time included the LNG facility and a capacity increase from 740 MW to 2,184 MW). In December 1996, financial closure for the second phase was attained and construction resumed. Phase I of the plant started to operate in May 1999.

Halting power generation: MSEB's finances have deteriorated due to the costly power purchase from DPC. In 2000-01—the first full year of power purchase from Dabhol—MSEB purchased 2,800 GWh at Rs. 4.5/kWh (about US\$9.5/kWh), more than double the average cost of purchases from its other suppliers. MSEB was able to pay for the power until December 1999, following which it started to fall behind. In January 2001, following a failure of the plant to ramp up in accordance with the provisions stipulated under the contract, MSEB declared misrepresentation, stopped payments altogether and requested compensation. In May 2001, MSEB rescinded the contract and construction of Phase II whose two new units (775 MW each) were to be commissioned in June and October 2001 was halted.

Financial implications: The amounts at stake are considerable. The cost of Phase I is estimated at US\$0.9-1.1 billion. The cost of Phase II—initially estimated at US\$1.9 billion—is expected to increase by some \$0.7 billion due to the construction stoppage. The present exposure of the lenders is of the order of US\$1.5 billion (Phases I and II), most of which has been arranged or guaranteed by Indian Financial Institutions. Enron's financial difficulties and subsequent bankruptcy (November 2001) has compounded the problem. Enron is said to have fired most of its personnel in India and stopped maintenance work on the plant. Under the circumstances, the likelihood that the project will be resuscitated and provide affordable power to MSEB diminishes by the day.

Still, the outcome of the current dispute is hard to predict. Attempts are currently underway to restructure the transaction by *inter alia* reducing the price of power from the project through various means. However, GoM/MSEB may have to bear large costs consequent to that project in the foreseeable future.

*In September 1992, at the request of the authorities, a World Bank team visited India and recommended against the project. Among the key concerns of the Bank were (i) the project was not economically justified in terms of being the least costly solution for Maharashtra (coal based plants produce considerably cheaper power); and (ii) the ability of MSEB to generate sufficient revenues meet its payment obligations under the PPA.

⁶⁴ The exception being that if GoM decides to charge a lower tariff than the one notified for a particular category of consumers, it has to compensate MSEB for the difference through a tariff subsidy.

4.9 Table 4.2 provides a financial summary of MSEB from 1995-96 to 2000-01.

Table 4.2: Maharashtra - Power Sector Financial Summary
(Rupees crore at current prices)

	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02 /d
Operating Revenues (excl. Subsidy /b)	7,386	8,817	9,525	10,536	11,131	11,826	12,367
Operating Expenses (excl. Dep'n)	6,089	7,053	7,644	8,316	10,303	12,038	10,404
Generation and Purchases of Electricity	4,299	5,049	5,755	6,096	7,758	8,737	7,935
Employee Costs	1,030	1,151	1,147	1,371	1,577	1,660	1,717
Other	761	853	742	848	968	1,641	753
EBITDA/a	1,297	1,764	1,881	2,220	828	-212	1,963
Less: Depreciation	845	913	961	1,089	1,223	1,331	1,544
Interest	733	763	884	1,110	1,286	1,361	1,521
Net Income before Subsidy	-281	88	36	21	-1,681	-2,904	-1,102
Revenue Subsidy - MSEB Accounts /b /c	630	259	306	355	2,084	62	5
Net Income after Subsidy	349	347	342	376	403	-2,842	-1,097

/a Earnings before Interest, Depreciation, Tax and Appropriation (EBITDA)

/b Revenue Subsidy includes 'Revenue Subsidy and Grants' and 'Compensation from GoM'; latter appears in the Profit & Loss Statements of MSEB from 2000-01 onward.

/c The revenue subsidy from GoM recorded in MSEB's Accounts (which are on an accrual basis) differs from that recorded in the GoM Budget (which is on a cash basis).

/d 2001-02 data represent estimates for the full year based on Actuals for 11 months

Source: MSEB Annual Report, various issues.

4.10 As can be seen in the above table, until 1998-99, MSEB only required a manageable subsidy of Rs 300-650 crore. 1999-00 was the first year in which the Dabhol plant was in operation, and as a result MSEB received a considerable subsidy of Rs. 2,084 crore.⁶⁵ 2000-01 was the year in which MERC issued its first tariff order – obviously MSEB's expenses (including Dabhol) were underestimated (MERC expected considerable efficiency improvements in MSEB over a short period), and it ended up with a deficit of Rs.2,904 crore. GoM compensated this loss by converting Rs.1,986 crore of debt service obligations into equity. With respect to 2001-02, following MERC's initial award, GoM denied the recommended increases for power looms and agriculture consumers and decided to provide a tariff subsidy to MSEB on that account (Rs.745 crore on an annual basis).⁶⁶ Given that MSEB stopped buying power from Dabhol in May 2001, its performance should be considerably better than the previous year – still a loss is expected given the delay in awarding the increase,⁶⁷ and unrealistic expectations by MERC of efficiency improvements.

4.11 As Table 4.3 indicates, since 1998-99, MSEB's financial performance (before subsidy) has been steadily deteriorating, largely on account of large payments for power from Dabhol. The increase in accounts receivable (days equivalent) is also a worrisome trend, as it indicates that MSEB faces difficulties in collecting its bills. The level at the end of 2000-01 was equivalent to about 50% of MSEB's operating revenues for that year. It appears that MSEB financed its increase in accounts receivable largely by increasing its accounts payable to various creditors. GoM and MSEB can avoid taking the necessary measures to improve MSEB's liquidity for as long as this budget constraint remains "soft". The ratio of debt to debt and equity is satisfactory, particularly since MSEB does not revalue its assets, but mostly because MSEB's lack of creditworthiness has limited access to new long-term debt for financing capital works. The shortfall in such investment is evident by power shortages and network breakdowns.

⁶⁵ MSEB applied for a tariff adjustment in FY1999-00 but it was not granted, essentially on political-administrative grounds.

⁶⁶ Whether the State will maintain the subsidy under the recent January 2002 order is yet to be ascertained.

⁶⁷ MERC award was given on January 10th, 2002; its implication being that only two-and-a-half months (in the fiscal year) were available for the increased tariff. The latest estimate of MSEB's net income after subsidy for 2001-02 is put at Rs.539 crores.

Table 4.3: MSEB Summary Balance

At the end of March	all amounts in Rs.crore					
	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Assets						
Accounts Receivable	2,388	2,535	2,994	4,044	4,875	5,909
Other Current Assets	2,033	1,645	2,484	2,387	4,407	1,830
Net Fixed Assets (incl. Other Assets)	<u>11,600</u>	<u>12,679</u>	<u>14,151</u>	<u>15,558</u>	<u>16,446</u>	<u>16,118</u>
Total Assets	16,021	16,859	19,629	21,989	25,728	23,857
Liabilities and Equity						
Current Liabilities	4,652	4,215	4,759	5,521	7,558	7,655
Long Term Debt	6,696	7,352	9,036	10,070	11,099	9,690
Equity	<u>4,673</u>	<u>5,292</u>	<u>5,834</u>	<u>6,398</u>	<u>7,071</u>	<u>6,512</u>
Total Liability & Equity	16,021	16,859	19,629	21,989	25,728	23,857
Return on Equity (before sub)	-6%	2%	1%	0%	-25%	-36%
Accounts Receivable (days)	118	105	115	140	160	176
Current Ratio	1	1	1.2	1.2	1.2	1
Debt:Debt&Equity	59%	58%	61%	61%	61%	60%

Source: MSEB

Regulation and tariff setting

4.12 One of the most significant measures taken recently has been the establishment of the Regulatory Commission.

(i) *Maharashtra Electricity Regulatory Commission (MERC)*. Set up in 1999 under the Central Government's Electricity Regulatory Commissions Act of 1998, MERC has three members and a staff of 27. Its budget for 1999-00 was Rs.3 crore. The Commission has the mandate to:

- Determine electricity tariff—wholesale, bulk, grid or retail;
- Determine the tariff payable for the use of transmission facilities;
- Regulate power purchase and procurement process of the transmission utilities and distribution utilities;
- Aid and advise GoM to formulate a policy for development of the power sector; and
- Promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of the Act.

In order to revise applicable electricity tariffs regulated power utilities in Maharashtra have to file an application with MERC. The latter then evaluates the basis of the request including particularly the anticipated expenses and the corresponding revenue requirements. Based on approved expenses (consistent with the introduction of efficiency improvement measures such as reduction in T&D losses), and profit entitlements, a net revenue requirement is calculated.⁶⁸ This in turn, translates into the aggregate tariff adjustment. MERC then decides how the tariff rates of different consumer categories need to be changed.

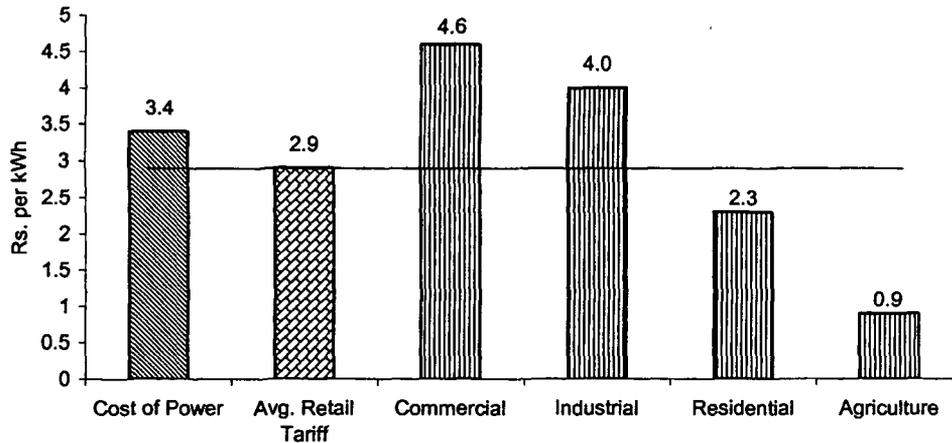
Since the establishment of MERC, MSEB has sought two tariff revisions for 1999-00 and for 2001-02. MERC has been slow in issuing tariff orders. Initially submitted to the GoM in May 1999 (i.e., prior to the constitution of MERC), MSEB's tariff application was passed to MERC in October 1999. Unfortunately, the tariff award (a 20% increase) was issued in May 2000, i.e. after the fiscal year had closed. The tariff application for 2001-02 was filed in March 2001, and the order was only

⁶⁸ For example, in issuing its tariff order for FY2001-02, MERC allowed 96.7 percent of MSEB's proposed expenses. It also reduced MSEB's revenue requirement on account of excess T&D loss. The net revenue (to be covered through tariffs) was only 87.7 percent of MSEB's request.

issued in January 2002, due *inter alia* to the rescinding of the Dabhol contract and certain GoM's objections which resulted in lengthy public hearings.⁶⁹ Hence, during 2001-02, the year for which MSEB requested the increase, MSEB will only benefit from the approved new tariff (of 4%) during three months. MERC also requested MSEB not to file for a tariff adjustment during 2002-03 and if necessary, to file in December 2002 for tariff adjustment in 2003-04.⁷⁰

(ii) *Power Tariff.* The structure of power tariffs in Maharashtra, like elsewhere in India, is heavily distorted. According to MSEB, nine out of its ten customers receive subsidized electricity. The economics of power—cost and tariffs—is reflected in Figure 4.1:

Figure 4.1: Cost and Price of Power (Electricity), 2000-01



The following observations can be made:

- The average retail tariff represents 87% of the average cost of generating, transmitting and distributing a kWh.
- The structure of tariff results in agriculture and residential customers being subsidized at the expense of commercial and industrial users, who pay considerably more per unit. Agricultural customers, for instance, pay only 26% of the average cost of power supply.⁷¹
- Given that the average cost of power supply was Rs. 3.4/kWh in 2000-01 and the recovery from the agricultural sector was Rs.0.9/kWh, the total subsidy was of the order Rs.2,700 crore.
- While no specific data are available on the cost of supply to the different categories of users,⁷² the cost of supply for domestic and agricultural customers is much higher than the average for all categories.
- This tariff structure is one of the main reasons⁷³ why the industrial demand has been stagnant or declining (on account of a switch to captive generation), while that of the subsidized categories is increasing rapidly.

⁶⁹ It is worth noting that as many as 460 parties requested to appear at the hearings held by MERC to consider the MSEB tariff proposal for FY2001-02. There were a total of 533 objections to the tariff proposal. This indicates the sensitivity of electricity pricing in Maharashtra.

⁷⁰ M SEB has contested this decision.

⁷¹ Among all Indian States, cost recovery from agricultural consumers is the highest. In Andhra and Karnataka, the corresponding numbers are 9 and 10 percent, respectively.

⁷² Studies have been commissioned by MERC to evaluate the actual cost of supply to the various consumer classes.

⁷³ The other cause is the poor quality of supply.

Table 4.4 describes the evolution of MSEB's tariffs, for the main consumer classes in recent years:

Table 4.4: Evolution of MSEB's Tariffs

Consumer Category	Before Sep. 98	Sep 98 - May 00	May 00 - Dec 01	Since Jan 02
Domestic (LD1)	1.52	1.80	2.39	2.77
Agriculture	0.22	0.46	1.07	1.52
Industry (HTP1)	3.70	3.99	4.33	4.20
Commercial (LD2)	4.30	4.48	4.64	4.60
Mula Pravara	0.52	1.20	1.20	2.02
Overall Average	2.09	2.50	3.02	3.15

Source: MSEB

Recognizing the need to balance the tariffs, MERC stated in its initial tariff order that its target was to progressively reduce and eventually eliminate cross-subsidies within five years. The principle adopted seems to have the tariffs converge towards the average cost of supply. Its 2002 tariff award shows progress on this front.

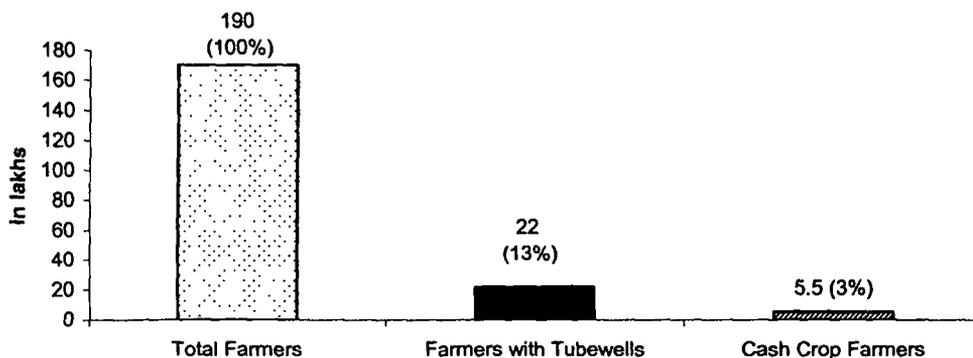
Power subsidies: Size and beneficiaries

4.13 The Central Government's Electricity Regulatory Commissions Act of 1998 provides that if a state government decides to subsidize a particular set of consumers, it can do so by compensating the utility for the difference between the tariff approved by the regulator, and that set by the State. Under this clause, GoM has been subsidizing a number of consumer groups including Domestic (urban and rural), Power Loom, Agricultural, Streetlight and Public Water Works. GoM made provisions for tariff subsidies for 2000-01 and 2001-02 equivalent to Rs.745 crore and Rs.500 crore in its 2000-01 and 2001-02 budgets respectively. However, on a cash basis, GoM provided MSEB in 2001-02 some Rs.1283 crore, of which Rs.789 crore was on account of 2000-01 arrears.

4.14 *Power subsidies to farmers and households: Actual vs. Intended Beneficiaries.* As seen from Figure 4.1 above, on a group classification basis, Maharashtra's industrial and commercial consumers are subsidizing the power consumption of farmers and households. However, within these groups, who are the actual beneficiaries? Figures 4.2 and 4.3 shed light on this issue.

4.15 The latest available data suggest that of the total number of farmers in Maharashtra only 13% have pump-sets and only 3% are cash crop growers, who use most of the electricity and water. Thus, it is not an unreasonable proposition to state that cash-crop growers, particularly those who grow sugarcane, are the main beneficiaries of power subsidies. However, it is unlikely that sugarcane growers are the poor and marginal farmers in Maharashtra.

Figure 4.2: Power Subsidies to Farmers: Who are the Beneficiaries?



4.16 Figures 4.3a and 4.3b provide information, based on the National Sample Survey, 55th Round (1997-98 data), on the pattern of rural household expenditures on electricity. On a per capita basis as well as a share in household expenditures, these figures show that the distribution of spending on electricity is skewed. Poor rural households in Maharashtra spend less than relatively rich households. Thus, any electricity subsidy to rural households largely benefits the relatively better-off.

Figure 4.3a: Maharashtra Rural Households
Monthly electricity expenditures
(Percent of hh budget)

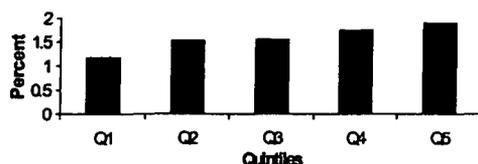
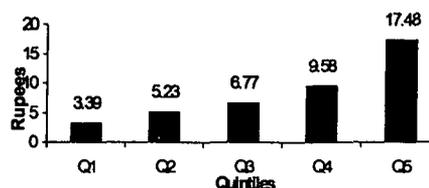


Figure 4.3b: Maharashtra Rural Households
Monthly electricity expenditures
(Per capita)



Running MSEB as a commercial entity: Progress and obstacles.

4.17 MSEB, with active support from MERC has been trying to commercialize its activities. Some notable examples include disconnecting 3.5 million delinquent consumers over the past year; initiating a large scale metering program; introducing a decentralized Management Information System for effective billing; and suspending about 1,500 staff involved in malfeasance.

4.18 Notwithstanding these attempts, GoM has not actively supported MSEB in its reform efforts:

- An anti-theft legislation considered essential to enable effective action against delinquent customers had been under consideration by GoM for thirty months. After extensive deliberations, the anti-theft legislation is expected to be effective from October 2002;
- GoM filed, at a late stage, affidavits with MERC which resulted in delays in the release of tariff awards;
- Against MSEB's advice, GoM supported the maintenance of flat rates below metered rates for agriculture, at a time when MSEB was engaged in a campaign to create incentives for metering.⁷⁴ Similarly, it recommended increasing industrial tariffs further at a time when their (lucrative) consumption is declining as they switch to captive generation;
- It instructed MSEB—through stay orders—to refrain from disconnecting specific delinquent customers; and
- It did not support MSEB's effort to collect from a cooperative (Mula Pravara) at the rate approved by MERC – that cooperative compensates MSEB at a rate much lower than that approved.

4.19 Changing these policies would improve MSEB's financial performance – especially its cashflow. Other Indian States have implemented similar changes. In Andhra Pradesh, for example, anti-theft legislation has led to the creation of special courts and police stations to deal with theft cases. Through effective enforcement of this legislation, the authorities have demonstrated how much can be done in reducing theft and improving collections. The anti-theft legislation was introduced in Andhra Pradesh in 2000, and in the same year billing increased by 25% and actual revenue collection, by 35%.

⁷⁴ Following a policy introduced in the 1970s, agriculture consumers enjoy unmetered connections.

4.20 The policy changes outlined above, together with others such as targeting subsidies to groups of power users efficiently, should be viewed as initial steps along a reform path that leads to sustainable commercial performance by MSEB and its successors, as the private power utilities in Maharashtra have long achieved. The key to sustaining these improvements is to improve governance at both the sector level and corporate level. Whatever reform path is chosen by GoM for the state's power sector (see below), a pre-requisite for implementing structural reforms to the power sector is to stem MSEB's accumulation of losses, starting by enabling operating revenues to exceed operating costs. GoM's budget would benefit from this improvement immediately and substantially. Hence GoM should implement these changes without waiting to decide on longer-term reforms to the sector.

Moving forward: Reforms undertaken and future options

4.21 Barring Dabhol and its associated problems, MSEB has been one of the better performing power utilities in India. Nonetheless, several actions are urgently needed: the quality of service ought to improve, T&D losses ought to decline, tariffs across different consumer categories ought to be balanced and the fiscal bleeding stopped. Virtually all stakeholders in Maharashtra agree that reforming the power sector is a priority issue. Notwithstanding the uncertainty related to the Dabhol Project, now is the time to initiate a comprehensive reform program.

(i) *Power Sector Reforms: Committees' Findings, Recommendations and Implementation.* In the last five years, GoM has commissioned several studies with an objective to reform its power sector (Box 4.2). The Committees appointed by the GoM have submitted their reports, but very little action has taken place in terms of actual reform.

Box 4.2. Power Sector Reform Initiatives in Maharashtra

Examples of these studies and other reform efforts include:

- Rajadhyaksha Committee. Appointed in 1996, the Committee outlined several long term measures to "put MSEB on a viable footing." To enhance the financial performance of MSEB, it recommended the creation of a regulatory body; the conversion of MSEB into a generation and transmission company (under the Companies' Act) shares of which would be sold to the public, and the privatisation of the distribution business. Aside from creating a regulatory body, which resulted from Central Government intervention, the recommendations were not implemented.
- Upasani Committee. In 2000, GoM appointed the Upasani Committee to formulate legislation to enhance MERC's powers, and make it comparable to other regulatory bodies in India. A Maharashtra Electricity Reform Bill was prepared in this context to *inter alia* strengthen the powers of MERC and initiate the unbundling of the sector. The draft legislation is still pending.
- Memorandum of Understanding with GoI. In March 2001, a MoU was agreed upon by GoM and GoI with measures designed to enhance the commercialisation of MSEB, with the broad objective of reducing system losses and attaining a breakeven point in distribution by 2003. GoM agreed to support MERC and implement fully its tariff orders. Overall, the impact of this MoU seems to have been minimal.
- Energy Review Committee. In February 2001, GoM appointed the Energy Review Committee, chaired by Dr. Madhav Godbole. The Committee's main objectives were to investigate, review, recommend and negotiate with the Dabhol Power Company a new framework for its activities; and enhance the financial performance of MSEB. The Committee recommended the development of a Maharashtra specific reform model. A few characteristics of this model were:
 - Restructuring MSEB into a number of generation and distribution utilities, with transmission remaining a monopoly activity;
 - Financial restructuring of the resulting entities prior to their privatization;
 - Privatizing the newly created urban distributors on a priority basis, while implementing credible options for the rural areas, such as a cooperatives-based models; or privatizing those with the support of a transparent subsidy mechanism; and
 - Creating incentives for privatized distributors to reduce losses through a multi year tariff system.

The Committee submitted its report to the GoM in April 2001, but no action has been taken on it.

(ii) *MSEB's efforts to reduce T&D losses.* In order to reduce the T&D loss levels from the current levels of about 40% to 23% by 2010, MSEB has initiated several measures to reduce T&D losses which include:

- Improvement in the distribution system;
- Time-bound program for metering, targeting 100% metering of all agricultural consumers by December 2004;
- Introduction of MIS, energy audits, adopting profit-center approach and billing at sub-divisional level;
- APDP schemes formulated under MoU signed with GoI; and
- Disconnection drive for unauthorized connections.

(iii) *Lessons from experience:* There have been several successful cases of power sector reforms in other developing countries.

- Table 4.5 reports the achievements of two Latin American power utilities following a series of reforms, including privatization.

Table 4.5: Performance improvement of two Latin American electricity distribution companies from the time of privatization until 1998^a

	Peru	Chile
Name of the utility	Luz del Sur	Chilectra
Year privatized	1994	1987
Energy sales (GWh/year)	19%	26%
Energy losses (%)	-50%	-70%
No. employees	-43%	-9%
Customers/employee	135%	37%
Net receivables (days)	-27%	-68%
Provisions for bad debts (% sales)	-65%	-88%

Note: ^a Changes, as of 1998, measured in terms of performance relative to the year of privatization.

Source: From company annual reports and websites.

- International experience amply demonstrates that sustainable improvements in the quality of service delivery can only be attained following fundamental reforms in the structure and ownership of power utilities. That is essentially because successful utilities have necessarily to operate on the basis of commercial considerations. Moreover, regulators have considerably more leverage over private utilities than over Government ones, in the first case it can levy penalties or even suspend the licenses, in the second case, there is little the regulator can do.
- There have been several changes the role of the State from operator to policy-formulator. Furthermore, stakeholders whose status could be affected by the reforms have legitimate concerns, which need to be addressed. Where power sector reforms have been successful, there was a strong government commitment, extensive consultation process with stakeholders took place, and broad ownership of the reform program which was tailored to the local circumstances. Reforms have often resulted in decreasing T&D losses, an accelerated electrification program and in some cases, reduced tariffs.

(iv) *Future Options.* Maharashtra by now has studied enough power sector reform options. The time has come for GoM to articulate its reform strategy. Lessons from other countries suggest that a "home-grown" reform program that results from a broad consultation process with all the key stakeholders improves the chances of success. Based on the Godbole Committee's (2001) recommendations, GoM has released a "White Paper on Reforms in the Power Sector" (July 2002) that outlines a power sector reform strategy based on wide consultations with stakeholders - consumer

groups, political parties, MSEB employees and MERC. GoM is planning to enact a the Maharashtra Electricity Reform Bill in December 2002 to facilitate implementation of the proposed reform program.

More specifically, building on the recommendations of the Godbole Committee Report, a possible action program could be outlined as follows:

- Policy Announcement, Strategy Preparation and Implementation. A Power Sector Reform task force is constituted which reviews all the previous reports and assists the government in formulating a policy, subsequent strategy and time-bound implementation plan. The policy statement should outline a long-term strategy for the power sector. Keeping the best interests of Maharashtra in perspective, this reform strategy should be widely discussed with all stakeholders. It would then be placed in the legislature for approval before proceeding with the implementation of the reform program.
- Enabling legislation. Implementation of reforms requires an appropriate legislative foundation, and to this end, the announcement of the policy statement would be followed by enactment of an enabling legislation. This legislation, among other things, would strengthen the regulatory framework: MERC needs to be empowered further, especially in key areas such as the issuance and enforcement of licenses to companies operating in the power sector. A tariff design would be put in place, which provides incentives for performance and which ensures that tariffs are progressively rationalized to cover the cost of supply.
- Initiating the restructuring of the sector. The sector would be reorganized along commercial lines and restructured into commercially - oriented entities. The distribution business, and eventually the generation business, should have private participation in order for efficiency to improve on a sustainable basis.

(v) *Policy Announcement in the 2002-03 Budget.* Showing its concern regarding the high financial losses of the power sector and indicating a commitment to comprehensive reform, the GoM in its 2002-03 Budget made several policy announcements. In particular,

- It realized that "...The financial position of the state government has been put to a grave risk because of the unsatisfactory financial condition of the Maharashtra State Electricity Board (MSEB)... the government has been periodically converting outstanding loans to MSEB into equity thereby relieving MSEB of the burden of servicing the loans...financial support from the budget for MSEB is becoming untenable."
- And stated "...the government has initiated the process of comprehensive reforms in MSEB with clearly defined milestones. The proposed reforms will be based on discussions initiated on the report of the Godbole Committee. As a part of this process, comments and suggestion of all the stakeholders will be obtained on the proposals contained in the report, the draft Maharashtra Electricity Reform Bill and the Electricity Bill 2001 of the GoI. In particular, responses will be invited to the suggestions relating to unbundling, privatization of distribution and rationalization of tariff. The suggestions received from various stakeholders and government's own views in respect of these suggestions will be published in a White Paper by June 2002. It is necessary to stress that the consultation process will include exhaustive discussions with workers' union. Given the close linkage between the future of MSEB and its employees, it is expected that the worker's unions will take a constructive approach to reforms in MSEB."
- In terms of immediate action it noted that "...certain measures recommended by the Godbole Committee for improving the operational efficiency of MSEB will be implemented immediately. These include complete meterization within the next three years, replacement of defective meters with improved-quality meters, amendment to the act to provide for severe punishment to those indulging in and abetting power thefts and other such malpractices."

4.22 It appears that GoM has finally decided to act and has declared through the annual budget that it is committed to launch wide-ranging fundamental reforms in order to improve the quality of service the citizens of Maharashtra are entitled to, and restore the financial viability of the sector. The time has come to act.

II. Irrigation and Water Resources

4.23 Maharashtra has a large area of dry land and nearly 70% of the state is water deficient. It relies primarily on rainfall during the monsoon season, which extends from June through August. Of the total 225 lakh hectares of cultivable land in the state, about 57% is cultivated which is higher than the all-India figure of 43%. The percentage of gross irrigated area to gross cropped area in Maharashtra is only 16.4, which is substantially lower than the all-India ratio of 38.7. This implies that 83.6% of agricultural area in the state is rain fed. As the agriculture sector continues to be the largest provider of livelihood to its citizens, irrigation is critical for Maharashtra's economy.

4.24 The dire fiscal situation of the GoM has limited the flow of funds to the irrigation sector, particularly for operations and maintenance. As discussed in Chapter 2, the borrowings of the irrigation development corporations have added to the off-budget liabilities of the state. Poorly prioritized expenditures and weak recovery of user charges have resulted in a number of incomplete projects and poorly maintained assets.

Regional characteristics and sources of irrigation

4.25 In Maharashtra a narrow coastal plain lies between the Arabian Sea and the Western *Ghat* mountains. The coastal mountains are characterized by high rainfall (average rainfall exceeds 4000 mm) but the Deccan plateau in the eastern part is mostly dry as it falls in the rain shadow zone of the *Ghats* (average rainfall of 500 mm barely 150 kilometres to the east). However, further to the east, the plains receive an average annual rainfall of 1000 mm. Due to the topography of the state, its demarcated divisions differ substantially in terms of water available for irrigation and crops cultivated (Table 4.6).

Table 4.6: Regional characteristics and cropping patterns in Maharashtra

Region	Characteristic	Main crop
Vidarbha	Heavy rainfall in south-eastern part	Cotton, paddy
Marathwada	In the rain shadow zone, drought-prone area	Pulses, cereals and irrigated crops such as sugarcane, horticulture
North Maharashtra	Drought-prone area	Sugarcane, banana, grapes, onion
Western Maharashtra	Rich in rainwater	Sugarcane, horticulture, cereals
Konkan	Receives 45 percent of State's total rainfall	Paddy, horticulture

4.26 As mentioned above, only 16.4% of the gross cropped area in Maharashtra is irrigated. This is substantially lower than the average 38.7% at the national level. There are two types of irrigation facilities: (i) surface water, which uses canals to connect rivers and other surface water sources to the fields; and (ii) groundwater, which comes from privately owned wells, including bore-wells and tube-wells. Another source is natural recharging from excess water from the irrigated fields that drains away or percolates underground. As over 95% of Maharashtra is rocky, the main source of groundwater irrigation is rainwater. Groundwater irrigation has accounted for about 65% of total irrigation in the past several years, its share declined to 55% in 1999-00. Similar to other Indian states with vast arid areas, power subsidies to agriculture (see the previous sub-section on the power sector) in Maharashtra have encouraged excessive pumping and over-extraction of water. The resulting drop in water levels in many areas is likely to have an adverse impact on longer access to irrigation and drinking water.

Public sector in irrigation: Financing, inefficiencies and subsidies

4.27 The main responsibility of water resource development and management in the state rests with the Irrigation Department.⁷⁵ But in order to counter the hard budget constraint and claim its share of water under the tribunal award (Box 4.3), one of the largest statutory irrigation development corporations (IDCs) – Maharashtra Krishna Valley Corporation – was created. In recent years, four more IDCs were created to address concerns of balanced regional development. The mandate of these IDCs is to harness and utilize water resources in different river basins. IDCs are responsible for surveying, planning, designing, executing, constructing and managing all projects in their respective river basins (Table 4.6 below).

Box 4.3. Krishna Water Dispute and MKVDC

The Government of India established the Krishna Water Dispute Tribunal to resolve the issue of sharing Krishna river water between the states of Maharashtra, Karnataka and Andhra Pradesh. The tribunal declared the sharing formula in 1976. According to this award, out of a total of 2060 thousand million cubic feet (TMCB) of water of Krishna basin, 560, 700 and 800 tmcB had been allocated to Maharashtra, Karnataka and Andhra Pradesh, respectively.

To claim its share, Maharashtra was required to store this water by May 2000. If it did not, a review and revision of water shares among the states was expected. To meet this requirement, Maharashtra has spent heavily on the Maharashtra Krishna Valley Development Corporation to create storage capacity. A large amount of investment has been made on building water storage infrastructure, such as dams, with high capital investment. But this is not accompanied by facilities for distribution systems; many of the downstream canals used to increase the irrigation coverage will be constructed only over the next 10 to 15 years. The other two states are facing similar problems, with no real increase on irrigation potential but a substantial increase in off-budget liabilities.

4.28 *Financing.* Most of the capital expenditures on irrigation have shifted to the IDCs. Irrigation accounts for the largest share of off-budget borrowings of Maharashtra; the other two key activities are power and co-operatives. In the second half of the 1990s, the poor financial position of GoM (as discussed in Chapter 2) has led to a squeeze in capital expenditure and an increased reliance on off-budget borrowing, which at the time did not require prior approval from the Government of India. The GoM transferred all works on 35 major, 53 medium and 418 minor projects in the Krishna valley to the Maharashtra Krishna Valley Development Corporation (MKVDC). For the completion of all works, MKVDC required Rs.11,660 crore, of which 30% (or Rs.3,500 crore) was to be paid by the GoM as share capital and the rest to be raised by the Corporation through sale of state-guaranteed bonds.

4.29 During the five-year period from 1996-97 to 2000-01, MKVDC has spent Rs.6,998 crore to which the GoM has contributed Rs.1295 crore or roughly 20%; the remainder has been raised by MKVDC through bonds.⁷⁶ Lately, in view of the State's precarious fiscal situation, credit rating agencies have downgraded the GoM's rating from AA to B grade, and MKVDC and other IDCs are finding it difficult to get subscriptions to their bonds.

⁷⁵ Other agencies managing water include the Water Conservation Department (for some minor irrigation projects in the range of 100 to 250 hectares of irrigable area) and the Ground Water Survey and Development Agency (under the Water Supply and Sanitation Department). *Zilla Parshids* (under the Rural Development Department) also manage minor irrigation projects of less than 100 hectares.

⁷⁶ "Maharashtra Krishna Valley Development Corporation: An Overview," Government of Maharashtra.

Table 4.7. Irrigation Development Corporations in Maharashtra

	Year established	Funds raised through bonds upto 2000-01	Funds to be raised during 2001-02	All amounts in Rs.crore			
				GoM's equity share		Interest on bonds paid upto 2000-01	Interest due on bonds (2001-07)
				Total	Paid upto 2000-01		
Maharashtra Krishna Valley Development Corporation	1996	4973	745	3500	1295	1234	2436
Vidarbha IDC	1997	1219	445	2245	253	280	781
Tapi IDC	1998	748	300	1400	63	99	501
Konkan IDC	1998	273	75	273	48	43	108
Godavari-Marathwada IDC	1998	1076	370	1300	209	85	758
Total (Rs.crores)		8289	1935	8718	1868	1741	4584

Source: Irrigation Department, GoM

4.30 In the original plans, these Corporations were supposed to pay for their own borrowings through water recovery charges. So far, however due to non-completion of these projects, there has not been any financial return on these projects. Annual interest payment on these bonds, which have increased from Rs.700 crore in 1996-97 to Rs.1,300 crore, have been made through GoM's budget. The debt servicing (interest payments alone) on these IDC bonds in the next 6-7 years is about Rs.5000 crore (Table 4.7). Thus, the GoM like its neighboring state of Karnataka has ended up creating off budget *actual*, as opposed to merely *contingent*, liabilities to circumvent budgetary borrowing constraints.

4.31 *Institutional inefficiencies.* The existing agencies have not kept pace with the changing needs of the water sector, particularly with respect to: (a) water resources management, allocation and planning; (b) expenditure prioritization; and (c) institutional arrangements for the provision of reliable and accountable services for which users are willing to pay. Institutional changes are necessary at a number of levels.

Box 4.4. Water Users Association: The Maharashtra Experience

A number of studies done in Indian States have shown that demand management through farmers' choice of crop varieties and planting dates must be a part of the solution to the difference between water requirement and adequate and timely water supply. With this flexibility the farmers can make optimal conjunctive use of groundwater and surface water resources. Experience from Andhra Pradesh and Maharashtra shows that management by water users associations (WUAs) leads to both effective and efficient spending, better cost recovery and an associated wealth effect to farmers. As of September 2001, there were roughly 600 WUAs in operation in Maharashtra and another 217 were being proposed. WUAs have improved participation, land use, irrigation, cropping intensity, yield and cost recovery, incomes and profits. Other benefits of the associations included a feeling of ownership/belonging, freedom to choose crops, reach of irrigation water to distant 'tail-enders' and freedom from bureaucracy/hierarchy that resulted in inefficiency. But there are certain difficulties faced by WUAs, such as inadequate O&M expenditure for canal maintenance for example cement lining to prevent seepage in canals, which is a responsibility of the Irrigation Department. A few success stories of WUAs in Maharashtra are:

- A WUA near Nashik used to pay for two separate irrigation pumps located at two different places – one on the fields and the other near the water storage facility. By availing credit facilities and adopting new technology such as drip irrigation, it was able to recover its cost of Rs.1 crore in 6 months.
- In Samaj Parivartan Kendra, farmers pooled about Rs.50,000 to build small canals. The water was saved on check dams and lifted from wells for rabi summer crop on a payment basis. Efficiency of water usage has increased and the farmers are making profits.
- The Sri Lakshmi cooperative society charges member farmers on an area basis and pays to the Irrigation Department on a volumetric basis. There are 16 sugarcane factories whose yield increased to 100-135 tons/ha after forming the society and profits increased considerably.

4.32 At "the bottom," there is a need for more effective involvement of users in managing the distribution systems on which they depend. The State has been piloting the Water Users Association (WUAs) as part of the program to increase user participation in system management. While there is

evidence that this is improving systems management in some areas (Box 4.3), there is no clarity, as yet, on critical questions like the role and responsibilities of the irrigation service provider (the Irrigation Department) and the WUAs. There is also no clear definition of financial responsibilities and arrangements, and no clarity on the volumetric entitlements or rights to water.

4.33 At the “service provider” level, there are major challenges in the Irrigation Department. While the Department has a core of well-trained, competent engineers, it is generally over-staffed and the skills mix is inappropriate, with too much emphasis on engineering construction and too little on management and customer relation skills. While spending on operations and maintenance (O&M) of existing facilities is already inadequate due to financial constraints, salaries account for 70% of total O&M costs. The Irrigation Department acts like a monopolist that does not deal with competition and can pass on any costs it incurs. In short, there are few of the characteristics of a healthy, modern, institutional arrangement, including competition amongst suppliers, accountability to users, benchmarking and regulation.

4.34 At the “resource management” level, the all-embracing Irrigation Department functions as the resource manager. There are numerous problems with this arrangement, including (a) a conflict of interest between the Department’s role as regulator and user; and (b) the absence of a clear legal status for water rights, of a registry of rights and of a system for administering these.

Table 4.8: Water charges for selected Cops and States in India as of September 2001

Crop	in rupees per hectare				
	Andhra Pradesh	Karnataka	Rajasthan	Uttar Pradesh	Maharashtra
Sugarcane	875	1000	574	474	4673 ^c /3180 ^d
Paddy	494 ^a /370 ^b	250	198	287	180 ^e /360 ^f
Wheat	250	150	148	287	360
Cotton	250	150	178	114	548 ^g /1088 ^h
Maize	250	88	67		270
Pulses		88	79	212	
Vegetables			109	287	548 / 2040

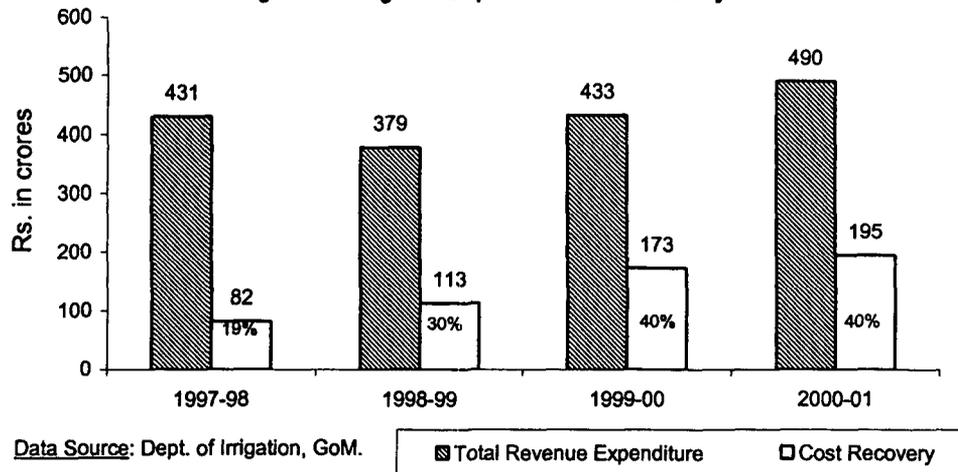
Note: ^a first crop, ^b second crop, ^c flow, ^d drip & sprinkler, ^e on contract, ^f on demand, ^g rabi, ^h hot weather, ⁱ kharif.

Source: Irrigation Department of Government of Maharashtra. For other states, World Bank, 2001 'Karnataka: Rural Policy for Growth and Poverty Reduction'.

4.35 *User Charges and Subsidies*: Historically, water user charges in Maharashtra used to be low and unable to cover recurrent expenditures. However, since September 2001, user charges have been increased to cover full O&M costs and up to 20-25% of the capital cost. These revised water charges have the provision of an automatic 15% increase every year for 5 years to cover a larger part of the capital cost and to neutralize effects of inflation. This indeed has been a bold decision by the GoM and Maharashtra is the first state in India to have adopted this kind of water rates. While water rates in Maharashtra are much higher than most states in India (Table 4.8) and assessment of user charges is high, recovery continues to be a major problem.

4.36 Figure 4.4 below provides a picture of the state of finances of Maharashtra’s Irrigation Department over the last several years. It shows the pattern of cost recovery, which is now roughly 40 %.

Figure 4.4: Irrigation Department: Cost Recovery

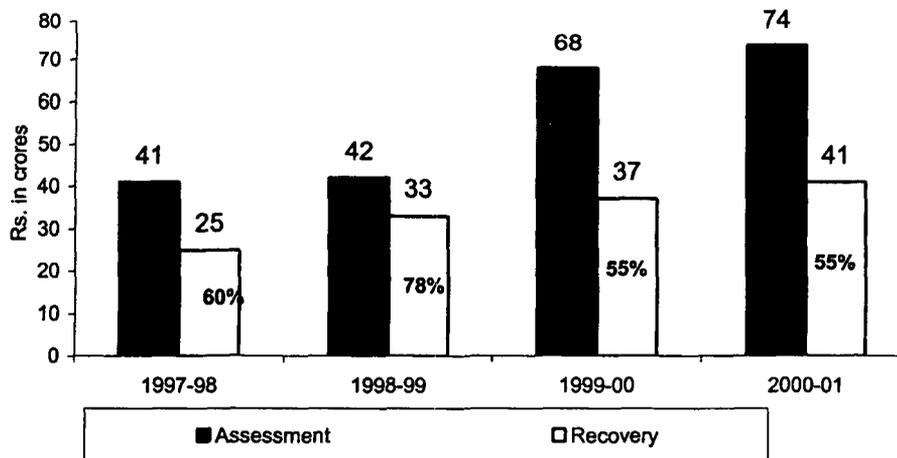


Before reading too much from this figure, a few things must be noted:

- The expenditure numbers do not include capital spending (either total or the amount depreciated);
- Interest on bonds raised by these development corporations in the last several years are not included in the expenditure numbers; and
- Spending and cost recovery numbers are for both irrigation and non-irrigation water (including industry and residential).

4.37 It is quite clear from the above facts that the cost recovery numbers will look much worse if one were to include the interest cost, which is being paid by the Government. This shortfall in cost recovery, however, *does not necessarily* imply that user charges need to be higher to cover these large gaps in cost recovery.⁷⁷ It is important to ensure that the cost of water delivery is reduced by minimizing inefficiencies. Moreover, the assessment and collection of charges needs to be improved (Figure 4.5).

Figure 4.5: Surface Irrigation Charges -- Assessment & Recovery



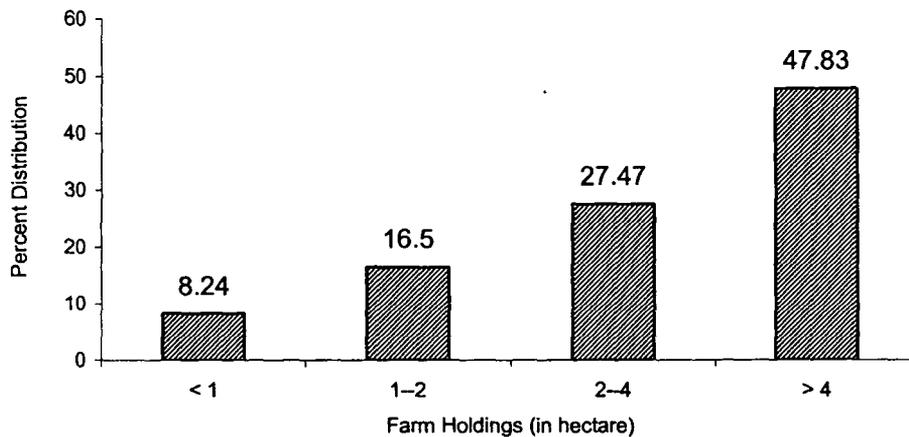
⁷⁷ GoM has revised water user charges, effective September, 1, 2001, for both irrigation and non-irrigation usage with an objective of covering 100 percent of operation & maintenance expenditures. These charges will increase by 15 percent every year and have been announced (and published) for a five-year period (2001-05).

4.38 Figure 4.5 provides information on the assessment of surface irrigation charges only and the amount that is eventually recovered from farmers. The gap reflects the inefficiency in collection. Thus, be it production or collection inefficiencies, or improper tariff structure, the fact remains that a considerable amount of Maharashtra's taxpayers' money is being spent by the Irrigation Department to provide water services. Any effort to increase cost recovery will have to deal with water pricing issues relating to all water consumers.

4.39 *Subsidy Beneficiaries:* The next important question is: Who are the beneficiaries of these subsidies? Ideally, one would like to know who are the users of these subsidies by various income groups. Analysis needs to be done separately for irrigation and non-irrigation water usage. In the absence of readily available data, we provide the following approximation to such a benefit incidence analysis for irrigation water. One can make two observations from Figure 4.6, which provides the distribution of total irrigated area in Maharashtra by farm size, based on the latest data available (NSS Data, 54th Round, 1997-98 data). The total irrigated area is the sum over all major crops across seasons.

- Over 75% of the irrigation (from sources including canals and electricity operated bore- and tube-wells) benefits accrue to farmers with average farm holdings of more than two hectare. On the other hand, less than 10% of the irrigation benefits accrue to farmers whose average farm size is less than one hectare.⁷⁸
- If one looks at ground water irrigation, which is mostly through electric pumps, roughly 80% of benefits accrue to farmers with average farm size of more than four hectares. On the other hand, close to 60% of the benefits from canal irrigation accrue to small and marginal farmers.

Figure 4.6: Total Irrigated Area: Distribution by Farm Size



4.40 Therefore, the proposition that most of the irrigation subsidies in Maharashtra accrue to farmers with average farm holdings of more than two hectares is supported by data. So if the objective of irrigation subsidies is to help the marginal and small farmers, there is little evidence (except for canal irrigation) that it is being met in Maharashtra. Groundwater irrigation, mostly through electric pumps, accounts for almost two-thirds of irrigation in the State. As discussed earlier in the power sector section, the power subsidies to agricultural consumers are also benefiting the large sugarcane farmers.

⁷⁸ The categories of land holding classified by the Government of India are: Marginal — less than one hectare; Small — between one and two; Small Medium — between two and four; Medium — between four and ten; and Large — more than 10 hectares. The first category of Marginal Farmers accounts for roughly 60 percent of all land holding. Small Farmers accounts for about 20 percent; and Medium and Large account for less than 10 percent of all land holding.

Moving forward: Reforms undertaken and future options

4.41 GoM recognizes the need for reform and the Irrigation Department has taken several positive initiatives. Notable achievements and plans include:

- The GoM is planning to establish an independent State Water Planning and Regulatory Authority, similar to the Maharashtra Electric Regulatory Commission (MERC), to plan and manage the state's water resources on a multisectoral basis and to provide a regulatory framework for the water sector. This body will, inter alia, have the authority to decide and fix water charges for various uses and would resolve water disputes within the state. The proposal for setting up Maharashtra State Water Planning and Regulatory Authority has been approved by the Cabinet and an Act to this effect is under preparation.
- Expenditures/investment in incomplete irrigation works is being prioritised for projects with more than 75% construction completed but within the constraint of creating a regional balance of projects. A statutory constitutional provision empowers the Governor to reallocate funds for removing regional imbalance.
- As mentioned above, all irrigation/ non-irrigation water charges have already been raised in September 2001 and will be increased by 15% every year up to 2005. To promote transparency, the rates are published for a 5-year period, the latest being for 2001-05. According to the "sunset provision", this policy will have to be reviewed in 2005.⁷⁹
- In an effort to empower farmers and increase efficiency, the GoM plans to move from government-controlled to people-controlled irrigation systems management. To this end, it plans to pass on the management of allocated water to WUAs. With a view to provide a legal framework to this transition, GoM has decided to enact "Maharashtra Farmers Management of Irrigation System Act, 2002" which is currently under preparation.
- The Irrigation Department is rationalizing its total staff strength of 40,000 by 25%.

4.42 While these initiatives of the GoM are noteworthy, lessons from experience gained elsewhere, suggest that meaningful and sustainable reform in the water sector require a well thought through strategy for change, and a commitment to participation of and communication with all interested parties. Since most of the changes involved are difficult to implement, strong political leadership and commitment are required to make things happen. On the basis of the analysis done, it is the view of this report that irrigation in Maharashtra would go a long way in providing effective, efficient and equitable services to its citizens if the above-mentioned initiatives of GoM are effectively implemented, and are further supported by the following short and medium to long run reform options:

Short-term options (next 1-2 years). Several short-run options that GoM can consider include:

- Reducing off-budget borrowings by the IDCs as laid out in GoM's Medium Term Fiscal Reform Program, and continuing to ensure that any borrowings are applied towards capital expenditures generating the highest returns;
- Change over to volumetric charging and bulk water supply and finalize legislation to formalize farmer participation in the management of surface irrigation systems, including clearly defining WUA and Irrigation Department roles and responsibilities; and
- Adopting State Water Policy by 2003.

Medium- to long-term options. Over the medium term the GoM needs to formulate a concise Water Sector Strategy and Policy and a sequenced plan of reform actions. The Irrigation Department has recently commissioned a Report from an independent commission on the challenges for water

⁷⁹ A Committee under Madhav Godbole has recommended "sunset provision" under which all Acts would become void in 5 years unless they are reviewed and renewed.

resource and irrigation management in the State. There is much, both in substance and process that is positive about the Commission's work. But the report is not informed by a clear, simple, compelling vision of "what a sound water resources and irrigation sector in Maharashtra might be," and of a limited, sequenced and prioritized set of actions for moving "from here to there."

4.43 Using the Commission's report as a starting point, the State needs to develop such a Strategic Vision and Action Plan. This should include attention to:

- An institutional framework for resource management, including the legal framework, regulatory responsibility, such as water regulatory authority, pricing of bulk water and the allocation and administration of water rights;
- A framework for service provision, including competition amongst suppliers; accountability to users; benchmarking, regulation and pricing;
- Improving collection efficiency of irrigation charges to at least 70-80% over the next two years and enforcing prescribed penalties for delinquent users;
- "New generation of irrigation institutional arrangements" in the yet-to-be-developed command areas of the Krishna reservoirs. The new arrangement would, inter alia, include: clearly-defined water rights; new forms of efficiently managed service organizations, possibly including the private sector; and stimulate high-value-added, high employment generating agriculture.

III. Commodity Market Interventions: The Case of Cotton

4.44 Maharashtra is a major cotton growing state. With an annual production of about 30 lakh bales, it accounts for nearly 20% of the cotton produced in India. Grown on about 15% of total cropped area, cotton is essentially a dry-land crop with 98% of Maharashtra's area being rain-fed. While the State produces more cotton and allocates more land area to its production than most other major states in the country, its yield is much lower. The main reason is that improved varieties of seed are known to respond favorably to irrigation and generate higher yields. As a primary cash crop, cotton is a major source of income in Maharashtra for approximately 30 lakh farmers and their families involved in its production.

Monopoly procurement scheme: Description, rationale and operation

4.45 The GoM intervenes in the cotton market through a populist monopoly procurement scheme. On behalf of the government, the Maharashtra Cotton Farmers Marketing Federation procures all cotton produced in the State at a pre-announced support price.

4.46 *Description.* The monopoly procurement scheme assures cotton growers a guaranteed, variety-specific price for the annual season. Farmers are given an advance payment of 80% of the guaranteed price at the time of tender, and the remaining 20% is paid at the end of the season. In addition, the scheme provides a bonus to farmers in the form of an Advance Additional Price (AAP). This bonus is 75% of the net surplus of the scheme; the latter being the difference between the scheme income and its total cost.⁸⁰ The remaining 25% of the surplus is put in a Price Fluctuation Fund (PFF). If AAP exceeds the due bonus (75% of surplus) to farmers, funds are drawn from the PFF to cover up the difference. In turn, GoM provides funds to cover this deficit.

4.47 At the national level, there exists a price support mechanism for raw cotton that is primarily operational during the peak periods of the harvest months when due to rapid arrivals of supply in the market, the price may dip to low levels. Intended as a "price safety net," the current GoI policy has a provision of a Minimum Support Price (MSP) for *Kapas*,⁸¹ which is determined on an annual basis.

⁸⁰ The surplus is thus based on the selling price of lint, cottonseed and cotton waste and all expenditures incurred in procurement, processing and marketing operations under the monopoly procurement scheme.

⁸¹ *Kapas* is the stage of cotton prior to ginning. After ginning, which separates cotton seed from lint, it is pressed into bales.

All cotton growers in the country can sell their crops to the GoI at the MSP. Set up in 1970, the Cotton Corporation of India is the body charged with buying cotton at the MSP. Its other activities include processing indigenous cotton for National Textile Corporation mills and helping create a buffer stock for price stabilization. However, under the monopoly scheme, all cotton growers in Maharashtra are required to sell their crop to GoM.

4.48 *Rationale.* Set up by an Act in 1971,⁸² the Maharashtra State Marketing Federation was responsible for buying and selling cotton as a self-sustaining enterprise. The monopoly procurement scheme had two main objectives: First, to enable the cotton growers in the State to get a fair share of the price for their crop; and second, to supply unadulterated cotton to consumers in the textile industry at a reasonable price. Implemented in 1972-73, the scheme was meant to improve the economic condition of farmers by increasing productivity through better technology and regulation of the cotton market.

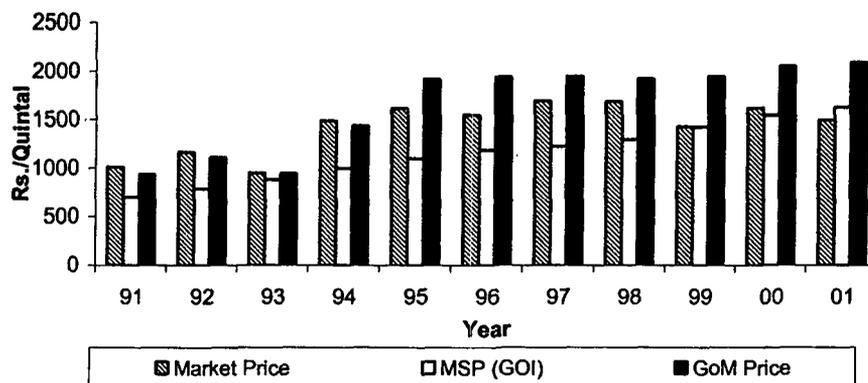
4.49 *Scheme operation.* The scheme functions as follows: The State is split into 12 zones with 60 sub-zones spread over 8-9 centers in four regions: Vidarbha (six zones), Marathwada (four zones), Khandesh (one zone) and Western Maharashtra (one zone, but with negligible procurement). They cover 22 districts and 3 million farmers over an area of 3 million hectares. Raw cotton is procured from farmers at 500 centers and taken to 800 different factories for unloading, weighing and grading.

4.50 The Maharashtra State Marketing Federation operated the scheme as the chief government agent until 1984. It was then taken over by the Maharashtra State Cooperative Cotton Grower's Marketing Federation Ltd., which is registered as a cooperative society and is assisted by *Taluka* (Block) Sale and Purchase societies as sub-agents. The Federation has representatives in zones, sub-zones and factories. At each center a representative helps with weighing, checking quality and making payments for raw cotton. The cotton is then transported to factories for ginning and pressing and then sold in bales in the open market to textile units.

Scheme's performance: State of finances, inefficiencies and beneficiaries

4.51 Until the mid-1990s, the scheme was self-financing. Barring two "bad years" 1984-85 and 1985-86, the scheme made accumulated profits of Rs.223 crore and paid Rs.1127 crore as bonus to farmers.⁸³ However, since 1994-95, it has not been run as a self-sustaining, no-profit, no loss scheme. Two factors have contributed to its downfall: (i) falling market prices; and (ii) raising minimum support prices. In the last few years, the scheme's support price rose considerably and has been 30 to 35% above the GoI's MSP (Figure 4.7).

Figure 4.7: Cotton Procurement Scheme: Prices



⁸² Maharashtra Raw Cotton (Procurement, Processing and Marketing) Act, 1971.

⁸³ GoM's Valluri Committee report on "Monopoly Cotton Procurement Scheme," May 2000.

4.52 *State of finances.* Since 1994-95, the scheme has incurred massive financial losses. In 1994-95, the total cost of producing one quintal of processed cotton rose by 40% (from Rs.1,648 in the previous year to Rs.2,326 per quintal) of which 70% was due to higher procurement price, which went up from Rs.1,437 to Rs.1,920 per quintal. This led to a loss of Rs.158 crore. Since then, this pattern of loss has not changed. (Table 4.9).

4.53 The Federation is surviving through (a) budgetary support from the government; (b) delayed payments to farmers; and (c) debt rescheduling from the co-operative banks. The accumulated liabilities of the Federation in 2000-01 were nearly Rs. 2800 crore.⁸⁴ In the past, payment to cotton sellers was made immediately after procurement, however, during the last several years the Federation has started accumulating arrears due to partial/non payments to farmers. There are pressures on the government to immediately pay the estimated Rs. 800 to 900 crore plus interest which is due to cotton growers who sold cotton under the scheme. The Maharashtra State Co-operative Bank (MSCB) is the principal financier of the Federation, but the government has not paid its dues to MSCB. Therefore, the Reserve Bank of India (RBI) has recommended MSCB to stop all funding for the cotton procurement scheme. The RBI has demanded that, before any further funds are made available to the GoM, all dues to MSCB are paid. Moreover, due to its poor financial condition, if MSCB and other cooperative banks (e.g., District Central Co-operative Bank) fail, the scheme itself is unlikely to survive.

Table 4.9: Maharashtra Cotton Procurement Scheme: Profits/Losses

Year	Total Income (Rs./Quintal)	Total Cost (Rs./Quintal)	Cotton Procured (Lakh Quintals)	Profit/Loss (Rs. crore)
1990-91	1162	1084	65.96	51.5
1991-92	1392	1338	51.21	27.7
1992-93	1162	1154	94.85	7.6
1993-94	1697	1648	65.11	31.9
1994-95	2021	2326	52.17	-158.6
1995-96	1882	2281	131.03	-522.7
1996-97	2006	2258	149.89	-378
1997-98	2091	2323	88.35	-204.8
1998-99	1851	2367	120.56	-624.4
1999-00	2005	2444	176.03	-772.6

Source: The Maharashtra State Co-Operative Cotton Grower's Marketing Federation Ltd., Mumbai.

4.54 *Production inefficiencies.* Due to a number of production inefficiencies, the costs of ginning and pressing are higher in Maharashtra than in the neighbouring states of Gujarat and Andhra Pradesh. In 1998-99, the per quintal ginning and pressing cost in Maharashtra was Rs.94 as compared to Rs.87 in Gujarat and Rs.83 in Andhra Pradesh. The higher cost of production in Maharashtra can be attributed to the relatively poor quality of infrastructure. There are about 800 factories in Maharashtra; half of them are cooperatives and half are private operated. Of these, only 150 have a composite facility for both ginning and processing whereas in the other states most factories carry out these processes at the same location. In most cases, raw cotton is moved from non-facility centers to ginning factories where it is processed into lint. It is then moved to pressing facilities and finally after pressing the lint the bales are transported to a storage facility. This production inefficiency increases the transport cost in Maharashtra resulting in higher processing charges.

4.55 In selling the fully pressed bales of lint cotton, the Federation is competing with private traders who operate more efficiently by following better trade practices (e.g., holding stocks for

⁸⁴ Only 40 percent of this liability is shown on GoM's budget in the form of loans from GoM to the Federation and funds borrowed from the Maharashtra State Co-operative Bank Federation (with GoM's guarantee). Nearly 650 crores has been borrowed from the scheme's "Capital Formation Fund" which is to be paid back to farmers with a 12 percent interest.

shorter periods and working on smaller margins). The Federation produces cotton bales from November to April but stores them for a much longer period, which varied between 15 and 23 months during 1994-95 and 1998-99. The cost of holding each bale in 1998-99 was Rs.120. During periods of high procurement processing is delayed due to the lack of adequate ginning and pressing facilities. Moreover, the Federation has to compete in the market with about 8000-9000 private traders who operate with an average annual turnover of about 1500 bales each. The traders get their cotton either from farmers who do not want to repay their loan from the co-operative society/ bank or by paying a little extra money to the farmers who do not have superior quality cotton. Traders then sell the same cotton to the scheme and make money by manipulating both the grade and the weight of cotton. Thus, the Federation's objectives of controlling the quality of cotton and making bulk quantities of different varieties and grades available under one umbrella are not served.

4.56 Till recently, the scheme placed restrictions on the movement and export of cotton outside state boundaries. Every year the Federation deploys "flying squads" to prevent cotton from being smuggled across the border. According to a policy directive issued on November 7, 2001, farmers are allowed to sell cotton in the market outside Maharashtra but not to the private sector within the state. Similarly, cottonseed cannot be sold to oil manufacturers. This has been in line with the nature of monopoly procurement. Although the GoM purchase price exceeds the local market price by approximately Rs.500 per quintal, about 20% of the cotton is sold in neighboring states such as Gujarat and Andhra Pradesh due to delayed payments and uncertainty in Maharashtra. This is in spite of having to incur transport cost, which is about five percent of total transaction, and the GoI price in these states being lower than the domestic purchase price.

4.57 *Actual vs. targeted beneficiaries: An issue of governance.* An important objective of the scheme is to help cotton farmers in the state to get a fair share of the price for their crop. The scheme has a built-in feature designed to ensure that the benefits of the support price are directly accrued to cotton growers. According to this statute, unless authorized by the State Government, no one but the grower can sell his crop at the authorized collection centers. The presence of intermediate traders is a violation of the Monopoly Act and this offence is punishable with imprisonment and/or fine. Yet, this group has become a major rent seeker in recent years (Valluri Committee Report, 2000).

4.58 It is common practice for small traders to purchase raw cotton from growers to sell at the centers. The intermediaries buy cotton from farmers at a low price and, with the help of corrupt officials, sell it to the Federation for a higher price. Moreover, lower quality *Kapas* are often sold disguised as "upgraded" quality cotton. According to a survey done in 2000-01 by the Federation, in a sample of 7,800 cases, 20% were found to be "upgraded" in this fashion. In a related survey, which covered all processed cotton bales, each bale was linked to the cotton procured and the latter linked to the price paid to the growers. Of the 250 lakh bales surveyed, 80% were of poorer quality than reported.

4.59 Yet another reason why the benefits to cotton farmers are being reduced is the rising interest cost to the Federation. Due to the large borrowing from, among others, the co-operative banks to finance its losses the Federation has built up a huge financial liability. During the past few years, debt rescheduling and increasing interest payments has become a regular feature of the scheme. As reported by the Valluri Committee (2000), "higher interest costs are eating into the money provided for meeting the losses."

4.60 Thus, instead of benefiting cotton farmers, who are the intended beneficiaries of the scheme, the higher procurement price is helping the financial institutions and intermediate traders. Moreover, there is no indication that there has been any increase in either productivity or quality of cotton.

Scheme evaluation and reform options

4.61 What purpose does a monopoly procurement scheme—such as the one administered for cotton in Maharashtra—serve in today's global economy? Does the cotton scheme have any true

economic rationale, that is, does it address any market failures? Does it help the poor farmers of Vidarbha and Marathwada regions where cotton is primarily grown? This section addressed these questions, and based on the analysis, a few reform options are outlined below.

4.62 It is difficult to think of any valid economic reason for the state to intervene in the cotton market in an open-ended fashion. If anything, it distorts the pattern of crop production in favor of the protected crop. There is no market failure in cotton in Maharashtra. The cotton market appears to be working fine as seen in other Indian states. The GoM appointed Valluri Committee made a similar assessment in its evaluation of the Cotton Monopoly scheme. Noting that "...the concept of monopoly runs counter to a market economy and to free trade in a nationwide domestic market..." it recommended that the scheme be discontinued from 2000-02 and the Federation be disbanded.

4.63 Could there be a distributional equity issue that would justify state intervention? One could argue that the provision of a minimum support price protects the interest of cotton growers, particularly when there are extreme conditions in the market (e.g., crashing prices due to high production). Given that there exists a nation-wide minimum support price, which is set every season by the GoI, and becomes effective when market prices fall below it, there is no real justification for GoM to set its own price for equity reasons. In an ideal case, there could be a private, self-financing insurance scheme that provides help when market conditions are not favourable to cotton growers.

4.64 *Reform options and the GoM Budget for 2002-03.* It is the view of this report that the Cotton Monopoly scheme has outlived its original objectives. In its current form, the scheme is not fiscally viable as it is incurring unsustainable losses. Despite the high procurement price paid (since 1994-95) by the scheme, the associated benefits are not going to the poor cotton farmers due to rent seeking activities of intermediate traders and corrupt government officials. As recommended by the GoM's Valluri Committee's report, the scheme should be discontinued and the Federation should be disbanded.

4.65 The GoM budget for 2002-03 favours this approach though it falls short of disbanding the scheme. However, it does state, "...the State Government will procure cotton at the central government's minimum support price and also permit the Cotton Corporation of India and others to purchase cotton in the state..." (paragraph 15). The policy initiative to allow others to buy cotton in the state, if implemented, will effectively break down the monopolistic feature of the scheme.⁸⁵

4.66 The policy announcements made in the Budget Speech are indeed the right ones to take in the immediate short-to-medium run. If implemented, it would allow the Federation to improve its efficiency through competition with other traders. In the long run, there are various other ways to support the farmers rather than direct intervention in the market. For example, the guarantee price could be replaced with a 'deficiency-payment' program that pays the farmers the difference between a floor price and the market price whenever the latter falls below the former. Instead of having government involvement in purchase, processing and storage of cotton, steps could be taken to promote agricultural research and extension services to increase adoption of high yielding seed varieties produced specifically for dry-land areas.

4.67 While the policy announcements made in the Budget are positive steps, it remains to be seen what part of those policies are implemented.

IV. Commodity Market Interventions: The Case of Sugar

4.68 India is the world's largest producer of sugar with an annual production of 15.5 million tons. Sugar is also a heavily regulated commodity with restrictions, both country and state specific, on production, distribution, pricing and sale. Partly due to regulation, sugar productivity in India is low

⁸⁵ A government resolution dated July 4, 2002 attempts to implement these decisions; namely multiple agencies procuring cotton in the state and at GoI announced support prices only. Whether these are being strictly adhered to will be better known in the coming months.

by international comparison: annual per acre yield is 2.4 tons against 5 to 6 tons in other parts of the world. Nonetheless, it remains one of the most profitable crops on a per hectare basis in India.

4.69 The sugar industry in Maharashtra, mostly in the co-operative sector, accounts to 35 to 40% of the sugar produced in India. Cane, from which sugar is recovered, is produced on 3 to 4% of the total cultivated area in the State. It is a water intensive crop and absorbs over 70% of total irrigation water. It also has the lowest yield among the major crops grown in the State and provides support to about 2% of landowners.

Sugar production in Maharashtra

4.70 Roughly 8 lakh hectares of land is under cane cultivation. On average, the yield per hectare is about 80 tons. It remains one of the most profitable crops on a per hectare basis. Among all major crops, it absorbs the highest levels of agricultural subsidies on water (irrigation), power (electricity and diesel) and fertilizers as it uses these inputs more intensively than other crops. Also known as a "lazy man's crop," as it does not require much effort to grow, cane continues to be very popular in Maharashtra due to the relatively high profits from cultivation and the generous financial support from the government for setting up co-operative mills.

Sugar cooperatives

4.71 Sugar is recovered through a process of crushing cane in mills. In Maharashtra, sugar it is almost exclusively produced by government supported cooperatives. At the end of March 2002, of the total 212 registered sugar mills in the State, 201 are cooperatives. The number of private sugar units has almost withered and it is now a state policy that only co-operatives mills will receive new licenses. Furthermore, the requirement that all new mills be cooperatively owned by cane growers leads to a close relationship between mills and farmers, which often leads to efficiency related problems.

4.72 *Rationale.* The rationale of government supported sugar cooperatives is to promote rural development. Like in other cane growing states in India, the sugar industry in Maharashtra is mainly spread over rural areas, and, therefore, the major share of benefits are expected to go to the rural population. It is true that some of the successful sugar co-operative mills, particularly in the western parts of the State, have helped rural areas socially, economically, industrially, and educationally. But it has come at a high cost to the state exchequer and it remains to be seen whether the benefits have outweighed the costs.

4.73 *Setting up a mill.* It could be said that sugar co-operative mills in Maharashtra provides private benefits at public cost. A party willing to set up a sugar mill is required to contribute a mere 10% of the total cost, the remainder is borne directly by the GoM in the form of share capital or through loans and loan guarantees.⁸⁶ The licensing power for a sugar mills is in the hands of politicians, who also own several sugar mills in the State. On the recommendation of the Minister of Co-operatives, the State Commissioner of Sugar grants permission for setting up new sugar co-operatives. In the last several years, 10 to 12 new sugar mills have been set up on an annual basis. A typical mill has a 1250 metric ton crushing capacity per day and costs about Rs. 50 crore to set up.

4.74 *Functioning status.* A majority of sugar cooperative mills in Maharashtra are sick in the sense that their share capital has eroded and they have incurred financial losses for at least two consecutive years. It is not difficult to understand why they become sick. First, there is no proper cost-benefit analysis in determining a new mill. There has been a proliferation of new mills resulting in the under utilization of the existing ones. More importantly, the absence of any incentives or penalties leads to a moral hazard situation. Despite being a financially non-viable proposition from the start, a person or a party sets up a new mill because the GoM pays for it. The owner operates the mill as long as the government support is forthcoming. This process provides employment to farmers, rents to mill-

⁸⁶Loans to sugar mills have been mainly provided by the National Co-operative Development Corporation.

owners and government officials, and votes to politicians. The State and its people end up with a big fiscal mess.

Cane pricing

4.75 Cane prices, both in the country and in the states, are controlled. At the beginning of each cane crushing season, the Government of India announces a Statutory Minimum Price (SMP) based on a sugar recovery rate of 8.5% (a premium is set for higher recovery rates), which must be followed by all sugar mills. The SMP is determined for each mill, there are a total of 465, in the country. In practice, however, each State announces a higher State Advised Price (SAP), which effectively becomes the prevailing price.

4.76 In Maharashtra, there is a statutory provision for the Sugar Cooperatives that until a sugar co-operative has returned the GoM's share in equity and repaid all guaranteed loans, the prices of cane for that cooperative will be determined by the GoM. The price is set by a Committee of Ministers for each co-operative mill. The mills first pay the GoI determined SMP as an initial advance within 15 days of cane delivery. A second payment is then made when the mill's balance sheet permits. A small final payment is made some months later following a state audit of the mill. Due to the poor state of finances, most farmers do not receive much beyond the initial advance.

4.77 The co-operatives are heavily involved in scheduling the planting, harvesting and financing of the crop. The cost of harvesting and transporting cane to the mill/factory is borne by the co-operatives. Strictly speaking, the mills do not purchase cane: Farmers receive the difference between the gross receipts from sale of sugar and by products, less mill costs.

Liability of the state government

4.78 Limited information is available on the extent of GoM support to the sugar cooperatives. A rough estimate indicates a direct share capital of about Rs.720 crore in the last 10 years. In addition, the GoM supports sugar mills in other ways, such as loans on interest and principal defaults, ad-hoc subsidies on crushed cane and transport subsidies. While data on these items are not readily available, this form of support is not very large. Nevertheless, the extent of loans from financial institutions and co-operative banks guaranteed by GoM are substantial. The outstanding stock of guaranteed loans at the end of March 2001 was Rs.3,300 crore, of which about Rs.212 crore have already been invoked during 2000-01 (Table 4.10). Given the rampant sickness in sugar factories and the fact that many have closed down, it is very likely that these guarantees are invoked, thereby putting additional pressure on the state's already precarious fiscal situation.

Table 4.10: Government financial support to sugar co-operatives (1991-2001)

On- and off-budget	Rs. Crores
I. Share capital in sugar co-operatives (from 1991-92)	722
II. Return on Equity due to GoM as on April 1, 2001	672
(Return on Equity actually received by GoM as on April 1, 2001)	(54)
III. Interest paid by GoM for the 10 year period on default NCDC and MCDC loans	26
IV. Loans taken from Financial Institutions (IFCI, IDBI & State Co-operative Banks) against state guarantees	3286
(of which guaranteed loans invoked in recent months during 2001-02)	(212)

NCDC: National Co-operative Development Corporation, MCDC: Maharashtra Co-operative Development Corporation

GoM's intervention in sugar: an evaluation

4.79 Notwithstanding the rural development objective of the GoM and the few successes reported, the intervention in the sugar market does not seem to achieve any economic objective. It is simply a case of private benefits at a public cost. Furthermore, the available evidence suggests that most of the

public subsidies tend to benefit the rich farmers. There is no targeting for the poor and no evidence that the objective of distributional equity is being served.

4.80 An important concern is the sustainability of further expansion of sugar production, which is a very water intensive crop, in a water scarce state like Maharashtra. All sugar cane area is irrigated. To some extent, the canal water charge for sugar cane is now the highest in the country at Rs 4,673 per hectare. If adequately collected, it would significantly change the incentives for sugar cultivation in canal command areas. A big challenge is to reduce power subsidies for groundwater irrigation which is also used for sugar. As noted earlier, this generates negative environmental and social externalities, especially in areas where the only source is ground water and there is a tight competition in demand between agriculture and drinking water. In addition to the fiscal costs of supporting the establishment of sugar mills, these concerns add urgency to reforming the government's development strategy in the sugar sector as a whole.

4.81 A number of committees have been set up by the GoM to address the issue of sick units. By and large, they all have questioned the role and method of the GoM in promoting sugar co-operatives. The Godbole Committee, which submitted its report in March 1999, made several suggestions that should be supported. Its major findings were:

- The GoM should not extend any financial support to new or existing sugar co-operatives and must distance itself from issues related to fixing cane prices, financing factory construction and purchasing of plants and machinery;
- Sick units, that are unlikely to be revived, need to be liquidated; and
- The GoM should not interfere with the operation of those co-operatives where it has no stake.

This report supports the findings of the Godbole Committee.

GoM initiatives and Budget 2002-03 announcements:

4.82 The GoM fully recognizes these issues, and recent budget announcements in March 2002 on the co-operatives in Maharashtra have serious implications for the financial viability of existing and new sugar co-operatives in the state. Some of the key announcements are summarized below:

- It will no longer be possible for the state government to extend financial support to new commercial units in the co-operative sector. As part of fiscal consolidation of the GoM, apart from not providing direct financial support, commercial enterprises in the co-operative sector will no longer be given guarantees.
- The GoM will discourage proliferation of new co-operatives and instead advise prospective new entrants in the sugar factories to take over the ailing units rather than set up new units in the state. This is necessary because of the excess capacity in these sectors which threatens the viability of the existing units (By end of February, 2002 the sugar factories in the state had unsold stocks of 62.78 lakh tons).
- To aid a quick transition to a more competitive environment, the GoM has decided to facilitate quick liquidation of co-operative units that are clearly uncompetitive. To ensure that this process does not get bogged down in procedural delays, the powers of liquidation will be vested in an independent three-man Board, which will take all quasi judicial and commercial decisions from declaration of co-operative units as unviable to their final closure and asset distribution. The Board will also be empowered to restructure units, including divestment, merger and amalgamation.

Moving ahead

4.83 Similar to issues in the power sector and cotton monopoly procurement, most of the problems related to sugar co-operatives in the state have been recognized. While the budget announcements are positive steps and in the right direction, it remains to be seen if and when they are implemented.

4.84 At the national level, the Government of India in February 2002 approved, in principle, complete decontrol of the sugar industry after futures trading in sugar becomes operational in 2002-03. Complete decontrol of sugar implies that the existing levy sugar system (by which 10% of sugar must be sold to fair price, ration shops) and quota release mechanism for sugar will be abolished. While complete decontrol will take some time to be effected, it remains to be seen what impact will it have on the GoM's sugar policies.

V. Promoting Rural Development in Maharashtra: A Few Lessons

4.85 The GoM's focus on rural development is quite clear and well understood. As discussed in Chapter 1, Maharashtra's growth has been driven mostly by the industrial and service sectors and agricultural growth, relative to these sectors, has been lower. The latter has also slowed down due to repeated droughts. The analysis of the four sectors/sub sectors included in this chapter indicates that the GoM has been intervening in the agriculture sector to facilitate high productivity, create employment, help the poor and promote economic development. Farmers are given subsidized electricity and irrigation; their interests are protected in the production of cotton and sugarcane. But has the farm sector really benefited from these interventions? More specifically, have the rural poor benefited? Are such interventions fiscally sustainable?

4.86 The analysis in this chapter indicates that by and large the fruits of most government support have not accrued to the poor farmers. For example, the cash-crop farmers, particularly those who grow sugarcane, are the main beneficiaries of power and irrigation subsidies. But the sugarcane farmers are not the poor and marginal farmers of Maharashtra. In the case of cotton, the benefits of higher price, above the GoI minimum support price, are being captured by rent seeking intermediaries, whose mere presence is a violation of the Cotton Act. In the case of sugar, the major share of benefits are expected to go to the rural population. And it is true that some of the successful sugar mills have helped in promoting rural development. But in the majority of cases, sugar mills have been dysfunctional and imposed a big liability on the state exchequer.

4.87 These four sectors together pose a big drain on the State's resources. A big portion of the MSEB losses are due to farm subsidies. While the water user charges have been raised recently to cover full O&M costs, the recovery rate continues to be very low. The cotton scheme is almost bankrupt and could easily bankrupt a number of co-operative banks if the GoM was not providing periodic support. A similar story emerges from the sugar co-operatives.

4.88 It appears that the GoM's current rural development strategy is not bearing fruits. The fiscal cost is high and unsustainable, and the benefits are not being equitably distributed. However support for the rural sector is justified, both in terms of poverty alleviation (most of the poor are rural) and in terms of building support for reforms. The challenge for GoM is therefore, to find mechanisms including new ones to provide more effective, equitable and sustainable assistance to the farm sector.

4.89 An important challenge is to sustain and possibly increase the State's agricultural growth. Maharashtra agricultural GSDP grew at a rate of 5.3% during the last fifteen years. Sustaining and raising this growth will require raising agricultural productivity not only of existing traditional crops, but a greater emphasis on cultivation of other higher value crops (e.g. horticulture and away from low value paddy and wheat and besides sugar and cotton). Fostering greater agricultural diversification will require investments in rural infrastructure (rural roads, market infrastructure, etc.) and market support services. Furthermore, given the high poverty rates among agricultural laborers, who account for a large share of the rural population, fostering more labor intensive agriculture will be important. Reforms in non-farm sectors are equally important for promoting rural development.

4.90 Alternative mechanisms to subsidize farmers, particularly the poor ones, need to be explored. These could replace the existing set of distorting interventions with a streamlined system of cash-support or coupons. Other off-setting benefits to farmers could include greater market liberalization, expanded private sector participation in areas such as marketing, and the development of efficient crop insurance markets. Several Indian states such as Andhra Pradesh and Karnataka are now starting to look at these new and more efficient ways to support the rural community. There is plenty of international experience Maharashtra can also draw on in moving to a new phase of its support for rural development.

4.91 In undertaking reforms in these sectors, the GoM needs to formulate an effective communication strategy to explain to its people the existing situation and the need to take remedial measures. It is likely that GoM's reform efforts will be met with resistance and could be unpopular. Reforms need not only be, but also seen to be, pro-farmer, not anti-farmer. This chapter has provided some analytical support for GoM to convey its intentions to the people of Maharashtra.

Chapter 5

Social Sectors: The Opportunity Cost of Public Funds

5.1 High fiscal deficits due to subsidies on power, among other commercial products, crowd out expenditure on more essential responsibilities of government. As described in Chapter 4, expenditures on cotton, sugar and electricity are high and fiscally unsustainable. In contrast to subsidies on these commodities that cannot be justified on economic grounds, there are good reasons for supporting expenditures on health and education.

5.2 This chapter argues that spending in the health and education sectors in Maharashtra can and does lead to improvements in economic efficiency and equity. It gives a sense of the value of spending on these sectors and, therefore, of the opportunities foregone by using budgetary resources for lower priority items. The focus is on primarily on health, education, and a social protection program of the State—the Employment Guarantee Scheme (EGS)—because they reflect explicitly stated priorities of government.

I. Millennium Development Goals and Maharashtra

5.3 As discussed in Chapter 1, Maharashtra appears to be on schedule for achieving the Millennium Development Goals (Table 1.1). According to official statistics, the state has virtually achieved universal enrollment of children in primary education. Similarly, on health indicators, registered infant mortality fell by over 30% between 1991 and 2000 a finding broadly consistent with the 20% fall in child mortality documented by the National Family Health Surveys (NFHS) between 1993 and 1999. Should these rates of reduction continue, the goals will be met well before 2015.

5.4 However, confidence about achieving the goals is premature and some indicators are troubling. Recent data on health status suggest that simple extrapolations are not likely to be followed and the rural poor appear to have been by-passed in the progress over the past decade. And while it appears that virtually every child in Maharashtra is currently enrolled in school, successful completion of primary education to the point of producing a literate graduate is significantly less common.

5.5 The implications for policy for achieving the Millennium Development Goals are consistent with the general principles that should guide public expenditures in the social sectors and the budget as a whole. The standard justification for public spending in any sector depends on how well the expenditure item compares with other sectors on the following three grounds:

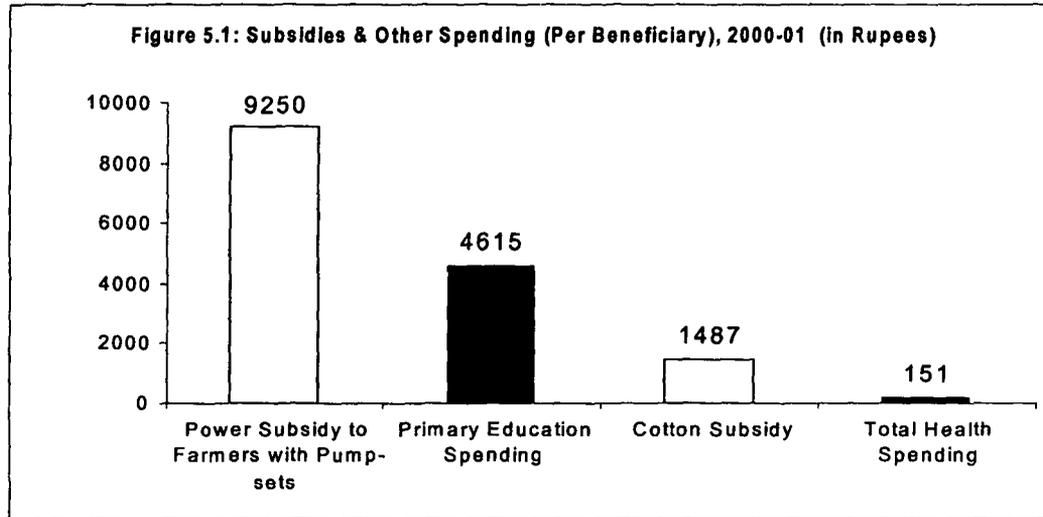
- the degree to which spending improves **efficiency** by ameliorating market failures in the sector;
- the degree to which spending improves **equity**, measured by how much benefit ends up in the hands of the poor; and
- the degree to which spending commitments are consistent with the government's **ability to implement** the policies that are funded.

5.6 The sections on health, education and the EGS (below) examine progress on improving social indicators, document the impact of public expenditures, and compare different categories of expenditures within the sector on these three criteria. But before getting into the details of these sectors, the issue of opportunity cost of funds is briefly discussed.

II. Opportunity cost of funds

5.7 The previous chapter had noted that the four subsidies examined—cotton, irrigation, power and sugar—are high. They may be associated with an increase in private production of goods, but these benefits are purely private at public cost. None of them is correcting any market failure and

very few benefits are reaching the poor. Figure 5.1 presents the opportunity cost associated with some of these activities. It is clear that expenditures on commercial subsidies that displace spending in the social sectors come at a very high opportunity cost.



III. The Health Sector

5.8 Up to the 1990's, Maharashtra held an enviable position relative to other Indian states on many health indicators. For example, the overall mortality rate for children under two years old in 1993 was 8.1% in comparison with rates of about 10%, 11% and 9% in Andhra Pradesh, Karnataka and Tamil Nadu, respectively. The differential between rich and poor was also significantly less pronounced than in the other states. Comparing people at the 10th and 90th percentile of the income distribution, the differential in mortality rates was only about four percentage points (from 9.5 to just over 5%). In the other three states, the differences were 8, 10 and 12 percentage points for Andhra Pradesh, Karnataka and Tamil Nadu.⁸⁷ That is, while poor people everywhere suffer from worse health than others, the differences were ameliorated to a substantial degree in Maharashtra.

Table 5.1. Mortality rates in Maharashtra: 1993 and 1999
(in percent)

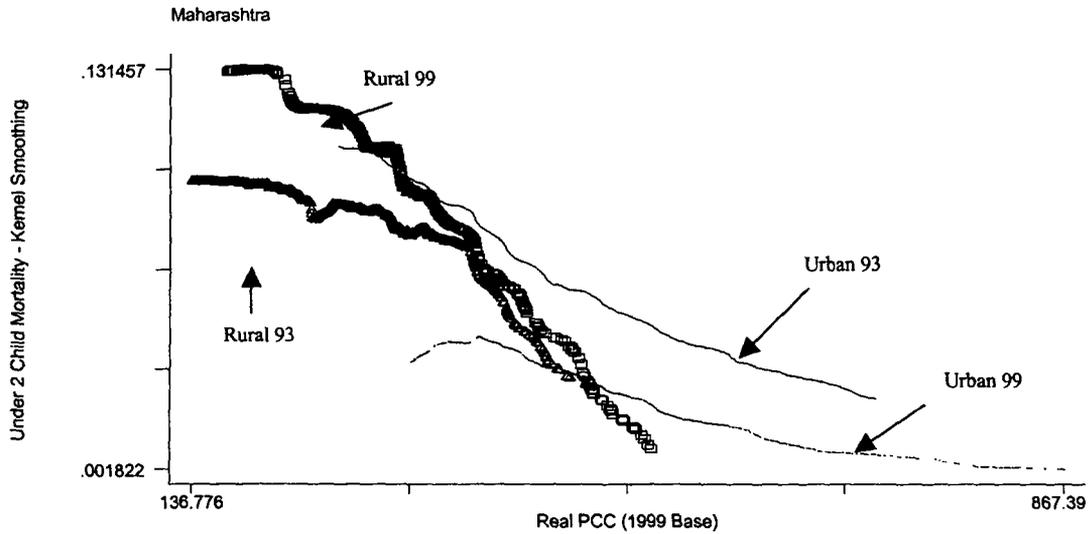
		Maharashtra	Rural	Urban
(i) Infant mortality	1993	7.5	8.2	6.4
	1999	6.1	10.1	2.7
(ii) Child mortality	1993	8.1	8.9	6.8
	1999	6.4	10.8	2.3

Source: Calculations based on the National Family Health Surveys 1993, 1999.

5.9 A cursory look at more recent data implies further improvements. The first column of Table 5.1 shows that statewide, infant and child mortality rates have fallen between 1993 and 1999. However, when urban and rural rates are calculated separately, it becomes clear that the improvement has been entirely in the urban areas and rates in the rural areas appears to have deteriorated.

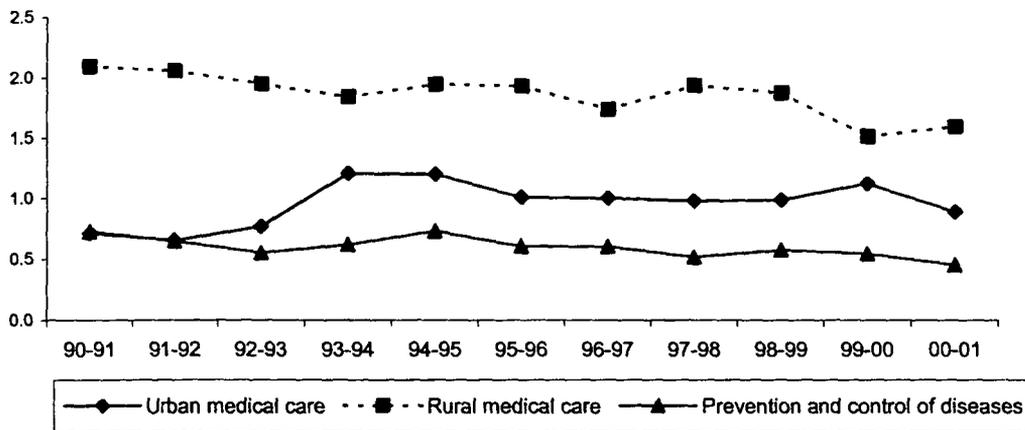
⁸⁷ This analysis draws on the results of Chaudhary and Hammer (2002).

Figure 5.2: Under-2 mortality rates by per capita income



5.10 Looking more closely, Figure 5.2 indicates that the deterioration of health status in the rural areas is concentrated among people with incomes in the poorer half of the rural population. These trends are disturbing on a variety of dimensions. As far as the overall Millennium Development Goals are concerned, it is impossible to reduce the average infant or child mortality in the state by half, relative to 1990, without reducing rural rates. Even if urban rates were to fall to zero, average values would be above the goal. Furthermore, the main thrust of the policy goals is to improve the quality of life among the poorest. The experience of the last decade suggests that whatever progress has been made has by-passed the rural poor entirely. The causes of this trend are not completely apparent, but this should be a high priority for the GoM's Health Department.

Figure 5.3: Percent of total revenue budget spent on health 1990-2001



5.11 Figure 5.3 shows the trend in the share of the public budget going to health over the past decade. While the share of the budget, as well as of state income, has been falling, real per capita expenditures have been quite stable with some increase in medical care spending over the decade. Furthermore, the share of each component of spending has remained relatively constant over the period. The Department of Health has apparently been maintaining services at the same levels in the face of sluggish changes in overall budgets. One noticeable shift is from rural to urban medical care

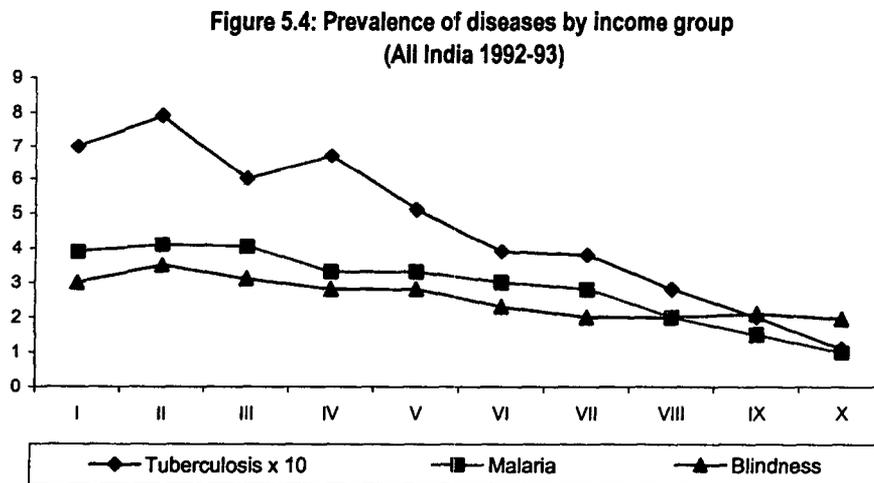
in 1993-94. Whether this can explain the relative changes in health status between urban and rural areas is not clear and is discussed below. However, it is noteworthy in comparing figures two and three that relative mortality and budget shares between the regions have moved in opposite directions.

The impact of public expenditure in the health sector

5.12 The two characteristic market failures in health are first, large externalities associated with interventions for controlling communicable diseases and second, the general inadequacy of private insurance markets leaving most people exposed to substantial financial risk due to catastrophic illness. Income groups vary both in terms of the kinds of health problems they face, as well as the extent to which they use publicly supplied services. While the first two considerations determine where governments can make a potential contribution, some programs are too difficult to implement. Categories of expenditure have different degrees of difficulty in carrying them out, and this should influence policy choices. For example, given the difficulty of administering insurance programs, the intervention most likely to address the problem of exposure to risk is improved access to hospital services.

5.13 In this section, two broad categories of health expenditures are evaluated on these grounds: communicable disease control and medical services, including both primary care and hospital services.

5.14 *Communicable disease control.* The main interventions associated with communicable diseases have large external effects, some of these interventions, such as certain forms of pest control, are pure public goods. In addition to the efficiency benefits of such efforts, attacking communicable diseases is pro-poor. In terms of need for protection, poor people have a much higher incidence of communicable diseases than do the non-poor. Figure 5.4 below shows the relation between standards of living and prevalence of different diseases in India. The relative incidence of tuberculosis between poor and rich is seven to one and malaria four to one. In contrast, a chronic, non-communicable disease such as blindness, due to cataracts, differs by only a factor of three to two. While the poor suffer from all diseases more than the rich, the disparity is dramatic in the case of communicable disease.



Source: Calculations from NFHS 1993 .

5.15 In terms of the use of public services, attention to communicable disease is also very much geared to the poor. NFHS surveys indicate that over 30% of publicly supplied vaccinations are received by children from the poorest quintile of the population while less than 10% are received by those in the richest quintile. Due to the fact that relatively wealthy parents get their children

immunized in the private sector and vaccination campaigns are directed toward rural areas, the majority of government efforts at immunization accrue to the poor and very little to the wealthy.

5.16 Finally, experience in Maharashtra shows that public efforts had substantial impact in communicable disease control. Analysis of the 1993 and 1999 NFHS surveys show that immunization is a very powerful explanation of child health, along with the mother's education and the family's economic standard of living. In this study, access to piped water did not seem to be a determinate. However, analysis of district level data shows that the incidence of diarrheal disease, a leading factor in infant and child mortality, responds not to access to piped water, per se, but to the fraction of water samples found by public health laboratories to be contaminated. The conclusion then is that the assurance of water quality is an effective instrument of public policy even if simple access to water is not.

5.17 While Maharashtra spends approximately 16% of total health expenditures on communicable diseases, the share fallen over time. Over time, this fall might be expected as income grows and people tend to suffer from and demand care for chronic or other non-communicable illnesses. In light of Table 5.1 and Figure 5.2 showing possible worsening of conditions in rural areas, particularly among the poorest, shifting resources away from communicable diseases is premature.

5.18 *Medical services.* Medical services in the Department of Health budget are divided into urban and rural care. For the sake of assessing spending priorities it is often more useful to think in terms of type of services such as primary versus hospital based care. The former is usually ambulatory and relatively inexpensive and the latter is usually for in-patients needing more expensive medical procedures and support services. In general, the market failures associated with primary care have relatively little effect on efficiency compared to hospital care. This implies that fees in primary care facilities at marginal costs are justified, particularly in facilities with congestion. Charges for primary care given in hospitals, in particular, can be higher still in order to direct patients to primary facilities where care can be provided less expensively

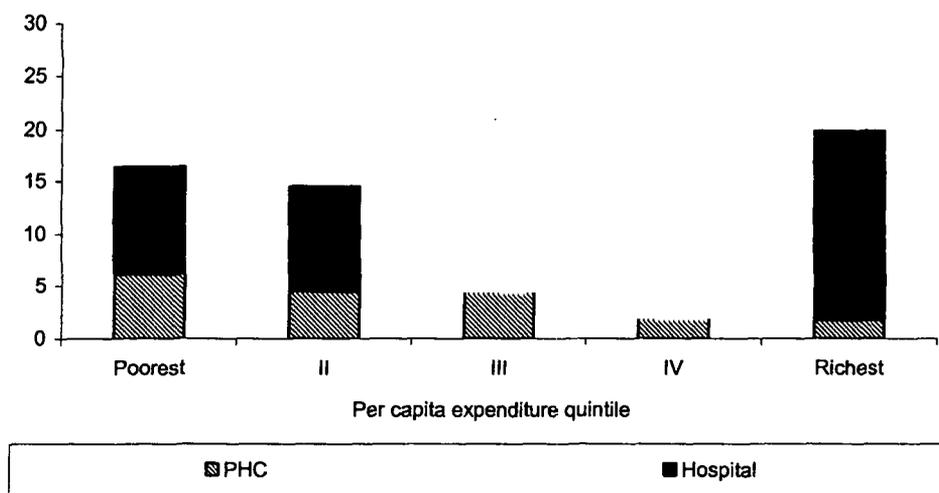
5.19 In the absence of both private health insurance and the ability of governments to administer insurance programs, hospitals tends to be the most likely option for public expenditure devoted to improving efficiency in the health care market. This is recognized by poor people as reflected in many studies that show a great deal of concern for handling medical expenses by means of selling assets. It is only catastrophic, hospital-related expenses that require these extreme measures (World Bank 1998).

5.20 On equity grounds, however, the story is reversed. In contrast to the case of communicable disease where there is a great deal of complementarity between equity and efficiency concerns, in the case of medical services, attacking the large efficiency loss from insurance market failures runs counter to redistribution motives for spending. Benefits from hospital services are not well targeted to the poor whereas, in Maharashtra's case, primary services are. Figure 5.5 presents the distribution of subsidies to hospitals and primary health care. Note the large proportion of patients from the upper-middle income groups. One part of the discrepancy is that poor people frequently do not seek treatment for illnesses even when physical access is not a problem. While poor people face at least as much uncertainty about their necessary health needs, they are not as likely to take advantage of services. A problem for future policy is to find ways of making catastrophic care available to poorer segments of the population.

5.21 The key question though, is whether public expenditures on medical care improve health status or financial security. Throughout India as a whole, the answer to this obvious-sounding question is doubtful. Analyses of the NFHS surveys generally show no relation between the presence of public health care facilities and infant or child mortality (World Bank, 1998). This can be due to one of two effects: either public spending does not translate into actual services rendered due to managerial difficulties, absenteeism, malfeasance, among others, or given the extensive private

participation in medical services, increases in public output might partially displace private care leaving the net increase modest.

Figure 5.5: Distribution of health care subsidies in Maharashtra, 1995-96



Source: Mahal et al. "Who Benefits from Public Health Spending in India"

5.22 When the whole sample of the NFHS for Maharashtra is used, the same result appears – no impact of the presence of public medical facilities in villages. However, single surveys are not sufficient for establishing this effect. For example, facilities might be placed precisely where they are most needed, that is, in the worst areas. This would tend to bias the estimates against finding the result. Recently developed techniques known as “propensity score matching” have been developed to handle this problem and were applied to the Maharashtra NFHS data.

5.23 When this technique is applied, it appears that having a public medical facility (of any sort) in a rural village does indeed, have a favorable impact on health. Mortality in villages with and without a public facility is 6.3% and 9.1%, respectively. It cannot be concluded that public medical facilities are always effective because the analysis only looked at villages that are very poor, remote, in very bad health, and have no private practitioners.⁸⁸ Villages without any public facility make up only 10% of all rural villages. Therefore results on this sample may not generalize to all facilities statewide. However, the results do indicate that the expansion of facilities to those areas that currently have no public or private facilities could make a substantial contribution towards reducing infant and child mortality.⁸⁹

5.24 Different types of health care services usually impose different burdens on administrative capacity. For example, it is often easier for governments to successfully carry out infrastructure construction projects than it is to run a dispersed set of facilities for medical care. Similarly, problems of assuring attendance of professional staff is often much easier in a hospital setting than in primary health care clinics. Recent work in India has shown that medical personnel obtain much of their professional satisfaction from working with colleagues and adequate facilities that allow them to make use of their training (World Bank 2001). In many states these considerations will tend to increase the attendance of providers and conscientious care in hospital settings and argue for somewhat less emphasis on maintaining fixed public facilities at the primary care level and somewhat more on support for hospital-based services.

⁸⁸ Overall statewide mortality is less than 6.3 percent.

⁸⁹ While this result may seem obvious, the same technique found no such effect in several other states.

5.25 However, in terms of the government's ability to successfully implement its health programs, Maharashtra is in an unusually privileged position relative to other Indian states. In Maharashtra implementation of health programs does not pose as great of a problem as elsewhere and does not make the case for greater or less emphasis on one type of service relative to others. Recently a survey by the Public Affairs Center (PAC) was conducted on citizens' perceptions of basic services from health care to drinking water to public buses to primary education across states. In Maharashtra, where 80% of respondents said they had access to a health care facility, public or private, within 3 kilometers of their home, 88% noted that a doctor was present at the time of their visit and 93% a paramedic, and only 8% said they had paid bribes for in-patient care compared to 29% in Tamil Nadu and 26% for both Karnataka and Uttar Pradesh.⁹⁰ Implementation problems do not appear to be a major factor that should affect priority setting in health in Maharashtra.

5.26 In summary, considerations of the efficiency, equity and implementability criteria for evaluating public expenditure argue that great emphasis be put on prevention of communicable diseases. This is due to the complementarity between the efficiency – enhancing characteristics of public goods and the disproportionate degree to which combating such disease will help the poor. The relative emphasis between primary and hospital care should be continuously discussed and monitored by the Department. The former being much better at reaching the poor, the latter better suited to addressing the critical insurance market failure and neither being unduly limited by problems of implementation capacity. The general shift of resources pre- and post- 1993 from communicable disease control and rural medical care to urban care should be re-examined in this light.

IV. The Education Sector

5.27 The minimum age for admission to standard I is 5+. The children above age 5 are admitted to Std 1, to provide access to all such children outside the school. The state government is implementing various individual beneficiary schemes which include free text books, uniforms, writing material to students and attendance allowance to girl students from weaker sections of the society. Moreover to achieve the goal of universal elementary education, the state government has made education free for all children up to standard X and free education for all girl students up to standard XII. These schemes have made a great impact on reduction of drop-out rate and there is a trend of continuous incremental decrease in drop-out rate from year to year.

5.28 Enrollments in school at all levels have continuously increased over the past decade. At this point, it is estimated that virtually all children begin school. This is an increase from perhaps only eighty percent twenty-five years ago.⁹¹

5.29 However, high current enrollments mask problems in the education system. The numbers of repeating students and children dropping out of school before finishing standard VIII are substantial. Dropout rates before standard V are about 16 per cent and before standard VIII are 32% (Selected Educational Statistics, 1999-00). The gross enrollment rate is 101.9% meaning there are more students in school than in the appropriate age group. Since the great majority of children begin school on time and since 16% of students drop out before standard V, this means that many students are over-age. These facts indicate a substantial amount of inefficiency in elementary education in the sense that children are not making steady progress through school. This problem is exceptionally acute among the poor.

5.30 Total spending on education has remained virtually constant at about 20% of total revenue expenditure for the state throughout the past decade. Similarly, the composition of spending has been constant as well with 45%, 40% and 15% going to primary, secondary and higher education respectively, with an apparent blip favoring secondary education at the expense of primary in

⁹⁰ Public Affairs Center, *State of India's Public Services: Benchmarks for a New Millennium* (Bangalore: Public Affairs Center, 2002), see especially pp. 14-19 (health) and 27-31 (education).

⁹¹ See Filmer and Pritchett (2000).

1999-00. However in 2002-03, the percentage of expenditure on primary and secondary (including higher) education has increased to 52 and 43% respectively.

Primary education

5.31 Efficiency arguments for spending on elementary education are usually based on the external effects that a literate person in the labor force has on others. In India, this effect has been demonstrated in the case of agriculture where educated farmers tend to increase the yield of their neighbors (Rosenzweig and Foster, 1995) at least in periods of changing technology.

5.32 More easily demonstrated are the equity effects of primary education. Benefits of primary education expenditure are highly progressive. The first column of Table 5.2 shows the proportion of primary school age students from each income group. Children from families in the poorest 20% of the population of Maharashtra represent 24% of all students in contrast to 16% from families in the richest fifth of income. Subsidies to primary school are quite progressive due to the tendency of poorer families to have more children. Higher income groups have virtually all their children in school, therefore, the remaining children who are not in school are disproportionately from poor families. The composition of the marginal entrants to primary school is shown in column 2.

Table 5.2: Current and marginal entrants to school by income groups

Quintile	(1) Primary Schools		(3) Secondary Schools		(4)
	Current share of students	Share of new entrants	Current share of students	Share of new entrants	
Poorest	0.24	0.4	0.14	0.13	
	2	0.23	0.17	0.18	
	3	0.19	0.18	0.18	
	4	0.18	0.19	0.19	
Richest	0.16	0.02	0.29	0.31	

5.33 Finally, enrollments respond to greater resources devoted to primary education. Even very coarse measures of quality such as teachers per student in any one year can be shown to positively influence primary school enrollments in succeeding years. These analyses indicate that quality improvements paid for by reducing the commercial subsidies could contribute substantially to achieving full enrollment and better educational outcomes

Secondary education.

5.34 Secondary education, particularly higher secondary education, does not have quite as strong a justification for public expenditure as does elementary on either equity or efficiency criteria. On equity grounds, secondary education is still much more common among the relatively well off than among the poor in Maharashtra. Column 3 of Table 5.2 shows the proportion of students between the ages of 14 and 17 who are attending school. This graph alone shows substantially more students from among the richest 20% of the population.

5.35 This table surely overstates the attendance of poorer groups in secondary school, since a large fraction of the students in this age group are likely to still be finishing primary school. There are two countervailing effects: falling attendance in primary schools as incomes rise and rising attendance (rising more steeply than indicated in the graph) in secondary schools. Even the marginal entrants to secondary education are likely to be relatively well off since there is still substantial room for increased attendance in the richest quintiles. Hence, column 4 shows that the fraction of new secondary school entrants is also disproportionately from the better-off households. An effective strategy for increasing the attendance poor students in secondary schools is likely to include at least as much attention to improving primary schools as to expanding secondary school capacity. A larger

pool of poor, but well-educated students, finishing standard VIII is likely to be a significant factor in changing the composition of secondary school students in the future.

5.36 In terms of enhancing market efficiency, government must take account of its effect on the private sector. The GoM's support to secondary education is predominantly in the form of establishing Grant-in-Aid (GIA) arrangements with institutions. The expansion of aided institutions comes partially at the expense of unaided, private schools. The determinants of the number of private secondary school teachers in each district were analyzed. Such determinants included overall enrollment of secondary school students, family income, and numbers of publicly supported teachers. Estimates indicate that every two extra teachers employed in a GIA secondary school displace about one teacher in unaided institutions. This crowding out makes the increase in net secondary school capacity by increases in public capacity somewhat harder to achieve.

5.37 A decision by the government of Maharashtra to reduce the overall transfer to grant-in-aid institutions would essentially mean a cut in public support to secondary education given the high degree of overlap between the two. If such a decision was taken, the government would have to allow either teachers' wages to fall to new, lower market levels due to the reduction of demand, or for fees in secondary education to rise or both. The market for teachers in this situation is hard to predict and would have to be closely watched. Staffing, particularly in rural areas, may be very difficult to maintain. There could be room for increases in fees at secondary level on the basis of both equity and efficiency calculations as noted above.

5.38 However, two caveats should be mentioned. First, the responsiveness of student demand for secondary education with respect to prices is difficult to predict, especially with such a large change in the overall financing, and could lead to a much slower expansion of secondary school enrollments. While the distribution of secondary education subsidies right now is not particularly pro-poor, a longer term goal will have to be to increase poor children's attendance. Secondly, there could be other, serious consequences in terms of social objectives from the slowdown of secondary education. For example, analyses of the determinants of child mortality discussed in the health section above show a strong effect of women's education, (controlling for various other possible determinants such as income, water supply, access to health facilities). Mothers with primary and secondary education have mortality rates of children under two of 6.4 and 5.7% in comparison with 8.1% for mothers with no education. The impact of secondary education is statistically very strong.

5.39 Consequences of reducing secondary education, therefore, could be very serious. Without substantially better information on how changes in the subsidy scheme for GIA institutions will affect enrollment and educational attainment, GoM's intention to restrict funding to GIA institutions (meaning, implicitly, secondary education) is risky and premature. Given much better targets for reducing deficits, cuts in secondary education are a very low priority.

Higher education

5.40 Less justified in terms of either equity or efficiency is the subsidy to tuition at the university level. In terms of equity, the enrollment of students from different income groups is surely much more skewed than secondary education since finishing the latter is a prerequisite to the former. International experience and other evidence from India suggest that university education subsidies are extremely regressive.

5.41 In terms of efficiency, there are two principle market failures associated with higher education and subsidies to students is a very inefficient way of addressing them. Whether the benefits from higher education are associated with externalities is debatable but in any case are not likely to justify anywhere near a subsidy of 100% of the cost of education. In principal, then, students should be paying a substantial fraction of the marginal cost of their education. The problem is that the credit market will not lend without collateral. The "asset" created is reflected in the increase in future earnings and this cannot be secured by the lender. The appropriate policy is a loan program structured

in a way that private banks have an incentive to pursue repayment. The difficulties, however, of administering a loan program should not be underestimated. Repayment rates will probably always be lower than commercial banks would require without some subsidy. First steps in this direction could include gradual increases in fees, full scholarship support for students from poor families (if identifiable) and steady experimentation with loan programs.

5.42 The second market failure is the externality associated with basic research. Again, the appropriate instrument in this case is not free tuition. Instead, the government may want to pay for research outputs directly on a competitive basis. Faculty needing research assistance may pass on some of this money to students, yielding student aid but in a more focused, output oriented way.

5.43 Policies which address both of these issues will yield savings only in the medium term. Instituting a loan program, even if it would ultimately save a large fraction of total government costs as loans are repaid, will not yield any money until the first set of recipients of loans finish their education. If fees are introduced gradually, fiscal returns may only show up in the long run. Of course, establishing the means of increasing research output would use added funds, not save them.

5.44 Once again, however, relative to improving the quality of elementary education, support to higher education is a lower priority and, over time, a substantial amount of cost recovery would be preferable to current levels of subsidy. However, there are real market failures associated with the market for higher education and therefore, relative to subsidies on electricity, cotton, etc., cuts in funding to higher education should be a low priority.

V. The Employment Guarantee Scheme (EGS)

5.45 The Employment Guarantee Scheme is the most important anti-poverty program in Maharashtra. The state-sponsored scheme introduced in 1972, and was initially started as a drought relief program and was successful in the famine relief operation during the drought of 1970-73 (Dreze, 1990). In the later years, this program became an important anti-poverty program. Due to droughts, declining size of land holdings, and poor productivity, the agriculture sector failed to fully absorb the rural labor force and thus created a need for public provision of employment. It was also felt that, the EGS would help alleviate the danger of large-scale migration to urban areas and produce certain indirect benefits, such as rural assets and land development activities that would increase agricultural growth and wages, as the bargaining strength of unskilled laborer would increase due to the presence of employment guarantee.

5.46 *Salient Features.* The EGS provides employment on demand for all adult residents of villages and 'C' class municipal towns of Maharashtra. Work is restricted to unskilled manual labor and is offered within a radius of 8 kilometers from the participant's residence. If the work site falls beyond this distance, then the EGS Act provides camp arrangements and travel expenses. The EGS targets the poor by fixing of wages below the market wage creating a disincentive for the non-poor and choosing projects with a labor intensity criterion that the ratio of labor to other costs is 51:49. Project activity is generally in the agriculturally lean seasons so that competition with agricultural labor demand is avoided.

5.47 *Sources of Finance.* The EGS is financed through resources raised from special taxes, such as tax on professionals and traders, additional Motor Vehicles and Sales tax, special assessment on irrigated lands, surcharge of land revenue, and tax on non-residential urban lands and buildings under Education Cess Act. As the revenue from the first three items accounts for more than 90% of the total costs of the scheme, the EGS is a program funded mainly by the urban population. Revenue collected from these taxes and a matching contribution from the general revenues of the state government is credited to a separate fund the "Employment Guarantee Fund". This is to ensure that these funds are utilized only for the EGS. Unspent resources in any year are carried forward to the subsequent year.

5.48 *Implementing Agencies.* The implementation of the EGS is done through government departments, and only productive work is permitted, which includes: irrigation, soil conservation and

land development, and roads. Out of the completed works, between the inception of the EGS and the end of December 2000, soil conservation and land development together accounted for 66% and irrigation for 13% of the total work.

5.49 *Sub-schemes under the EGS.* In recent years, three sub-schemes have been introduced in order to shift the focus of the EGS from being a program exclusively for employment generation and asset creation to one that is integrated with other rural development programs. The Horticulture Program, introduced in 1990, gives financial support and technical assistance to small and marginal farmers holding 0.2 to 4.0 hectares of land for a period of three years to start up horticulture cultivation on their land. The Jawahar Wells Program, started in September 1988, digs wells on the land of small and marginal farmers below the poverty line.

5.50 *Effectiveness of the EGS expenditure:* Most studies based on surveys indicate that benefits from the EGS mostly went to the poor belonging to vulnerable classes, small and marginal farmers, and landless households, especially in the Marathwada and Vidarbha regions. The distribution of the EGS expenditure across districts clearly shows a positive correlation between EGS spending and poverty. The percentage of women participating in EGS has also been high with a participation rate of 50% on an average. Women, who are generally less mobile compared to men, as they are usually burdened with childcare and other household responsibilities, find it convenient to participate in the EGS employment since it is offered in the vicinity of the village. Amenities, such as crèches near the work sites, also encourage them to take up EGS employment. Although there is some evidence of leakage due to corruption, various evaluations have revealed that the EGS has been relatively more successful in controlling the quality of implementation and the type of works executed as well as in dealing with corruption than other programs such as the IRDP and JRY. Some studies have, however, revealed signs of deterioration in the targeting performance of the EGS (e.g. Gaiha 2000). Based on the ICRISAT survey of two villages Shirapur and Kanzara at two different times, 1979 and 1989, experienced a decline in targeting performance. The percentage of poor excluded by the EGS increased from 80.7 to 85.7 and the share of non-poor in total participants increased from 38.9% to 54.8%.

5.51 *Enrollment in the EGS has been falling.* Despite its many desirable qualities, the EGS seems have run out of steam in recent years. The number of person-days of employment generated and total expenditure incurred on this program appears to have stagnated. Several reasons have been suggested in the literature (Engkvist, 1995). This could partly be due to competition from other poverty alleviation programs, e.g., centrally sponsored schemes such as JRY providing wage employment on better terms; increasing difficulty in finding suitable projects within the village; and decreasing demand for unskilled employment opportunities as education levels go up. Rationing of EGS employment as a result of the hike in EGS wage in 1989 is may also be a reason for the lower participation rates (Ravallion *et al.* 1993). The EGS funds did not increase commensurately with the wage increase, because the government stipulated that existing projects should be completed before opening up new ones.

5.52 *Should the GoM be Concerned?* The decreasing demand for EGS employment need not be a cause for concern, if it is an indication that alternative farm work at attractive wages may be available to agricultural workers. However, the continued existence of poverty and regional disparities suggests that this may not be the case and there is a need to restructure and strengthen the EGS. Dev (1992) using data for 1987-1988 shows that the EGS eliminates no more than 7% of unemployment among wage laborers. Thus the fact that EGS employment constitutes a small fraction of the total unemployed/ underemployed implies that the EGS continues to have an important role in the provision of employment in rural areas. The EGS has been successful in reducing rural unemployment in Maharashtra.

5.53 Simplifying registration procedures and formulae for wage calculations can increase the participation of the poor. A wider dispersal of work sites bringing them closer home can attract the

poor more. Greater emphasis on public rather than private assets: creation of community assets (e.g. watershed programs and soil conservation works) rather than individual assets (digging wells) would benefit the poor more. A separate provision for maintenance of EGS assets combined with vesting of responsibility for maintenance in the local community needs to be made. For effective maintenance of assets created under the EGS it is necessary that the potential benefits from the assets accrue to the villagers. Local needs have to be considered with increased people's participation in the selection and design of projects under the EGS. Keeping the EGS wage below the average agricultural wage is important to maintain the targeting efficacy of the program.

5.54 The tendency to use EGS funds for other purposes has to be curbed since the fund requirement is seasonal and the diversion of these resources for other uses might lead to a shortfall in the funds available for EGS purposes when required the most. Covering the so far bypassed backward/tribal areas can increase EGS employment. Reallocation of outlays in favor of vulnerable regions can also lead to better utilization of funds. Specific needs of women, such as flexible work hours and work locations close to home, need to be accounted for in program design and tasks assignment. Enhanced allocation of outlays would be possible if the centrally sponsored employment schemes are merged with the EGS. Projects themselves should also be integrated into a comprehensive rural development plan. This has been done for example, through a sub-scheme *Shram Shaktidware Gram Vikas* (Village Development Through Labor) that was introduced in 1989 to take up development activities in a village in an integrated manner considering the appropriate backward and forward linkages. The issue of corruption can be tackled by simplifying the procedures for registration and method of calculation of piece rate wages. Greater transparency such as displaying muster rolls on the village notice board and increasing the awareness among workers can reduce corruption to a great extent.

VI. Reform Options

5.55 This chapter has noted that spending in the health and education sectors and on the EGS in Maharashtra can and does lead to improvements in economic efficiency and equity. Furthermore, that the relevant government departments have demonstrated the ability to implement policies and translate spending into economic well-being. Across all spending options in these sectors, even those with relatively weaker justification, cuts in funding should be a very low priority and not considered until subsidies on commercial products are removed first. That said, there are several possible changes in emphasis that could be made within these sectors.

In the health sector...

5.56 There appears to be a worsening of regional difference in infant and child mortality. Urban areas have seen a significant improvement over the past decade while rural areas have deteriorated. GoM Budgets for health have been generally stagnant with a shift of resources from rural to urban medical care in the early part of the decade that has never been reversed. Priority policies should reemphasize communicable disease control that has both very clear economic justification and disproportionate benefits for the poor.

5.57 Extension of service to the relatively few rural areas with neither public nor private health care should also be pursued. In contrast to other states, Maharashtra has the administrative capacity to make this a feasible objective. Finally, improving access to hospital services for the poor through better referral and transport services would also increase both equity and efficiency in the sector.

5.58 Higher spending on communicable disease control and improving access to hospitals by the poor will cost extra money. Extending primary health care services to underserved areas would not cost much on balance if all primary services were subject to fees covering marginal costs. While catastrophic losses associated with hospital care need to be cushioned by the government, there is less justification for subsidies for low cost care. If such fees are considered, revenues would be allowed to remain in the clinic at which they were collected in order to maintain the facilities and to keep stocks

of drug supplies. People should be able to see a reason for paying. In rural areas, such fees should be subject to debate since the distributional benefits of subsidy are greater there.

In education...

5.59 *Primary education.* The state government accords highest priority to the achievement of universalization of elementary education. In education, having children begin primary school is no longer a problem in Maharashtra but having them continue through to functional literacy is, particularly among the poor. Completing primary education is well justified on economic grounds, disproportionately helps the poor and, in Maharashtra, responds to the public financial resources devoted to it. It should, therefore, continue to be a priority.

5.60 *Secondary education.* Arguments for secondary education are more ambiguous. Relatively few secondary school students come from the poorer segments of the population. There is evidence that increased public spending for secondary education displaces private spending. On the other hand, secondary education, at least for girls, is an important factor in improving infant mortality. Also, over time the expansion of secondary education will be needed to bring the benefits of economic growth to a larger fraction of the population. More detailed analysis is needed to determine the appropriate mix of policies to increase secondary enrollments among the poor between increased funding for more secondary facilities or ensuring that more poor children finish primary school successfully and make use of the current facilities. As of now, the evidence favors improvements in primary school. The proposal to hike fees in secondary and higher secondary schools is under consideration. Moreover, there is a proposal under consideration to reduce the subsidies to the students from those families that an afford to pay higher fees. and providing concessions in fee rate to students from poorer families.

5.61 *Tertiary education.* Public financing of higher education is more problematic still. Both equity and efficiency considerations argue against major public subsidies to tuition for university students. However, since borrowing unsecured loans for education is difficult in private credit markets, student loan programs are justified. Over time this will result in a substantial reduction of public spending in higher education, however, there will be no short-term fiscal benefit. A benefit will not be seen until loans begin to be repaid, and this will take several years. More spending for research output is also justified and will help fund universities. This obviously is not a source of savings either.

Administrative reforms are also needed...

5.62 Common to both health and education in particular, is the need for several administrative reforms. The assignment of personnel needs to be made less subject to political interference. Also, information needs to be collected using better methods, more organized and used to determine which policies do, in fact, achieve the objectives intended for them. As of now, little data on outcomes such as health status or learning achievement is collected in a way that allows them to be compared to policy inputs. Inferences in this report can only be tentative due to this fact.

Reforming the EGS...

5.63 The persistence of poverty in Maharashtra calls for an evaluation and possible reorientation of the EGS. The surplus in the EGS reserve fund suggests that its scope can be extended to address the issue of chronic poverty apart from tackling transitory poverty. EGS benefits can be effectively targeted to the poor by adopting the approach of geographic targeting focusing on the least developed villages. Greater focus needs to be given to regions with high tribal population and greater degrees of vulnerability. Sustainable poverty reduction is possible by focusing on productive rural infrastructure. The regional concentration of EGS activities also needs to be examined. There seems to be a need to reorient the scheme to increase the coverage in regions where the presence of the EGS is currently low.

Chapter 6

Improving General Public Services and Overall Governance

6.1 The overall governance framework is a critical enabling factor in promoting stable economic development. This chapter focuses on three key areas for governance reform: (i) Improving the efficacy of the state civil service, (ii) Promoting transparency in government operations and reducing the level of corruption, and (iii) Strengthening the capacity of the government to deliver public services more effectively. Progress in tackling these governance reform challenges has been uneven: The Maharashtra civil service remains overstaffed and represents a significant continuing drain on scarce budgetary resources. On the other hand, GoM has made a strong commitment to bolstering transparency by introducing a model Right to Information (RTI) bill to the state assembly and is considering steps to strengthen institutional arrangements to combat corruption. There have also been significant improvements in service delivery, but more could be done to extend these examples of success both geographically and across a wider range of services. Most critical of all is the need for political will to address the state's complex and varied governance challenges.

I. Reforming the Civil Service

6.2 Maharashtra's civil service consists of three categories of employees: (i) state government employees; (ii) local government employees (Zilla and Nagar Parishad); and (iii) employees of grant-in-aid institutions (GIA institutions). The GoM is responsible for paying the full salaries and pensions for all three categories of employees. In 2000-01, the state and local governments together employed about .7 million persons, and the GIA institutions employed nearly 0.6 million persons, making the total GoM employees a little less than 1.4 million persons.⁹²

6.3 The number of employees in the state and local governments has more or less remained the same over the past 6-7 years at between 0.6 and 0.7 million. Although employment has grown in GIA institutions, particularly for secondary education, the number of teachers has more or less kept pace with the secondary school enrollment.⁹³ Work charged employees were restricted to PWD, Water Supply & Irrigation departments where work contracts were issued – most of these employees have been regularized. However, there are 177,000 temporary employees, which has remained more or less the same since late 1980s. Nevertheless, one may add that despite creating separate SPVs to manage large irrigation and roads works, there has not been much decline in the total employment in government.

6.4 A study commissioned by the GoM⁹⁴ suggests that civil service overstaffing could be as much as 30%. While the quality of public service delivery is questionable, a number of indicators suggest that the number of state employees is more than the number needed to provide the current level of public service. For example:

- A recent assessment carried out by the heads of departments revealed 29,800 existing posts in 20 departments and a surplus of 8,300 employees;
- During the past decade, nearly 11 departments were added;
- Over the last two years, the number of Secretaries, Principal and Additional Secretaries posts have increased sharply;

⁹² In addition to these employees there are a large number of employees in specialized institutions and in the "public sector". Although these institutions are expected to pay for the wages and benefits of their employees, ultimately it is the GoM is responsible for this labor force as well.

⁹³ Basic education, primary and secondary, is highly decentralized at the local level in Maharashtra, as compared to other Indian States. The GoM finances the recurrent expenditure for a large number of institutions that were started and are run by non-government organizations (NGOs). This is mainly true in secondary education, where most schools in Maharashtra are run by approved NGOs. Once a new school built by an NGO is registered, the GoM is committed to pay the salary and non-salary expenditures.

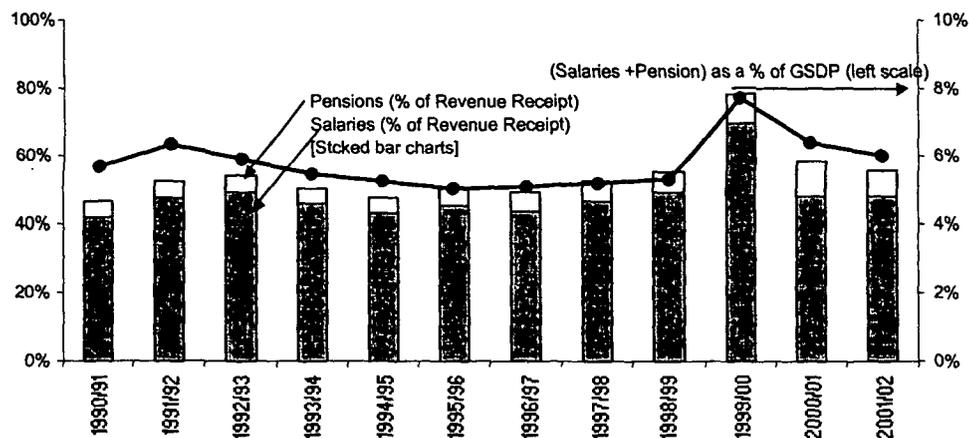
⁹⁴ Godbole (July 2001)

- Overstaffing is especially acute in the Irrigation and Public Works Department (PWD), despite the large number of public sector corporations that were created for irrigation, roads and bridges in the past few years; and
- Overstaffing has also been the result of sanctioning staff separately for each scheme in the development budget. In most cases, these employees stay on after the scheme is completed. This problem is particularly acute in the Agriculture Department.

Fiscal implications of a growing salary and pension burden

6.5 The GoM's wage bill, salaries and pensions, rose from an average of 47.5% of the total revenue receipts during the first half of the 1990s to a high of about 80% in 1999-00—the year when most of the arrears were paid. While the salary bill fell modestly in 2000-01 and 2001-02, it remains above the trend (Figure 6.1). The pension bill continued to rise even in 2000-01, increasing by 51% between 1999-00 and 2000-01, before falling marginally in 2001-02.

Figure 6.1: Salaries and Pensions
(as a percentage of revenue receipt and GSDP)



6.6 Reasons for High Growth: The growth in the total wage bill has come from two sources: (i) growth in employment, particularly in GIA institutions as discussed above; and (ii) wage increases granted by the Central Government's Fifth Pay Commission. However, as GoM adjusted the wages of its employees at a slower pace than that adopted by the GoI, there was a large temporary increase in the wage bill in 1999-00 and 2000-01, due to the payment of arrears. However, even after accounting for this temporary increase, the total salary bill has structurally increased to about 50% of revenues (from about 47.5% in early 1990s).⁹⁵

- Growth of the GIA salary bill. The growth in the salary bill for the GIA institutions has been significantly higher than the growth in the salary bill for the state and local government. During the second half of the 1990s, the average annual growth rate of state and local government service salaries was about 13%, while the growth rate of GIA salaries was 20% (Table 6.1). Given that both these classes of workers received similar wage increases, the larger increase in the GIA salaries was mainly due to the higher growth in GIA employment. Over this period, the total state and local government employment remained at around 1.2 million, whereas the employment in the GIA institutions increased from about 0.58 to 0.68 million—a 17% increase.

⁹⁵ Due to insufficient data, it has not been possible to decompose the total wage bill into the temporary increase due to arrears, and a more permanent—structural increase in wage bill. However, the wage bill in 2001/02 represents a long-term increase since by then most of the arrears have been paid.

- **Impact of the Fifth Pay Commission Award.** Wages in Maharashtra have generally kept pace with inflation. Nominal average wage adjustment exceeded inflation by about 1-2 % per annum during 1993-97. After 1997, however, there was a sharp increase in real wages of civil servants due to the Fifth Pay Commission award. The Government of India constituted the Fifth Pay Commission to recommend salary increases for central government employees only. However, its recommendations have been more or less adopted across all states. The GoM, however, has followed a slower timetable for aligning of the state's pay scales with the central government scales, thereby moderating the impact of the pay increase.

Table 6.1: Growth in salaries and pensions

(in percent per annum)

	Average 90/91-94/95	Average 95/96-00/01
State and Local Government Salaries	0.15	0.13
GIA institutions Salaries	0.19	0.2
Total Government Salary Bill	0.16	0.17
Pensions	0.16	0.3
Total Government Salary and Pension	0.16	0.18

6.7 **Mounting pension liabilities.** In the past decade, the GoM's civil service pension bill has shown considerable increase (Table 6.1). From an average growth of 0.2% in the first half of the 1990s, this rose to 0.3% in the second half – much higher than the rise in the wage bill. The GoM is one of the few state governments in India with a comprehensive age-group distribution of its civil servants, which helps more realistic projection of the state's pension liabilities. Like the GoI and other state governments in India, the pension liability of the GoM is entirely unfunded and is a defined benefit operating on a pay-as-you-go basis. The GoM is planning a more detailed exercise to estimate its pension liabilities and awaiting GoI's policy reforms on civil service pensions.

The problem of frequent transfers

6.8 A critical area linking civil service issues and service delivery is that of inter-departmental transfers of civil servants. Unlike Karnataka, Maharashtra does not have a central data-base to monitor and track transfers; yet, there seems to be a widespread perception that the problem of premature transfers has increased significantly in the last decade. Premature transfers undermine service delivery and civil service morale by spawning corruption and generating serious managerial instability. Recognizing this as a major issue, the Godbole Report (2001) has recommended that Maharashtra adopt a law banning premature transfers entirely and creating a civil service board to authorize transfer requests.⁹⁶ The newly Administrative Reforms Committee, headed by a former Chief Secretary, has been charged with the task of formulating changes to the state's transfer policy, but no such reforms are likely to succeed without high-level political support; In Karnataka, such high-level backing resulted in a huge reduction in transfers from approximately 50,000 in 2000-01 to about 15,000 in 2001-02.

New Directions in Reform: The 2002-03 Budget Speech

6.9 Recent fiscal pressures have forced the government to rethink its employment policy. In the recently announced 2002-03 budget, civil service reform is a recurring theme. Key measures include:

- A new scheme of "Extraordinary Leave" will be introduced for government employees (other than teachers, doctors, nurses and police personnel) from April 1, 2002. Under this scheme (i) employees will be eligible for a grant of Extraordinary Leave (leave without pay) for a period up to 5 years during their service. During this leave period they will be allowed to take up employment outside the government provided they have had no official dealings with the new

⁹⁶ The report is under consideration by a cabinet sub-committee on governance chaired by the Chief Minister.

employer in the last five years. (ii) The period of Extraordinary Leave will be treated as "on duty" for all other purposes including seniority and retirement benefits. (iii) The cadre strength of the employee who has been granted extraordinary leave will be suitably reduced and the resulting vacancies will not be filled during the leave period.

- Given the increasing burden of pensions on state finances, new recruits in government service will not be eligible for pension under the existing scheme. A new scheme of contributory pension will be framed and made applicable to such recruits.
- New recruits in government service will be on probation for a period of two years and will not be given pay scales during this period. They will be paid a consolidated wage, which will be determined separately for each category.
- All classes in secondary schools, which have less than thirty pupils, will be ineligible for grants-in-aid from the Government. Surprise inspections by a team of inspectors will be carried out twice a year and teaching posts found to be in excess, as based on pupil population, will be held ineligible for grants-in-aid from the Government on a permanent basis.
- As a gesture of sacrifice the salaries of all Ministers, which were earlier reduced by 10% will be further reduced by another 10% from April 1, 2002 bringing the total cut to 20%. Travelling and daily allowances of ministers will be restricted to a maximum of 10 days in a month.

These are important policy changes; much, however, will depend on they are implemented over time.

II. Promoting Transparency and strengthening anti-corruption institutions

6.10 A second set of challenges relates to need to promote transparency to foster more accountability, curb rent-seeking, and empower citizens in their dealings with government, as well as reinforce the capacity of the state to both deter and prosecute corruption cases at all levels of government.

6.11 *Transparency and Right to Information.* Several Indian states have enacted Right to Information (RTI) laws to promote transparency. Maharashtra also passed such a law in 2000, but it was rendered ineffective by its large number of exceptions, and very weak appeals process. After several NGOs and others expressed serious reservations, the government re-visited the issue and created a committee, with representatives from outside the government to draft a new RTI law. This new model bill has just been submitted to the state assembly for approval. The new bill applies to a wider range of agencies than the old law, contains strong provisions for access to information at all levels of government, including Cabinet documents, and proposes an independent appeals process via the Ombudsman to challenge executive decisions to withhold information. This new bill is probably the strongest example of RTI legislation in the country and, if enacted, should provide a powerful impetus for greater transparency.

6.12 *E-Governance and strengthening information technology capacity.* The spread of e-governance has also helped improve transparency and cut opportunities for corruption in several states. Unfortunately, in Maharashtra, the Information Technology (IT) Department has been unable to play the catalytic role in this process that it did in Andhra Pradesh. As a relatively new entity created only in 1998, the Department lacked the credibility to promote business process re-engineering in the government with the application of e-governance. Greater co-ordination with the General Administrative Department will be necessary to promote real restructuring in government procedures and processes. The IT Department is also short of technical support. A recent policy decision empowering it to purchase hardware for all government departments (previously with the Industry Department) has overburdened the Department with a host of narrow procurement issues. This has interfered with its strategic role in serving as a catalyst for the growth of IT and e-governance in Maharashtra. There also seems to be a perception among some field departments that

the IT Department is stifling local initiatives rather than fueling them by insisting on the use of particular software packages over others. On the other hand, the Department has played an important role in developing sustainable models for service delivery involving private players, societies, and NGOs.

6.13 *Reinforcing Anti-Corruption Institutions.* Unlike Karnataka and Madhya Pradesh, Maharashtra's Anti-Corruption Bureau (ACB) reports to the Home Department, not to the independent Lok Ayukta (Ombudsman). The ACB, which consists mainly of police and other government officers on deputation, is not well equipped to prosecute more complex forms of corruption, such as financial scams. The time it takes to investigate an allegation of corruption and to prosecute is very long, and few cases are prosecuted because this requires the permission of the appointing authority. There are also concerns that the ACB itself is not immune to corruption. The GoM is considering a proposal to establish an independent vigilance commission to oversee the ACB, combat internal corruption in its ranks, speed up investigations, and publicize cases where permission to prosecute is denied in its Annual Report to the state legislature.

6.14 A strong Lok Ayukta (Ombudsman) provides a good measure of accountability in government. The operation of the Lok Ayukta, whose powers are purely recommendatory and rest on the office's moral authority, could be strengthened by: granting it financial autonomy; bringing the Maharashtra State Electricity Board and the Maharashtra State Road Transport Corporation under its ambit; allowing greater flexibility and autonomy to hire technical experts in different fields to investigate complaints; making the Chief Minister part of the public servant, as defined in the Lok Ayukta Act; and requiring government to table Lok Ayukta reports in the state legislature in a more timely fashion.

III. Improving Public Service Delivery

6.15 Despite the civil service's large size and its burgeoning cost, there is widespread disenchantment with public service providers. As in other states, citizens complain of inordinate delays and long-winded and non-transparent procedures. Reforms underway in select departments indicate that the benefits from e-governance are many, especially in tandem with the restructuring of government departments, including redefining both jobs and functions, as well as better performance evaluation systems for civil servants. In addition, states that provide stable tenure for managers, proactively offer information to consumers, and possess strong institutional mechanisms to deal with corruption are more likely to foster an environment for effective public service delivery.

6.16 GoM has initiated important reforms in three areas on a pilot basis: (i) Payment of stamp duties and registration of documents; (ii) district collectorates; and (iii) urban service centers that provide a range of services including licenses and certificates. All three of these services are important: Stamp duties generate a significant revenue at a time of fiscal stress; district collectorates reach out to the majority of rural citizens; and urban municipalities have taken on a growing importance in a state, which has one of the highest rates of urbanization in the country—42.4% in 2001 against the national average of 27.8%.

(i) *Stamps and Registration.* The Stamps and Registration Department provides property registration to the public. In the process, stamp duty, which provides an annual revenue stream of \$500 million, is collected. The GoM has streamlined and upgraded service delivery in the state's 360 sub-registries. In the new system (Box 6.1), the time required to register a document has dropped to an average of 25 minutes and the opportunities for corruption have been vastly reduced. This reform process in Maharashtra represents a possible model not only for transforming this agency in other states, but also for improving service delivery across other services and agencies. One such lesson, for example, has to do with tactics. After an initial pilot in the city of Pune, officials decided to roll-out all the changes, including computerization, at the same time rather than in a phased manner. This had the advantage of standardizing service delivery across sub-registries simultaneously, maximizing the

impact of political and public support for reform, which might have dissipated had the approach been slower, and not giving the opposition to reform time to crystallize and stall the program.

(ii) *District Collectorates.* District collectorates are a vital point of interaction between the government and citizens. Mostly covering rural areas, they have wide-ranging powers from law enforcement to revenue collection to the administration of schemes and projects. They are also empowered to issue an astonishing number of certificates to ordinary citizens, approximately 85 in total, necessary for day-to-day living. Some of these, particularly caste, income, domicile, nationality, senior citizens' certificates, and ration cards for use in government controlled "Fair Price Shops," carry important benefits, such as access to desired schools, jobs, and credit. The potential for abuse of power by government functionaries, bribery, and corruption is therefore rife. GoM has made a strong effort to improve the services provided by creating citizen facilitation centers in the collectorates. Four pilots have been carried out in the districts of Thane, Pune, Nagpur, and Ahmednagar. The experiences of Thane and Ahmednagar are described below. The district collectorate in Pune and Nagpur have also initiated some steps towards modernization but are significantly less advanced than Thane and Ahmednagar.

Box 6.1. Service delivery improvements in the Stamps and Registration Department

The new model of providing services by the Stamps and Registration Department, made operational on February 1, 2002, has several noteworthy features:

- The model stressed understanding the problems in the existing business process first and then developing an e-governance solution. Among some of the key business process improvements was the elimination of discretion by sub-registrars in the areas of when and whether to register a document or return it; now documents that meet specified requirements (and these have also been simplified) will automatically be accepted for registration and returned within a specified time. The State's Ready Reckoner, a manual used for determining property values and stamp duty, has also been made more precise by pegging property values at the sub-zone level and using survey numbers rather than addresses for property identification. The manual has been fully computerized, making it possible to generate stamp value in a matter of minutes. In addition, machines have been installed in 200 offices allowing customers to purchase stamp paper on the spot rather than going through the more cumbersome procedure of buying it separately from stamp vendors. It also saves the GoM the standard 3% commission on stamp paper bought from them. Sub-registrars will now be required to sign registration documents, immediately after they are generated and in full view of the waiting public, rather than in a closed office later on.
- In all 359 Sub-registrar's offices, Maharashtra has pioneered outsourcing of document registration to private firms on a "Build-Operate-Transfer" basis. Five-year contracts were awarded to qualified parties through a tendering process. The contract lays down performance standards in terms of time taken to complete registration formalities, including time of retention of documents received for registration (24 hours), electronic document scanning and data capture and even the layout of offices to ensure minimum standards of customer convenience. Since the software used is linked to city survey numbers and ready reckoner values, property values are verified instantly on-line. Improved service quality and revenues have been achieved at zero capital cost by the Department and zero workload arrears, while reducing the discretion of Sub-registrars, increasing transparency and decreasing avenues for corruption. It also provides for the problem of computer hardware maintenance, endemic in almost all government departments. This frees department staff for redeployment to other functions, such as enforcement, or even to other departments.
- The changes are based on a realistic and sustainable revenue model: Stamps and Registration will charge its customers Rs. 20 for every page of paper it handle (compared to payments by the S&R Department to contractors ranging between Rs.3 (Mumbai) to Rs.14 (Thane)). In addition, the offices will be operated and maintained by private companies for an initial contract period of five years. They will be responsible for maintaining computer hardware, providing personnel for data-entry and scanning tasks, and maintaining performance standards. Because data entry operators are privately hired, they will act as a potential check on misuse of authority by government employees. Penalties will be levied on the operator's revenue stream if transactions involving less than 30 pages take more than 25 minutes. Data entry operators will digitally scan all thumbprints and photo images required for applications.
- Extensive consultations with employees and the public across the state helped blunt resistance and improve the chances for employee buy-in by offering them better office space and facilities in exchange for co-operation.
- The Department has a Web site that provides answers to frequently asked questions, an organizational chart, invitations to tenders, procedures for registration and other matters, and a feedback/question form that allows clients to communicate on-line with the Department.

- **Thane:** The Thane experience serves as a model for modernizing district administration in the country. Key features of the Thane citizen facilitation center are: (i) **Process Improvements:** The certificate issuing powers of the district collector are delegated to the deputy collector, sub-divisional magistrate, and Tehsildar, allowing all certificates to be issued at district headquarters itself, thereby simplifying and reducing the number of no-objection certificates from other agencies. Certificates issued by the office and the requirements to issue them are plastered on the walls in large print. Computerization and technology are used to provide real-time information and services to the public, and turnaround time on approvals or rejections is capped at 24 hours. Additionally, officers are rotated periodically to prevent them from developing vested interests and to reduce the burden of working in the collectorate for any individual officer. Stamp paper, and affidavit and notarization facilities are also available at the center for a fee, making trips to other offices for these purposes unnecessary; (ii) **NGO Involvement:** The citizen facilitation center is run by a co-operative society on a one-year contract, which the government is likely to renew. In addition to providing data entry operators, the society mans two help-desks to answer questions and assist in the filling out of forms; and (iii) **Private Sector Participation:** The cost of creating the center was approximately \$3.4 million of which \$1.2 million was raised from MLA's and the rest from the Maharashtra Chamber of Housing and Industry (MCHI), a private group. MCHI in turn hired a private vendor to provide software, training support, and project management assistance and built the facility. The project is financially self-sustaining with citizens' paying Rs. 20 for stamp paper and affidavits, on a per transaction basis.

- **Ahmednagar:** Ahmednagar also has a center that resembles the one in Thane, but most certificates take a week to deliver instead of one day because Ahmednagar has not delegated powers to issue certificates. Operated by an NGO, the center has counters to sell forms, accept applications, deliver certificates, and assist citizens. All services available, fees to be paid, and time deadlines for delivery are displayed on a large board near the entrance. Stamp paper and legal affidavits are automatically printed out at a counter for the public and a judicial officer is available at fixed times to sign such documents. There is also a State Bank of India counter to accept payments. Furthermore, the center offers access to old personal records, such as birth certificates, legal judgments, and Government Orders, which are available within three days for records less than 10 years old. Payment of a small fee for 'urgent' delivery results in documents being released within one day. The center does not charge for its services and, like Thane, depends on the sale of forms, stamp paper, and the preparation of affidavits for its revenue. The GoM covers electricity and stationary costs under its contract with the NGO, which is renewable on an annual basis. Ahmednagar has fully computerized ration card records. This has helped eliminate large numbers of duplicate names, resulting in far more accurate ration card roster that can easily be cross checked against the Below-Poverty-Line and other lists to improve their accuracy as well. The process of computerizing land records and providing for on-line certificates has already begun with data entry almost complete. *Talathis* (village accountants) have generally cooperated with the process because computerization involves less drudgery for them and it saves them the need to hire people to maintain records on their behalf.

(iii) **Urban Municipalities: The Case of the Greater Mumbai Corporation (BMC):** Like district collectorates, urban municipalities perform a variety of functions that directly impinge on the lives of ordinary citizens: they receive payments for many services, such as utility bills, collect property taxes, and issue licenses and certificates. Byzantine procedures, imperfect information, layered decision-making processes, and poor office management have rendered many of these offices highly ineffective and turned them into hotbeds of graft and aggravation for ordinary people.

- BMC Citizen's charter: Published in June 1999 with the help of Praja, an NGO, the BMC's citizen charter sought to publicize existing standards for public delivery that were not being followed. The charter listed the main functions of the BMC's departments (Solid Waste Management, Public Health, Road, Electricity, Transport, Waterworks, Licensing, Environment, and Sewerage), the process of service requests, and the time limit to respond to various kinds of complaints. The process of registering grievances was clearly laid out and Praja agreed to follow-up on grievances ignored by the BMC (The NGO is now developing an on-line system for grievance redressal). The names and telephone numbers of all corporators (elected members of the municipality) in the city were provided. The charter was simply designed and 150,000 copies distributed by the daily newspaper, The Indian Express.
- Service delivery user surveys: After the citizen charter was published, Praja conducted a survey of the BMC's performance, which covered ten departments and focused on service quality, staff attitudes, and grievance redress system. While the Waterworks department was highly rated in the survey, respondents were less satisfied with other departments particularly the License, Sewerage, and Traffic Departments. The Road Department's maintenance work was also rated poorly. Approximately one-third of all respondents had filed a complaint with the BMC of which only one-third registered satisfactory outcomes. The survey findings were published in a small booklet and widely distributed, stoking public pressure for change and giving officials valuable feedback.
- The Dahisar citizen facilitation center: One of the BMC's most impressive steps has been the establishment of the citizen facilitation center in Dahisar, one of its 24 wards. The time required to obtain a birth or death certificate, register a complaint, pay a utility bill, or get a shop license has been reduced to 15 to 20 minutes. The ward's charter is posted at the entry. Critical changes include (i) help desks with dual monitors (thus allowing citizens to see exactly what operators themselves see at the same time) that offer a wide range of useful information, (ii) A single window to process applications for licenses, (and NOC's), and pay bills, (iii) A grievance tracking software package (CARE) that makes it extremely easy to file a complaint, allows senior officers to monitor the response of their subordinates to complaints, and lets them use the data generated from the system to identify bottlenecks that need attention, and (iv) A computerized letter and file tracking system (MOIS) that replaces the cumbersome system of inward and outward registries by department for handling mail. Employees were encouraged to cooperate with the changes, which had the support of local corporators, through a mixture of carrots and sticks. An improved office environment and public image, and the promise of smaller crowds thronging department offices because of the greater efficiency and transparency of the CFC, combined with the threat of reassigning recalcitrant personnel to a more distant ward were critical in assuring employee support. The fact that the ward itself was relatively new may also have made it more open to organizational innovation on this scale. All employees receive computer training and the ratio of computers to staff in the ward is about 1 to 1. Because Dahisar does not charge for services, the financial sustainability of the program is a question. The GoM now plans to roll out the Dahisar model to other wards in the city by October 2002.

6.17 *GoM and Citizen's Charters*: GoM has attempted to promote the use of citizens' charters in the state as a way of improving service delivery across departments. The government has also established a committee to approve such charters headed by the Principal Secretary, GAD (AR). So far, 21 charters have been authorized. There are questions about the extent of public consultation in their formulation. In addition, none of the charters adopted by GoM contain penalties for non-compliance, unlike the Hyderabad Water Supply and Sewerage charters (HWSSB) and the 'core' charter for AP's Urban Municipal Governments. Penalties are a powerful way of demonstrating departmental intent to reform world-wide. GoM officials also note a tendency for departments to 'play it safe' by committing to looser service standards in their charter that they already know they

can meet easily. Nor is it clear how well disseminated these charters are – although a few have been placed on the internet. Finally, an effort is needed to evaluate how these charters are actually working through independent user surveys, for example.

6.18 *Are Land Records and Transport Lagging?* One puzzle is why Maharashtra has lagged so far behind its neighbor, Karnataka, in the computerization of land records. Land records computerization for most of the 1990's was in the hands of the National Informatics Center (NIC) but did not advance much. Officials then decided to invite private parties to bid for the preparation of software for computerization and its initial piloting; after the bidding was completed and a company identified, GoM decided that the costs involved were too high and reverted to the original plan of relying on NIC. NIC was then asked to develop a software package using IBM's DB2, a related-database management software program (RDMS), with which NIC was relatively unfamiliar, resulting in a longer delivery time-line.⁹⁷ As a result, individual collectors interested in land records computerization won the permission of the Chief Secretary to proceed with their own local initiatives without waiting for NIC. At the moment, Maharashtra is now a patchwork of a few sparse and locally-based initiatives to computerize land records, which will later have to be blended into NIC's program. Clearly, the computerization of land records in the state has suffered because of confusion over whether to use NIC or private companies for the task, debates over RDMS packages, and tension among the key players.

6.19 A similar situation seems to prevail in the Transport Department where computerization began in the mid-1990's in seven Regional Transport Offices (RTO's) outside Mumbai. Irregular electricity supply, the reluctance of government to subsidize diesel costs for generators and the purchase of pre-printed stationery meant that these systems were not always fully operational. Field staff have now asked for the support of the IT Department to upgrade these systems. The top priority of the IT Department is, however, to focus on upgrading service quality in Mumbai's neglected RTO offices through an outsourcing model, similar to one employed in Stamps and Registration, which will be extended to the rest of the state's RTO's later. In addition, the IT Department intends to use DB2 in Mumbai and then elsewhere rather than upgrade the existing Oracle version installed in offices outside Mumbai. The software debate, however, is less important than the deeper concern by employees that the outsourcing of management and maintenance functions might undermine their strength in the Department.

IV. Some Suggested Next Steps

6.20 As argued throughout this report, the GoM is neither slow in understanding the nature and magnitude of problems faced by its departments nor is it facing a shortage of good ideas to address those problems. In most cases, it is the lack of adequate political and bureaucratic will, which often explains the inertia. If not fully on board before, the GoM has been made fully aware of its governance problems by the Godbole study. Several reform actions were announced in the March'03 budget to tackle the fiscal challenges imposed by the large civil service and the GoM has begun to take important steps towards streamlining service delivery in some areas and promoting greater transparency by submitting a model RTI bill to the state assembly. The following suggested options will strengthen the GoM's governance reform program.

On civil service reform

The GoM's program to reduce the size of the civil service is moving in the right direction, but the pace needs to quicken. The following specific reform options are suggested:

- The Department of Finance, with the help of the National Productivity Council, has carried out a detailed assessment of the surplus labor within the Department of Finance using an objective criterion on the role and function of the Department. It would be useful to extend

⁹⁷ The IT Department purchased 8,000 copies of DB2 at concessional rates from IBM and thus wanted to use DB2 as its primary RDMS.

such an exercise to other departments to identify surplus manpower as well as realign their role. One vehicle to achieve this goal is to press ahead with the ARC's proposal to conduct functional reviews of major departments.

- GoM might consider developing a voluntary retirement scheme on the lines of the recently approved GoI policy and develop retraining and redeployment plans for surplus staff. Until such a VRS package is adopted by GoM, other measures to contain the growing wage bill - containing growth in work-charged employees, implementing the "Extraordinary Leave" scheme and abolishing posts identified as surplus – may be undertaken.
- Frequent transfers of civil servants undermine both morale and service delivery. The GoM could consider developing a monitoring system to track transfers over time and create statutory civil service boards to approve transfers at all levels.
- There is a general feeling that many of the GIA institutions do not effectively use the funds allocated to them. It would be useful to carry out an audit or evaluation of a random sample of the GIA institutions as a prelude to a larger exercise to identify surplus employment.
- As suggested by the Godbole Committee, the GoM needs to control/reduce the number of higher-level positions of secretaries and additional secretaries.
- A special effort needs to be made to identify redundancies in Agriculture, PWD and the Irrigation Departments. A mechanism needs to be put in place to ensure that when new corporations are created to implement activities carried out by the Government Departments, the relevant staff are also transferred along with the activities.

On reforms to promote transparency and reduce corruption, GoM can do a lot more to strengthen its anti-corruption institutions.

- The Right to Information bill is likely to have an empowering effect on citizens/consumers in their interactions with the government. The GoM should make it a priority to pass the bill.
- A strong Lok Ayukta (Ombudsman) facilitates accountability in service delivery and government. Measures need to be taken to enhance its financial autonomy, scope of authority, and capacity to hire outside experts. Reports should be presented on time.
- The GoM may consider establishing an independent Vigilance Commission to oversee the work of the Anti-Corruption Bureau to improve its credibility and efficacy.
- The GoM should reassess the role of the IT Department to make it more effective as a catalyst for e-governance.

On public service delivery, GoM has made a number of major advances, but these need to be extended.

- In view of the success of pilot citizen facilitation centers, these could be rolled out in all municipal wards in Greater Mumbai and in other major urban areas like Nagpur, Pune and Nasik. The Thane model could also be extended in other district collectorates in the state.
- The GoM should accelerate the pace of land records computerization, an area where Maharashtra has significantly lagged behind its neighbor, Karnataka.
- The GoM should foster more public consultation in the design of charters, wider dissemination, and user surveys to assess and track improvements over time.

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