

# Economic Profile and Development Strategy

## Introduction

Maharashtra, with a population of 97 million in 2001, emerged as the second most populous state in India. With about 9 per cent of India's population, Maharashtra produces country's 19 per cent of industrial output, 15 per cent of service sector output and about 13 per cent of GDP. Though the most industrialised of Indian states, it is not the most urbanised as it was till 2001 when Tamil Nadu pipped it to the second place. Its per capita income of Rs. 22,179 in 2000-01 makes it the third richest state in India after Punjab and Haryana (GoM, 2003). Despite that, the per capita income of the state has increased steadily at 3 per cent per annum over the last two decades. But its fiscal situation does not reflect its relative income position. As a per cent of GDP, its revenue deficit, fiscal deficit and debt stood at 3, 3.5 and 17.3 per cent, respectively in 2000-01. Over 87 per cent of its borrowings were financing consumption expenditure, adding to the unsustainability of the debt being contracted.

Our objectives remain the same as before but the national and the international context in which we pursue them is no longer the same. Globalisation and the new technologies have changed it radically. Both create opportunities and pose new challenges. The strategy that we devise has not only to be in consonance with the changed context but it has to lead to sustainable growth. As Mr. Wolfensohn points out in the WDR 2003, we have to create new institutions and strengthen existing ones so that cooperative solutions emerge and are implemented. The growth of services sector, which largely comprise the new economy, contributed 8 per cent to the growth of Maharashtra's economy during 1997-98 and 2000-01. Seen in the context of the shrinking contribution of agriculture to the GDP (the agriculture sector showed a decline of 5 per cent in growth during the same period) and the near stagnant contribution of industries to the GDP during 1997-98 and 2000-01, we need growth strategies, for sustainable growth and development.

## Section I

### Economic Growth

In the Tenth Five Year Plan (2002-07) Maharashtra has set for itself a GDP growth rate of 8 per cent with accelerated economic development through infra-structural development, with more private initiative in all possible sectors, ensuring high speed industrial development and creating large scale employment.

Having experienced the growth rate of 8.9 per cent during the Eight Plan (1992-97), the target set for Tenth Plan seems quite achievable but deceleration of growth rate to 4.7 per cent per annum during the Ninth Plan (1997-2002) and the deterioration in the fiscal situation of the state make the task daunting. The Tenth Five Year plan document highlights the above scenario by pointing out to the "...disappointing progress in many social as well as infra-structural sector" (GoM, 2002a). It may also be relevant to see the inter-state comparison of the growth rates during the last two Five Year Plans (Table 1.1).

**Table 1.1: Growth rates in State Domestic Product in the Eighth and Ninth Plans and those Targeted in the Tenth Plan**  
(Per cent per annum)

Major States	Eighth Plan 1992-97	Ninth Plan 1997-02	Tenth Plan (Targets) 2002-07
Andhra Pradesh	5.4	4.6	6.8
Assam	2.8	2.1	6.2
Bihar	2.2	4.0	6.2
Gujarat	12.4	4.0	10.2
Haryana	5.2	4.1	7.9
Himachal Pradesh	6.5	5.9	8.9
Karnataka	6.2	7.2	10.1
Kerala	6.5	5.7	6.5
Madhya Pradesh	6.3	4.0	7.0
<b>Maharashtra</b>	<b>8.9</b>	<b>4.7</b>	<b>7.4</b>
Orissa	2.1	5.1	6.2
Punjab	4.7	4.4	6.4
Rajasthan	7.5	3.5	8.3
Tamil Nadu	7.0	6.3	8.0
Uttar Pradesh	4.9	4.0	7.6
West Bengal	6.3	6.9	8.8

Source: GoI, 2002a; GoM, 2002a

Most states grew slower in the Ninth Plan than in the Eighth Plan, with the exception of West Bengal and Orissa. But for a fair comparison Maharashtra can be compared with other high-income states like Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Gujarat, Punjab and Haryana. If we examine the growth rates of these states, we find that during 1985-86 to 2000-01, Gujarat recorded a growth rate of 7.5 per cent, Tamil Nadu 6.6 per cent, Karnataka 6.1 per cent, Andhra Pradesh 5.7 per cent, Punjab 4.5 per cent and Haryana 4.6 per cent. Maharashtra recorded a growth rate of 7.3 per cent (Table 1.2). That being so, it would be appropriate to state that Maharashtra is poised to go on a higher path of growth provided it modifies its goals and priorities and devises new directions in the rapidly changing economy of not only the country but also the world. Such growth cannot be realised unless the human development indicators are in tandem with the growth in the industrial, social, and infrastructure sectors.

Since the aim of the planners is to make the economy world class, in comparison with some of the fast-growing pacific-rim countries will be apposite. During the period from 1985-86 to 2000-01, while Maharashtra's economy grew at 7.3 per

cent, Indonesia recorded growth rate of 7.1 per cent, Malaysia 7.3 per cent, Singapore 7.8 per cent, Taiwan 8.0 per cent, Thailand 8.7 per cent and South Korea 8.7 per cent. This comparison also fares well.

### Sectoral Growth

Historically, economic development of the countries of the First World was accompanied by shifts in the shares of primary, secondary and tertiary sectors in their income and employment. The models incorporating the changes acquired prescriptive significance, though the historical experience was specific to the time and location. Development of East and South East Asia has been accompanied by the growth of tertiary sector ahead of the secondary. Globalisation and new technology have made predictions difficult; Maharashtra's experience in the last two decades suggests that the State may follow the East Asian rather than the Western path of sectoral change.

The share of the primary sector in Maharashtra's income decreased from about 28 per cent in 1980-81 to about 17 per cent in 2001-02. The share of the secondary sector reduced from around 32 per cent, to about 24 per cent and that of the tertiary sector increased from about 40 per cent

**Table 1.2: Trends in Rates of Growth in Gross State Domestic Product at Constant Prices**

(Per cent per annum)

State	Gross State Domestic Product (GSDP)		GSDP Per Capita	
	1980-81 to 1990-91	1993-94 to 1998-99	1980-81 to 1990-91	1993-94 to 1998-99
Karnataka	5.4	8.2	3.3	6.4
Gujarat	5.1	8.0	3.0	6.2
Tamil Nadu	5.4	6.8	3.9	5.8
<b>Maharashtra</b>	<b>6.0</b>	<b>7.1</b>	<b>3.6</b>	<b>5.4</b>
Rajasthan	5.9	7.7	3.8	5.3
West Bengal	4.8	6.8	2.6	5.0
<b>All-India</b>	<b>5.6</b>	<b>6.8</b>	<b>3.3</b>	<b>4.8</b>
Kerala	3.2	5.5	1.7	4.2
Himachal Pradesh	5.0	6.7	3.1	3.9
Haryana	6.2	5.8	3.9	3.6
Andhra Pradesh	4.3	4.9	2.1	3.5
Punjab	5.4	5.0	3.5	3.0
Orissa	5.0	4.3	3.1	2.9
Bihar	4.7	4.2	2.5	2.6
Madhya Pradesh	4.0	4.4	2.1	2.3
Uttar Pradesh	4.9	4.5	2.5	2.3
Assam	3.6	2.7	1.4	1.0

Source: GoI, 2002a and 2002b

to 58 per cent (GoM, 2004). We shall show later that the shares of employment changed in the same direction but slowly. The changes in output of the primary sector, the secondary and the tertiary sector in terms of per cent per annum during representative periods are shown in Table 1.3.

**Table 1.3: Growth in SDP at Factor Cost by Sector: 1980-81 to 2001-2002**

Year		Sector				
		Primary	Secondary	Tertiary	NSDP	Per Capita SDP
Share in SDP, (%)	1980-81	27.69	32.56	39.75	100	-
	1990-91	22.88	32.90	44.21	100	-
	1999-00	17.8	27.4	54.8	100	-
	2000-01	17.4	24.8	57.8	100	-
	2001-02	17.4	24.5	58.1	100	-
Growth, Percentage per annum	1980-81	3.12	5.91	6.42	5.42	3.05
	1990-91	3.83	6.30	7.56	6.40	4.64
	1999-00	2.74	5.05	5.82	4.73	2.43
	2000-01	-5.29	-12.25	1.95	-3.22	-4.99
	2001-02	12.83	11.43	13.49	12.87	10.86

Source: GoM, 2004

## Sectoral Analysis

### Agriculture

According to the 2001 Census, nearly 55 per cent of the workers of Maharashtra work in agriculture. They produced 10.1 mt of food grains in 2000-01. Maharashtra's share in India's food grain output has declined from 7.3 per cent in 1980-81 to less than 6 per cent in 2000-01. This has been due to decline in the share of area put to food crops. From a share of 79.1 per cent in 1982-83, the area declines to 71.5 per cent in 2000-01. This resulted in decline in food crops in the agricultural output from 22.3 per cent to 16.7 per cent during the period. Though the area under cereals declined, cereal production increased mainly due to improved methods to boost yield. Maharashtra ranked second in the production of coarse cereals. Yields also increased in cotton, oilseeds, vegetables and fruits. Maharashtra ranked first in India in the production of cotton and onions, and second in sugarcane. The State produced 18.65 per cent of the cotton in India, 35.56 per cent of the onions and 16.78 per cent of the sugarcane in 2000-01 (GoI, 2003). The state ranked third in its share in production of pulses and oilseeds. Sugarcane production registered increase

both in area and in yield. Sugarcane contributed significantly to the growth in the total value of agricultural output in the 1990s. It accounted for 80 per cent of the incremental gross value of agricultural output between 1993-94 and 1999-00.

There is no doubt that the cropping pattern is changing away from low-value cereals to high-value crops produced for the market. Commercial crops are immensely more profitable. A cotton farmer in Maharashtra harvests only 134 kgs per ha compared to 360 kgs in Haryana; a cane-grower produces 88 thousand kgs of cane per ha in Maharashtra where as a farmer in Tamil Nadu produces 177 thousand kgs. The comparison can be there for all the crops but it is important to see that the output of food-grains per ha in Maharashtra averages 103 kgs while that in Punjab is 1032 kgs, almost ten times. While this low yield may be due to scarcity of water, poor soil quality and small land holdings, there has also been a visible shift in the crop patterns. Farmers in Maharashtra are increasingly taking to commercial crops, which may be due to the pressures of globalisation, spurred by the WTO. A comparison of the returns to farmers in some of the commercial crops may provide the reason for such a shift. The yield per ha of grapes has been Rs.2,36,000 sweet oranges Rs.2,15,000, bananas Rs.1,20,000 and mangoes Rs.1,02,000. This is significantly higher than the return of Rs.4,000 to Rs.12,000 from conventional grains (GoM, 2002). This shift has put undue pressure on irrigation system, ground water resources etc, which needs to be addressed in a significant manner. The Tenth Plan envisages accelerated agricultural development programmes and search for new opportunities in other areas.

### Irrigation

The gross irrigated area in Maharashtra was 3.65 million hectares in 2000-01, which was only 16.4 per cent of the total cropped area. This is three times more as compared to the area in 1960-61. Though this may sound impressive, it would not be possible to irrigate more than 30 per cent of the total cropped area, despite steep increase in expenditure on irrigation, from 14 per cent of the Third Plan's total expenditure to 33 per cent of the Ninth Plan's. Disproportionate accessing of the scarce resources by the cane-growers is also compounding the parsimony of the nature. Marginal holders stand

little or no chance to improve their access to irrigation and, through it, to food and nutrition.

The scope for major and minor irrigation has also been exhausted. In the years of inadequate rainfall, the reservoirs do not get enough water and the need to provide drinking water reduces the availability of water for irrigation. Faulty pricing of water has not only created an excess demand for water but has also increased the wastage. The user prices are so low that they do not cover even the operation and maintenance expenses. But in September 2001, user charges were increased to cover full O&M costs and up to 20-25 per cent of the capital costs. This is an encouraging step.

Underground water is also being over-exploited, leading to some of the environmental issues, which will be discussed in Chapter 15. A user survey of ground water reveals that the ground water irrigation is mainly through electric pumps. Roughly 80 per cent of the ground water exploitation is by farmers with average farm size of more than 4 ha.

Be that as it may, the irrigation potential created from all sources, major, medium and minor, till the end of June 2001 was 4.9 million hectares, barely 35 per cent of the potential. According to the National Sample Survey (NSS) data, over 75 per cent of the irrigation benefits accrue to farmers with average farm holdings of more than 2 ha and only less than 10 per cent of the irrigation benefits accrue to farmers whose average farm size is less than 1ha.

### *The WUAs: Not just water but water with justice*

The State government has encouraged formation of Cooperative Water Users' Associations (WUAs) so that irrigation management could be handed over to them to encourage community participation in common property rights. The policy also seeks to:

- reduce the gap between irrigation potential and actual utilisation,
- increase water use efficiency of irrigation management,
- restrict expenditure on maintenance and repairs of irrigation system, and
- recover government charges effectively.

The main responsibility for water resource development and management rests with the Irrigation Department. To overcome the hard budget constraint and claim its share of water under

the Tribunal award, the Government created a number of Irrigation Development Corporations (IDCs). Most of the capital expenditures have shifted to the IDCs. Irrigation accounts for the largest share of off-budget borrowings of Maharashtra. Annual interest payment on the bonds issued by Maharashtra Krishna Valley Development Corporation (MKVDC), which have increased from Rs. 7 billion in 1996-97 to Rs. 13 billion in 2000-01, is made through GoM's budget. It is expected to increase to Rs. 50 billion in the next 6-7 years.

## *Industrial Structure*

### *Growth with Diversification*

Maharashtra contributes 18 per cent to the country's industrial output. The manufacturing sector in Maharashtra made net value addition of 21.5 per cent and deploys 17 per cent of the fixed capital in the organised industrial sector in 2000-01 (GoM, 2003). But the factory employment has decreased from 14.7 per cent in 1990-91 to 11.2 per cent in 1999-2000.

The industrial activity in Maharashtra is concentrated in four districts, viz. Mumbai City, Mumbai Suburban District, Thane and Pune.

The composition of the organised industrial sector in Maharashtra has undergone considerable change in the last two decades. In the early sixties, the consumer goods industry was more prominent than the capital goods and the intermediate goods industry. However, recently the capital goods and the intermediate goods industries have assumed greater importance than the consumer goods industry. The share of the capital goods and intermediate goods industries together in the valued added has increased to 79 per cent in 1999-2000 as against 48 per cent in 1960.

The industries in Maharashtra include chemicals and chemical products, food products, refined petroleum products, machinery and equipment, textiles, furniture, basic metals, motor vehicles, trailers and other transport equipments. The shares of different industries are as follows:

- chemicals and chemical products -17.6 per cent
- food and food products -16.1 per cent
- refined petroleum products -12.9 per cent
- machinery and equipment 8 per cent
- textiles - 6.9 per cent

- basic metals - 5.8 per cent
- motor vehicles, trailers -4.7 per cent, and
- furniture -3.3 per cent.

The above industrial segments dominate the value addition in Maharashtra. These industrial segments together consumed 74 per cent of total inputs consumed by all industries in the State.

When the states are ranked by the value added in each of the 33 two-digit industries surveyed in the ASI, Maharashtra featured in the top three positions in 24 industries; and in 14 industries it ranked first. A more direct and decisive proof of Maharashtra's competitive edge in the industry segment would come from ranking of the states by the total factor productivity in each industry segment. In another way, we can also infer Maharashtra's superiority from Table 1.4. A factory in Maharashtra employs 16 per cent more fixed capital and 2 per cent more labour but produces 37 per cent more output and 51 per cent more value added than a factory in India. More elaborate discussion on the various issues of industrial development can be seen in Chapter 5.

**Table 1.4: Fixed Capital, Value of Goods and Services, Net Value Added and Employment Per Factory, Maharashtra and India, 2001**

Comparison Points	Maharashtra	India
Fixed Capital Per Registered Factory (Rs.Lakhs)	356	307
Production of Goods and Services Per Factory (Rs.Lakhs)	935	682
Net Value Added Per Factory (Rs.Lakhs)	178	118
Employment Per Factory (Persons)	63	62

Source: GoM, 2002a

#### *Unregistered Manufacturing*

The relatively less regulated sectors like unregistered manufacturing, trade, hotels and restaurants, communications and transport other than railways experienced higher growth in the 1990s than in the 1980s. The growth rate of unregistered manufacturing was 9 per cent per annum, while it was 16 per cent per annum in communications in the 1990s compared to about 5 per cent and 6 per cent respectively in the 1980s (GoM, 2002b).

The advent of liberalisation has given impetus to the rapid industrial development in the State. Since August 1991 up to August 2001, 9,806 projects involving an investment of Rs. 2222.64 billion in Maharashtra have been registered with the Government of India, and are in different stages of implementation. Of these, 4,298 projects have started their production. Major part of this proposed investment will be in Konkan (40 per cent), followed by Pune region (26 per cent) and Nashik region (13 per cent). The industrial development after liberalisation is also characterised by the participation of Non-Resident Indians (NRIs)/ Foreign Direct Investors (FDIs). Under FDI scheme, 2,473 projects with an investment of about Rs. 464 billion were approved by the GoM up to October 2001. Of these approvals, 827 units have been already commissioned by January 2002.

The liberalisation will affect the industry in the State in many ways. Liberalisation will force Maharashtra to specialise in the production of goods in which it has comparative and competitive advantage in the country.

#### *Challenges of Globalisation*

Globalisation will force the State to benchmark the total factor productivity in each industry with the best performer in the world. Progressive reduction in import duties will increase the competition in the domestic market and producers who cannot reduce their unit costs and prices to the level of their competitors would be forced to close down. Firms would try to become leaner and flatter. They would have to give up vertical integration and go for horizontal integration. They would like to hive off some of their activities and outsource. They would want to shift from their present high cost location to another where land and labour are cheaper.

#### *Maharashtra Industrial Policy 2001*

The Maharashtra Industrial Policy 2001 focuses on high-tech, knowledge-based industries. With the adoption of IT (Information Technology) and BT (Biotechnology) based technologies the government hopes to increase industrial exports and employment. Maharashtra intends, as do other states, to discontinue incentives based on sales taxes but continue fiscal incentives. The Industrial Policy promises a new package of incentives such as exemption from payment of electricity duty, stamp

duty and registration fees and refund octroi to all new industrial units in backward areas. It offers special capital incentives in the form of grant for setting up new small-scale industrial units in backward areas and interest subsidy to new units in textiles, hosiery and knitwear. It exempts all khadi and village industries from the payment of sales tax. It plans to establish self-governing industrial townships at 12 different places in the State.

### *Export Potential*

The State's share of India's exports is estimated at 35 per cent. In 2000-2001, Maharashtra exported goods worth Rs. 506.27 billion comprising largely engineering, chemicals, apparels, leather and leather products, electronics and gems and jewellery. Between 1991 and 2001, 562 EOUs (Export-Oriented Units) with investment worth Rs. 75 billion were set up in Maharashtra. The State has to attract much more investment in the infrastructure of ports, airports, warehousing and feeder roads to such facilities to exploit the export potential of the State. Studies by NCAER in 1994 revealed that India had substantial competitive advantage in the exports of bananas, grapes, lychee, onions, tomatoes and mangoes. Maharashtra is one of the largest producers of mangoes, grapes and onions. The export promotion drive would have to be synchronised with the State's changing crop pattern in agriculture towards horticulture, floriculture, animal husbandry and food processing (MEDC, 2002).

### *Is small beautiful? Not always if it is SSI*

Of late, the policy related to giving incentive and subsidy, direct and indirect, to the small scale and khadi and village industries in the context of national development strategy is being debated. Rakesh Mohan (2002) has analysed different sources of data on SSI to show that the policy of reservation of products for SSI might have contributed to India's poor performance in comparison to China and some fast growing South East Asian economies in respect of growth of manufacturing output, employment and exports. It is stated that the fiscal incentives granted to the SSI dissuades the small entrepreneurs from exploiting the economies of scale and makes their existence conditional on the government subsidies. Whereas there was a decline in the share of household industry, the growth of

non-household SSI benefiting from the fiscal incentives failed to compensate for the loss of household industry. The data produced by the SSIDO exaggerates the performance of the SSIs because it does not take into account the high mortality rate, endemic to SSI. Mohan argues that by and large, the policies of the government have helped sustain low productive employment without creating built-in incentives for the growth of high productive manufacturing employment.

### *Tertiary Sector*

The tertiary sector consisting of transport, communications, banking insurance, real estate, public administration and other services has grown at a compound annual growth rate of 7 per cent during 1993-94 to 2000-01. Highest growth was, however, seen in communications and banking and insurance. These are modern sectors and have experienced rapid growth. Mumbai, being the commercial and financial capital of the country, houses these largely. In contrast, the share of real estate in SDP declined.

The service sector dominates the economy of Maharashtra, accounting for 61.4 per cent of the value addition and 69.3 per cent of the value of the output in the country. Out of the above, the share in "Recreational Services" was 63.2 per cent and 53.2 per cent, respectively.

India has a strong competitive advantage in knowledge-based industries and Maharashtra has qualitatively above an average infrastructure of knowledge industry in India. Approximately 25 per cent of the top 500 companies in the IT sector are in Maharashtra. The State accounts for 28 per cent of the software exports of India. Half of country's internet users are in Maharashtra. The largest number of country's internet providers are based in Mumbai. Specialised institutions in Maharashtra like C-DAC, Pune University, Mumbai University, IIT, VJTI and National Centre for Software Technology produce skilled technicians. The State government declared Maharashtra's information technology (IT) Policy in 1998. The Policy stresses the government's commitment to strengthen the State's leading position and to make its information technology industry globally competitive. It has initiated policies relating to human resource development, infrastructure, incentives to IT industry and

computerisation of citizen-government interface. There are plans to set up Info-tech Parks through MIDC at Mumbai, Navi Mumbai, Pune, Aurangabad, Nagpur, Sangli, Solapur, Satara, Kolhapur, Ahmadnagar and Nashik. The SETU Project initiated in 7 districts is to be extended to other districts (MEDC, 2002).

Maharashtra has a good base of qualified personnel in biotechnology. Nature has bestowed upon the State immense bio-diversity of flora and fauna. Biotech innovations come from small entrepreneurs and Maharashtra has no dearth of them. The Biotech panel has identified immense potential of the State in agri-bio-tech, drug development and manufacture, pharmacogenomics, environmental bio-technology and marine bio-technology. The market for bio-tech based products is yet to be explored. Besides, the industry lacks venture capital. While venture capital and angel fund investments in the info-tech sector grew from Rs. 0.7 billion in 1996 to Rs. 3.2 billion in 2000, the funding for biotech sector has so far been negligible. There is an urgent need for a proper “intellectual property right regime” if biotechnology is to grow.

### *Entertainment Industry*

The film industry in India has created a brand image for itself in the name of “Bollywood”. The FICCI-Anderson Entertainment Sector Report of March 2001 projects that by 2005 the total entertainment industry size would be Rs. 310 billion. Of late, from a highly unorganised sector based on individual ownership, the industry is moving towards corporatisation. There is an urgent need to promote the entertainment industry in Maharashtra in general and in Mumbai in particular. According to the Report of PricewaterhouseCoopers on film and entertainment industry, India ranked second in the number of screens in Asia Pacific. The number of screens is projected to grow from 13,400 to 21,000 in 2005. Despite the drop in admissions in recent years, India accounts for 78 per cent of the Asia Pacific region’s admissions. India ranks second behind Japan in box office spending in Asia Pacific region. The box office spending in India is expected to grow by 11 per cent per annum from \$496 million in 2000 to \$851 million in 2005. Total film exports from India are expected to increase from Rs. 6.65 billion in 1999 to Rs. 14.6 billion by 2005.

TV channels are reaching a wide audience – Zee reaches 27 million households, Sony 16.82 million and Star-Plus 14.82 million. Industry in Maharashtra should be able to capture a large chunk of this growth. Since the majority of films are made in “Bollywood”, the growth will be in Maharashtra. To give fillip to the industry, the government needs to reduce the entertainment tax rate from 60 per cent of the ticket price to around 20 to 25 per cent prevailing in most other states. To give a boost to the industry, the government has announced a three-year tax holiday for the multiplexes in the State and lowered the duty after three years (MEDC, 2002).

### *Tourism*

Currently tourism contributes an estimated Rs.905 billion or 5.6 per cent to the GDP of India compared to the World average of 10 per cent. The travel and tourism sector created 9.3 million jobs directly and 17.4 million indirectly in 1999. This is expected to increase to 12.9 m jobs directly and 25 million indirectly by 2010. Maharashtra should try to get a sizeable share in the pie. The 720 km long coastal track of the Konkan characterised by abundant sunshine offers vast scope for developing beach resorts. The State could do well to learn from the development of tourism industry in Rajasthan, Kerala and Goa. Currently only 0.3 per cent of global tourists visit India annually. The infrastructure of transport, hospitality and sanitation is almost non-existent in the hill stations, beaches and national parks in the State. The State should lobby with the Central government to include tourism and hospitality in the infrastructure sector as recommended by Rakesh Mohan Committee on Infrastructure. This will help the industry to claim 100 per cent exemption from income tax payment for the first five years and give easy access to cheaper funds from the IDFC (MEDC, 2002).

### *Infrastructure*

Rapid agricultural and industrial growth depends on the availability of infrastructure facilities. Table 1.5 refers to an index, which is a composite comparative profile of the availability of physical, social and institutional infrastructure in the states. Amongst the major states Gujarat, Haryana, Tamil Nadu, Kerala and Punjab had higher values on the infrastructure index than Maharashtra.

**Table 1.5: Index of social and economic infrastructure, 1999**

States	Index
Rajasthan	75.86
Madhya Pradesh	76.79
Assam	77.72
Orissa	81.00
Bihar	81.33
Himachal Pradesh	95.03
Uttar Pradesh	101.23
Andhra Pradesh	103.30
Karnataka	104.88
West Bengal	111.25
<b>Maharashtra</b>	<b>112.80</b>
Gujarat	124.31
Haryana	137.54
Tamil Nadu	149.10
Kerala	178.68
Punjab	187.57

Source: GoI, 2002b

It is difficult to prioritise infrastructure because the economic criteria like cost-benefit analysis of the projects or their internal rates of return are not easily calculated for well-known reasons. WDR 1994 reports that one per cent increase in the stock of infrastructure increases GDP by one per cent too. The Maharashtra Vision 2005 (MEDC, 2002) refers to the need, estimated by the Rakesh Mohan Committee, to invest 6-7 % of the GDP in infrastructure to maintain a high rate of growth. This will be discussed in detail in the chapter on infrastructure (Chapter 6).

### *Power*

Power is considered critical to economic development, as it is believed to have large backward and forward linkages relative to other infrastructure. Maharashtra, being more industrialised and more urbanised than India, per capita consumption of electricity in the State, 492.3 kWh in 2000-01 exceeded that in the country, being 356.4 kWh, by 38 per cent. Between 1961 and 2001, installed capacity in the State increased at the compound rate of 7.5 per cent per annum. The rate declined to 3.3 per cent in the 1990s (GoM, 2002). The per capita capacity in Korea, Malaysia and Argentina is between 5-8 times higher than in India. In China, it is almost twice as high as in India (Ann Kruegar, 2002). Lead over Maharashtra would be marginally less substantial.

Maharashtra has a relatively large market for industrial power. Nearly 40 per cent of its total sales are to industrial customers, compared to the national average of 30 per cent, and 23 per cent are agricultural customers which is well below the national average of 30 per cent (World Bank, 2001).

In Maharashtra, as in other states, load-shedding is common in all districts of the State except two, viz., Mumbai and Mumbai Suburban. The extent of load shedding when the demand peaks may be taken as a proxy for the shortfall in supply. The shortfall, though, has declined from 14 per cent of the peak to 9 per cent over the last two years but so has consumption of electricity by industry, agriculture, railways and public water works. Total availability of electricity in Maharashtra was 75,000 million kWh in 2000-01, of which 62,317 million kWh was generated in Maharashtra. Total consumption of electricity in the same year was 47,300 million kWh. The production probably includes the power supplied by the Dabhol Power Company that is no longer available now.

There are well-known ways to manage the peak time demand and supply. The current excess of generation over peak demand may be just adequate if the technical problems associated with T&D and banking of power were tackled first. The real difficult problem is that of increasing installed capacity to meet the increased demand for power for the targeted growth of 8 per cent. The Maharashtra Vision 2005 estimates power consumption at 79,062 million kWh in 2004-05. With three major power projects, the Dabhol, the Patalganga and the Bhadravati on hold, the chances of supply catching up with demand appear to be slim unless the State-owned Maharashtra State Electricity Board (MSEB) underwent a radical transformation. The MSEB incurred a loss in financial year 2000-01, which was met by a subsidy from the State government. The Board accounts for three-fourths of both the installed capacity and generation of electricity. The MSEB's T&D losses at 39.4 per cent in 2001-02 and 34.8 a year earlier were intolerably high compared to the international standard of 10 per cent. The Central Electricity Authority of the Government of India has established a norm of transmission and distribution (T&D) losses at 16 per cent. Given that MSEB's average cost of purchases in 2000-01 was

approximately Rs. 2 per kWh, had the losses been at the 16 per cent level, MSEB would have economised nearly Rs. 30 billion (World Bank, 2001).

Much of the supply in the State is not metered and monitored which encourages pilferage. Part of the losses in transmission and distribution is due to old equipments. Only half of the power supplied is billed and of the sales value, only 80 per cent is collected. Use of electricity in agriculture is highly subsidised. Agriculture consumes 27 per cent of the supply but contributes barely 7 per cent to the sales revenue. Industry bears the brunt of subsidies to agricultural and domestic users, not all of whom are poor.

### *Transport and Communication*

Bad roads and communication infrastructure creates uncertainties and delays in delivery. Producers who may be working on just-in-time inventory do not tolerate uncertainties of delivery schedules. In a competitive world, countries that lack efficient transport infrastructure lose their exports to others.

Total road length in Maharashtra in 2001 was 260,000 km. Maharashtra led India in road length standardised for area since 1981. In 1997, it was 117.62 km per 100 sq. km in Maharashtra compared to 74.93 km in India (GoI, 2002). Maharashtra has completed 90 per cent of the road development plan 1981-2001. The roads maintained by the Public Works Department (PWD) and Zilla Parishads measured 217,000 km. Of them about 82 per cent were surfaced.

The percentage interpreted as an indicator of quality does not compare too badly internationally. But the maintenance of the roads is poor. Nine out of every ten inhabited villages in the State were connected by all-weather roads and 7 per cent, by fair-weather roads. Road connectivity plays an important role in building social, political and economic networks that reduce transaction costs all round. Roads, like other means of transport, extend the market for goods and labour. Equally importantly, village roads improve the access of the rural population to health and education.

The State spent 8 per cent of the expenditure on Transport and Communication in the Third,

Fourth and Fifth Plan, 6 per cent in the next three plans and the highest ever, 10.5 per cent, in the Ninth Plan. The State has allotted a little less than 7 per cent of the outlay to this sector in the Tenth Plan.

### *Ports: a minor berth*

Along the 720 km long coastline of Maharashtra there are two major ports, Mumbai and Jawaharlal Nehru port, and 48 minor ports. The major ports are the responsibility of the Central government and the minor ports of the State government. Mumbai port handles both passenger traffic and cargo traffic whereas the JN port handles cargo only. The two ports are crucial to Mumbai's and consequently to Maharashtra's economy. Between 35-40 per cent of the exports of India pass through the Mumbai port.

The State government has decided to develop 7 of the 48 minor ports. The objective is to provide multi-user facility to handle all kinds of cargo, bulk, break-bulk, petroleum and chemical containers. It is expected that commercialisation of agriculture in Maharashtra and industrialisation of Konkan would increase export potential of the State considerably and proximity to ports would make the exports competitive. The development would relieve pressure on the Mumbai port. However the development requires large investments, well beyond the State in the present financial situation. The State has decided to tide over the difficulty by inviting private sector participation based on BOOT contracts. It established Maharashtra Maritime Board as a nodal agency in 1996 for acquisition of land, development of approach roads, supply of water and such other facilities. Techno-economic feasibility studies have been carried out in seven selected sites. Port Rewas-Aware is being developed as a multi-purpose port and Port Dighi as chemical/liquid terminal (GoM, 2002).

### *Telecommunications*

There were 5.5 million telephone connections in the State at end of March 2001. Of them, only 16 per cent were in rural and 84 per cent in urban Maharashtra. The density of telephone connections per 1000 population was 56.41. Mahanagar Telephone Nigam Limited (MTNL), which operates only in Mumbai, is having more than 2.4 millions landline connections.

In the last couple of years, with the entry of private companies offering cell phones and landlines, the national and international connectivity in India and in Maharashtra has increased substantially. With the vision of making Mumbai a global financial centre, the telecom infrastructure in the State and the Capital City would have to improve manifold.

## Section II

### Social Sector Attainments

Human beings are both the means and the end of development. The Human Development Index is an attempt to affix to a region an index, which is a constant weight aggregation of indicators of at least three aspects of human well being, viz., income, health and education.

The Human Development Index constructed by the Government of India includes the following indicators: life expectancy at age 1 and infant mortality rate to represent longevity, proportion of literates to total population in age group of 7 years and above, intensity of formal education to represent educational attainment, and per capita real consumption expenditure adjusted for inequality to represent economic attainment (NHDR, 2001). Maharashtra scores 0.523 on the HDI 2001 and ranks fourth among the Indian states arranged from top to bottom by the values of the index. It was below Kerala, Punjab and Tamil Nadu. Between 1981 and 2001, Maharashtra HDI improved from 0.363 to 0.523. In 1991, Tamil Nadu replaced Maharashtra in the third rank pushing it to the fourth (GoI, 2002b).

The HDI was much lower in rural than urban Maharashtra. In 1981, it was 0.306 for rural and 0.489 for urban Maharashtra. Rural-urban disparity was much greater in Maharashtra than in Kerala. The index improved faster in rural than urban Maharashtra in the 1980s and the rural-urban disparity was marginally lower in 1991 than in 1981.

The index is not of much use to the policy-makers unless they find out the component of the index of the region they administer is poor relative to others. Hence, we need to look at the components of the index separately.

### Attainment in Education

#### Literacy Levels

In 2001, 77 per cent of Maharashtra's population of 7 years and over was literate. The State ran a poor second to Kerala with the literacy rate of 91 per cent, the highest among 16 major states of India. Maharashtra is ahead of India where only 65 per cent of its population seven years and older could read and write a simple sentence. The adult literacy rate for population 15 years and over was about 67 per cent in Maharashtra and 89 per cent in Kerala (GoI, 2002).

#### The Human Poverty Index

The UNDP's Human Development Index has spawned other indices based on various indicators of deprivation. Prominent among them are its own Human Poverty Index (HPI), and Gender Disparity Index (GDI) of the Planning Commission.

According to the more comprehensive of the two versions of the HPI of the Planning Commission, Maharashtra ranked 8<sup>th</sup> in 1991 and Kerala 7<sup>th</sup>, among all the States and Union Territories of India. According to UNDP's HPI for 1993-2001, Maharashtra stood 3<sup>rd</sup> and Kerala 4<sup>th</sup> among 15 large states of India (Table 1.6(a)). The modified version of the UNDP index reported in Table 1.6(b) places Maharashtra in the 9<sup>th</sup> and Kerala in the 1<sup>st</sup> rank.

### Disparities in Educational Attainment

#### Rural-Urban Differences

Literacy levels are lower in rural than in urban areas. Seventy one per cent of Maharashtra's rural and 86 per cent of its urban population aged 7 years and over was literate in 2001. The corresponding literacy rates in Kerala were 90 per cent and 93 per cent respectively.

Gender differentials exist in both states but are much wider in Maharashtra than in Kerala, much more so in rural than urban areas. In 2001, 59 per cent of women and 82 per cent men in rural Maharashtra were literate. The corresponding rates for Kerala were 87 per cent and 90 per cent. In urban Maharashtra about 79 per cent of the women and 86 per cent of the men were literate compared with 91 per cent of the women and 93 per cent of the men in urban Kerala (GoI, 2002b).

Table 1.6 (a): Human Poverty Index (UNDP Method) 1993- 2001

State	Health (Probability of dying before 40)	Education (Illiteracy Rate)	Provisioning	HPI Value	HPI Rank
	1993-97	(%) 2001	(%) 1998-99	1993-2001	
Andhra Pradesh	0.15776	38.89	28.85	30.22	9
Assam	0.23989	35.72	44.57	35.49	10
Bihar	0.22738	52.47	43.37	42.23	15
Gujarat	0.16999	30.03	30.25	26.33	5
Haryana	0.17783	31.41	30.12	26.89	6
Karnataka	0.15545	32.96	28.40	26.95	7
Kerala	0.0539	9.08	37.20	25.92	4
Madhya Pradesh	0.26038	35.89	46.17	36.40	13
<b>Maharashtra</b>	<b>0.13254</b>	<b>22.73</b>	<b>30.80</b>	<b>23.90</b>	<b>3</b>
Orissa	0.23906	36.39	44.17	35.51	11
Punjab	0.1498	30.05	21.80	23.21	2
Rajasthan	0.20358	38.97	43.77	36.26	12
Tamil Nadu	0.1364	26.53	20.73	20.95	1
Uttar Pradesh	0.32985	42.64	41.03	36.56	14
West Bengal	0.15504	30.78	32.05	27.45	8
<b>India</b>	<b>0.19634</b>	<b>34.62</b>	<b>36.50</b>	<b>31.09</b>	

Source: GoI, 2002b

Table 1.6 (b): Human Poverty Index (Modified) 1993-2001

States	Health (Probability of dying before 40)	Education (Illiteracy Rate)	Children under age 4 undernourished (weight for age)	HPIM Value	HPIM Rank
	1993-97	Per cent 2001	Per cent 1998-99	1993-2001	
Andhra Pradesh	0.15776	38.89	37.7	33.46	6
Assam	0.23989	35.72	36.0	31.33	5
Bihar	0.22738	52.47	54.4	46.69	15
Gujarat	0.16999	30.03	45.1	34.09	7
Haryana	0.17783	31.41	34.6	28.90	4
Karnataka	0.15545	32.96	43.9	34.24	8
Kerala	0.0539	9.08	26.9	18.89	1
Madhya Pradesh	0.26038	35.89	55.1	41.44	13
<b>Maharashtra</b>	<b>0.13254</b>	<b>22.73</b>	<b>49.6</b>	<b>35.46</b>	<b>9</b>
Orissa	0.23906	36.39	54.4	41.16	12
Punjab	0.1498	30.05	28.7	25.67	2
Rajasthan	0.20358	38.97	50.6	39.77	11
Tamil Nadu	0.1364	26.53	36.7	28.32	3
Uttar Pradesh	0.32985	42.64	51.7	41.58	14
West Bengal	0.15504	30.78	48.7	36.40	10
<b>India</b>	<b>0.19634</b>	<b>34.62</b>	<b>47.0</b>	<b>36.45</b>	

Note: For HPI and HPIM, the state with the lowest value has been ranked 1

Source: GoI, 2002b

### *Literacy by Income*

Proportionately, more of the children in the age group of 6 to 14 years belonging to the richer households were currently in school than the children of same ages belonging to the poorer households. Children in Kerala belonging to the poor households were handicapped too. But the wealth gap in school enrolment was barely 9

percentage points compared with 29 in Maharashtra. Maharashtra could take some solace that the wealth gap in India was much wider at 44 percentage points (Table 1.7).

Simulated flow of 100 children through elementary schooling by economic group shows that in Maharashtra, 98 per cent of 15 to 19 year olds from rich households completed 1<sup>st</sup> Grade but only

**Table 1.7: Proportion of Children 6 to 14 years old “Currently in school” by economic group**

(Per cent)

State	Bottom 40 per cent	Middle 40 per cent	Top 20 per cent	Wealth Gap (Top-Bottom)
Maharashtra	67.1	83.9	96.2	29
Kerala	88.7	96.1	97.5	8.8
All India	50	76.7	94.2	44.2

Source: World Bank, 1998(Calculated from NFHS data 1992-93)

59 per cent from poorer households did so. In other words, four out of 10 either never crossed the threshold of a classroom or left without completing the 1st Grade. In Kerala, almost all students who enroll are likely to finish Grade 1 irrespective of their income. In Maharashtra, 83 per cent of the children from rich households finished Grade 8, the end of the cycle of basic education compared to only 28 per cent of the poorer households (World Bank, 1998). Not only are the children of poorer household less likely to enroll but if they did, they are more likely to leave before completing either primary or basic education. To the extent students from poorer families do not enroll or drop out without completing basic education they lose the subsidies offered by the government.

#### *Gender Differences in Educational Attainment*

Literacy rate among women is higher in Maharashtra than in India. However, the State lags behind Kerala. In 2001, 68 per cent of the women and 86 per cent of the men in Maharashtra were literate. In Kerala, 88 per cent of the women and 94 per cent of the men were literate (GoI, 2002b).

The gender gap in schooling is wider for the poor than for the rich (Table 1.8). In the age group 15-19, 42 per cent of the boys and 13.8 per cent of the girls in the poorer 40 per cent of the households completed Grade 8. This difference reduces sharply in the richest 20 per cent with 87 per cent of boys and 79.9 per cent of girls completing Grade 8.

Among children in the age group 15-19 who complete Grade 8 the gender gap between the rich and the poor is 55 percentage points in Maharashtra. The gap between rich and poor girls is 66 and that between rich and poor boys 45 percentage points. In Kerala, there is reverse discrimination in favour of girls.

#### *Attainment in Health*

##### *Life Expectancy*

Attainment in health as indicated by life expectancy at age 1 increased from 64.5 years in 1981-85 to 68.1 years in 1992-96. Women could expect to live longer, 68.9 years in 1992-96 compared to men who could expect to live for 66.8 years (GoI, 2002b).

##### *Infant mortality rates*

Infant mortality rate (IMR) is defined as number of deaths in the first year of a child's life per 1000 live births in a given year. IMR reflects the probability of a child dying before reaching age one. Table 1.9 shows that the infant mortality rates have been falling for the past three decades in all the different categories, but remain high compared to the internationally accepted norms of 5 per 1000 live births. However, the disparity between rural and urban areas in terms of IMR remains the same, though the gender gap has fallen considerably. In 2001, Maharashtra ranked second amongst Indian states next to Kerala, but its IMR was three times as high as in Kerala. IMRs are higher in rural areas and for females (Table 1.9).

**Table 1.8: Gender gaps in the proportion of 15 to 19 year olds who have completed Grade 8 by economic group**

(Per cent)

State	All Quintiles			All Quintiles Lower 40 per cent			All Quintiles Top 20 per cent		
	Male	Female	Gender Gap	Male	Female	Gender Gap	Male	Female	Gender Gap
Maharashtra	67.2	49	18.3	42.1	13.8	28.3	87	79.9	7.1
Kerala	72.8	76.8	-40	47.4	57.9	-10.5	90.9	93.7	-2.8
India	53.7	35.5	18.2	31.3	9.5	21.8	85.2	79.6	5.6

Source: World Bank, 1998 (Calculated from NFHS data 1992-93)

### Nutrition

Maharashtra has not done well in improving nutrition. About 57 per cent of the rural and 55 per cent of the urban households consumed less than 2,700 calories per day. About a quarter of all rural and 28 per cent of the urban households reported an adequate calorie intake. Only 17 per cent of the households in the rural and urban areas reported more than adequate levels of calorie intake (GoM, 2002).

**Table 1.9: Infant Mortality Rates (IMR)**

Year	IMR	Rural	Urban	Male	Female
1981	119	131	67	131	106
1991	74	85	47	72	76
2001	45	55	28	43	48

Source: GoI (2002b), SRS Bulletin (2003)

Low level of food intake results in poor nutritional status of women and children. Nearly half the ever-married women 15-49 years old suffer from anemia. The incidence is higher, 51 per cent in rural and 45 per cent in urban Maharashtra. Sixteen per cent of the children under 2 years of age were severely undernourished, with the weight for age index 3 Standard Deviation units (SD) below the mean, 41 per cent were moderately undernourished at 2 SD below the mean (IIPS, NHFS-2, 2000). The Bang Report reveals severe under- and malnutrition among the tribal population and backward areas of the State.

## Section III

### Distributive Aspects

While the state has done well in promoting growth, it has not done as well in securing its fair distribution across regions and sections of population. Equity in distribution is essential for sustainable growth. We preface our discussion of regional disparity with urbanisation, which reflects inequality in the distribution of population across space. A virtuous interaction between population and productive factors may at times transform a sleepy village into a city whose prosperity far surpasses that of the region in which it was situated creating a schism between rural and urban standards of living.

### Urbanisation

Since independence, proportionately, far more persons lived in urban Maharashtra than in urban India. In 2001, 42.4 per cent of Maharashtra's

population but 27.8 per cent of India's was enumerated as urban areas. As mentioned earlier, till 1991, Maharashtra was the most urbanised of the 16 large states of India. In 2001, it ranked second after Tamil Nadu though the latter's urban population was less than two-thirds of Maharashtra's. The State's urban population increased faster than its total population; which shows that cities of Maharashtra received migrants not only from rural Maharashtra but also from the villages and towns of the rest of India. They migrated overwhelmingly to the industrialised Mumbai-Pune region.

### Distribution of Urban Settlements and Population by Size-Class

In 2001, Class I settlements or cities with population of 100,000 or over, formed nearly 11 per cent of the cities and towns in Maharashtra and they accounted for 80 per cent of the urban population of the State. Relative to India, a much greater share of Maharashtra's urban population lives in Class I cities. As in the country, so in Maharashtra, urbanisation slowed down in the 1990s relative to the 1980s but the number of Class I and II cities increased faster. In the past they absorbed at least 83 per cent of the increase in urban population in Maharashtra.

In 1991, there were three cities with population of a million or more. Their number increased to 7 in 2001. These 7 cities accounted for about 52 per cent of Maharashtra's urban population. Mumbai alone accounted for 29 per cent of the population of Maharashtra and 56 per cent of the population of 7 million-plus cities. Between 1991 and 2001, nearly 88.2 per cent of the growth of urban population was absorbed by 7 million-plus cities.

The cities in Maharashtra, like those in most of the Third World, have failed to provide their citizen the basic amenities like housing, safe drinking water, sanitation and clean air. Globalisation is both a challenge and an opportunity to them. The cities are undergoing a painful structural adjustment. The strategy of industrialisation, import substitution and licensing had built up diversified but an inefficient large and small-scale industrial sector in the cities. It is now exposed to much fiercer competition from domestic and foreign producers. The transition from capital-intensive import-substituting industries

to labour intensive export oriented industries based on flexible specialisation and information technology has just begun. Cities are likely to lose their relative advantage as producers of large-scale manufacturing. They are becoming junction-points for transfer of goods, finance, capital, people and switch-gears of information. To cope with the challenge the cities have to become attractive places to live, work and do business in. They would be required to provide high quality infrastructure of power, telecommunications, roads and all the civic amenities to attract foreign capital and reduce transaction costs all round. China in particular and East and South East Asian countries in general have succeeded in providing the necessary infrastructure and catapulted themselves into middle to high income countries as defined by the United Nations. The transformation requires a wide range of policies at all levels, national, state and local. They include population control, deregulation of laws, rules and regulations relating to land, labour and movement of goods and services. Daunting as the task may appear in the present context of financial crunch, Maharashtra can face the urban challenge by following strict financial discipline, efficient management of public sector and adopting innovative ways of eliciting cooperation from the domestic and foreign private sector. It would be difficult to meet the challenge if Maharashtra lapses into a state of financial instability and political and social turmoil. Chapter 13 gives a detailed exposition on the subject of urbanisation in Maharashtra.

### *Regional Disparities*

The present state of Maharashtra with Bombay as its capital was formed in 1960 by splitting the bilingual Bombay state and integrating the Marathi-speaking regions, Vidarbha from Madhya Pradesh and Marathwada from Hyderabad with Konkan and Western Maharashtra. The four regions, Konkan, the Western plateau, Marathwada and Vidarbha, differed in their natural endowments and levels of economic and social development. To allay the fears of people of Vidarbha region, the Constitution of India was amended in November 1956 and the President was empowered to bestow on the Governor of the State, responsibility to appoint statutory development boards for Vidarbha, Marathwada and Rest of Maharashtra.

Dissatisfaction with regional inequality led to the appointment of the Fact Finding Committee chaired by Prof. V. M. Dandekar in 1984. The terms of reference required the Committee to decide indicators for assessing imbalance in development, to determine the district-wise imbalance and to suggest remedial action to remove the existing imbalance. The Committee chose 1984 as the latest year and compared the level of physical and social infrastructure built with public investment in each district in 1984. It calculated the public expenditure needed to raise the district's level in a specific sector to the State average.

The backlog in developmental expenditures was found to be higher in the districts of Marathwada and Vidarbha (GoM, 1984). Calculated per head of regional population, the backlog amounted to Rs. 327 for Rest of Maharashtra, Rs. 772 for Marathwada and Rs. 859 for Vidarbha in 1984 (GoM, 1997).

The publication of the Report awoke the backward regions to the constitutional provisions for the appointment of the statutory regional development boards. Dissatisfaction over the tardy implementation of the planned removal of the backlog simmered for a decade and led to the appointment of the Indicators and Backlog Committee in 1995 to find out if the backlog had increased between 1984 and 1994.

The Committee followed the same methodology as its predecessor, the Dandekar committee, and concluded that it had. Intra-regional disparity reduced in the rest of Maharashtra but widened in Vidarbha and Marathwada. The per capita backlog in 1994 in the rest of Maharashtra was estimated at Rs. 755 while it was five times higher, Rs. 3614, in Marathwada and Rs. 4001 in Vidarbha. The backlog in Marathwada and Vidarbha was made up largely of backlog in physical infrastructure while that of the rest of Maharashtra was largely contributed by a backlog of social infrastructure.

Seventeen districts were identified as backward in 1994, which accounted for 55 per cent of the area of the State, 37.5 per cent of the population and 76 per cent of the estimated backlog. Of these, three belonged to Western Maharashtra, six to Marathwada and eight to Vidarbha. Needless to add, that these districts scored low on the HDI as well (GoM, 2002b).

The Central government had formulated a policy to reduce regional inequality by identifying the most backward districts. According to it the million plus cities were made out of bounds for new manufacturing industry and fiscal incentives were offered to attract it to the notified backward districts.

The Government of Maharashtra strengthened the industrial licensing policy of the central government with its own location policy banning some sites for industry and providing infrastructure and incentives to it for situating them in backward districts. Consequently, the regional distribution of industry in the State has become more even than before.

Real per capita income Net District Domestic Product (NDDP) in every district of the State increased between 1993 and 1998. It was marginally more dispersed in 1998 (CV=41.5 per cent) than in 1993 (CV=39.5 per cent). No district shows an increase in illiteracy. The neglect of public health infrastructure in the 1990s has contributed to an increase in both infant and child mortality in rural Maharashtra (World Bank, 2002). The widening rural-urban disparity would contribute to widening inter-district and regional disparity in infant and child mortality. There is a high correlation between per capita NDDP (1998-99) and HDI (2000). The Spearman's rank correlation coefficient was 0.82. District-level poverty ratios are not available for recent years but, in 1993-94, per capita NDDP and district level poverty ratios were significantly but inversely correlated ( $r = -0.72$ ) supporting both the trickle-down theory and the government intervention.

The HDI constructed for the districts of Maharashtra using the UNDP methodology for 2000 highlighted the backwardness of the districts of Marathwada and Vidarbha (Table 1.10). The State average value was 0.58. Only the districts of Mumbai - both city and suburban, Thane, Raigad, Sindhudurg, Pune, Satara, Sangli, Kolhapur and Nagpur had values of HDI that were above the State average. Barring Nagpur, no other district of Vidarbha and none from Marathwada were above the state average attainment (GoM, 2002b).

Within Western Maharashtra including Konkan, there are backward districts. The tribal district of Dhule and Nandurbar had low HDI. Nandurbar's HDI value was a mere 0.28. The districts of Marathwada are the most backward, with values

lower than the state average. The HDI value for Jalna was 0.27. Except for Aurangabad, none of the other districts scored higher than 0.47. In Vidarbha, none of the districts were above or at par with the State average with the exception of Nagpur. Amravati and Wardha are relatively more developed of Vidarbha districts with HDI values of 0.50 and 0.49 and ranked 15<sup>th</sup> and 16<sup>th</sup> respectively. Gadchiroli, despite being in the second quartile in terms of per capita district domestic product, had the lowest HDI of 0.21 while Yavatmal had HDI of 0.22 (GoM, 2002b).

**Table 1.10: Human Development Index and Per Capita District Domestic Product in Maharashtra**

District	HDI 2000	Rank	PCDDP (Rs.) 1998-99	Rank
Mumbai	1.00	2	45471	1
Mumbai (Subn.)	1.00	1	45471	2
Thane	0.82	3	33200	3
Raigad	0.70	6	30364	4
Ratnagiri	0.44	22	14354	25
Sindhudurg	0.60	9	20016	10
Nashik	0.51	13	20636	8
Dhule	0.36	30	11789	34
Nandurbar	0.28	32	11789	35
Jalgaon	0.50	14	16449	17
Ahmadnagar	0.57	11	15251	22
Pune	0.76	4	28000	6
Satara	0.59	10	15563	20
Sangli	0.68	7	20411	9
Solapur	0.48	17	18097	13
Kolhapur	0.64	8	20925	7
Aurangabad	0.57	12	19365	11
Jalna	0.27	33	12047	33
Parbhani	0.43	24	13827	26
Hingoli	0.43	25	13827	27
Beed	0.47	18	15303	21
Nanded	0.37	29	13068	31
Osmanabad	0.38	28	12905	32
Latur	0.47	19	13677	29
Buldhana	0.41	27	13823	28
Akola	0.44	23	16069	18
Washim	0.36	31	16069	19
Amravati	0.50	15	17168	14
Yavatmal	0.22	34	13382	30
Wardha	0.49	16	16952	16
Nagpur	0.71	5	28878	5
Bhandara	0.46	20	14467	23
Gondiya	0.46	21	14467	24
Chandrapur	0.41	26	19325	12
Gadchiroli	0.21	35	17140	15
<b>Maharashtra</b>	<b>0.58</b>		<b>22763</b>	

Source: GoM, 1002a; GoM, 2002b

The districts of Mumbai and Mumbai suburban occupied the top slot. The difference in human development achievements in these two districts on the one hand and the others on the other hand is stark. The HDI reflects the regional disparities that persist in Maharashtra despite attempts made by the government to mitigate them through financial allocations for investment in physical infrastructure to ensure egalitarian economic growth. It also indicates that the high levels of income and the high social sector attainment of Mumbai has in fact pushed up the average income of the State and the average HDI value for the State.

Analysis of individual indicators of economic, structural and human development revealed that districts of Pune division were ahead of the districts from other regions of Maharashtra. However, they lagged behind on indicators of social and gender development such as percentage of girls married below 18 years of age compared to Konkan. Income levels are generally lower in the districts of Vidarbha compared to those in districts of Pune. The districts of Marathwada lag behind on economic, structural, social and human development indicators. Konkan emerged higher on economic, social and human development indicators. However, wide inter-district disparities exist in all regions (GoM, 2003).

#### *Rural-Urban Disparity*

Analysis of the National Sample Survey data on household consumption expenditure by Sawant and Mhatre (2000) shows that urban-rural disparity in consumption expenditure has widened. Two important conclusions emerge.

First, urban-rural consumption disparity increased for all as well as non-poor households. The former disparity increased from 1.64 in 1967-68 to 1.94 in 1993-94. The latter, increased from 1.95 in 1967-68 to 2.11 in 1993-94.

Second, amongst the sixteen major states, Maharashtra had the highest urban-rural ratio for all households in all the survey years implying the highest urban-rural consumption expenditure disparity. Widening of urban-rural disparity in levels of living is inversely related to the rural per capita farm income and share of rural male workers engaged in non-farm employment. The rise in disparity is negatively related to growth in the State's agricultural income but positively to growth in non-agricultural income.

#### *Poverty*

The higher growth rate in per capita SDP in Maharashtra has not translated into a faster reduction in poverty. The State has been able to reduce the share of the poor in population from 43.44 per cent to 25.02 per cent and the number of poor persons from 29 million to 23 million between 1983 and 1999-00. In contrast, Kerala was able to reduce the share from 40.42 per cent to 12.72 per cent and persons living in poverty from 11 million to 4 million (GoI, 2002a and 2002b).

Haryana, Bihar, Himachal Pradesh, Karnataka, and Rajasthan experienced steep declines in poverty levels of more than 12 percentage points between 1993-94 and 1999-00. Uttar Pradesh, West Bengal and Tamil Nadu also registered significant reduction in poverty (Table 1.11).

Rural poverty in Maharashtra declined from 45.23 per cent in 1983 to 23.72 per cent in 1999-2000. The number of rural poor reduced from 19.4 million to 12.5 million. In urban areas, poverty reduced from 40.26 per cent to 26.81 per cent but the poor increased marginally from 9.7 million to 10.3 million (GoI, 2002a and 2002b).

In the 1990s, rural poverty in Maharashtra declined faster than urban poverty. It declined at 7.8 per cent a year compound compared with 4.5 per cent in 1993-94 and 1999-00.

Projections for 2006-07 indicate that poverty ratio is likely to decline in Maharashtra to 16.18 per cent and the number of poor to 1.7 million. Many states would do better than Maharashtra. Unfortunately, in terms of poverty, the performance of Maharashtra comes closer to several of the less developed states in the country (Table 1.12).

#### *Employment Market*

Maharashtra's population increased at 2.0 per cent per year, compounded from 78.9 million in 1991 to 96.8 million in 2001. The workers, main plus marginal, enumerated in the Census of 2001 increased a little faster at 2.2 per cent per annum from 33.9 million to 42.1 million. They increased faster than population irrespective of sex and rural-urban residence (Table 1.13). Contrary to the general impression, employment increased faster than population in cities than in villages.

**Table 1.11: Percentage of Population below Poverty Line, 1973 – 2000**

(Arranged in increasing order of 1999-2000)

State	1973-74	1977-78	1983-84	1987-88	1993-94	1999-2000
Punjab	28.15	19.27	16.18	13.20	11.77	6.16
Himachal Pradesh	26.39	32.45	16.40	15.45	28.44	7.63
Haryana	35.36	29.55	21.37	16.64	25.05	8.74
Kerala	59.79	52.22	40.42	31.79	25.43	12.72
Gujarat	48.15	41.23	32.79	31.54	24.21	14.07
Rajasthan	46.14	37.42	34.46	35.15	27.41	15.28
Andhra Pradesh	48.86	39.31	28.91	25.86	22.19	15.77
Karnataka	54.47	48.78	38.24	37.53	33.16	20.04
Tamil Nadu	54.94	54.79	51.66	43.39	35.03	21.12
<b>Maharashtra</b>	<b>53.24</b>	<b>55.88</b>	<b>43.44</b>	<b>40.41</b>	<b>36.86</b>	<b>25.02</b>
<b>All-India</b>	<b>54.88</b>	<b>51.32</b>	<b>44.48</b>	<b>38.86</b>	<b>35.97</b>	<b>26.10</b>
West Bengal	63.43	60.52	54.85	44.72	35.66	27.02
Uttar Pradesh	57.07	49.05	47.07	41.46	40.85	31.15
Assam	51.21	57.15	40.47	36.21	40.86	36.09
Madhya Pradesh	61.78	61.78	49.78	43.07	42.52	37.43
Bihar	61.91	61.55	62.22	52.13	54.96	42.60
Orissa	66.18	70.07	65.29	55.58	48.56	47.15

Source: GoI, 2002a and 2002b

Regrettably, secure organised employment stagnated at 3.7 million in the decade but its complement, the insecure unorganised employment, increased from 30.2 million in 1991 to 38.4 million in 2001 improving its share in total employment from 89 per cent to 91 per cent. Estimate of the share of the informal sector differs with the source of data and definition used.

If one used the NSSO and equated the formal sector with regular wage and salaried employment, informal sector would consist of self-employed and casual labour. In 1999-00, 88.2 per cent of the men and 98.5 per cent of the women were employed in the informal sector in rural Maharashtra. Their respective shares in urban Maharashtra were 46.0 per cent and 59.0 per cent. Work participation rates

**Table 1.12: Poverty projections for 2006-07**

State	Rural		Urban		Combined	
	Per cent	No. (lakh)	Per Cent	No. (lakh)	Per cent	No. (lakh)
Andhra Pradesh	4.58	26.97	18.99	41.75	8.49	68.72
Assam	37.89	95.36	4.48	1.78	33.33	97.14
Bihar	44.81	482.16	32.69	54.74	43.18	536.91
Gujarat	2.00	6.88	2.00	4.38	2.00	11.25
Haryana	2.00	3.30	2.00	1.51	2.00	4.81
Himachal Pradesh	2.00	1.18	2.00	0.14	2.00	1.32
Karnataka	7.77	28.66	8.00	16.34	7.85	45.00
Kerala	1.63	4.03	9.34	8.01	3.61	12.04
Madhya Pradesh	28.73	192.07	31.77	74.46	29.52	266.54
<b>Maharashtra</b>	<b>16.96</b>	<b>101.61</b>	<b>15.20</b>	<b>72.68</b>	<b>16.18</b>	<b>174.30</b>
Orissa	41.72	139.12	37.46	23.57	41.04	162.69
Punjab	2.00	3.40	2.00	1.95	2.00	5.35
Rajasthan	11.09	54.41	15.42	23.44	12.11	77.86
Tamil Nadu	3.68	12.46	9.64	31.61	6.61	44.07
Uttar Pradesh	24.25	373.16	26.17	111.25	24.67	484.41
West Bengal	21.98	137.53	8.98	22.21	18.30	159.73
<b>All-India</b>	<b>21.07</b>	<b>1705.26</b>	<b>15.06</b>	<b>495.67</b>	<b>19.34</b>	<b>2200.94</b>

Source: GoI, 2002a and 2002b

**Table 1.13: Main, Marginal and Total Workers by Sex & Rural-Urban Residence, Maharashtra, 1991 & 2001 and Rates of Growth 1991-2001**

Total	1991	2001	1991	2001	1991	2001	1991	2001
(R+U)	Main	Main	Marginal	Marginal	Total	Total	Pop.	Pop.
Persons	31.01	35.67	2.90	6.38	33.91	42.05	78.94	96.75
Males	20.92	24.49	0.38	2.44	21.29	26.92	40.83	50.33
Females	10.09	11.19	2.53	3.94	12.62	15.13	38.11	45.42
<b>Rural</b>								
Persons	21.38	22.75	2.65	5.35	24.03	28.11	48.40	55.73
Males	12.77	13.59	0.27	1.82	13.05	15.41	24.54	28.44
Females	8.61	9.16	2.38	3.53	10.99	12.70	23.86	27.29
<b>Urban</b>								
Persons	9.63	12.92	0.25	1.03	9.88	13.95	30.54	41.02
Males	8.15	10.90	0.10	0.62	8.25	11.51	16.29	21.89
Females	1.48	2.02	0.15	0.41	1.63	2.43	14.25	19.13
<b>Rates of Growth Per Annum</b>								
Total								
(R+U)	Main	Marginal		M+Marg		Pop.		
Persons	1.4	7.9		2.2		2.0		
Males	1.6	18.7		2.3		2.1		
Females	1.0	4.4		1.8		1.8		
<b>Rural</b>								
Persons	0.6	7.0		1.6		1.4		
Males	0.6	18.9		1.7		1.5		
Females	0.6	4.0		1.4		1.3		
<b>Urban</b>								
Persons	2.9	14.1		3.4		2.9		
Males	2.9	18.3		3.3		3.0		
Females	3.1	9.9		4.0		2.9		

Note: Rates of Growth are compound rates of growth

Source: For this Table and tables that follow: NSSO, 1997 and 2001. Results of the Employment- Unemployment Survey for the 50<sup>th</sup> Round (1993/94) and 55<sup>th</sup> Round (1999/2000). Results for Maharashtra pulled out of the Central Sample Data

(WPRs) of men and women, rural as well as urban, increased between 1991 and 2001. This increase was the result of increased participation of marginal rather than main workers (Table 1.14). This corroborates the faster growth of the informal sectors.

The net effect of the operation of the demand and supply in the labour market is seen in the changes in the rate of unemployment. Since the Census is yet to publish the data of 2001 relating to unemployment, one has to turn to the NSSO.

According to the NSSO, unemployment in Maharashtra increased among men and women living in villages or towns, irrespective of whether it was measured with the reference period of a year, a week or every day of the week (Table 1.15). Unemployment measured by the most comprehensive measure the CDS rate, increased from 4.3 per cent of the labour force in 1993-94 to 6.5 per cent in 1999-00 in rural Maharashtra and

from 6.3 per cent to 8.1 per cent in urban Maharashtra. Urban women experienced higher rates of unemployment than urban men, both in 1993-94 and 1999-00.

Unemployment was essentially the problem of the young entrants to the labour force, much more in urban than in rural Maharashtra (Table 1.16). The current weekly status unemployment rates for the educated 15 years of age and over declined for rural men and women and urban women in the 1990s. Urban educated men 15 years and over faced higher rates of unemployment in 1999-00 than in 1993-94 (Table 1.17).

The State faces two major problems in respect of its labour force. First, its workers are overwhelmingly engaged in informal activities where incomes are low. Secondly, most of the unemployed are young belonging to the ages of 15-24, more so if they were educated as well. The employment policy of the State needs to address itself to the problem urgently.

**Table 1.14: Work Participation Rates by Sex and Rural-Urban Residence, Maharashtra, 1991 & 2001**

Usual Status (R+U)	Main		Marginal		Total	
	1991	2001	1991	2001	1991	2001
Persons	39.28	36.87	3.68	6.60	42.96	43.46
Males	51.24	48.65	0.92	4.85	52.16	53.49
Females	26.47	24.10	6.64	8.49	33.11	32.59
<b>Rural</b>	<b>1991</b>	<b>2001</b>	<b>1991</b>	<b>2001</b>	<b>1991</b>	<b>2001</b>
Persons	44.18	40.82	5.48	9.61	49.66	50.43
Males	52.05	47.78	1.12	6.40	53.17	54.18
Females	36.08	33.57	9.96	12.95	46.05	46.52
<b>Urban</b>	<b>1991</b>	<b>2001</b>	<b>1991</b>	<b>2001</b>	<b>1991</b>	<b>2001</b>
Persons	31.52	31.49	0.82	2.51	32.34	34.00
Males	50.02	49.77	0.61	2.83	50.62	52.60
Females	10.37	10.58	1.07	2.14	11.44	12.72

Source: NSSO, 2001

## Section IV

### Strategy and Policies

We have delineated above the economic profile of Maharashtra highlighting its performance relative to other states in India. To devise a strategy for the future one has to set the objectives and assess our strengths and weaknesses and our achievements and failures.

### Objective

To grow at a sustainable rate of 8 to 10 per cent per annum over the decade 2002-12, is the objective. Sustainable growth implies not only a high growth rate and human development but also intra- and inter-generation equity. It requires building institutions to resolve conflicts over distribution of benefits from social assets. These conflicts prevent the creation of the assets in the first place.

**Table 1.15: Unemployment Rates by Usual, Current Weekly and Current Daily Status by Sex & Rural-Urban Residence, Maharashtra, 1993-94 & 1999-2000**

Usual Status	Usual Principal Status		Usual Principal + Subsidiary Status	
	1993-94	1999-2000	1993-94	1999-2000
<b>Rural</b>				
Persons	1.2	1.8	0.8	1.4
Males	1.7	2.4	1.2	1.9
Females	0.7	1.1	0.3	0.7
<b>Urban</b>				
Persons	4.9	6.4	4.4	5.8
Males	4.6	6.1	4.3	5.6
Females	5.8	7.8	4.7	6.6
	Current Weekly		Current Daily	
<b>Rural</b>				
Persons	2.6	3.5	4.3	6.5
Males	3.0	2.7	4.6	6.3
Females	2.0	3.3	4.0	6.9
<b>Urban</b>				
Persons	5.6	6.8	6.3	8.1
Males	5.3	6.5	6.0	7.7
Females	6.6	8.1	7.8	10.0

Source: NSSO, 2001

**Table 1.16: Unemployment Rates by Current Daily Status in Labour Force Entry Ages by Sex & Rural-Urban Residence, Maharashtra, 1993-94 & 1999-2000**

(Per cent)

Age Group	Rural				Urban			
	Males		Females		Males		Females	
	1993-94	1999-2000	1993-94	1999-2000	1993-94	1999-2000	1993-94	1999-2000
15-19	9.3	13.8	7.1	11.3	17.5	24.8	18.5	14.8
20-24	11.2	13.9	6.9	10.0	16.0	18.2	22.3	18.8
25-29	5.9	7.3	5.6	6.7	7.0	11.8	9.6	6.1
15-29	8.7	11.3	6.4	8.9	12.3	14.9	16.7	12.3

Source: NSSO, 2001

### Weaknesses

Agro-climatic conditions in the State are not favourable to growing cereals such as rice and wheat. Most of the State falls in the rain shadow and is dry and arid. Irrigation potential is low and its utilisation is much lower. Poor quality of land, its fragmentation and lack of water have resulted in low yields. Rural-urban and regional inequality of income and human development is high and so is poverty.

### Strengths

Maharashtra has a relative abundance of entrepreneurship, thanks to the cosmopolitan character of its capital city Mumbai. The city's riches provide an insatiable market for the produce and labour of the hinterland. The State has a good physical, social and financial infrastructure. It is the most industrialised and second most urbanised and, judged by the per capita income, the third richest of the large states in India.

### Performance

Maharashtra has maintained its eminence over the long haul since its formation in the 1960. Along with most other states of India, Maharashtra too suffered a deceleration in the second half of the 1990s largely due to successive droughts, implementation of the Fifth Pay Commission, the Asian meltdown and the world recession.

### Failures

The biggest failure has been that to make growth sustainable and convert the high growth performance into equally high performance in human development. Neither did poverty decline fast enough nor did some of the aspects of human development improve as fast particularly in relation to the best performer, Kerala. In recent years, unemployment has increased. Available data show that rural-urban, regional and gender-based inequality has widened.

**Table 1.17: Unemployment Rates by Usual Status and Current Weekly Status among Educated 15 Years & over by Sex and Rural-Urban Residence, Maharashtra, 1993-94 & 1999-2000**

Usual Status	Usual Principal Status		Usual Principal + Subsidiary Status	
	1993-94	1999-2000	1993-94	1999-2000
<b>Rural</b>				
Persons	7.1	7.0	4.7	6.1
Males	7.0	7.0	5.4	6.2
Females	7.7	7.2	7.2	6.0
<b>Urban</b>				
Persons	6.9	7.5	6.3	6.9
Males	5.3	6.8	5.1	6.2
Females	14.5	11.7	12.7	10.5
	Current Weekly			
<b>Rural</b>	1993-94	1999-2000		
Persons	7.5	7.1		
Males	7.3	6.9		
Females	8.8	8.7		
<b>Urban</b>				
Persons	7.1	7.5		
Males	5.6	6.9		
Females	14.8	10.6		

Source: NSSO, 2001

### *Basic Choices of the Strategy*

The states in India base their strategy of development taking the cue from the strategy/perspective plan documents prepared by the Planning Commission. The long process of formal and informal consultations between the states and the Planning Commission results in the Draft Five Year Plan first at the national and then at the state level.

There are tensions between the philosophy of planning and that of the market. Assuming that the reforms agenda would be pursued regardless of the party voted in office, one could safely infer that the role of the market would increase and that of the plan would shrink. The state would be entrusted with the responsibility of increasing the supply of public goods, which are usually under-provided if left to the market. The government may encourage (discourage) the production of goods involving positive externalities (negative externalities). It could build, own and operate departmentally or it could enter into a BOT contract or even a BOOT contract with private producers.

These choices affect the size of the budget, resource mobilisation required and the macroeconomic policy. It is quite unlikely that the GoM would be able to mobilise through taxation and borrowing the resources to build the physical infrastructure of irrigation, power, telecommunication and transport on the one hand and social infrastructure of health and education needed for achieving growth with equity.

### *Strategy for Short Term*

The State government, forced to borrow to consume, is under severe fiscal strain. In the short run, the government has to generate surpluses on the revenue account by prudent fiscal management. Surpluses are needed for better maintenance of public assets and investment in agriculture, irrigation and rural infrastructure where it is not likely to crowd out private investment.

### *Medium to Long Term Strategy*

The most crucial strategic question Maharashtra faces relates to the role to be assigned to agriculture. It provides food for the population and raw materials and labour to industry. Besides, it provides market for the products of industry. Because of the reasons referred to earlier, productivity of

agriculture is low and has stagnated over time. Green Revolution did not spread to coarse cereals and though the price terms of trade increased income terms of trade did not, at least for the small and marginal farmers. Prosperity is limited to water-rich big farmers growing sugarcane and grapes and other commercial crops. Organised employment did not increase as fast as rural population and organised industrial employment declined in the 1990s.

The gloomy scenario has a silver lining in diversification of agriculture to horticulture, dairying, poultry and animal husbandry. The change is already underway. Its pace can be increased by establishing cold chains of cold storage and refrigerated transport and also by promoting food processing and canning industry. Since agriculture is carrying substantial labour slack, the benefits of diversification may not show up in increase in the numbers employed but it will in person-days employed. The pace of diversification will also depend on availability of power and road and rail transport.

Farmers particularly the poor among them take time to adopt new things. That is why agriculture would not respond immediately to diversification. Fortunately, globalisation frees the industry from the dependence on domestic agriculture for market. If industry in Maharashtra is competitive, it can readily sell its products in the international markets.

### *Twin Engines of Growth*

Maharashtra would do well to concentrate on the two engines of growth, manufacturing and infrastructure. Factories in Maharashtra are bigger in scale and more productive than the all-Indian average. Maharashtra occupies top ranks in value added by most industries in India. The Industrial structure of the State is diversified and matured over time. Capital and intermediate goods industries have improved their share in the value added quite substantially. With higher labour productivity industry in Maharashtra remains competitive despite higher wages. That the State is a better place to do business in, is certified by the fact that it leads other states in the inflow of foreign direct investment.

Maharashtra's Industrial Policy 2001 emphasises development of high technology based industries in the State. This is a step in the right direction. Exports of high-tech industry will put the

State on the industrial map of the world in the same way as exports of software industry catapulted Bangalore and Hyderabad. Globalisation, according to Ghose (2003), is really export of LDC manufactures to compete with the manufactures of the DCs. He shows how the LDCs that exported manufactures prospered in the current phase of globalisation whereas exporters of primary products, most of African countries for instance, suffered.

### Infrastructure

Infrastructure is basic to material and social development. Researchers have tried to quantify the elasticity of response of GDP to variation in expenditure on infrastructure. We have referred to two estimates, one by Krueger and the other by Rakesh Mohan in the text. The first relates to LDCs and the second to India. Their relevance to Maharashtra is not known. In development economics, average shares of expenditure on infrastructure in GDP of countries at different levels of per capita income are often accepted as norms for poor countries wanting to graduate to higher levels of income. Statement such as that India should spend say 6 per cent of its GDP on infrastructure or education or health is often rooted in norms derived from international experience. More relevant to Maharashtra is the index of infrastructure by states. It shows that Maharashtra lags behind Punjab, Kerala, Tamil Nadu, Haryana and Gujarat in social and economic infrastructure.

Infrastructure plays a crucial role in a highly competitive global context. Increasing production of perishable goods serves no use if they cannot be delivered cheaply and speedily to where they are demanded. Competition has forced producers to reduce costs of holding inventories of raw materials, spares and finished products. Just-in-time system requires very efficient infrastructure.

Infrastructure is difficult to prioritise but power is considered the most critical element of it because of its very high forward and backward linkages relative to other infrastructure. Per capita consumption of power is high in Maharashtra relative to the average in India but it is much less than in East and South East Asian economies including China. High cost of power caused by frequent load-shedding, inefficient captive power

plants, high T&D losses, lack of maintenance, monitoring of consumption and proper pricing of electricity supplied to agriculture puts Industry in Maharashtra at a disadvantage in relation to the manufactures from these countries in national and international markets. Addition to capacity has almost come to a standstill because of the Enron imbroglio but the Gordian knot has to be cut.

Next to power in importance is the infrastructure of transport and communication. Excepting some kinds of roads and minor ports, much of it lies in the central sphere. There is urgent need to develop Centre-State and Private sector cooperation in the development of infrastructure. The rise of information industry and growth of the financial sector has increased the importance of communication infrastructure. Maharashtra has developed substantial advantage in knowledge based industry which will reduce transaction costs all round, help exports of software and hardware and increase inflow of portfolio and foreign direct investment to the State.

#### Box 1.1: Benchmarking with the Best

As a state aspiring for a place in the Sun, Maharashtra should look at East and South-East Asia for inspiration. Maharashtra has miles to go in improving literacy and life expectancy to levels that could compare well with those prevailing in the East Asian and South-East Asian countries.

- Adult literacy rate was 84 per cent in China in 2000 while it was 67 per cent in Maharashtra in 1995-96.
- Life expectancy at birth was 70.5 years in China in 2000 and 65 years in Maharashtra in 1992-96.
- Population below poverty line was 4.6 per cent in China in 1987-2000 and 25 per cent in Maharashtra in 1999-2000.
- Total Fertility Rate was 1.8 in China in 1995-2000 and 2.8 in Maharashtra in 1995-97.
- China spends 2.3 per cent of the GNP on education while Maharashtra spends 2.21 per cent of SDP on education. Singapore spends 3 per cent, Republic of Korea, 3.7 per cent and Malaysia 4.9 per cent. Malaysia spends 1.4 per cent of its GDP on public health while China spends 2.1 per cent, Singapore, 1.1 per cent, Republic of Korea 2.4 per cent. Maharashtra spends only 0.61 per cent of its SDP on public health.
- It is not only higher public spending but the quality of service that is essential.

### *Social Infrastructure and Equity*

We saw earlier that Maharashtra lags behind Kerala in human development. This could be attributed to two factors. First, Maharashtra spends a smaller share of its GDP on health and education than Kerala. Secondly, social, economic, cultural and political factors in Kerala have combined to empower women much more than in Maharashtra. Consequently, Maharashtra runs a poor second to Kerala in many respects such as reducing fertility, infant mortality and poverty on the one hand and improving education and health on the other. Kerala has improved the access of the marginalised groups, women and poorer households for instance, to the social infrastructure of education and health much more than has Maharashtra.

Without the slightest intention of detracting from the achievements of Kerala, one should note the specific factors that favoured the laudatory outcomes in Kerala. Social anthropologist refers to prevalence of matrilineal family in the past. The long years of Communist rule may have helped women to fight discrimination.

Demographers point to the male out-migration that forced women to shoulder the responsibility of managing the household's land and other business, looking after the education of children, freedom from repeated childbearing caused by long absence of the husband and much else. Kerala is regionally not as diverse and as water-starved as Maharashtra. Even the human habitation pattern is a whole continuum of villages without much rural-urban differentiation.

Despite the collapse of time and space brought about by new technology, economic development takes time particularly when we try to achieve sustainable growth assuring intra-generation and inter-generation equity and justice. Conflicts over distribution are inevitable and need to be resolved by creating institutions to address them. In Kerala, ideology, political parties and trade unions helped by other NGOs led to such resolution and empowerment of women. Maharashtra has to await such a coalition to emerge.

