

## Conclusions and Policy Recommendations

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The preceding discussion gives a detailed account of the major development sectors of Maharashtra. The present scenarios of these sectors and main findings have been discussed, highlighting the successes and failures on each front. Based upon the findings of each sector in the state, overall conclusions and policy recommendations are suggested as follows.

### Overall Conclusions

Based on the analysis of available data, information and subsequent findings of each chapter, overall conclusions are listed as follows.

- Maharashtra has good physical, social and financial infrastructure and a relative abundance of entrepreneurs. It is the most industrialised; the second most urbanised and, judged by the per capita income, the third richest state in India. However, weak agro-climatic conditions and low irrigation potentials and their utilisation in the state have resulted in low agricultural yields. Maharashtra spends a small share of its GDP on health and education. The social, economic, cultural and political climate in the state is responsible for lags in overall human development. Coalition politics and the coalition government, in recent years, have given an unfocussed approach to key elements of institutional and policy reforms.
- Since 1997, the financial ability of all state governments has weakened and Maharashtra is no exception to this. Decline in receipts, apart from poor own tax and non-tax revenue, along with steady decline in the central transfers has put the state finances on a critical path. Analysis of state's current fiscal situation indicates that if the GoM does not undertake any significant fiscal reforms, the current fiscal situation may become unsustainable. The state is already unable to cope up with the high levels of debt and deficits.
- Though the major population of Maharashtra resides in rural areas, with agriculture as the dominant source of livelihood, the growth rate of this sector is very low. Public investment in agriculture is reported to be almost stagnant. The slowing down in the growth of work animals has been concomitant with the expansion of milch animal population in Maharashtra, which showed over 53 per cent growth between 1956 and 1997. Inadequate infrastructure and lack of flow of information technology have been cited as the major barriers for better market integration in the existing marine fish markets of India.
- Many of the irrigation projects started in different plan- periods have not been completed in time, which has resulted in cost overruns besides delaying water supply to farmers. Projections indicate that demand for irrigation water in the state is expected to increase by 182 per cent between 1996 and 2030. The investment required to create one hectare of irrigation under the MMI sector has increased by about 17 times between the third and eighth five-year plans in the state. This is partly due to inadequate allotment of funds required for completion of the projects. The ratio of potential utilised to the total potential created in irrigation, especially in MMI sector, is abysmally low in the state, as compared to the national average, due to inadequate allocation of funds required for constructing main and sub-canals. Area under micro-irrigation has increased phenomenally (about 65 per cent/annum) since 1986. Despite this, drip irrigated area accounted for just 4.97 per cent of the net irrigated area as of 1999-2000.
- The GoM followed an elaborate industrial policy to disperse industry and thereby reduce regional disparities within the state. However, this has not yielded the desired result and it is the time to have a fresh look at the policies, programmes and industrial set-up for promotion and the long-term viability of the industrial sector in the state.
- The ratio of bank credit to infrastructure financing to the total bank credit was a meagre 2 per cent in 1998 and even in 2002 it was just about 6.5 per cent. Though Maharashtra's per capita consumption of power is high when compared to that for all India, the problem of

regular supply of power across all the regions of the state is yet to be tackled. High T&D losses, poor maintenance, poor monitoring of consumption and distortions in pricing of electricity have adversely affected the growth of power sector and also the profitability of MSEB. Industries in the state have also been disadvantaged, while competing in the global marketplace, directly as a result of the irregular power supply at a high cost. Rural road network is better in Maharashtra than in other states, but urban regions, both in terms of quality of roads and road length, are not satisfactory. In terms of teledensity, Maharashtra falls among top states but the teledensity is skewedly distributed. Low tariffs, poor service coverage, contaminated water supply, lack of accounting norms, deficient institutional arrangements, etc. are the problems of water supply, particularly in urban areas of the state.

- Most of the PSUs in Maharashtra are in a financially vulnerable position and continue to depend on the grants and support from the government. Further, delays in the finalisation of the accounts of the PSUs, as well as inefficient practices of some of the PSUs have resulted in severe losses to the Government. There are at least 30 units where restructuring can take place immediately. Several of these 30 units operate on low efficiency and high cost basis. The government could easily merge some of them and form a single Corporation. State's restructuring and privatisation agenda is gaining momentum, but very slowly. If accelerated and enforced properly, privatisation and restructuring will provide a good deal of revenues to the state government and also make the PSUs commercial entities in the true sense of the term.
- In 2000, for the first time, the World Human Development Report affirmed that the enjoyment of human rights is an integral part and a necessary condition for human development. The development of the weaker sections, co-terminus with their emancipation, may pose major challenges in Maharashtra in the coming decades.
- Maharashtra, with its rich cultural heritage and natural beauty, boasts traditional age-old hand-

woven and handcrafted articles along with the advanced technology in the state. Handlooms and handicrafts have the potential to provide gainful employment to thousands of weavers and craftsmen with minimum financial investment in the state.

- Increasing public demands for better quality of services are posing major challenges for governance in the state. There are age-old legislations that still hold well. It is indicated that there are about 400 obsolete laws in the country which were formulated ages ago, have ceased to have any relevance in present times, and thus, are not conducive to the development of the state.
- Developmental intervention, over the years, has brought about a marked reduction in poverty and illiteracy in the state. Specifically, the gap between rural and urban poverty and rural and urban illiteracy has declined. With respect to primary education and electricity too, the state has performed well. Special programmes such as EGS, IAY, SGSY etc. have helped in tackling problems of rural employment and poverty, to some extent. The PRIs helped the emergence of leadership and contributed for the improvement of quality of rural life.
- The primary strength of tourism in Maharashtra is Mumbai. In addition to being the commercial and entertainment capital of the country, Mumbai is now planning to be a top urban tourist destination. The city houses many famous tourist spots such as the Gateway of India, Museums, Shopping malls, Bollywood, amusement parks, beaches and the international airport that brings around 26 per cent of international tourists to India. The weaknesses of tourism in Maharashtra include long haul tourist dependence, Mumbai's host ambience and its poor connectivity to various within state destinations, dependence on business tourism, lack of innovation, information availability and quality human resources. The opportunities for the state's tourism are based on domestic tourism, proximity to economically growing ASEAN countries, growth in cultural tourism, Business Tourism and MICE market and the international airport that is being planned at Goa, just a few kilometres away from the high tourism potential district of Sindhudurg. The

threats to tourism are the perception of tourists about various aspects, global and national effects, safety and security issues in Mumbai, economic situations at source market and competition from other Indian states.

- Although Maharashtra is a highly urbanised state, levels of urbanisation are uneven across regions and districts. Policies towards equalisation of the extent of urbanisation and urban growth were in operation but implemented too slowly to satisfy the protagonists of regional equality. While globalisation and liberalisation hold some promises, they also pose some danger for the backward regions of the state. Urban poverty has emerged as a complex, multi-dimensional phenomenon. However, in order to meet individual's needs, the programmes need to cater to all types of vulnerabilities on a proper assessment of possible forms of poverty in a given context. Homelessness has specially been observed, with respect to the vulnerable sections, necessitating appropriate schemes to increase the availability of affordable housing to Economically Weaker Sections and Low Income Group, which, in turn, leads to facilitating allocation of land, extension of funding assistance, provision of support services, etc.
- In the registered manufacturing sector, the elasticity of employment with respect to manufacturing GDP is 0.14. Elasticity estimate with respect to 'Gross Capital Formation' is also of a similar magnitude. The informal and very small and medium size establishments hold better promises of employment growth. Lack of savings, inability to attract FDI, high cost of power, high cost of credit, poor and unreliable infrastructure, improper regulations and untargeted non-merit subsidies are the well-known factors that have caused retardation of output and employment opportunities in the state. EGS perhaps provides effective floor to rural or agriculture wage rates. However, availability of EGS works opportunities is very uneven across districts.
- There is a lack of desired attention towards the environmental management in the state. In

general, public co-operation and co-ordination among concerned authorities is not satisfactory. Both quantity and quality of water are not up to the mark and wide disparity exists in the amount of water supplied in different areas. Per capita water availability in the state is lower than that at national level. Wastage of water in a common feature and it is as high as 50 per cent due to miss use, overuse and leakage during various stages of water supply system. Similarly, sanitation facilities, in both urban and rural areas are highly inadequate. Various programme on water supply and sanitation, initiated by the GoM have met with only a limited success. While high levels of SPM and RPM from industries, transportation and construction activities are the major causes of concern in urban areas; the low quality of fuel used in rural areas is responsible for indoor air pollution. Higher levels of RPM are responsible for various health problems in the state. Noise levels in many towns exceed standards in all categories of areas, for both day and night, by wide margins, mainly due to industrial and vehicular noise.

- Proper treatment and disposal of wastewater and solid waste are lacking. As high as 99 per cent of sewage from Municipal Councils and 50 per cent of that for Municipal Corporations goes untreated and eventually finds its way into various water bodies. Continuous flow of untreated or partially treated wastewater into the rivers has degraded their water quality and they can neither be used as drinking water source nor for outdoor bathing. Millions of people in the state, specially, children, get affected due to water borne diseases. Only 10-12 per cent of total waste generated is of high risk, which could be separated at the source in order to prevent it from getting mixed into the MSW. However, despite some policy initiatives from ULBs, most of the housing societies do not segregate waste and the main reasons for this are lack of willingness, poor awareness and civic sense among people and lack of necessary infrastructure provided by the authorities. Use of non-conventional energy such as wind energy in the state has been started but it lacks proper cost-benefit analysis for further promotion.

## Policy Recommendations

In order to plan an appropriate strategy for future development of the state, the following policy recommendations are suggested.

- To grow at a sustainable rate of 8 to 10 per cent per annum, over the decade 2002-12, and for overall human development, the state should concentrate on manufacturing, infrastructure and services sectors. Agriculture and allied sectors, being the priority sectors in the future growth of the state, should be given due emphasis and necessary measures need to be taken for streamlining the credit flow in these sectors.
- Since the current fiscal policy stance is unsustainable, a fiscal correction is a must to achieve a sustainable fiscal policy regime. Three major areas of reforms could be - enhanced resource mobilisation effort, expenditure restructuring and an interest cost minimising debt management policy.
- Medium term framework resource mobilisation effort of GoM would need to concentrate on both own tax and non-tax revenues. This would entail reforms involving areas of tax policy and tax administration. Introduction of state-level VAT would be one such step in the area of tax policy. This would reduce problems of double taxation of commodities and multiplicity of taxes, resulting in cascading tax burden. This would also reduce or eliminate artificial manipulation with the tax base, ensuring better compliance.
- For a better tax administration, the present system would require to be revamped with an improved computerisation with facility to prepare a large database and its retrieval system. Tax audit can be done on the basis of third party information system provided by such computerised database.
- With regard to non-tax revenues, user charges for all non-merit services would need to be linked to the cost. For merit goods, such as primary education and basic health care facilities, this norm may not be applied.
- There is also sufficient scope for increasing the earnings in the form of interest, dividends and profits. The government must bring out a proper disinvestments policy for withdrawing from the sectors, which can be considered to be non-core areas. Proceeds of such disinvestments can be used to finance the high cost debts by introducing large-scale debt swap.
- On the expenditure side, any reform would be limited given the committed liabilities nature of the expenditure items, like interest payment, pension and salaries and wages. One way of reducing the salary payments is to go for reduction of the number of state government employees. It can be suggested that the reduction in numbers can be 2 percent per annum. This is so because average natural attrition rate is 2.8 percent per annum. But such reduction should not affect the delivery of critical services. Arresting the growth of pension would not be an easy task. New initiatives in this regard should be taken which could be in terms of introduction of 'Funded Pension Schemes' for the new employees.
- Rapid reduction in the debt-servicing obligation both by reducing the fiscal deficit and also by a reduction in the cost of debt servicing is another area of focus. In the prevailing low interest rate regime, an active debt management policy should try to alter the high cost debt structure to low cost through large scale retiring of expensive debt introducing debt swapping. State public sector enterprises need to function on commercial lines, and should provide adequate return on capital invested.
- For better contingent liabilities management, rationale for extending guarantees should be carefully examined and underlying risks documented. For better cash management, treasury operations should be fully computerised and access to overdraft with RBI be reduced, if not eliminated.
- The government may have to reformulate its policies and priorities to create an environment suitable for agricultural growth. Improvement in agricultural productivity and diversification of the traditional patterns of horticulture, animal husbandry etc., is required. Equally important is the need to promote rural non-farm employment so that the burden on the agricultural sector is reduced. Growth in both of these sectors will generate more rural income, stimulate consumer

demand and give a boost to other economic sectors. The GoM should withdraw its support to the co-operative sugar mills and in the cotton sector. It should also phase out the monopoly procurement scheme. Allied activities, which provide supplementary and complementary employment and also add to the income of the farmers, must be promoted. Offshore fishery resources should be promoted through introduction of newly designed fuel-saving multi-day mechanised fishing vessels, deep sea fishing vessels, and production of both marine inland fisheries from reservoirs and culture fisheries to increase the overall fish production. There is a need to educate fishermen and disseminate to them the information about mechanised fishing techniques and efficient marketing of fish-catch.

- The GoM must reform the APMC Act, 1963 so as to allow private parties to develop agricultural markets in the state as this would facilitate the creation of more markets and improve market infrastructure. Private sector investment in agro-processing, use of IT for dissemination of information to farmers and upgradation of knowledge, skills and communication capacity of extension personnel will help in increasing the agricultural performance. To rejuvenate rural credit delivery system, high transaction costs and poor repayment performance need to be tackled. In order to fully capitalise on exports, it is necessary to invest in post-harvest technology and ensure that there are no infrastructure bottlenecks. In addition, technical measures for maintaining food quality and sanitary and phyto-sanitary requirements are required.
- While no single strategy is going to solve the problem of water scarcity, there is an urgent need to formulate appropriate strategies to reduce the demand for water in the irrigation sector. On the whole, the state must plan to use water judiciously, reduce its intervention in sensitive crops like cotton and sugarcane, capitalise on its horticultural and floriculture sectors, promote allied activities, strengthen rural infrastructure and encourage private sector participation and investment in agriculture. Policies on water

resource development and management should be different for water surplus and water scarce basins. The state should also study the feasibility of transfer of water from water surplus basins to water scarce basins. To compensate for the inequality in the distribution of surface irrigation, more investment must be made on minor irrigation and watershed development programmes in those districts, which have less area under surface irrigation.

- Priority must be given to bridge the gap between irrigation potential created and actual area under irrigation. Constructing community wells, increased use of drip irrigation and better utilisation of available groundwater may ease this problem. Watershed development is very necessary to stabilise the carrying capacity of land and water resources in rain-fed areas. Irrigation policy should be focussed on completion of on-going projects. Massive Watershed Development Programmes (WDPs) must become central, and not marginal. The GoM should seek to involve Panchayat Raj institutions in both implementation and maintenance of projects under WDPs. Proper co-ordination between departments that are operating WDPs is needed. The state must also make full utilisation of resources available from NABARD's RIDF facility.
- Since irrigation sector of Maharashtra is the largest in India, it is essential to establish a Water Regulatory Authority (WRA), similar to State Electricity Regulatory Commission (SERC), to manage and suggest strategies for improving the performance of irrigation sector as well as to solve all water related disputes within the state. Water rates for different uses and working expenses needed to maintain the sector should be approved by the WRA. In order to increase the collection of water revenue, a two-part tariff structure can be introduced, wherein all land owners within the command area should pay a flat annual membership fee, on a per hectare basis, which entitles them to claim water, and a variable fee linked to the actual extent of service used by each member.

- Department of Industries should evolve suitable schemes and activate its district centres to adopt new management techniques for quality improvement, cost reduction, improved productivity and operational efficiency. Sick Small-scale units and non-BIFR units should be rejuvenated. For industrial development in the backward regions of the state, better institutional support should be provided. Film industry should be supported and promoted, particularly to make it competitive in the global markets. In view of the growing concerns for the environment, industrial pollution should be tackled and clean technologies should be promoted to minimise damage to environment.
- The infrastructure facilities especially power, ports and road network should be improved. The provision of most of the infrastructure services involves the central government, the state government and the local bodies. A proper integration of roles, responsibilities and obligations of these layers of the governments is required. Accelerated Power Development Reform Programme (APDRP) can be treated as a model, which provides efficiency-based incentives to states. Similarly, other incentive schemes should be devised for the efforts of the state in providing various infrastructure services and promoting efficiency. There is an urgent need to develop Centre-State cooperation and Private Sector Participation in the development of infrastructure. Private sector participation can take various hybrid forms including responsibility of construction, transient ownership, operation, and leasing and ultimate ownership. Privatisation can also act, as a substitute for the lack of political will to implement tariff rationalisation by the state utilities. Privatisation in distribution of power and water can help in reducing T&D losses, leakages and thefts and improve financial position of SEBs and ULBs.
- Removal of anomalies in tariff policies both across various infrastructures services (inter-services) and also within the same service (intra-service) needs to be carefully looked into. Some of the infrastructure schemes, such as construction of roads can be integrated with the employment and income generation programmes to help in alleviation of poverty. One of the most contentious issues in development of infrastructure in the state pertains to the land acquisition and displacement of Project Affected People (PAP). The state should ensure proper compensation packages to the PAP to ensure development of infrastructure with a less inhuman face.
- Technical and conceptual capabilities, which can provide impetus to the functioning of the organisations, are the needs of the hour in the programme of restructuring and reformulation of the public sector undertakings in Maharashtra. Outright sale of the equities of the public sector enterprises may not evoke much response in the absence of a clear-cut portrayal of the role of the state as well as the enterprise in the industry and the economy in which the firm operates. Unit-specific disinvestment strategy would go a long way to improve the efficiency and revenue generation capacity of the enterprise. The state needs to make a clear distinction between public corporations and cooperatives in the manner in which it proceeds for disinvestment. Since Public Sector Cooperatives have a welfare maximisation criterion, it would be difficult to formulate a disinvestment policy in these cases.
- Human and social capital should be strengthened to generate initiatives in governance that dovetail development with local conditions and emancipate people. Building technical capacities that equip people to create employment opportunities in their local environment is necessary. Political parties and trade unions with the help of NGOs and others should try to resolve human development issues and empowerment of women. Diversification of skills enhancement is required to ensure wider employment choices and opportunities in the state. A statutorily enforceable time-bound Universal Food and Nutrition Security Action Plan should be formulated with committed resource allocation for near universal PDS.
- A Comprehensive Resources and Sustainable Livelihoods Action Plan with specified actionable programmes should be targeted to ensure one guaranteed dignified year-long livelihood for every family through vigorous promotion of sustained agriculture and micro-enterprises, re-

oriented EGS, and integrated livelihoods with forest conservation. The Plan must include a comprehensive package of training in entrepreneurial and technical skills, the creation of employment opportunities in the local environment, financial and technical inputs, land linkages, development support and the effective implementation of land-laws to provide inalienable land rights to SCs and STs.

- A comprehensive Health Assurance Programme should be implemented including a Universal Health Insurance Scheme, a special tribal health policy, strengthening and extension of Primary Health Care with assured budgetary allocations, and social audit of public and private health centres. An Education Assurance and Action Programme linked to livelihoods should be implemented with inclusion of livelihoods (vocational and entrepreneurial) streams from VIII Standard and open schools-cum-community polytechnics. The programme should also include multiple entry points in academic institutions with bridge examinations, consolidation of literacy with functional and entrepreneurial skills, and qualitative improvement in teaching methods.
- Community participation and leadership in the local self-governance should be strengthened through capacity building of Panchayati Raj functionaries and Gram Sabha members. This is required to manage natural resources and implement PESA effectively, empower women's panchayats and transfer financial powers to panchayat samitis and gram panchayats. Policies should be implemented through formulation of supportive rules, regulations and procedures including monitoring of functionaries and welfare schemes by Gram Sabha, continuation of subsidies for social sector, extension of reservation policy (with preference to first generation beneficiaries) to private sector and underprivileged among minorities. Persons with disability should be given equal access to technical, professional and higher education, provided with livelihood security, and should be empowered to participate in the institutions of local self-governance.
- The tradition and richness of the handmade textiles and handicrafts must survive along with technological advancements in order to bring an economic balance and maintain job opportunities in rural areas. Developing a good marketing network can give a push to the accumulated inventories and augment the modern development of the handlooms and handicrafts sector. Revamping of the Handloom Corporation will provide a major thrust to the sector. Developing and exploiting the inherent skills in producing consumer-oriented merchandise, with design and quality intervention and marketing in the right environment, would better sustain this sector.
- In Governance, a systemic change starting with electoral reforms and system improvements is recommended. Electoral reforms will have to start with process improvements like prevention of polling irregularities, arresting and reversing criminalisation and checking abuse of unaccountable money power. Systems improvement should include reforms in political parties. Report of various committees on reforms should include public opinion and a time frame should be set for the implementation of any report after it is submitted. Repeal of old and obsolete legislation is necessary. The State Law Commission should tackle the task of identifying obsolete laws as quickly as possible. Administrative reforms are necessary to improve the efficiency and transparency of government functioning and service delivery. Public Private Participation (PPP) can promote good governance. This system has been tried out successfully for the registration of documents and can be used in the PDS and other activities.
- Once the Legislature passes the Appropriation Bill, (already passed by the centre in August 2004) expenditure should be totally in accordance with the appropriation. The Police authorities should become instruments for upholding the Rule of Law. For making this effective, they need to be insulated from any political interference in their operational matters. The police should also be made accountable to the law.

- Maharashtra has taken several good initiatives for e-governance. For instance, SETU is for the issue of various types of certificates and SARITA is for Registration. Quality in Government services can be improved by integrating the Citizen's Charter and Information Technology initiatives under a holistic umbrella. There should be a proper monitoring of the citizens' charters, preferably by an NGO, and they should be easily available without any difficulty and should be given a wide publicity. The institution of Lok Ayukta should be made more transparent to the public.
- For integrated development of villages, measures need to be taken to expand the medical and transport facilities, post and telegraph services, market and pucca roads to a large number of villages. Special attention is required for Vidarbha region, which is lagging behind. Devolution of more power to the gram sabha with greater accountability and transparency at all levels could enhance the people's participation and empowerment.
- The panchayats should be endowed with adequate responsibilities and necessary powers in the area of financial administration so as to ensure their autonomy in the decision-making process at local levels. In addition to funds allotted for the centre-sponsored schemes, financial assistance could be provided to the panchayats to undertake development programmes as per the local requirement. Efforts could be made to provide certain percentage of grants to the gram panchayats as untied grants, subject to the broad guidelines under which such untied funds could be utilised. Authorisation to panchayats to levy and collect appropriate taxes, duties, tolls and fees, making such amendments which are in consonance with the provisions of Article 243H of the constitution and recommendations of the state finance commission should be considered.
- Tourism development requires removal of information barriers, intelligent decision-making process and information about Maharashtra's present key markets, their spending patterns, future interests and economic conditions. A long-term standard system of tourism data collection and analysis with the help of Ministry of Tourism, the GoI and the GoM should be developed. Also, sustainable tourism guidelines, policies and standards that would help in development of eco-friendly destinations such as Sindhudurg beach destination and wild life destinations in Vidharba should be framed. Sustainable Tourism Destination Plans for some specific places should be undertaken in the short term and encourage private sector participation by adequate promotion of such destinations in Maharashtra.
- Implementation of Tourism Satellite Account is needed in co-operation with WTO and WTTC, India to promote investment in the tourism sector at grass root level e.g. development of micro enterprises to promote rural tourism. A high level of professional education and training at all levels of the tourism industry is needed. This will consider the levels and targets for future demand by improving quality of services. It will also include increasing the tourism awareness of the people of Maharashtra and encouraging young people to engage in tourism courses and undertake tourism as a profession. Maharashtra's religious destinations attract tourists from all over India and abroad. Improving the environment and ambience of such religious destinations should be undertaken.
- The goal of the urban agenda involves development of a host of broad sub-sectors like sustainable expansion of urban infrastructure facilities such as water supply, sanitation, environment planning, transport infrastructure, creating an enabling legal, financing, regulatory framework for housing, land acquisition and development, township development, poverty alleviation, research and training, strengthening of Urban Local Bodies (ULBs) and capacity building of ULB personnel, etc.
- Enhancement in the flow of investment to the critical sectors of urban infrastructure, creating a facilitating process for speeding up the growth of new economic activities and expansion of the existing ones is suggested. Urban upgradation encompassing housing, social, physical and economic environment, amenities and services, including integrated transport system, have to be recognised as part of state development process.



An important concern of the government should be to provide policy framework and legislative, fiscal and financial system that would put into effect the enabling role of the government in the housing delivery system.

- Innovative areas of employment are required to be explored to suit the state conditions. Diversification of agriculture and protective irrigation will provide better employment potential. This may need reforms in agricultural marketing to allow direct marketing by farmers' companies and societies and amending laws to accommodate this possibility. Government can raise the demand for goods and services with the hope that the multiplier effect will enhance employment. Given the fiscal constraints, incremental improvements in the existing capacity would be the best that one can hope. Government agencies engaged in training, information services, market intelligence and market building would be helpful.
- Maharashtra has several environmental problems, which need urgent attention. The state leads in industrial and economical growth, which generates high levels of pollution, and at the same time, it also houses India's best bio-diversity hotspots, sanctuaries and national Parks. Therefore, very balanced strategies are needed to solve the current environmental problems and prevent future ones. Environmental awareness and education need a significant capacity building among all stakeholders of environment, including commons, authorities and policy makers, through media, training programmes, camps etc. Increased role of NGOs and community in sustainable environmental management is the need of hour.
- Water conservation measures such as rainwater harvesting and sustainable use of groundwater resources would reduce problems of shortage of water. Demand-side management and rationalising the water tariffs for various uses will discourage the users to misuse or over-use water. Reuse and recycling of municipal wastewater should be encouraged. After proper treatment, wastewater could be used for irrigation purposes.

This would be beneficial for areas with water scarcity and will also provide necessary nutrients for crops, thereby reducing the use of chemical fertilisers. Conventional treatments for municipal wastewater accompanied by low cost treatment methods, such as disposal of wastewater into constructed wetlands, in-house wastewater recycling by housing societies and other establishments, etc. would reduce the load on conventional municipal systems. Accelerated and improved concept of CETPs, both in terms of technology and management, would be beneficial for industrial areas.

- Alarming levels of air pollutants and health problems associated with them indicate the need for an urgent action for improvement of vehicle design, use of clean fuels, improvements in road infrastructure and better traffic management. Promotion of mass transport by improving the condition of existing mass transport system, encouraging private car pool, etc. will reduce air pollution to a great extent. Encouragement of renewable energy and non-conventional energy sources, innovative technologies, bio-fuels, energy audits, energy campaigns etc. will have long lasting positive impact on the environment.
- Policies for SWM should be framed using the principle of the 4 R's i.e. reduce, recover, reuse and recycle. Source separation of waste should be encouraged so that mixing of waste is avoided and segregated waste could be utilised in a meaningful way. Housing societies should be encouraged to go for vermi-composting, kitchen garden techniques, etc. Similarly, promotion of common hazardous waste collection, treatment and disposal facilities for industries is required. Strict enforcement of policies is necessary to prevent deforestation and encroachment on forestland and other areas of public interest. Coastal bio-diversity and marine resources should be protected for sustainable development of coastal areas of the state. Last but not the least, conflicts between the regulations of central and state governments, which affect development plans of the state, should be avoided.