

CHAPTER III

ENVIRONMENT DEPARTMENT

3.1 Implementation of Environmental Acts and Rules relating to Air Pollution and Waste Management

3.1.1 *Highlights*

The biological, ecological and atmospheric degradation has direct impact on the quality of life and depletion of natural resources. In the process of industrialisation and urbanisation the environment was being contaminated, damaged and destroyed. There has been an increasing awareness on environmental issues in public policy.

The review revealed that air pollution in the State and in the major cities showed an increasing trend during 1997-98 to 2000-2001. Extent of industrial air pollution was not properly assessed by the Maharashtra Pollution Control Board as adequate samples were not available. The vehicular air pollution in Mumbai city has gone up to alarming level. The important recommendations made by the Committee appointed by the Bombay High Court for replacement of old engines with Compressed Natural Gas engines and scrapping of old vehicles are yet to be implemented by the State Government. The compliance of the Biomedical Rules by majority of the big hospitals in the State was not ensured even after expiry of the implementation period. Hazardous waste generating industries in the State disposed off the waste by landfill method without providing adequate treatment. Most of the industries remained were not covered in the inspections conducted by the Maharashtra Pollution Control Board. Domestic solid waste generated in the urban areas of State is dumped untreated in absence of processing facility.

The ambient air quality in the State had declined as the major parameters of air pollution have exceeded the prescribed standards and is at high levels in most of the air quality monitoring stations including those in Mumbai city.

(Paragraphs 3.1.5.1 and 3.1.5.2)

The vehicular air pollution in Mumbai city is at alarming levels and the pollutants have far exceeded the prescribed standards. Combating the pollution in compliance of the directions issued by the High Court of

Mumbai, is affected due to non-availability of cleaner fuel, change of existing vehicle engines and scrapping of old vehicles.

(Paragraph 3.1.5.3)

Industrial air pollution was virtually not assessed by the Board due to 90 per cent shortfall in the stack monitoring. Twentysix per cent of industries had not installed air pollution control devices/equipments. There were 15581 red and orange category industries in the State constituting 34 per cent of the total number of industries, of which 6305 are air polluting industries. The Maharashtra Pollution Control Board does not have industrial category wise data of air polluting units.

(Paragraph 3.1.5.5)

Air monitoring vans fitted with imported air quality monitoring instruments purchased by the Maharashtra Pollution Control Board at a cost of Rs 3.17 crore could not be optimally utilised due to frequent technical faults.

(Paragraph 3.1.5.6)

Monitoring of the air pollution caused by the stone crushing industry had been neglected by the Maharashtra Pollution Control Board due to inadequate sampling and field inspection. The Board was also not aware of the functional status of many units.

(Paragraph 3.1.5.7)

The thermal power stations of the Maharashtra State Electricity Board had also added to the air pollution as more than 50 per cent of the samples in five stations revealed that the fly ash content had exceeded the prescribed limits.

(Paragraph 3.1.5.8)

The compliance of the Biomedical Waste Rules had been deficient as only 962 units out of 6423, had applied for authorisation and 278 units had been granted authorisation whereas only 22 hospitals had adequate treatment facility as of March 2001. The process of identification of the units i.e. mainly hospitals/nursing homes had been slow. As against 1856 private hospitals and 484 public hospitals Maharashtra Pollution Control Board identified only 385 hospitals as on March 2001 in 9 subregions. By and large the biomedical waste generated by these units was disposed off untreated.

(Paragraph 3.1.6.1)

In Mumbai city, the major State Government and municipal hospitals have not even applied for the authorisation and therefore, the adequacy/inadequacy of the disposal facilities could not be determined.

Maharashtra Pollution Control Board has not pursued the matter effectively to bring these under their monitoring.

(Paragraphs 3.1.6.1 and 3.1.6.3)

Government took 7 years to authorise an agency for safe disposal of hazardous waste. All the industries in 9 regions disposed the hazardous waste on the land without adequate treatment. Monitoring was not effective as inspections and sampling done by the Board was far below the prescribed norms.

(Paragraphs 3.1.7.1 and 3.1.7.2)

All the major municipal corporations in the State including Mumbai and Pune were dumping the solid waste without any scientific treatment or segregation. None of the municipal corporations had set up waste processing facilities or applied for authorisation to the Maharashtra Pollution Control Board.

(Paragraph 3.1.8)

As required statutorily, Maharashtra Pollution Control Board has not spent the water cess amount on pollution control measures. They have not finalised their Annual Accounts and Annual Reports since 1997-98.

(Paragraphs 3.1.9 and 3.1.10)

3.1.2 Introduction

To deal with environmental pollution, Central Government enacted the Air (Prevention and Control of Pollution) Act, 1981 to provide for prevention and control of air pollution. Subsequently a more comprehensive Act viz The Environment (Protection) Act, 1986 was enacted by the Parliament as an umbrella Act to cover all the specific and general provisions left out by earlier enactments. Government of India also brought out a National Conservation Strategy and Policy statement on Environment and Development in June 1992 which emphasised the needs of attaining the goal of an environmentally wise society.

The results of review of the implementation of water pollution control measures by the Comptroller and Auditor General of India were mentioned in para 6.5 of the Audit Report, Government of Maharashtra (Civil) for 1999-2000. A review of the Environment Protection Act and the rules enacted thereunder for the control and prevention of Air Pollution, Waste Management and management of Hazardous, Biomedical and Solid Waste, the working of the State Environment Department (SED) and the Maharashtra Pollution Control Board (MPCB) was conducted during March-June 2001. The major findings of Audit Review are mentioned in the succeeding paragraphs.

3.1.3 *Organisational set-up*

The SED formulates the policies and programmes for implementation of the provisions of the Environment Protection Act, and oversees the working of the main regulatory body, the MPCB.

The MPCB is an autonomous body set up in 1970 headed by a Chairman. The Member Secretary of the MPCB executes its decisions. It has 11 regional offices and a central laboratory at Navi Mumbai, besides seven regional laboratories attached to the regional offices.

3.1.4 *Audit coverage*

The working of MPCB in relation to Air (Prevention and Control of Pollution) Act, 1981 and Environment Protection Act, 1986 was reviewed for the period 1996-97 to 2000-2001 by test-check of records at its Headquarters. Out of the 11 regional offices, records of eight* offices and those of the Transport Commissioner (TC), relating to control of vehicular pollution were test-checked. The findings are mentioned in the succeeding paragraphs.

3.1.5 *Air pollution*

3.1.5.1 *Status of ambient air quality in Maharashtra*

The Air Act 1981 was initially made applicable to the chemical industrial zone of Mumbai Metropolitan Region and industrial areas of Roha, Patalganga and Tarapur and thereafter in November 1995, the entire Maharashtra State had been declared by SED as Air Pollution Control Area. Ambient Air Quality Monitoring (AAQM) is watched mainly under National Ambient Air Quality Monitoring (NAAQM) Programme funded by the Central Pollution Control Board (CPCB). In the State, 25 stations are being operated and several educational institutions are involved in the activity.

The standards of various air pollutants have been defined by the CPCB in 1994 in terms of their Annual Arithmetic Mean i.e. average of minimum of 104 measurements in a year taken twice a week 24 hourly at uniform intervals. It is also provided that 24 hourly values should be within the limits in at least 98 *per cent* of the measurements in a year. Details of ambient air quality standards prescribed are as follows:

* Aurangabad, Kalyan, Mumbai, Navi Mumbai, Nashik, Pune, Raigad and Thane

Pollutant	Time weighted average	Concentration in ambient air	
		Industrial are	Residential are:
Sulphur Dioxide (SO ₂) (µg/m ³)	Annual	80	60
	24 hours	120	80
Oxides of Nitrogen (NO _x) (µg/m ³)	Annual	80	60
	24 hours	120	80
Suspended Particulate matter (SPM) (µg/m ³)	Annual	360	140
	24 hours	500	200
Respirable Particulate Matter (RSPM) size less than 10 mm (µg/m ³)	Annual	120	60
	24 hours	150	100

3.1.5.1.1 Monitoring results at NAAQM stations in terms of the above standards for the period 1997-98 to 2000-2001 revealed that out of 25 stations, monitoring is not being carried out at seven stations (Nagpur – four and Aurangabad – three), for which reasons were not available on record in respect of Nagpur and Aurangabad. It was replied that the institute responsible for monitoring has stopped the work.

The results of parameters were within limit at eight stations (Chandrapur – three, Dombivali – two, Nashik – one, Nagpur – one and Pune – one). Monitoring results at three stations in Mumbai being carried out by National Environmental Engineering Research Institute was not available with the MPCB. As the monitoring results were not made available to MPCB, it is doubtful if the monitoring was conducted at all.

Ambient air quality exceeded prescribed standards in 53 to 84 per cent of the samples

Scrutiny of analysis report at remaining seven stations as detailed in Appendix XIX revealed that the level of SPM exceeded the prescribed limits in 53 to 84 *per cent* of the samples during the period 1997-98 to 2000-2001. RSPM exceeded the prescribed standards in 63.81 *per cent* of the samples during 2000-2001. Air pollution at all the stations showed increasing trend during the period 1997 to 2001.

As against the requirement of minimum 104 annual observations from each NAAQM stations assigned, the State Board could cater to this requirement at only 3* stations. In Nagpur stations, the observations made were even less than 90 throughout the period 1997-98 to 2000-2001 and in Pune, it was less in one year.

Fixed monitoring stations not established by the MPCB in other regions of the State

3.1.5.1.2 Since the entire State had been declared as air pollution control area, MPCB was required to operate air quality monitoring stations in the State in addition to the NAAQM stations. However, except in Mumbai (22 stations) and Pune (4 stations), fixed monitoring stations had not been established by the MPCB in other regions and the ambient air quality was monitored only when there was a complaint or demand.

* R.T.O. Colony Tank, Nashik (1997-98), Nashik Municipal Corporation Building (1997-98 and 2000-2001) and at WIT Campus, Solapur (1998-99)

Though the results were not within the standards prescribed by the CPCB, efforts were not made by MPCB to identify the reasons for the same or for taking necessary measures to prevent, control and regulate air pollution.

MPCB stated that due to shortage of staff, the Board found it difficult to fix monitoring stations at each subregion level and efforts were made to monitor ambient air quality at critical places. Thus, despite the availability of funds, the State Government had not taken measures to adequately monitor air pollution.

3.1.5.2 Status of ambient air quality in Mumbai

Annual mean concentration range prescribed by the CPCB were as follows :

	Industrial (I)	SO ₂ and NO ₂	SPM	Residential (R)	SO ₂ and NO ₂	SPM
Low	L	0-40	0-180	L	0-30	0-70
Moderate	M	40-80	180-360	M	30-60	70-140
High	H	80-120	360-540	H	60-90	140-210
Critical	C	> 120	> 540	C	> 90	> 210

In Mumbai, out of the 18 stations monitored, the annual mean concentration of SPM was critical (> 210) at 10 stations and was high (140-210) at remaining 8 stations as on March, 2000. Further, it was observed that instead of increasing the number of stations in a city like Mumbai which was so thickly populated, the Board had reduced the monitoring stations from 22 to 6 in 2000-2001 to increase the frequency of the monitoring.

3.1.5.3 Vehicular pollution

In cities in the State, automobile emissions cause air pollution in traffic intensive areas. The main pollutants are carbon monoxide, lead, aerosol, nitrogen oxides and heterogeneous group of hydrocarbons. The implementing authority to contain the vehicular pollution is the TC of the State through the Regional transport Offices (RTOs). To detect and control vehicular pollution Transport Commissioner has authorised 1045 Pollution Under Control (PUC) centres all over Maharashtra as on March 2000. The results of the PUC check carried out by the Transport Department in the last five years are as follows :

Air quality in 18 stations of Mumbai was critical at 10 and high at 8 stations

Period	Total number of motor vehicles in Maharashtra	Motor vehicles checked	Motor vehicles detected for violation of pollution norms	Percentage of motor vehicles checked with reference to Col. 2	Percentage of motor vehicles detected with reference to Col.2
(1)	(2)	(3)	(4)	(5)	(6)
1996-97	4515746	490288	49957	10.86	1.10
1997-98	5039992	686798	59958	13.63	1.2
1998-99	5518156	915734	104694	16.59	1.9
1999-2000	6113523	612057	76691	10.01	1.25
2000-2001	-	572978	98067	-	-

Vehicular pollution at two traffic junctions in Mumbai showed considerable increase

The number of vehicles checked and detected for PUC was inadequate compared to the number of vehicles in the State. The Ambient Air Quality (AAQ) at traffic junctions in Mumbai had degenerated sharply over the last few years and has reached critical levels. Monitoring of the AAQ at two traffic junctions in Mumbai by the MPCB from January 2000 showed that air pollution in Mumbai was at alarming levels**.

The control of vehicular pollution was therefore not effective.

An anti-pollution drive was carried out by Regional Transport Offices in Mumbai from January 2000 as a result of which they detected 53,056 vehicles for vehicular pollution and recovered fine of Rs 5.23 crores as of June 2001.

3.1.5.3.1 Compliance of directions issued by the Mumbai High Court

In response to public interest writ petitions* by "Smoke Affected Forum", the High Court of Mumbai appointed (December 1999) a committee headed by the Transport Commissioner and all representative agencies to examine, consider and recommend measures to reduce vehicular pollution in Greater Mumbai. The Committee submitted its Report to the High Court in April 2000 with 101 recommendations. The important recommendations cover issues such as improvement in quality of fuel by bringing down the sulphur content in diesel and benzene content in petrol; alternative fuel i.e. CNG or Euro II compliant engines; scrapping of old vehicles; measures for prevention of fuel adulteration; effective methods for monitoring and improving prescribed emission norms and financial incentives to taxi and auto rickshaw owners.

**SO₂ has gone upto 317.82 µg/m³ (Sion–August 2000), NO₂ upto 1616.57 µg/m³ (Sion–February 2000) as against prescribed standard of 80 µg/m³, PM 10 upto 361 µg/m³ (Mulund–February 2000) as against 100 µg/m³.and CO upto 12.88 mg/m³ (Sion – August 2000) as against 4 mg/m³.

* Writ Petition No. 1762 of 1999 and No. 1968 of 1998 and No. 1999 of 1999

Government sought time till 2003-2005, for implementation of the major recommendations of the committee

3.1.5.3.1.(i) The State Government accepted all the recommendations with a request to the High Court to grant extension of time limit till 2003-2005 for implementation of major recommendations mainly due to inadequate number of CNG stations. For scrapping of private vehicles of 20 years old the Government has sought time till December 2002.

Regarding adulterated fuel the RTO offices inspected 150 petrol pumps till March 2001. The recommendations regarding reduction of the chemical contents in diesel and petrol have been implemented in January 2001 by the TC. The Committee also recommended strengthening of the public transport system by introducing more number of air-conditioned buses either by Brihanmumbai Electric Supply and Transport (BEST) or by private operators.

3.1.5.3.1.(ii) The State Government was also directed by High Court to provide funds and infrastructure for setting up the requisite number of computerised continuous air monitoring stations for the Mumbai Metropolitan Region (MMR). In compliance to this direction, the MPCB submitted (February 2000) a proposal to the State Environment Department for installation of 14 automatic ambient air quality monitoring stations in MMR area, at an estimated cost of Rs 10.52 crore which will be borne by MPCB (50 per cent), Local Body (25 per cent) and Urban Development Department (25 per cent). Specification of instruments had been finalised by the MPCB (August 2001) and intimated to the local bodies who would purchase the equipments.

3.1.5.4 *Non-representative location for ambient air monitoring*

Air Pollution in Thane Belapur industrial area, which was in the outskirts of Mumbai, was mainly caused by the chemical industries in this belt. To monitor the ambient air quality of Thane Belapur industrial belt, a computerised continuous air monitoring equipment received under World Bank Aided project of "Industrial Pollution Control" was installed (September 1999) at the Office of the Thane Belapur Industries Association at Rabale.

Scrutiny of AAQM reports for the said station for last two years revealed that all the parameters for air pollution were within the limit. However, this station was surrounded by trees and was away from the cluster of air polluting chemical zone in the industrial area. Installation of the air-monitoring instrument at a non-polluting and non-representative location resulted in non-representative air quality results in the Trans Thane Creek (TTC) Industrial belt. MPCB have acknowledged that this industrial belt has one of the most air polluting zone and stated they would consider installing the equipment in future in a representative location.

3.1.5.5 Air pollution due to industries

Industrial air pollution is mainly caused by asphalt plants, fly ash emissions from thermal power stations, process emissions from chemical industries and the sugar industries using bagasse as fuel and stone crusher industry. Based on pollution potential, industries are classified as Red, Orange and Green, red having the highest pollution potential. Every entrepreneur is required to obtain consent from the MPCB to establish and operate an industrial unit. The total number of industries with the break-up of red and orange category which are classified as the polluting industries is given below :

26 per cent units were not having air pollution control systems and 412 units were having non-operating control systems.

Total number of industries in the State as of March 2001	Large scale industries		Medium scale industries		Small scale industries	
	Red	Orange	Red	Orange	Red	Orange
46506	879	109	737	326	6774	6756

There were 15581 red and orange category industries in the State thus constituting 34 per cent of the total number of industries, of which 6305 are air-polluting units. The MPCB does not have industrial category wise data of air polluting units.

Information received from the MPCB (except Kolhapur region) revealed the following:

No. of air polluting units in the State	No. of units having valid consent	No. of units having air pollution control device	Percentage of units not having control devices	No. of units operating control systems satisfactorily	No. of units having non operating control systems
6305	5630	4660	26	4248	412

Analysis of the data from the MPCB revealed that the Mumbai Metropolitan Region (Mumbai, Thane, Kalyan and Raigad) had the largest number (63 per cent) of air polluting units followed by Pune, Aurangabad, Amravati and Nagpur.

Stack monitoring totally neglected

As per the norms prescribed by the MPCB, each field officer was required to do six stack sampling of air polluting units in a month, in order to assess the air pollution control measures. Stack monitoring is a totally neglected item of work in the MPCB as during 1999 to 2001, there was shortfall in sampling of 90 to 92 per cent and hence the extent of industrial air pollution could not be assessed.

MPCB admitted (September 2001) that there was shortfall in stack sampling due to operational difficulties faced by the staff.

Further, the submission of environment statements by the industrial units to the MPCB, which is a tool to watch the compliance of conditions of the consent granted and adequacy of pollution control measures adopted by the units were not watched by the MPCB due to lack of infrastructure facilities.

3.1.5.6 Underutilisation of mobile air monitoring van

With a view to exercise extensive monitoring of ambient air quality and stack monitoring, the MPCB procured (1998) seven mobile air monitoring vans at a cost of Rs 3.17 crore (approximately). The air monitoring instruments were bought from USA and assembled in vans by Chemtrol Engineering Limited, Mumbai, who was responsible for maintenance, service of the vans as per the contract agreement. The vans were supplied (July 1998) to seven Regional Offices. From the very beginning there were complaints against the performance of the vans. The expected performance of one van was one sample per day (8 hourly). On an average of 25 samples per month, the mobile van should have monitored 800 samples per region during the period August 1998 to March 2001 (32 months). However, in three test-checked regions that the actual monitoring done was only between 2.5 and 29 *per cent* of the expected performance. All parameters could not be monitored as all the instruments were not working simultaneously. Even though the warranty period was for 3 years, Chemtrol Engineering Ltd. did not attend to the complaints promptly and properly thereby resulting in underutilisation of the vans.

Thus, the very purpose of purchase of the vans was defeated and huge investment became unfruitful, besides the loss of revenue to be recovered from the industries for air monitoring. The services of the drivers deployed for the vans also could not be utilised fully. MPCB stated that they had issued legal notice to Chemtrol Engineering Private Limited in April 2001.

3.1.5.7 Control of air pollution in stone crusher industry

Stone crushing industry was classified under Orange category (medium polluting). The main pollutants in this industry were SPM and RSPM. Ministry of Environment and Forest (MOEF) prescribed standard of SPM to be not more than 600 mg/Nm³ at 40 meters distance in addition to other control measures.

MPCB was unable to control the pollution caused by the stone crushing industry. They were also not aware of the functional status of many of the units

Information received from 8* Regions revealed that the MPCB granted consent for establishing 1026 stone crushing industries, however, only 365 industries (36 *per cent*) were granted periodical consents to operate as on March 2001. Most of these units did not renew consent from time to time. The status of the remaining 661 industries was not known to the MPCB. During last 5 years i.e. 1996-97 to 2000-2001, only 213 field visits and 33 sampling were carried to see whether the industries were operating without the consent of MPCB and were following the control measures and standards prescribed by MOEF. The sampling results revealed that, 50 *per cent* showed excess limits of SPM. The MPCB was thus unable to control pollution created by the large number of stone crushing industry in the above mentioned 8 regions.

3.1.5.8 Pollution in Thermal Power Stations

Thermal Power generation was a highly polluting industry and was classified as Red category. The industry causes air pollution due to excess emission of SPM (fly ash). There were seven Thermal Power Stations (TPS) in Maharashtra which were mainly coal based. Though all the units were having pollution control arrangements and Electro Static Precipitators (ESP) to arrest fly ash and were operated to their maximum extent, yet the prescribed standards of SPM (150 mg/Nm³) could not be achieved by the units due to low/bad quality of coal used in the industry and for want of upgradation of the air pollution control system.

Thermal Power Stations of MSEB had added to the air pollution

Scrutiny of the stack monitoring reports of five TPS (Eklahare at Nashik, Bhusawal at Jalgaon, Parli-Vaijanath at Aurangabad, Chandrapur and Koradi at Nagpur) for the period 1997-98 to 2000-2001 revealed that the SPM exceeded the limit in most of the cases and ranged between 45 *per cent* and 100 *per cent* of monitored samples. In Nashik, as against the limit of 150 mg/Nm³, the SPM limit ranged between 524 mg/Nm³ and 5714 mg/Nm³ and in Koradi, it was as high as 17130 mg/Nm³ in February 2001. All the TPS of MSEB had been granted consent by the MPCB.

In order to control the pollution, MSEB decided (March 2000) to use bag filter technology or higher efficiency ESP in a phased manner and was expected to achieve the prescribed standards by 2005-06.

3.1.6 Biomedical waste

Biomedical waste comprises of infectious organic and pathological waste, needles and other sharp instruments, discarded medicines and cytotoxic drugs generated during diagnosis, treatment, immunisation of human beings or animals or research activities, in the production or testing of biologicals etc. Institutions generating biomedical waste include hospitals, nursing homes, veterinary institutions, animal houses, clinical laboratories etc. It was

* Aurangabad, Kalyan, Mumbai, Navi Mumbai, Nashik, Pune, Raigad and Thane

estimated that hospitals were generating 1 to 2 kg of waste per patient per day of which 85 per cent was non-hazardous and remaining was infectious and hazardous. Inadequate treatment and improper handling and management of biomedical waste causes health risks to health care personnel, waste workers and inmates of the institutions and this also is a potential environmental hazard.

The standards for treatment and disposal of biomedical waste were notified by GOI by the Biomedical Waste (Management and Handling) Rules, 1998 and amendment thereof of 2000 to ensure that such waste was handled without any adverse effect on human health and environment. The prescribed authority for implementing these Rules in the State was MPCB.

3.1.6.1 Slow progress in compliance of Biomedical Waste Management Rules

As per the above Rules, it is mandatory for every institution generating, collecting, receiving, storing, transporting, treating, disposing and/or handling biomedical waste in any manner to make an application to the prescribed authority (MPCB) for grant of authorisation accompanied by the prescribed fees. Rules also envisage installation of proper/adequate waste treatment facilities within the implementation period. All institutions covered under the Rules were to be granted authorisation based on their capacity for handling the waste. Hospitals and nursing homes having more than 500 and 200 beds respectively were required to have adequate facilities like incinerator/autoclave/microwave systems before 30 June 2000 and 31 December 2000 respectively. The status of the units identified, authorisations granted etc as of March 2001 are given in table below :

Identified units	Units applied for authorisation	Units granted authorisation	Units having adequate treatment facilities	Units disposing the biomedical waste without any treatment
6503 (includes 80 big hospitals)	1018 (16 per cent) (includes 56 big hospitals)	278 (4 per cent)	22	996 (98 per cent)

The above data reveals that a large number of hospitals/nursing homes had yet to apply for authorisation and whereas of the 278 units which were granted authorisation, only 22 units had adequate facilities for treatment of wastes. Thus large number of hospitals and nursing homes which were granted authorisations were disposing the biomedical waste without any treatment. The status of the treatment facilities in the remaining hospitals/nursing homes were not known to the MPCB. The untreated wastes were carried by local bodies along with the domestic solid waste and deposited in the dumping grounds. Thus the purpose of authorisation and achieving adequate biomedical waste treatment facilities in all units having more than 200 beds by

December 2000 could not be achieved as on March 2001. MPCB stated (May 2001) that show cause/prosecution notices had been issued by respective regional officers to the defaulting hospitals.

Information collected during the course of review from 9* Subregional Offices of MPCB revealed that though there were 1856 private hospitals registered with the local bodies and 484 Government/Zilla Parishad hospitals/public health centers, MPCB had identified only 385 private hospitals as on March 2001.

In Mumbai city, the major State Government and Municipal Corporation hospitals had not applied for authorisation

In Mumbai city, all the four major State Government hospitals and three Brihanmumbai Municipal Corporation (BMC) hospitals had not applied for the authorisation as of March 2001. The quantity of waste generated and adequacy/inadequacy of the disposal facilities by these institutions was therefore not known to the MPCB. The MPCB has also not inspected the existing facility of incinerators/ autoclave in the State Government/BMC hospitals in Mumbai.

MPCB stated (May 2001) that they had issued notices to all the identified bio-medical waste generating units. This was not tenable as compliance of the rules were evidently tardy and effective steps were not taken for ensuring proper management of the biomedical wastes in the cities and towns of the State.

3.1.6.2 Common biomedical waste treatment facility provided by local bodies

Common treatment facility for bio-medical waste provided by only two municipal corporations in the state

As per the Rules, Municipal Corporation/Urban Local Bodies were responsible for providing suitable common disposal/incineration sites for the waste generated in their jurisdiction. Out of 15 municipal corporations and 250 urban local bodies, information received for 8 municipal corporations and 144 urban local bodies revealed that two corporations namely Pune and Pimpri Chinchwad provided common incineration facility. In Mumbai, upgradation on a centralised biomedical waste treatment facility was in progress. Nashik, Kalyan-Dombivali and Aurangabad Municipal Corporations had taken some initiative for the common treatment facility, whereas Thane and Ulhasnagar Municipal Corporation and all the municipal councils in the State had not taken any action in this regard.

3.1.6.3 Status of District Government Hospitals

Unsafe and ineffective waste management practices in the district hospitals

There were 4 General Hospitals, 6 Women Hospitals, 21 District Hospitals and 351 Rural Hospitals under the administrative control of Director of Health Services, Maharashtra. The State Government, with the assistance of the World Bank, was in the process of implementing "Maharashtra Health System

* Ahmednagar, Aurangabad, Kalyan I and II, Nashik, Pune, Pimpri-Chinchwad, Satara and Thane

Development Project”, at a cost of Rs 7.48 crore which included development of a well sustained Waste Management system in the 136 Secondary hospitals of the State in a phased manner over a period of five years. As part of the initial phase for reduction in waste hazard by implementing the basic Bio-medical Waste Management Rules of the Government i.e. source segregation and containment, a waste audit was carried out by an agency appointed by Director of Health Services in a sample of 14 hospitals in the State.

The available data showed that none of the hospitals were following safe and effective waste management practices in accordance with the Rules such as source segregation of waste, treatment of infectious organic, pathological waste and sharp waste and provisions of protective measures for waste treatment. Liquid wastes were released into the hospital drains without any treatment, which added to the risk caused by improper solid waste disposal. Director of Health Services stated (June 2001) that an action plan for small, medium and large hospitals was under preparation and targeted date for completion of Phase One was December 2001.

3.1.7 Hazardous waste

Hazardous waste comprises of waste generated by chemicals, metals, inflammable industries.

3.1.7.1 Delay in authorising an agency for identifying the site for disposal of hazardous waste

Rule 8 (1), (2) and (3) of Hazardous Waste (Management and Handling) Rules, 1989, stipulated that the State Government or a person authorised by it had to undertake an environment impact study before identifying the site as waste disposal site in the State and compile and publish periodically an inventory of disposal sites within the State for disposal of hazardous waste.

In October 1996, the Government authorised the Chief Executive Officer of Maharashtra Industrial Development Corporation (MIDC), a State Government Corporation as the implementing agency. MIDC had since identified nine* sites, out of which Memorandum of Understanding with the industries at two (TTC and Talaja) had been signed. Thus, Government took seven years to authorise an agency for safe disposal of hazardous waste under Rules for which Government could not give any valid reason.

3.1.7.2 Inadequate monitoring of treatment and disposal of hazardous waste

3.1.7.2.1 Though Hazardous Waste (Management and Handling) Rules came in to force in 1989, it was observed that even after a lapse of 12 years all

* Ambernath, Lote Parshuram, Mahad, Patalganga, Roha, Talegaon, Talaja, Tarapur and TTC

the 2528 industries in 9* regions dispose the waste by landfill without providing adequate treatment. On test-check of 2663 sampling reports made available to audit, it was observed that 2165 reports (81.30 *per cent*) showed excess limits of sulphates, chlorides or mixture of heavy metals than the standard prescribed by the regulatory authority. However, MPCB continued to renew the authorisations of all the industries from time to time without following the provisions of Rule 6(1) of the above Rules.

3.1.7.2.2 To keep strict vigil on the conditions of consent and safe disposal of hazardous waste, it was necessary for the field officers to visit the industry and monitor the standard of hazardous waste disposed. In 7 Regional Officers and 15 Subregional Officers, visit and sampling during 1998 to 2001 ranged between 25.86 *per cent* and 59.85 *per cent* of the prescribed norms. Majority of industries thus remained unattended by the field staff either for watching conditions of consent or for safe disposal of hazardous waste.

3.1.8 Solid waste management

Management of solid waste in urban areas was a major problem. The source of solid waste was mainly the domestic solid waste and the treated solid waste generated in the industries. It was the primary duty of the local bodies to collect and give adequate treatment to the solid waste generated in their jurisdiction.

3.1.8.1 In Maharashtra, there were 15 Municipal Corporations, 243 Municipal Councils and 7 Cantonment Boards. As per information furnished by the Regional Offices and Subregional Offices, total waste generated in 15 municipal corporations and 225 municipal councils was 10,956 and 4120.90 MT/per day respectively. Even though all the local bodies had collection facility, none of them had any segregation facility. Regarding treatment facility, only Aurangabad Municipal Corporation was converting 30 tonnes (10 *per cent*) of their solid waste into biofertilisers. Remaining quantity of 10,926 MT per day (99.73 *per cent*) generated in 15 Municipal Corporations and 4120.90 MT per day (100 *per cent*) generated in 225 Municipal Councils area remained untreated as of March 2001. The untreated and unsegregated solid waste was dumped in an improper way, where it decays thereby polluting the environment.

The city of Greater Mumbai generated about 6250 MT of solid waste per day. BMC has planned to treat 3000 tonnes per day of garbage by converting into energy at Deonar and Chincholi and by converting 1500 tonnes per day into compost at Deonar, Gorai and Mulund. Arrangement has been finalised with a private agency in respect of the Deonar project which is expected to start shortly.

* Amravati, Aurangabad, Kalyan, Mumbai, Navi Mumbai, Nashik, Pune, Raigad and Thane

None of the local bodies had applied for authorisation under the Rules

3.1.8.2 Under the provisions of Solid Waste (Management and Handling) Rules 2000, every municipal authority was required to set up a waste processing and disposal facility including land fills for which they had to apply for an authorisation to the prescribed authority. However, as per the information furnished by the Regional/Subregional Offices of MPCB, none of the Municipal Corporations/ Municipal Councils had even applied for authorisation as on date.

3.1.9 *Financial Assistance by the MPCB*

Water cess funds not used for pollution control measures by the MPCB

Under the provisions of the Water (Prevention and Control of Pollution) Cess Act 1977, 75 per cent of the cess collected by the Regulatory Body was required to be utilised on programmes and activities directly related to the Prevention and Control of Pollution (all categories of pollution). In the Report of the Comptroller and Auditor General of India (Civil) for 1999-2000, it was observed that the Board had not been utilising the cess amount adequately and kept huge amounts in short term deposits. The position had not improved in the current year also. As against Rs 5.28 crore of cess received during the year 2000-2001, Rs 24 lakh only was given to the TC for air pollution control equipment and this too on the directions of the High Court.

The Board stated that they had proposals to give 5 per cent contribution to the MIDC for common treatment facility of hazardous waste. Further, for Mumbai city, in compliance to the High Court directions the MPCB had committed itself to spend Rs 5.25 crore on purchase of vans for monitoring of the air quality.

3.1.10 *Delay in finalisation of Annual Reports and Accounts*

Mention was made in Para 6.5.14 of Audit Report for the year 1999-2000 regarding non-finalisation of annual accounts of MPCB and non-publishing of its Annual Reports from 1997-98 onwards. The position remained the same as of July 2001. In absence of the Annual Reports, the Legislature had not been kept informed of the compliance to the above mentioned pollution control Rules.

The above points were referred to Secretary to the Government in August 2001. However, no full and final reply have been received (December 2001).

WATER SUPPLY AND SANITATION DEPARTMENT

DRINKING WATER SUPPLY PROGRAMME

3.2.1 Accelerated Rural Water Supply Programme

3.2.1.1 Highlights

The Government of India launched the Accelerated Rural Water Supply Programme in 1972-73, which was revamped in 1999-2000 to provide safe drinking water to all rural habitations. Priority was to provide water to not covered/no safe source habitations and upgradation of partially covered villages.

State Government took up an ambitious programme of water supply schemes in November 1995 to provide 55 litres *per capita* per day of water to the rural population as against the Government of India norm of 40 litres *per capita* per day of water and also declaring the State as tanker free. As of March 2001, 30551 habitations were covered and 28376 were left uncovered. Accelerated Rural Water Supply Programme funds were utilised as supplementary grants and the State Government resorted to heavy market borrowings amounting to Rs 1556 crore from 1997-98 to 1999-2000 resulting in an additional financial burden on the State.

There was non-prioritisation of problem villages, delays in execution of works and schemes taken up without assured source of water, non-maintenance of Management Information System on Schemes sanctioned etc. The major audit observations are highlighted below.

State Government did not have any Management Information System of the number of schemes sanctioned, in progress and completed under Accelerated Rural Water Supply Programme. Audit of Maharashtra Jeevan Pradhikaran, the main implementing agency, revealed that there were 4390 schemes sanctioned for execution by the Maharashtra Jeevan Pradhikaran of which only 1474 schemes were completed, 1666 were in progress which required another Rs 2082.08 crore for completion. Besides

there were 1615 schemes sanctioned under Accelerated Rural Water Supply Programme during 1997-2001 for Rs 4384 crore which were not started at all due to resource crunch.

(Paragraph 3.2.1.5.1)

In four districts test-checked, 254 schemes taken up for execution by Zilla Parishad during 1997-98 to 1999-2000 were under progress and 38 schemes were not started.

(Paragraph 3.2.1.5.1.(iii))

The State Government spent Rs 25.34 crore on scarcity relief measures on account of temporary water supply schemes and supply of water by bullock carts/tankers during October 1997 to June 2000.

(Paragraph 3.2.5.2)

Out of Rs 617.08 crore released by Government of India under Accelerated Rural Water Supply Programme during 1997-2001, Rs 655.51 crore was spent as of March 2001. Rs 2342.94 crore was spent under the State Minimum Needs Programme (during 1997-2001) by the Maharashtra Jeevan Pradhikaran by resorting to market borrowings guaranteed by the State Government.

(Paragraph 3.2.1.6)

Contrary to the guidelines, the State Government reported under Accelerated Rural Water Supply Programme Rs 46.69 crore towards escalation charges due to time and cost over runs and Rs 68.03 crore on account of establishment and tools and plants charges during 1997-2001. The expenditure on water supply schemes over and above the norms of 40 litres *per capita* per day, which was required to be met from the State Minimum Needs Programme funds, was booked under Accelerated Rural Water Supply Programme. In six districts the excess expenditure of Rs 9.44 crore, was booked under the Accelerated Rural Water Supply Programme during 1997-98 to 2000-2001 by seven divisions of the Maharashtra Jeevan Pradhikaran. Five Zilla Parishads also booked excess expenditure of Rs 4.21 crore under Accelerated Rural Water Supply Programme for the same period.

(Paragraph 3.2.1.6.1)

The State Government could cover 30551 out of 46984 problem villages i.e. 65 *per cent* during 1996-2001. Due to non-prioritisation, 28376 problem habitations, (60 *per cent*) remained uncovered as of 31 March 2001. Further 8672 out of 10759 first category problem villages remained to be covered.

(Paragraph 3.2.1.7)

There was re-emergence of 11943 problem habitations as per the Comprehensive Action Plan of April 1999.

(Paragraph 3.2.1.7.3)

The Accelerated Rural Water Supply Programme guidelines envisage prioritisation to water quality affected villages. However, 502 habitations remained uncovered due to 44 incomplete rural water supply schemes and nine schemes sanctioned for 145 quality affected habitations were not taken up due to paucity of funds. Four districts of Ahmednagar, Amravati, Bhandara and Chandrapur had 378 (77 per cent) of the total number of quality affected villages in the State whereas 376 villages in the above districts remained uncovered due to incomplete schemes as of March 2001.

(Paragraphs 3.2.1.7.4 and 3.2.1.7.6(ii))

The State Government and the test checked Zilla Parishads did not have any information on the schools and anganwadis covered with safe drinking water during the period 1997-98 to 2000-2001.

(Paragraph 3.2.1.7.8)

There were delays in commencement and execution of works for more than three years. Two schemes in Ratnagiri and Raigad districts were taken up without assured water source, resulting in blocking of funds of Rs 4.33 crore.

(Paragraphs 3.2.1.8 and 3.2.1.9.1)

The Zilla Parishads did not take over the completed water supply schemes, which was considered expensive by them. As a result, Maharashtra Jeevan Pradhikaran was saddled with the maintenance of schemes for which the funds received under the Accelerated Rural Water Supply Programme were inadequate. Moreover, non-recovery of water charges from the beneficiaries resulted in Maharashtra Jeevan Pradhikaran being increasingly dependent on the State Government for funds for the maintenance of the schemes.

(Paragraph 3.2.1.9.4)

Rs 96.44 lakh released by the Government of India at the end of March 2001 for Information, Education and Communication activities were lying with the State Government.

(Paragraph 3.2.1.9.6)

Despite an expenditure of almost Rs 11 crore on computerisation, the State Government/Maharashtra Jeevan Pradhikaran does not have Management Information System on the Accelerated Rural Water Supply Programme, and thus there was no effective monitoring of schemes sanctioned, completed, in progress and yet to be taken up.

(Paragraph 3.2.1.9.8)

An evaluation of the programme by the State Government appointed Committee commented adversely on the propensity of the top down approach in the implementation of the programme without any concern for local level needs and recommended urgent steps for community participation in proper management, functioning, repairs and maintenance of the water supply schemes so that the targeted beneficiaries could get the benefit.

(Paragraph 3.2.1.11)

3.2.1.2 Introduction

Maharashtra has a physiographic configuration, where the Western Ghats and the windward side which includes the districts of Konkan region and adjoining areas of Kolhapur district have heavy rainfall. The other regions of northern, central and eastern Maharashtra including Vidharba receive less rain fall. However, due to typical topography and erratic rainfall pattern even in normal circumstances in Maharashtra for the last few years, a large number of villages face serious problem of drinking water. The districts of Ahmednagar, Aurangabad, Amravati, Beed, Nashik, Pune, Raigad, Satara, Solapur and Yavatmal are some of the drought prone districts which suffer from acute drinking water shortage.

Accelerated Rural Water Supply Programme (ARWSP) was in operation since 1972-73 as a hundred *per cent* Central grant-in-aid scheme for implementing the Water Supply Schemes in problem villages of the States/Union Territories in rural areas.

The entire programme was given a mission approach in 1986 and renamed Rajiv Gandhi National Drinking Water Mission (RGNDWM) in April 1991. Apart from the ARWSP, funds were also provided by Government of India (GOI) for Sector reform programme and five Sub Missions of (i) Human Resource Development (HRD), (ii) Research and Development (R&D) (iii) Information, Education and Communication (IEC) (iv) Management Information System (MIS) and (v) Provision of water supply in rural schools.

From 1999-2000 Sectoral Reform Programme i.e demand driven and community based rural water supply programme was introduced to ensure the

full participation of the beneficiaries in the project through a decision making role in their choice of scheme design and management arrangement.

The priorities of the ARWSP were:

- (i) To cover no safe source (NSS) habitations. Among them priority was to be given to the ones inhabited exclusively by Scheduled Caste/Scheduled Tribe or having larger Scheduled Caste/Scheduled Tribe population,
- (ii) Coverage of quality affected habitations with acute toxicity first and the others later,
- (iii) Upgradation of source level of safe source habitations to the norm of 40 litres *per capita* per day (lpcd) and
- (iv) Coverage of schools and anganwadis where safe drinking water sources could not be provided under the outlays allocated by the Tenth Finance Commission.

3.2.1.3 Organizational set up

The Water Supply and Sanitation Department (WSSD) was responsible for implementation of the programme at the State level. The Scheme was mainly implemented by the Maharashtra Jeevan Pradhikaran (MJP). The Zilla Parishads (ZPs) for execution of pipe water supply scheme upto Rs 15 lakh and Groundwater Survey and Development Agency (GSDA) for execution of bore wells and tube wells were the other implementing agencies. The ARWSP were recommended for administrative approval of the State Government by a State level Technical Advisory Committee which was chaired by the Principal Secretary, WSSD and had one nominee of the Central Government. The District Co-ordination and Monitoring Committee was to monitor and co-ordinate the implementation of the ARWSP/Minimum Needs Programme (MNP). The Superintending Engineer (SE) of the MJP in the respective districts was Member Secretary of the Committee.

3.2.1.4 Audit coverage

Implementation of the ARWSP during 1997-2001 was reviewed between January and June 2001. Records of the WSSD, MJP, the ZPs and the GSDA in nine districts* out of 33 covering 111 blocks were scrutinised. An amount of Rs 1322 crore (44.09 *per cent*) out of Rs 2998.45 crore (ARWSP + MNP) was test-checked in audit. The results of the review are discussed as follows.

* Ahmednagar, Amravati, Nagpur, Nanded, Nashik, Pune, Raigad, Ratnagiri and Solapur

3.2.1.5 Planning

3.2.1.5.1 Large number of incomplete schemes and sanctioned schemes not taken up for execution

The State Government took up a programme in November 1995 to provide 55 lpcd, against the norms of 40 lpcd of water, under ARWSP and MNP to all rural population and declare the State as Tanker Free as of March 2000 though enough funds were not available to implement the schemes. The resource mobilisation as planned for by the State Government did not materialise for various reasons.

The position of the schemes sanctioned, completed and in progress where MJP was the implementing agency is brought out in table below:

Schemes sanctioned under ARWS during 1997-9 to 2000-2001	Cost of the scheme (Rupee in crore)	Schemes completed till March 2001	Scheme in progress till March 2001	Expenditure incurred on schemes in progress till March 2001 (Rupees in crore)	Sanctioned schemes not started till August 2001
1	2	3	4	5	6
4390	8979.83	1474	1666	1533.50	1615

3.2.1.5.1.(i) Figures of complete and incomplete schemes as furnished by the State Government do not tally. This could not be explained by the State Government which is indicative of a poor MIS.

3.2.1.5.1.(ii) As against 4390 schemes sanctioned under ARWSP only 1474 schemes (33.57 per cent) were completed. Further, 1615 schemes costing Rs 4384 crore sanctioned for 5306 villages + 2875 habitations were not taken up till August 2001, as tenders were not called/finalised, work orders not issued primarily due to financial crunch faced by the MJP. Thus most of the schemes were taken up without foreseeing availability of financial resources resulting in non-completion of a number of schemes.

For the 1666 schemes in progress, the MJP decided to complete them by prioritising on basis of expenditure incurred and accordingly 109 schemes where 75 per cent of expenditure had been incurred will be taken up for completion first.

The State Government in reply (November 2001) stated that yearly targets were achieved though problem villages remained. The reply was not tenable as the State Government itself has fixed an ambitious programme in 1996 of providing water to all the problem villages by March 2000.

In four districts almost 50 per cent of the schemes under the ARWSP were incomplete

3.2.1.5.1.(iii) For schemes upto Rs 15 lakh, the ZPs were the executing agencies. Accordingly the State Government sanctioned, 1331 Schemes for execution by the ZPs at a total cost of Rs 151.46 crore during the period 1997-98 to 2000-2001. In four districts* test-checked where 552 schemes were sanctioned, 260 schemes were completed, 254 were under progress and 38 were not started. The ZP, Pune attributed non-completion of work/delay in completion to change of source of water supply, heavy rainfall and delays in receiving power connection from the Maharashtra State Electricity Board etc. The other districts gave no reasons but audit scrutiny revealed that there was lack of monitoring of the works by Chief Executive Officers of ZPs. The above four ZPs had incurred an expenditure of Rs 36.13 crore for execution of the schemes.

As a result, the problem villages could not be fully supplied with drinking water and the objective of tanker free State could not be fulfilled as of March 2001.

3.2.1.5.2 Expenditure on scarcity relief measures due to non-prioritisation of schemes

Due to scarcity of water in summer months, source of water going dry, non-completion of schemes in time, non-execution of sanctioned schemes the State Government had to incur heavy expenditure of Rs 25.34 crore on scarcity relief measures as per details given below:

Year	Measures taken	Villages and habitations	Expenditure incurred (Rupees in crore)
October 1997 to June 1998	(i) Temporary water supply schemes, (ii) Supply of water through bullock carts/tankers	775 5978	4.72 6.00
October 1998 to June 1999	(i) Temporary water supply schemes, (ii) Supply of water through bullock carts/tankers	370 1981	1.87 2.48
October 1999 to June 2000	(i) Temporary water supply schemes , (ii) Supply of water through bullock carts/tankers	450 2844	5.53 4.74

The districts, which had large number of tanker fed villages during 1998-99 to 2000-01, were Ahmednagar, Aurangabad, Beed, Nashik, Pune, Raigad, Ratnagiri, Satara and Solapur. A scrutiny of the mini action plan for 2000-2001 furnished by the MJP revealed that there were a large number of water supply schemes (556) in above mentioned districts which were lying incomplete even though more than Rs 512.95 crore was spent on these schemes as of March 2001. As these schemes had incurred expenditure of less than 50 per cent of their tendered cost their early completion in near future was also doubtful. This is evident from MJP's recent priorities of completing schemes on which 75 per cent expenditure has been incurred. The expenditure

* Nagpur, Nanded, Pune and Solapur

on scarcity relief measures which was incurred out of the State MNP funds could have been avoided had the priorities been given for completion of schemes in the first category problem villages and for completion of the other schemes in a phased manner.

Survey expenditure of Rs 1.86 crore could not be put to use, as schemes were not taken up for execution.

3.2.1.5.3 State Government's orders issued in October 1996 read with instructions of MJP issued in February 1998 authorised survey by private consultants for all water supply schemes. Accordingly till March 2001, the expenditure of Rs 1.86 crore was incurred on survey in four districts * test-checked where the schemes had not started till date. Incurring enbloc expenditure on survey on such a massive scale was not justified, as the expenditure could have been put to better use by completing the schemes in progress. Due to the financial crunch the MJP decided to give priority for incurring expenditure only on schemes in progress and therefore the utility of the surveys for schemes not taken up was doubtful.

The State Government stated (November 2001) that the plans and estimates would be useful in the long run. The reply is not tenable as surveys were conducted on the basis of 55 lpcd and designed for thirty years for which dam was a source. On rolling it back to 15 years and 40 lpcd from July 2000 and introduction of sectoral reforms applicable to all works which were not started, recasting of the schemes and resurvey would again be necessary.

3.2.1.6 Financial pattern of the schemes and outlay

The Central Assistance under the ARWSP was subject to matching provision/expenditure by the States under the State Sector MNP. The yearwise expenditure on ARWSP, State sector MNP (Water Supply Schemes) were as shown below:

(Rupees in crore)

Year	Funds received under ARWSP (GOI)	Expenditure incurred under	
		ARWSP (GOI)	MNP (State Governmen)
1997-98	110.87	160.01	292.95
1998-99	163.85	163.85	695.25
1999-2000	173.02	173.02	854.54
2000-2001	169.34	158.63	500.20
Total	617.08	655.51	2342.94

Note :Expenditure restricted to the extent claimed through utilisation certificates and progress reports submitted by the State Government to GOI.

* Ahmednagar, Nanded, Nashik and Pune

Expenditure under the State MNP was 3.6 times more than that under ARWSP and was met partly from market borrowings

The State Government has largely funded the programme as is evident from the fact that the MNP expenditure was 3.6 times the ARWSP expenditure. The ARWSP expenditure was Rs 655.51 crore and that borne by the State Government under MNP was Rs 2342.94 crore which was partly met from open market borrowings (Rs 1556.39 crore) made by the MJP.

3.2.1.6.1 Irregularities in accounting of ARWSP expenditure

The GOI guidelines for ARWSP stipulated that the funds released under ARWSP could not be utilised/adjusted for completion of earlier schemes or to meet excess expenditure over the approved costs of schemes. The norms for potable water under the ARWSP were 40 lpcd. The States could, however, provide drinking water in excess of these norms and meet the expenditure under the State MNP programme. Similarly, Establishment, Tools and Plant (ETP) charges could not be booked under the ARWSP.

Audit scrutiny revealed that the MJP/ZPs irregularly booked the above items under the ARWSP, the details of which for the districts test checked were given below:

Nature of the items booked under ARWSP	Period	Amount (Rupee in crore)	Remarks
Cost escalations of 200 schemes in 20 districts sanctioned under ARWSP by State Government	1997-98 to 1999-2000	39.65	Revised sanctions should have been accorded under State MNP
Escalation charges booked under ARWSP by 14 MJP Divisions	1997-98 to 2000-01	7.04	The charges should have been booked under State MNP
Excess expenditure of 15 lpcd booked by 7 Divisions of MJP in 6 districts	1997-98 to 2000-01	9.44	Expenditure was booked under ARWSP due to shortage of funds under MNP.
Excess expenditure of 15 lpcd booked by 5 ZPs	1997-98 to 1999-2000	4.21	State Government sanctioned the entire 55 lpcd cost under ARWSP.
Establishment, Tools and Plant (ETP) charges booked by MJP	1997-98 to 2000-01	68.03	These charges were levied under ARWSP as was done by MJP for all other schemes

Though GOI did not give any additional funds towards cost escalation, excess booking of expenditure or ETP charges, the fact remains that the additional cost was irregularly booked by the MJP under ARWSP. Revised sanctions should have been accorded under State MNP and expenditure incurred there under. Corrective action is therefore necessary.

State Government stated (November 2001) that they have issued instructions to MJP to rectify the accounts.

3.2.1.6.2 Non-utilisation of funds and inflated reporting of expenditure

Incorrect reporting by MJP of unutilised funds of Rs 39.81 lakh as expenditure

State Government released in March 2000 Rs 51.78 lakh and Rs 13.07 lakh of ARWSP funds through the MJP for Pune and Satara ZPs respectively for maintenance and upkeep of water supply schemes and to pay the arrears which were payable by the ZPs to the MJP towards maintenance and repairing charges. However, the MJP actually released Rs 32.78 lakh and Rs 7.03 lakh to ZPs Pune and Satara respectively in May 2000 by adjusting arrears. The ZP, Pune and Satara protested against the action of the MJP and returned the funds disputing the arrears payable as intimated by the MJP. These funds were lying with the MJP as of June 2001. Though the funds were available they could not be utilised and the MJP had reported the amount of Rs 39.81 lakh as expenditure under ARWSP to the GOI.

The State Government stated (November 2001) that it was an expenditure on the schemes which were not taken over by the ZPs and therefore required to be maintained by the MJP. The reply is not tenable as the funds allotted to ZPs Pune and Satara as per State Government orders were lying unspent with the MJP.

3.2.1.6.3 Excess expenditure on assessed cost

Non-observance of unit cost of the schemes affected cost effective management of the scheme

GOI permitted (January 1995), *per capita* cost for technical clearance of schemes under ARWSP as was applicable to the State MNP. Accordingly the State Government fixed in May 1996, the *per capita* cost at Rs 1790 to Rs 2330 depending on the regions. Scrutiny of 39 Regional/ Individual Rural Water Supply Schemes costing Rs 128.06 crore sanctioned during 1997-98 to 1999-2000 in Ahmednagar, Nashik, Raigad, Ratnagiri, Solapur and Sindhudurg districts revealed that, the *per capita* cost of the schemes ranged from Rs 2591 to Rs 5380 which was much more than the permissible unit cost. In 16 completed/in progress schemes the excess expenditure of Rs 2.83 crore had been booked under ARWSP. There was no revision of cost norms by the State Government after May 1996. The State Government continued to sanction a large number of schemes with 55 lpcd of water based on thirty years from 1997-98 to 1999-2000 on obsolete cost norms without any regard to availability of funds. Non-observance of unit cost of the schemes had affected cost effective management of the schemes. Besides, the excess expenditure was needed to be transferred from the ARWSP.

The State Government in reply (November 2001) stated that the deviation was made in public interest to cater to villages in difficult terrain. The reply is not acceptable as the excess expenditure incurred over cost norms was to be met from the State Plan (MNP).

3.2.1.7 Physical performance

3.2.1.7.1 Accelerated Rural Water Supply Programme

The physical targets and achievements during 1996-2001 in terms of the problem villages (PVs) to be covered as reported by the State Government to the GOI based on the Master Plan 1996-2000 was as under.

Year	PVs to be covered at the beginning of the years	Target (Number of villages and habitations)	Achievements	Balance at the end of the year	Percentage of achievements to targets
1996-1997	46984*	6000	6798	40186	113
1997-1998	40186	5607	6491	33695	116
1998-1999	33695	10000	10348	23347	103
1999-2000	35290*	5000	3953	31337	79
2000-2001	31337	8644	2961	28376	34
Total			30551		

*Note : Figures are from Master Plan 1996-2000.

Sixty per cent of problem villages remained to be covered during the period

The achievements are inclusive of those under State MNP. The above data showed that 30551 i.e 65 per cent of the problem villages as of April 1996 were covered but due to the additional villages reported by the State Government in the Action Plan of 1999-2004, 28376 i.e 60 per cent problem villages remained to be covered at the end of March 2001.

3.2.1.7.2 Non-prioritisation of first category problem villages

The power to accord sanction for water supply schemes in respect of problem villages were delegated to the State Government in July 1989. Audit scrutiny revealed that 129 water supply schemes in eight test checked districts, during 1997-1998 to 1999-2000, were taken up for villages receiving water between 11 and 40 lpcd and were second priority villages when all these districts also had category I villages i.e Not Covered (NC)/Partially Covered (PC) I which were yet to be covered.

The position of the categories of the villages, which were covered/not covered under the ARWSP for the entire State, was given in table below:

Category of available water	Category-wise balance as on 1.4.1999	Habitations covered		Balance as of March 2001	Percentage of habitations remained to be covered
		1999-2000	2000-01		
1	2	3	4	5	6
NC/PC-I	10759	1283	804	8672	81
PC 2 to PC 4	24531	2670	2157	19704	80
Total	35290	3953	2961	28376	

* As per Comprehensive Action Plan as of 1 April 1999

The State Government in reply (November 2001) stated that with a view to use resources optimally it became necessary to tie up habitations which are not in priority. The reply is not tenable because a number of schemes were taken up without a single priority village though it is mentioned in the sanction orders of ARWSP issued by the State Government that priority villages (NC/PC 1) were included.

It was observed that 81 *per cent* of the first category priority villages NC/PC1 were not covered during the period 1997-98 to 2000-2001 due to non-prioritisation in the planning process of the programme. A large number of Regional Rural Schemes were taken up which included the NC/PC1 villages due to the constraints of the unit cost norms. However, priorities were not given to the problem villages during execution of these schemes resulting in number of priority villages (NC/PC1) remaining uncovered as the schemes were left incomplete. The districts of Ahmednagar, Raigad, Ratnagiri and Satara had majority of the problem villages accounting for 40 *per cent* of the total habitations as of 31 March 2001.

The Comprehensive Action Plan of the State Government had proposed to cover the 35290 balance habitations as on April 1999 upto March 2004 i.e. 20 *per cent* each year. However, as can be seen from the above data, the achievements for the period 1999-01 was approximately 10 *per cent* only.

3.2.1.7.3 *Re-emergence of problem villages*

The Comprehensive Action Plan for the period 1999 to 2004 furnished to GOI by the State Government, indicated a re-emergence of 11943 (28376 – 16433) problem habitations as of March 2001. The State Government had, however, reported only 1886 additional problem habitations as on 1 April 1998 and no other reports or data were available on the problem of re-emergent villages thereafter. The reasons for increase/ re-emergence of problem villages attributed by the State Government (July 2001) were, additional habitations, some habitations being granted the status of Gram Panchayats (GPs); increase in population and/or decrease in lpcd water supply of existing schemes and some fully covered (FC) habitations becoming partially covered (PC) habitations.

In schemes executed by ZPs source of water was subsurface. It was observed in Audit that source sustainability measures were taken up by the ZPs. As more than 75 *per cent* of schemes executed by the MJP were based on surface source it was expected that the problem of re-emergent villages would be less on completion of the schemes.

3.2.1.7.4 *Inadequate coverage of water quality affected villages*

As per ARWSP guidelines water quality affected habitations were to be covered on priority basis.

GOI instructed the State Government in March 2000 to conduct random survey for water quality of 10 *per cent* water supply sources in the State. Accordingly, of the 241831 water supply sources 4.3 *per cent* were actually tested by state Government authorities during January 2001 to August 2001. Survey revealed as under:

Number of districts	Total sources	Actual tested	Fluorid	Iron	Brackishness	Nitrate
33	241831	10389	626	34	90	280

The districts of Chandrapur, Nagpur and Satara tested high for fluoride content and Nagpur had the highest nitrate content

3.2.1.7.4 (i) 63 Piped Water Supply Schemes (PWSS) costing Rs 410.77 crore for 490 villages and 72 habitations which had water quality problems identified in 14* districts were taken up for execution during 1997-98 to 1999-2000. It was observed that 378 out of the 490 villages (77 *per cent*) were from four districts viz. Amaravati (158), Ahmednagar (47), Bhandara (72) and Chandrapur (101).

3.2.1.7.4 (ii) Out of the above mentioned 63 schemes, only 19 schemes covering 46 villages/14 habitations were completed/ water supply started leaving 44 RPWS for 444 villages/58 habitations incomplete as of March 2001 and twenty seven of the incomplete schemes pertained to the four districts mentioned above depriving 376 villages in these districts of safe drinking water. In addition to the above, nine PWSS sanctioned for Rs 47.36 crore between December 1997 and March 1999 in six districts (Amaravati, Beed, Jalgaon, Kolhapur, Raigad and Sangli) for 90 villages and 46 habitations affected due to quality of water could not be taken up for execution due to paucity of funds (August 2001). Thus due priority was not given to tackle the quality-affected villages for water supply schemes as envisaged in the guidelines.

The State Government had requested the GOI (September 2001) to provide additional funds amounting to Rs 500 crore exclusively for tackling habitations with quality problems for which 29 RPWS schemes estimated to cost Rs 391 crore had been taken up.

3.2.1.7.5 Low priority to water quality affected villages

In Amaravati district, 27 villages in Bhatkuli Taluka, were affected due to salinity problem and excess chloride in existing water sources. Therefore a Regional Rural Water Supply Scheme (RRWSS) based on Purna Dam as surface source for 52 villages inclusive of above 27 villages was prepared and submitted to the State Government in June 1998. Since the dam was likely to

* Ahmednagar, Amaravati, Beed, Bhandara, Buldhana, Chandrapur, Dhule, Jalgaon, Jalna, Kolhapur, Nanded, Ratnagiri, Satara and Yavatmal.

be completed in 2003 Government approved 3 RRWSS costing Rs 13.24 crore based on existing supply wells of Amravati Municipal Corporation for the above 27 villages, between January 1998 and March 1999. The MJP had also incurred Rs 15 lakh towards private consultant for survey of the above villages. However, till March 2001 Government had not approved the tenders. Consequently, the affected villages with a population of 26831 souls (1991 census) were deprived of safe drinking water, though such villages were to be taken on priority basis as per the GOI guidelines for the ARWSP.

The State Government stated (November 2001) that earlier schemes designed for 30 years and 55 lpcd need to be recast and decision on this regard can be taken only at the State level. The reply is not tenable as those were already sanctioned schemes and needed to be tackled on a priority.

3.2.1.7.6 Water quality monitoring and surveillance

Chlorination method is used by Water Supply Authorities to provide safe drinking water. Public Health Laboratories exist in 30 of the 33 districts where regular water sampling was done. The reports of Public Health Laboratory Services for water quality for the year 1997-2000 revealed as under:

3.2.1.7.6 (i) Of the 24.54 lakh water samples tested in 30 districts, 7.55 lakh samples (31 *per cent*) were contaminated. Lack of contact period of chlorine before supply of water, use of water from abandoned wells, leakage due to pipe lines passing through nallah/gutter, non-availability of sufficient bleaching powder and alum for treatment purposes at water works, improper disinfections, mixing of domestic sewage through leaking pipe lines were the reasons attributed by the Public Health Laboratory authorities for contamination of water during above period.

3.2.1.7.6 (ii) Of the 1.15 lakh water samples in rural areas, for bleaching powder tested in 30 districts during above period in 16504 (14 *per cent*) samples the percentage of chlorine was less against the required 20 *per cent*.

3.2.1.7.6 (iii) Of the 20228 GPs in 24 districts there was no bleaching powder in 4116 GPs, which revealed that water chlorination was not being done regularly by the GPs.

Because of supply of unsafe water there were epidemics and death cases due to water borne diseases in rural and urban areas during 1998-99 to 2000-2001 as follows:

Disease	1998-99		1999-2000		2000-2001	
	Affected	Death	Affected	Death	Affected	Death
Cholera	17	4	4	1	Nil	Nil
Gastro-enteritis	27407	788	3917	33	12878	103
Diarrhoea	3608	70	1018	1	4176	12
Jaundice	1507	31	5862	54	1998	31
Typhoid	580	4	393	Nil	1007	2

1. Source of data – State Public Health Laboratory, Pune.

2. Data for affected and death due to water borne diseases in Rural and Urban areas are not separately available.

The State Government had spent Rs 126.75 lakh (till March 2001) out of the ARWSP funds on water quality survey/testing. In September 2001 instructions had been issued by State Government for setting up water testing arrangements at the block/Gram Panchayat levels as well as for strengthening public health laboratories within a period of 3 years.

3.2.1.7.7 Execution of tubewells/borewells by Groundwater Survey and Development Agency

GSDA was the implementing agency for tubewells/borewells taken up for execution under ARWSP. The GSDA received Rs 466.82 lakh under the ARWSP during the period 1997- 2001. The physical and financial performance of the ARWSP was given in the table below:

Year	Habitations	Borewells		Tubewells		Hand Pumps installed	Expenditure (Rupees in lakh)
		Drilled	Successful	Drilled	Successful		
1997-98	348	379	300	12	11	322	165.60
1998-99	836	933	703	11	11	672	219.92
1999-2000	6	10	5	00	00	17	9.31
2000-01 (February 2001)	39	47	38	00	00	24	11.33
Total	1229	1369	1046	23	22	1035	406.16

From the above data it was observed that the percentage of unsuccessful borewells in 1997-98 and 1998-99 ranged between 21 and 25 respectively.

As per details furnished in September 2001 by the Director, GSDA, Pune, 15274 hand pumps (9.93 per cent) costing Rs 5.21 crore (Rs 3409 per hand pump at 2000-01 prices), out of 1.54 lakh installed under ARWSP and State Plan Scheme as of March 2001, were permanently damaged. Lack of maintenance and excessive use were the reasons for damage.

3.2.1.7.8 No information regarding supply of safe drinking water to schools and anganwadis

Provision of safe drinking water to rural schools/anganwadis was one of the priorities of the ARWSP. However, details of works completed were not available with the test checked ZPs (July 2001) and neither they nor the State Government could furnish any data on the schools and anganwadis covered for safe drinking water from 1997-98 to 2000-01.

3.2.1.8 Delays in programme implementation

3.2.1.8.1 Delays in commencement of works

Scrutiny of execution of 59 Regional/Individual WSS works costing Rs 89.33 crore in Nashik, Nanded and Parbhani districts sanctioned between January 1997 and December 1998 revealed delay in commencement of works ranging from 6 to 19 months from the date of sanction of the schemes. Executive Engineer, MJP Division, Parbhani stated that the delay was on account of preparation and printing of tender booklet, advertising etc before issue of work order. MJP Division, Nashik stated that work order was prolonged as the finalisation of the contract was delayed. Besides delaying the completion of the schemes, the delays would add to the cost escalation of the works.

3.2.1.8.2 Delay in execution of works for more than three years

Works taken up under ARWSP were to be completed within a period of three years. However, in the following cases work was delayed for 18 to 36 months:

Name of the scheme and district	Sanction date/work order date	Administrative approval cost	Expenditure incurred up to March 2001	Stipulated date of completion	Status of work	Reasons for delay
		(Rupees in lakh)				
1. Ghoti WSS, Nashik	August 1994/ June 1996	326.19	301.13	June 1998	Incomplete as of March 2001	Opposition by en-route villages to work of rising main. Department also stated that the water supply was started from existing source from March 2000
2. Wani WSS Nashik	January 1996	117.71	110.37	December 1998	-do-	Headworks incomplete due to more water in dam.

Delays in completion of works were due to lack of monitoring by the district authorities to remove local level bottlenecks, which also led to non-adherence of the guidelines regarding completion of works within three years .

3.2.1.8.3 *Delay in technical sanction and implementation of modified scheme without recovery of popular contribution*

Payment of popular contribution by the local bodies not ensured

RRWS for 70 villages in Morshi taluka district Amravati under ARWSP was approved for Rs 52.69 crore in September 1998. The Chief Engineer sanctioned the work in April 1999 and work order was issued in August 1999. The technical sanction (TS) was substantially modified by the MJP in January 2001 to make the scheme workable based on a survey carried out by the contractor for which expenditure of Rs 8 lakh was incurred. The revised TS for Rs 46.44 crore accorded in January 2001 by Member Secretary (MS) (Technical) included an additional cost of Rs 4.84 crore on an extra item and excess quantity not included in tender and deletion of five villages included in the original sanction since it was decided that these villages would be tackled by the GSDA. Since the revised technical sanction included the incorporation of a new item and deletion of the approved villages, which resulted in a substantial modification of the scheme, revised administrative approval of Government was necessary before starting the work (work started in March 2001). In view of Government orders of July 2000 for popular contribution, it could not be ruled out that the works were started without revised approval to avoid payment of popular contribution by the local bodies. Further, even after the revised technical sanction, work had not commenced till February 2001.

In reply (November 2001) the State Government stated that the concerned Government resolution did not apply to works sanctioned before July 2000. The reply is not tenable, as a fresh administrative approval was necessary due to revision of technical sanction and deletion of already approved villages.

3.2.1.9 *Other points of interest*

3.2.1.9.1 *Schemes taken up without assured source of water*

Blocking of expenditure of Rs 26.59 lakh due to refusal of MIDC to supply water

3.2.1.9.1.(i) Belavali Vardoli WSS in district Raigad, approved in March 1998 under ARWSP for Rs 86.96 lakh was based on a source of water belonging to the Maharashtra Industrial Development Corporation (MIDC). Though Rs 26.59 lakh was spent by MJP division Panvel, District Raigad on providing, lowering and laying of pipes upto March 2001, MIDC authorities refused in February 2000 to give the water connection as the concerned villages had huge outstanding bills of unpaid water charges. The scheme was incomplete as of November 2001.

In reply (November 2001) the State Government stated that since MIDC was not granting connection, the work was suspended from June 1999.

Full fledged water supply scheme on temporary source of water

3.2.1.9.1.(ii) Pomendi Water Supply Scheme in district Ratnagiri was administratively approved in September 1997 at total cost of Rs 3.31 crore, and expenditure of Rs 4.11 crore was incurred as of March 2000. The scheme was designed for 30 years and a 55 lpcd was based on a temporary connection of the MIDC. The agreement with the MIDC spelt out the need for alternate source in view of the position explained for temporary nature of tapping connection.

MJP had not taken action for the alternative source. Therefore, the execution of scheme was at risk because MIDC may withdraw connection as and when required.

In their reply (November 2001), the State Government had not offered any specific reply.

3.2.1.9.2 Irregular excess expenditure

Expenditure on schemes sanctioned under ARWSP should be restricted to their approved cost. It was, however, noticed in two cases that expenditure was incurred over and above the sanctioned limit without any approval from competent authority.

(Rupees in lakh)

Name of scheme	Approved cost/ Month and Year	Expenditure till March 2001	Excess expenditure without sanction
1 Manegaon RRWS, Dist. Nashik	553.83 1995-96	619.19	65.36
2 Baragaon, Pimpri, Dist. Nashik	219.29 November 1994	252.06	32.77

As the funds have not been released by the MJP schemewise, the excess expenditure was met from available funds pertaining to other schemes.

While accepting the above observations, the State Government stated (November 2001) that revised administrative approval to these works would be sought for.

3.2.1.9.3 Excess payment due to irregular transportation charges

Vijay Durg Water Supply Scheme, Taluka Deogad, District Sindhudurg was Administratively Approved in April 1998 at a total cost of Rs 18.39 crore and technically sanctioned by Chief Engineer in September 1998. Scrutiny of records revealed that the rates of MS pipes included in the tender were based on rates forwarded by MS (Technical) in September 1998-99. Since the basic rates of MS Pipes were inclusive of transportation, separate provision for transportation and payment of Rs 21.93 lakh for that was irregular.

The State Government in their reply (November 2001) have accepted the mistake and stated that steps would be taken to avoid it in future.

3.2.1.9.4 *Operation and maintenance of the water supply schemes*

Maharashtra Zilla Parishad and Panchayat Samitis Act 1960 and Bombay Gram Panchayat Act 1958 read with Government Resolution of November 1986 provide for the maintenance of the Regional and individual Water Supply Schemes by the respective Zilla Parishads/Gram Panchayats. To overcome the financial constraints faced by these local bodies/authorities, operation and maintenance funds were created (November 1986) at district level by contributing 10 *per cent* of the annual allocation under MNP and ARWSP. Besides 20 *per cent* of annual income of the respective ZP was to be contributed to the operation and maintenance funds in addition to water and maintenance charges recovered at the prescribed rates in respect of Regional/individual water supply schemes.

From the year 1999-2000, upto 15 *per cent* of the funds released every year under ARWSP to the State could be utilised for operation and maintenance of assets created subject to ceiling of matching grants provided by the State out of MNP. However, such arrangements were not functional and MJP was maintaining the schemes. This is discussed in the succeeding paragraph.

3.2.1.9.5 *Insufficient funds for maintenance of water supply schemes*

Expenditure on maintenance of water supply schemes far in excess of the funds received by the MJP

3.2.1.9.5 (i) MJP spent Rs 39.82 crore during 1997-2001 from Plan funds for maintenance of 110 regional and 171 individual water supply schemes completed but not taken over by the concerned ZPs/GPs respectively. Besides Rs 2.60 crore received by the MJP from the State Government (by adjustment of funds released to the ZPs) out of the ARWSP funds, no further information was available on the funds released by State Government to the MJP. As of March 2001, Rs 109.05 crore was outstanding from the 32 ZPs in the State on account of maintenance and repair charges of the regional/individual RWSS maintained by the MJP. Thus MJP was obliged to meet the operation and maintenance expenditure.

3.2.1.9.5 (ii) In seven test-checked districts the maintenance and repair charges outstanding in respect of Regional and Individual WSS maintained by the ZPs and GPs for the period from 1997-2001 outstanding as of March 2001 were as follows :

(Rupees in crore)

S. N.	District	Hand pump Electric pump charges	Water charges outstanding in respect of regional schemes maintained by ZPs	Water charges outstanding in respect of regional schemes maintained by GF ;
1	Nanded	1.00	3.25	-
2	Pune	0.77	0.94	-
3	Raigad	-	1.71	-
4	Ratnagiri	0.31	1.04	0.35
5	Parbhani	0.59	-	1.96
6	Nashik	-	-	1.18
7	Ahmednagar	-	-	1.38
	Total	2.67	6.94	4.87

In Amravati and Nagpur districts details of recovery and outstandings of such water charges as of 31 March 2001 were neither available nor furnished. In Nanded district, where Rs 3.25 crore were outstanding from six talukas as of 31 March 2000 for recovery of water charges in respect of schemes maintained by the ZP, in one taluka there was no recovery for three years and in three talukas for one year during 1997-2001.

Further in Nagpur district Rs 20.57 lakh received under ARWSP were diverted by the ZP and Rs 17.19 lakh recovered on account of hand pump and electric pump annual charges were not credited to the Maintenance and Repairs (M and R) Fund but to the General Fund of the ZP thereby resulting in short accountal in the M and R Fund.

Due to non-recovery of the maintenance/operation charges from the GPs the schemes had become non-self-supporting and thereby increasing burden on the Government to provide funds for their maintenance. The purpose of creation of M and R Fund Accounts was thus defeated.

In their reply (November 2001), the State Government had not offered any specific reply.

3.2.1.9.6 Information Education and Communication

Four districts (Buldhana, Dhule, Parbhani and Yavatmal) of the State were selected for the awareness creation campaign programme of the Mission. The expenditure under the programme was to be equally shared by the GOI and the State Government till 31 December 1998 and thereafter cent *per cent* by GOI. A sum of Rs 2.81 crore (GOI Rs 1.47crore and State Government Rs 1.34 crore) were released during 1995-96 to 2000-2001 out of which expenditure of only Rs 1.71 crore was incurred.

3.2.1.9.6 (i) GOI released the 2000-01 share of Rs 96.44 lakh in March 2001, the money remained unutilised till June 2001 due to delay in submission of the earlier utilisation certificates by State Government.

3.2.1.9.6 (ii) The Parbhani and Yavatmal districts surrendered Rs 9.77 lakh and Rs 4.16 lakh respectively due to non-functioning of NGOs.

The expenditure was incurred on creating awareness/educating the people, through NGOs on sanitation, cleanliness and environment, need to preserve water resources etc.

The State Government in their reply (November 2001) accepted the fact of underutilisation.

3.2.1.9.7 Sectoral reform

Unspent balance of Rs 38.50 crore lying with ZPs on account of sectoral reforms

3.2.1.9.7 (i) The objective of the Sectoral reform programme introduced in 1999-2000 by GOI, was institutionalising community participation in RWSS based on the adoption of a demand driven, adaptable approach of community participation. The reform envisaged 10 *per cent* capital cost and 100 *per cent* operation and maintenance cost sharing by the users group. Under the programme GOI released Rs 38.64 crore directly to MJP in March 2000. The State Government decided in July 2000 to implement the reform in respect of all the WSS, which were administratively approved and tenders accepted but work orders were not issued. From the details furnished by four districts* it was noticed that only Rs 0.14 crore was spent by them on workshop, training at block/villages level etc leaving an unspent balance of Rs 38.50 crore with the ZPs as of March 2001.

In their reply (November 2001) the State Government did not offer any specific comments.

3.2.1.9.7 (ii) Non-recovery of ten per cent popular contribution

Malpathar Regional Rural Water Supply Scheme, District Yavatmal sanctioned under ARWSP consisting 40 villages approved for Rs 15.83 crore was technically sanctioned by the Chief Engineer, MJP, Amravati in September 1998. The State Government decided in July 2000 that ten *per cent* popular contribution would be recovered in respect of all schemes for which work order had not been issued after that date. Though the work order in respect of the above scheme was issued in November 2000, popular contribution amounting to Rs 1.58 crore from the ZP was not recovered. It was stated by the Division (December 2000) that sanction to the tender had been issued, however, no reply was furnished for non-recovery of the popular contribution.

* Amravati, Dhule, Nanded and Raigad

In reply it was stated by the State Government (November 2001) that the work was started without popular contribution on the directives of Chairman of MJP. However, no formal Government orders to this effect were issued till December 2001.

3.2.1.9.8 Management Information System

For effective planning, monitoring and implementation of various activities under ARWSP, GOI decided in March 1997 to take up a Management Information System (MIS)/Computerisation Project for Rural Water Supply and Sanitation Sector and released funds in March 1998. The cost sharing pattern adopted was as follows:

Item	GOI share (per cent)	State share (per cent)
Computer Hardware and Application Software	80	20
Training	100	--
Development of MIS Software	100	--

3.2.1.9.8 (i) Though the GOI released Rs 9.57 crore in March 1998, the State Government released its share of Rs 2.40 crore in March 1999 i.e after a delay of almost a year.

3.2.1.9.8 (ii) While RGNDWM envisaged computerisation for all the Offices upto division level and offices dealing with Water Supply and Sanitation Sector, Rs 98.96 lakh was spent for computerisation and renovation of WSS Department, Mantralaya.

Non-existence of MIS on the ARWSP, despite huge expenditure

Information regarding the number of Schemes taken up, completed, incomplete and the expenditure incurred thereupon were not furnished to Audit. Maintenance of such a MIS was absolutely essential for effective monitoring of the programme as funds for ARWSP had been received directly by MJP from the GOI since 1998-99. Despite the above expenditure for developing of a computerised MIS, neither the State Government nor the MJP had maintained a scheme wise MIS of the ARWSP programme. Thus effective monitoring of the Schemes was not ensured.

The State Government stated (November 2001) that software for MIS could not be developed because of insistence on the part of Government of India to await country wide uniform software provided by it. The reply was not tenable as no efforts were made to utilise existing hardware and software to maintain details of schemes sanctioned, in progress and completed.

Non-utilisation of Rs 90 lakh meant for computerisation

3.2.1.9.8 (iii) Of the Rs 11.97 crore (GOI + State share) available under MIS component, during 1998-99 and 1999-2000 Rs 11.06 crore was utilised for computerisation/training of District Level Offices of MJP, ZP and GSDA dealing with execution of water supply schemes, leaving an unutilised balance of Rs 91 lakh with State Government (September 2001).

3.2.1.9.8 (iv) No separate account of funds indicating the itemwise expenditure incurred was maintained by the MJP.

3.2.1.9.8 (v) Utilisation certificate in respect of expenditure incurred for MIS against GOI releases was not furnished as of June 2001.

In their reply (November 2001) the State Government had not offered any specific reply.

3.2.1.9.9 *Training under Rajiv Gandhi National Drinking Water Mission (Management Information System Component)*

Though Rs 12000 to each division was sanctioned by State Government in March 1999 for training under MIS component of RGNDWM, no training was imparted to officials of MJP division, Mangaon and Alibag, district Raigad. The Mangaon division had already received all the Software and Hardware under RGNDWM and attributed non-expenditure under training programme to non-receipt of amount for training where as the Alibag division had stated that the timing of the training was not found convenient (February 2001).

While accepting the above facts the State Government stated in its reply (November 2001) that instructions were issued to MJP to complete the training.

3.2.1.9.10 *Non-utilisation of equipments for want of trained staff*

Hardware costing Rs 9.77 lakh in Ratnagiri Division of the MJP was lying unused as training for the use of the software was not provided.

Similarly, plotter Rs 2.83 lakh, digitiser Rs 0.28 lakh, 4 CDs of Autocad Rs 4.08 lakh received by Ahmednagar circle office in July 1999 was lying unused due to absence of training to staff for requisite hardware /software. The same could not be used in Nashik Circle as authorisation code for Autocad and Plotter was not provided by the supplier.

No specific compliance was given by the State Government.

It was thus evident that though the training cost was borne entirely by GOI the State Government did not effectively utilise the funds and failed to impart training to the staff resulting in the hardware/software and other equipments lying idle.

3.2.1.10 *Monitoring*

For monitoring the physical and financial progress of different schemes like ARWSP/ MNP, specific formats were designed by GOI for submission of various information to the State Government and GOI. For effective planning, implementation and co-ordination of RWSS, a State level committee (SLC)

was set up under the chairmanship of the Minister, Water Supply and Sanitation Department. Similarly a District Co-ordination and Monitoring Committee at district level was set up consisting the District Collector as Chairman and the District Water Supply Officer (DWSO) as Member Secretary.

Large number of incomplete schemes

Despite meeting regularly as scheduled to monitor the implementation of the scheme as per action plan and take necessary remedial action in time to remove the constraints, if any monitoring the programme was evidently not effective as 1666 schemes were lying incomplete as of March 2001 and 1615 schemes could not be taken up for execution at all though administratively approved. The ARWSP has not received the due attention as is evident from the large number of priority villages remaining uncovered and the incomplete schemes.

The State Government stated (November 2001) that the financial crunch was beyond its control. The reply was not tenable in view of the fact that the lack of planning and monitoring to take up the schemes in a phased manner according to availability of funds resulted in a large number of incomplete schemes.

3.2.1.11 Evaluation

Need for involvement of local population in effective management of water supply schemes

The implementation, operation, maintenance and management of RUWSS was evaluated by a Committee constituted in January 2000 under the chairmanship of an ex-Chief Secretary* to the State Government. In its Report (February 2001) the Committee criticised the propensity of the top-down approach in the implementation of the master plan of 1996-2000 without any concern for local level needs and opined that over emphasis on targets and norms only encouraged excesses and undermined the proper operation and timely maintenance of existing schemes. The Committee recommended to the Government :

- (i) to take urgent steps for ensuring the proper management, functioning , repairs and maintenance of water supply schemes as benefits to the targeted beneficiary populace had not been commensurate with the expenditure incurred on these schemes,
- (ii) for involvement of local population in order to ensure proper running, repair and maintenance of the water supply schemes and additional funding for the operation and maintenance of the schemes,
- (iii) for tariff reforms,
- (iv) that Rural Regional Schemes involving a number of villages at huge costs implemented from 1996-2000 was to be the last resort excluding the

* Shri D.M. Sukhtankar

quality affected area. The Committee has recommended evaluation on a case-by-case basis and prioritisation in case of incomplete/ongoing schemes and

(v) setting up of a State Ground Water Authority for arresting the depleting ground water sources and for proper allocation and management of all uses of ground water including irrigation.

In reply State Government stated (November 2001) that the recommendations of the committee were submitted to the State Cabinet for decision.

3.2.2 Accelerated Urban Water Supply Programme

3.2.2.1 Highlights

The Accelerated Urban Water Supply Programme was launched by Government of India in 1993-94 for supplying drinking water to towns with population less than 20000 as per 1991 census. Priorities were to be given to those towns having low *per capita* supply, distant source, drought prone areas and those with water quality problems. The Maharashtra Jeevan Pradhikaran implemented the programme in the State.

A review of the implementation of the programme revealed that

Out of 79 towns eligible under the Accelerated Urban Water Supply Programme, Government of India sanctioned schemes to cover 20 towns only at an estimated cost of Rs 49.06 crore as against 36 schemes proposed by the State Government. Remaining 16 schemes were not approved by Government of India, as they did not meet the stipulated criteria. Of the 20 schemes approved upto 2000-01, five were completed, commissioned and handed over to the Municipal Councils for operation and maintenance, eight were in progress, seven others were yet to be completed though water supply was started. Out of the 11.01 lakh eligible population, schemes for 2.98 lakh (27 *per cent*) population covering 20 towns were approved upto March 2001. In the remaining 43 towns (79 eligible towns less 36 towns for which schemes were proposed by State Government), water supply schemes had been taken up by the State Government/Maharashtra Jeevan Pradhikaran out of their own funds and 21 towns were receiving adequate water, 10 towns were having problems only in summer months and the remaining 12 towns were receiving less than 70 litres *per capita* per day water throughout the year.

(Paragraph 3.2.2.5)

Government of India released to the State Government Rs 18.59 crore during the period 1993-94 to 2000-01 of which Rs 17.83 crore was released to the implementing agency and the balance Rs 0.76 crore was lying with the State Government as of 31 March 2001. Similarly Rs 3.31 crore, out of Rs 42.65 crore released to the Maharashtra Jeevan Pradhikaran during above period was lying unutilised as of 31 March 2001.

(Paragraph 3.2.2.6 (ii))

The schemes under Accelerated Urban Water Supply Programme were sanctioned and taken up without the 5 per cent popular contribution from the beneficiaries in contravention of the Government of India guidelines thereby defeating the objective of community participation in the projects.

(Paragraph 3.2.2.6 (iii))

Accelerated Urban Water Supply Programme was to be completed in two years. However, of the 13 schemes sanctioned upto 1998-99, only four were completed and handed over to the Municipal Councils. Of the remaining schemes, water supply was started in seven towns though schemes were incomplete and two schemes were in progress.

(Paragraph 3.2.2.2)

Contrary to State Government instructions, execution of the Shendurjana Water Supply Scheme in Amravati district costing Rs 11.39 crore was taken up without assured water source, resulting in blocking of funds of Rs 8.21 crore for two years since March 1999.

(Paragraph 3.2.2.7.1)

An excess expenditure of Rs 48.49 lakh was incurred over the approved cost of Rs 429.80 lakh sanctioned for execution of water supply schemes in Hadgaon town.

(Paragraph 3.2.2.7.2)

Bacteriological test of water sample in nine districts where urban schemes were implemented revealed that 4.73 per cent of the water samples were contaminated.

(Paragraph 3.2.2.9)

The popular contribution in urban areas was half of that in rural areas though the urban areas were receiving 70 litres *per capita* per day of water under Accelerated Urban Water Supply Programme as compared to 40 litres *per capita* per day received by rural areas under Accelerated Rural Water Supply Programme.

(Paragraph 3.2.2.10)

3.2.2.2 Introduction

The Government of India (GOI) launched in 1993-94 the Centrally Sponsored Accelerated Urban Water Supply Programme (AUWSP) for supplying drinking water to towns with population of less than 20,000 (1991 census) for completion by the end of the Eighth Plan to overcome the problem of water supply to smaller towns, which had been neglected by the State Governments. The programme aimed at: (i) providing safe and adequate water supply facilities to the entire population of such towns (ii) improving the environment and quality of life for better socio-economic condition and (iii) enhance

productivity to sustain the economy. The priority was to be given to the towns having special problems like very low *per capita* supply, very distant or deep water source, drought prone areas, excess salinity, fluoride, iron content in water source and high incidence of water borne diseases.

3.2.2.3 Organizational set up

AUWSP was implemented by Maharashtra Jeevan Pradhikaran (MJP). The Principal Secretary, Water Supply and Sanitation Department (WSSD) was the Chairman of the State Level Selection Committee (SLSC) and the Superintending Engineer (SE), MJP Central Office as Member Secretary of the Committee. The AUWSP were sanctioned by the Government of India on recommendation of the SLSC after considering the Detailed Project Reports(DPRs) prepared for each individual scheme.

3.2.2.4 Audit coverage

Under the AUWSP of the 20 schemes sanctioned by GOI till March 2001 in nine[§] districts out of thirtythree, five schemes in four* districts were test-checked. The expenditure on these five schemes as of March 2001 was Rs 13.08 crore which was 33 *per cent* of the total expenditure incurred on the schemes in the State during 1994-95 to 2000-2001. The results of the review are discussed below:

3.2.2.5 Planning

In Maharashtra State, of the 228 towns only 79 towns with total population of 11.01 lakh (as per 1991 census) were eligible for coverage under AUWSP. Of the 79 towns, 36 were identified as per GOI norms and DPRs costing Rs 143.69 crore were submitted to them duly recommended by the SLSC during 1994-95 to 2000-2001. However, Schemes in 20 towns, costing Rs 49.06 crore were only approved by GOI upto 31 March 2001. The remaining 16 Schemes costing Rs 66.72 crore were not approved by the GOI due to (i) *per capita* cost more than permissible limit and (ii) execution of the schemes having started prior to sanction of GOI/schemes nearing completion.

In the remaining 43 towns, out of 79 eligible towns, water supply schemes had been taken up by the State Government/MJP and 21 towns were receiving adequate water, 10 towns were having problems only in summer months and the remaining 12 towns were receiving less than 70 litres *per capita* per day water throughout the year.

3.2.2.6 Financial outlay and expenditure

3.2.2.6.(i) Expenditure on AUWSP was to be shared by GOI (50 *per cent*) and the State (50 *per cent*), including 5 *per cent* contribution from the beneficiary urban local bodies. The details of amounts released by GOI and by

[§] Ahmednagar-1, Akola-2, Amravati-1, Buldhana-2, Nanded-5, Osmanabad-4, Parbhani-1, Pune-2, Solapur-2

* Amravati, Nanded, Pune and Solapur.

the State Government to the implementing agencies and expenditure incurred by the State for the period 1993-94 to 2000-2001 as reported to GOI is as shown below:

(Rupees in crore)

Year	Scheme approved (number)	Cost approved by GOI	Grant released by GOI	Grant released to MJP			Expenditure incurred under AUWSP
				GO share	State share	Total	
1993-94	--	--	0.85	0	0		
1994-95	5	3.70	0.93	0.85	0	0.85	14.17
1995-96	1	1.45	0.36	0.93	1.00	1.93	
1996-97	4	8.56	3.08	0.36	5.39	5.75	
1997-98	0	--	1.37	4.50	4.33	8.83	
1998-99	3	10.06	3.94	2.38	4.10	6.48	6.48
1999-2000	2	4.66	3.68	5.00	5.00	10.00	10.00
2000-01	5	20.63	4.38	3.81	5.00	8.81	8.69
TOTAL	20	49.06	18.59	17.83	24.82	42.65	39.34

Note: Figures are from the utilisation certificates and progress reports submitted by the State Government to GOI.

3.2.2.6 (ii) Out of its share of Rs 24.53 crore, GOI released only Rs 18.59 crore till March 2001 and a further Rs 3.36 crore by June 2001. GOI delayed the release of funds due to late submission (September 2000) of utilisation certificates by the State Government for AUWSP funds received till 1999-2000. Of the Rs 18.59 crore released by GOI, Rs 0.76 crore was lying with the State Government as of March 2001.

In the 20 schemes sanctioned under the AUWSP, popular contribution was not recovered

As against Rs 42.65 crore (Rs 17.83 crore - GOI and Rs 24.82 crore of State Government) released to the MJP during 1994-2001, Rs 39.34 crore was spent as of March 2001, out of which Rs 17.57 crore was blocked in eight incomplete schemes.

3.2.2.6 (iii) AUWSP introduced by GOI was to be executed with five *per cent* popular contribution. In respect of all the 20 AUWSP Schemes sanctioned in the State for Rs 49.06 crore, no contribution was recovered from the local bodies.

3.2.2.7 Physical performance

Schemes sanctioned under AUWSP were to be completed within two years. Thus the schemes sanctioned till 1998-99 were to be completed upto March 2001. However, of the 13 schemes sanctioned upto 1998-99, only four were completed and handed over as of March 2001 to the council concerned, two were in progress and in respect of the remaining seven though water supply started, these were neither completed nor handed over. Of the seven schemes sanctioned in 1999-2001, one was completed and handed over and six were in progress. Over all position of completed / in progress schemes as of 31 March 2001 was as follows:

Number of sanctioned schemes	Completed and handed over	Water supply started but schemes not handed over	Works in progress
20	5	7	8

As per the progress report of March 2001, submitted by State Government to GOI the seven schemes out of the eight in progress, were likely to be completed by 2002-2003.

A scrutiny of three of the schemes in progress revealed the following position:

Rahata Pimplas, Water Supply Scheme (WSS) district Ahmednagar sanctioned by GOI in August 1998 under AUWSP was not started (May 2001) as tender had not been finalised by the MJP. Similarly WSS for Bhoom district Osmanabad and Kandhar district Nanded sanctioned by GOI in January 2001 were not started (May 2001) as DPRs were under preparation.

3.2.2.7.1 Schemes taken up without assured source/with temporary source of water

Augmentation to Shendurjana Ghat WSS district Amravati proposed with Pusali Dam as a source of water was approved for Rs 1.18 crore in August 1996 by GOI. The revised (estimated) cost of the scheme including proportionate cost of dam amounting to Rs 7.32 crore was approved by State Government in January 1999 for Rs 11.39 crore due to less yield of two existing supply wells suggested by Ground Water Survey and Development Agency (GSDA) in May 1993. Even though expenditure of Rs 8.21 crore; inclusive of Rs 7.02 crore paid to Irrigation Department, was incurred, dam work was incomplete due to revision of dam's cost. Consequently, expenditure on the scheme was unfruitful for two years (since March 1999) in the absence of assured source of water.

The State Government stated (November 2001) the delay in source cropped up due to circumstances not envisaged at the time of planning. Reply was not tenable since the execution of works without assured source was in violation of existing instructions.

3.2.2.7.2 Excess expenditure over approved cost

Expenditure on schemes sanctioned under AUWSP should be restricted to their approved cost. However in the case of Hadgaon water supply scheme district Nanded, expenditure was incurred in excess of sanctioned amount without sanction of the competent authority i.e. State Government.

Blocking of expenditure of Rs 8.21 crore on a scheme without assured source of water

(Rupees in lakh)

Name of scheme :	Approved cost/Month and Year	Expenditure till March 2001	Excess expenditure without sanction
AUWSP scheme in Hadgaon, Dist., Nanded	429.80 January 1997 (GOI sanction= Rs 356.37, December 1998)	478.29	48.49

As the funds were not released by the MJP schemewise, the excess expenditure was met by the MJP division from available funds pertaining to other schemes.

3.2.2.8 Operation and maintenance of the water supply schemes

The completed schemes were executed with dam/river as source of the water supply and thus 95 per cent dependability was ensured. The Schemes completed, were commissioned and handed over to urban local bodies were maintained by them and there was adequate water supply. Two schemes, viz. water supply scheme at Patur, district Akola and Sonpeth, district Parbhani though completed and commissioned were not taken over by the urban local bodies and were maintained by the MJP. Diversion of funds meant for capital project for operation and maintenance purposes is not intended and has the effect of decreasing the available fund for projects already approved.

3.2.2.9 Water quality monitoring

Laboratories have been set up by the State Government in the district headquarters for testing of water samples. In nine districts, where Urban Schemes under AUWSP were approved by GOI during 1995-2001, District Public Health Laboratories were in existence.

Chlorine content test in 2696 bleaching powder samples in these 9 districts during 1997-2000 revealed that the percentage of chlorine in bleaching powder ranged from 1 to 17 as against required 20 per cent. In thirty districts 175 bleaching powder samples out of 8451 tested by the District Public Health Laboratories in urban areas during 1997-2000 revealed that the percentage of chlorine ranged from 1 to 14 as against the required 20 per cent. Bacteriological test of water sample in these nine districts during 1997-2000 revealed that 10846 (4.73 per cent) samples out of 2.29 lakh were contaminated. The lack of proper maintenance and unhygienic environmental conditions were the reasons attributed by the Government in June 2001 for contamination of the water. The details on out break of epidemic on account of contaminated water during 1997-2001 for urban areas were not available separately with the State Government.

3.2.2.10 ***General***

The Popular Contribution (PC) fixed by GOI for urban areas was 5 per cent which was half of that for rural areas though the urban areas were receiving 70 lpcd of water as compared to only 40 lpcd of water in rural areas under ARWSP.

3.2.2.11 ***Monitoring of the AUWSP***

For effective planning, implementation and co-ordination of AUWSP, a State level committee was set up in February 1995 and October 1998 under the chairmanship of the Additional Chief Secretary and the Superintending Engineer, Central Planning Design for monitoring the physical and financial progress of implementation of each scheme, and reports in the devised format were submitted on quarterly basis to the GOI. A scrutiny of the minutes of the meeting held from 1996-97 to 1999-2000 revealed that only sanction to new schemes and inclusion of towns under AUWSP were discussed. There was also a mention about requesting the GOI to increase the population limit for towns under AUWSP from 20000 to 1 lakh. Discussions on the implementation of the schemes, bottle necks if any in the execution of the schemes and its financial progress were not evident from the minutes.

**AGRICULTURE, ANIMAL HUSBANDRY, DAIRY
DEVELOPMENT AND FISHERIES DEPARTMENT**

3.3 Loss on transfer of Government milk chilling centre

Leasing of milk chilling centre by Government without negotiating with the two co-operative societies, resulted in loss of Rs 51.68 lakh.

The Government milk chilling centre at Kadegaon, Taluka Khanapur, District Sangli, had the capacity to handle 20,000 litres of milk per day. Since the daily milk collection of the centre had come down from 11160 litres in 1989-90 to 260 litres per day by November 1998, for which no reasons were on record, Government considered a proposal to either shut down the unit or hand over the same to local Co-operatives.

Scrutiny of records of the Agriculture, Animal Husbandry, Dairy Development and Fisheries Department in January 2001 revealed that two* Co-operative Societies submitted proposals in April and June 1998 to take over the centre.

It was observed that the Government had not laid down any policy/guidelines regarding transfer of these centres by way of sale/lease to private parties considering their income generating capacity and the value of the assets being transferred. There was no prescribed procedure to invite competitive offers and ensure transparency in the procedure leading to the final decision of transfer of the centres.

The Government had, therefore, only two offers before them for consideration. The Dairy Development Commissioner (DDC) advised the Government (March 1999) against leasing the centre to KDSSL on the grounds of their poor financial condition and unsatisfactory performance. The DDC recommended in January 2000, the proposal of VDDSSL based on their financial position and working.

On the DDC's recommendations (February 2000), the Secretary while recording that the Industries Minister had requested for transfer of the centre to KDSSL, recommended that the Minister (Dairy) may call both the parties concerned and take a final decision in the matter. The Secretary had not made

* 1) Vasantdada Dudh Vyavsay Vikas Zilla Sahakari Sangh Ltd. (VDDSSL), Sangli

2) Khanapur Dudh Utpadak Krishi Purak Sahakari Sangh Ltd. (KDSSL), Kadegaon, Taluka Khanapur, District Sangli.

a recommendation on merits of the case for either party nor had he expressed any views. The Minister (Dairy) ordered on the same day, (3 February 2000) that the centre be transferred to KDSSL. It is pertinent to note that the Minister of Industries happened to be the founder member of the society i.e. KDSSL.

Accordingly, the milk chilling centre was transferred to KDSSL in February 2000, on 30 years lease at a lease rent of Rs 20,000 *per annum*. Subsequently in April 2000, the VDDSSL again approached the Government requesting to lease the milk chilling centre to them at the lease rent of Rs 1 lakh *per annum*.

Thus the decision of the Government to lease the chilling centre without inviting competitive offers and negotiating with the two Co-operative Societies in Sangli district, resulted in transfer of Government's assets at a throw away price resulting in loss of Rs 51.68 lakh, considering the rent of the building alone i.e. Rs 16021 per month, as certified by Public Works Department. Further, the *ad hoc* lease rent of Rs 20,000 *per annum* fixed by the Government at the nominal rate of 1 *per cent* of the original cost (Rs 20.43 lakh), is very low considering the present cost of the asset of Rs 41.38 lakh, based on the prevailing market value of the land.

The Secretary replied (September 2001) that the centre was established for the benefit of the milk producers of the Khanapur taluka and the only claimant for the same could be KDSSL operating in that area. The lease rent was charged at 1 *per cent* considering similar case of transfer (1994) of Baramati and Sangamner centres. This case was only 7 years old and cannot be considered as too old. The proposal was also approved by Finance Department.

The reply of the Secretary of the Department contradicts the decision of 1997 according to which the transfer of centres was to be decided on the merits of individual cases. Considering that the assets have been leased for 30 years, this is a case of transfer of ownership for all practical purposes. As the assets including land appreciates regularly, the valuation of assets and the lease rent needed to be decided afresh, instead of relying on a precedent which is seven years old. The statement that the KDSSL was the only eligible claimant is not supported by any Government policy. On the contrary the name of the VDDSSL was recommended by the Commissionerate. The financial condition of the KDSSL was also not considered while taking the decision. The decision was evidently taken on behest of the recommendation of the Minister of Industries, and the reply was an afterthought.

HOME DEPARTMENT

3.4 Non-recovery/short recovery of service charges and water charges

Failure to observe the Government instructions resulted in non/short recovery of service charges and water charges to the tune of Rs 34.16 lakh.

As per rule 846 of the Bombay Civil Services Rules, 1959 and instructions issued by the Government in December 1991 and June 1997 service charges at the rates prescribed from time to time and water charges at *pro rata* basis are recoverable from the occupants of Government quarters drawing pay Rs 1450 and above.

Audit scrutiny of records of the Superintendent of Police (SP), Jalna, Parbhani and Yavatmal between July 1998 and September 2000 revealed that the SP, Jalna recovered service charges at the old rate of Rs 16 instead of Rs 30 per month during 1993-94 to December 1998. The SP, Parbhani did not recover the service charges during 1994-95 to 1998-99. The water charges at *pro rata* basis were not recovered by the SP, Jalna and SP, Yavatmal during the period 1993-2000 and 1997-2000 respectively. The short recovery/non-recovery of service charges amounting to Rs 2.00 lakh in Jalna, Rs 11.14 lakh in Parbhani and water charges of Rs 15.28 lakh in Jalna and Rs 5.74 lakh in Yavatmal resulted in a total revenue loss of Rs 34.16 lakh to Government.

The SP, Jalna stated (January 1999) that service charges at Rs 16 per month was recovered upto December 1998 and at Rs 30 per month from January 1999 onwards. He also stated (July 2000) that since the rates for recovery of water charges were not fixed by the Department, recovery of water charges at *pro rata* basis could not be made. The SP, Parbhani stated (December 1999) that the matter regarding recovery of service charges was under correspondence and recovery would be made on receipt of orders from the higher authorities. The SP, Yavatmal stated (September 2000) that the matter would be referred to the Director General of Police (DGP), Mumbai and water charges would be recovered on confirmation from him.

The replies of the Superintendents of Police were not tenable as the issue of non/short recovery of service charges in another office of the Police Department was brought to the notice of Government through the Comptroller and Auditor General of India's Audit Report 1994-95 (Civil) and in June 1999, the Public Accounts Committee had recommended recovery of the

non/short levied charges. The DGP, Mumbai had also issued (July 1997) instructions to all the Superintendents of Police to recover the water charges and service charges from the occupants. Thus, the SPs failure to follow the Government instructions and adopt the appropriate recovery rates resulted in non-recovery of dues of Rs 34.16 lakh.

The matter was reported to the DGP, Mumbai (November 1998 to October 2000) and to the Secretary to the Government in July 2001 and followed up with reminders in September 2001 and November 2001. However, no reply has been received (December 2001).

PUBLIC HEALTH DEPARTMENT

3.5 Idle Intensive Care Unit equipment

Imported Blood Gas Analyser for intensive care units did not function in six District General Hospitals due to defective supply and technical fault, expenditure of Rs 39.95 lakh remained unfruitful for a period over six years.

The Government sanctioned (July 1993/January 1994) procurement of Blood Gas Analysers (BGAs) for the Intensive Care Unit (ICU) in six District General Hospitals (DGHs). In March 1994, the Director of Health Services, Mumbai placed purchase orders with Analytical Automation (I) Private Limited, Mumbai to supply six imported BGAs at the total cost of Rs 39.95 lakh. The BGAs were received in the hospitals between March 1994 and January 1995. The equipment were guaranteed for one year from the date of delivery.

Scrutiny of records (between August 1999 and September 2000) in the six DGHs revealed that all the BGAs went out of order due to defective electrodes and technical fault and hence did not function for the period 2 to 7 years as indicated in the following table.

S. N.	Name of DGHS	Date of receipt of BGA	Date of installation/commissioning	Date from which the BGA was not working	Period for which BGA not working	Expenditure incurred on repair (In Rupee)
1.	Akola	19 March 1994	19 March 1994	20 August 1996	62 months	5,481
2.	Amravati	10 December 1994	10 December 1994	23 April 1995	78 months	16,430
3.	Buldana	19 March 1994	19 March 1994 Not commissioned	19 March 1994	91 months	Nil
4.	Chandrapur	28 June 1994	15 August 1994	January 1996	69 months	Nil
5.	Gadchiroli	1 January 1995	1 January 1995	December 1998	34 months	Nil
6.	Osmanabad	21 June 1994	21 July 1995 Not commissioned	21 July 1995	75 months	Nil

The BGAs at Buldhana and Osmanabad were not working since the date of their installation, whereas the BGAs at Akola and Amravati went out of order even after these were repaired at an expenditure of Rs 0.22 lakh.

The Secretary, Public Health Department stated (June 2001) that orders for repairs of the BGAs had been issued in June 2001 by making provision of funds of Rs 18.60 lakh to the Director of Health Services (DHS), Mumbai.

Thus, failure of the DHS, Mumbai to take effective action against the supplier to replace/rectify the BGAs within the guarantee period, failure to enter into a service contract with the supplier and abnormal delay in providing funds for repairs led to non-functioning of the six BGAs worth Rs 39.95 lakh causing denial of the facilities to the patients in the ICUs for 2 to 7 years.

REVENUE AND FORESTS DEPARTMENT

3.6 Avoidable expenditure due to delay in finalisation of the land award

Delay of 3 years in valuation of land and properties and pursuing the matter with the land acquisition authorities resulted in avoidable expenditure of Rs 84.44 lakh.

According to the provisions of the Land Acquisition Act (Amendment) 1984 (Act) and instructions issued by the Government from time to time,

notification under Section 6 of the Act confirming the land acquisition should be published in the Government Gazette within one year from the date of publication of notification for acquisition of the land under Section 4 of the Act. The final award should be declared within two years from the date of issue of notification under Section 6 of the Act.

Audit scrutiny (November 2000) of records of the Collector and Special Land Acquisition Officer (SLAO), Manjra Project, Osmanabad revealed that notification under Section 4 of the Act for acquiring 15,658 square metres of built up area and open land in village Tugaon required for the Benitura Medium Project in Osmanabad district was published in December 1992 and the final notification under Section 6 of the Act was published in the Gazette in March 1994. The Executive Engineer, Medium Project Division, Osmanabad (EE) in June 1994 had prepared the valuation report of the properties and land on the basis of measurement taken prior to the joint measurements done in July 1991. The SLAO had been insisting the EE to value the land and properties on the basis of the joint measurement carried out in July 1991. The issue of finalisation of the valuation was under correspondence between the SLAO and the EE for three years (August 1994 to August 1997) and finally the EE submitted the valuation report based on the joint measurement to the SLAO in December 1997. Thereafter, the SLAO submitted (March 1998) the draft land award for Rs 1.50 crore to the Divisional Commissioner, Aurangabad, who rejected (May 1998) the award on the ground that declaration of the award cannot be made two years after the notification under Section 6 of the Act. Therefore, fresh notifications under section 4 and 6 of the Act were issued in February 1999 and January 2000 respectively and revised land award for Rs 2.34 crore was declared in February 2000. Thus, inordinate delay of 3 years on the part of the EE in submitting the appropriate valuation report to the SLAO resulted in additional liability of Rs 84.44 lakh, which could have been avoided.

The SLAO stated (May 2001) that due to delay in rectification of the valuation report by the EE, the initial award for Rs 1.50 crore could not be finalised within the stipulated period of two years from the date of notification under Section 6 of the Act. The EE stated (September 2001) that the first valuation report was prepared on the basis of actual measurement carried out prior to the joint measurement done in July 1991 and the SLAO refused to take cognisance of another joint measurement carried out in January 1997.

The reply of the EE was not tenable as he had assessed the value of the land and properties as per the information contained in the original joint measurement report and the delay of 3 years in sorting out the issue between him and the SLAO was not justified. Thus, abnormal delay on the part of the EE in pursuing the matter with the SLAO resulted in avoidable expenditure of Rs 84.44 lakh.

The matter was referred to the Collector, Osmanabad in June 2001 and to the Secretary to the Government in June 2001 and followed up with reminder in September 2001. However, no reply has been received (December 2001).

3.7 Management Information System in the Forests Department

In order to replace the time consuming, inefficient and manual method of updating the information in the Forests Department, a computer based Management Information System (MIS) was developed under the World Bank funded Maharashtra Forestry Project. In July 1997, the Department appointed Swed Forest International AB, Sweden as consultant at a contract price of Rs 31.27 lakh for the purpose. The work was to be completed within 13 months commencing from July 1997.

As at the end of March 2000, the department could complete the MIS relating to only 7 activities by April 2000. An amount of Rs 19.88 lakh was paid to the Consultant between March 1998 and March 2000. Besides this, the department procured 171 personal computers and accessories in March 1999 at a cost of Rs 2.46 crore and 289 personal computers in March 2000 at a cost of Rs 5.45 crore. Thus, the project planned to be completed within 13 months from July 1997 remained incomplete even after a period of 33 months (August 1998 to April 2001) and an expenditure of Rs 8.11 crore.

The Principal Chief Conservator of Forests (PCCF), Nagpur did not furnish the exact reasons for the delay.

3.7.1 Implementation of the Management Information System

A test-check of records in 28 offices revealed that even though an amount of Rs 19.28 lakh was spent on development of the infrastructure required for computerisation, the MIS was not installed in 10 offices and in 15 offices where the MIS had been installed (June 2000 to March 2001), no data entry could be done at all due to inherent problems in the MIS (Software).

Standard software engineering practices require that the software should be thoroughly tested before its acceptance and implementation. Test-check of the records of the 28 offices revealed that the Department accepted the MIS of seven activities without testing and ruling out the shortcomings in the software. As the Department was not operating the system, no reports could also be generated from the system. However, on testing the MIS with test data, Audit noticed the following deficiencies:

3.7.1.1 *Production and Sales Modules*

The production module has provision to enter the data relating to ‘Marking’, ‘Felling’ and ‘Logging’ of trees. However, it was observed that actual data entry for ‘Logging’ was not possible as the data under ‘Marking’ was not linked to ‘Logging’ in the system. Further, consolidation of the data received from the subordinate offices was not possible due to errors in the software. The Conservator of Forests (CF), Nagpur confirmed the facts. Since the Sales module had a link with the Production module, the Sales module could not be used due to the above mentioned problems in the production module.

3.7.1.2 *Plantation Module*

The data entry was not possible in this module due to defect in the software. When data entry was attempted, the system displayed a message “Data element missing from data dictionary”.

3.7.1.3 *Other deficiencies*

(i) There were no prescribed data entry sheets for facilitating the collection of data, its validation, authentication and subsequent entry into the system, (ii) The Backup menu was not working and as such no backup of the data was possible. All the data was lost on reinstallation of the software. (iii) Data entry in Marathi was not possible and (iv) No on line help was provided. As such the software was not user friendly.

The above mentioned deficiencies are illustrative to show that the MIS had programming defects, which hampered the data entry itself. Thus, the expenditure of Rs 7.27 crore on procurement of the personal computers and expenditure of Rs 19.88 lakh on development of the MIS remained unfruitful. This was in addition to the infrastructure created at a cost of Rs 19.28 lakh at the locations test-checked.

3.7.2 *Computerisation at the Range offices*

The MIS was designed to be installed in the offices of the Deputy Conservators of Forests and the PCCF and was not designed to use at the Range Offices. The Department, however, procured 289 personal computers costing Rs 5.45 crore for deployment at the Range Offices on 30 March 2000 viz at the fag end of closing date for the World Bank fund (31 March 2000). Scrutiny of records of eight Range offices revealed that the MIS was not installed in five Ranges and no data entry was made at all in the remaining three Ranges.

3.7.3 *Geographical Information System*

With a view to manage the forests through acquisition, analysis and distribution of geographical information, the Department procured 15 copies

of the GIS software “*Geomedia Professional*” costing Rs 63.90 lakh in March 2000. This software was to be utilised in the working plan divisions for preparation of the working plans.

Audit scrutiny in four working plan divisions revealed that though the GIS was installed between April 2000 and January 2001 in all the four divisions, only some initial work had been started in two divisions and using the GIS no report was generated (March 2001) by any of the working plan divisions.

3.7.4 Procurement of colour monitors

The department procured one colour laser printer and 17" colour monitor for each of the 450 personal computers procured in March 1999 and March 2000 at an additional cost of Rs 26.77 lakh though it was possible to operate the MIS with the use of ordinary 14" colour monitor.

Further, GIS software was procured for 15 working plan divisions only whereas the 17" monitors had been procured for all the 450 computers.

3.7.5 Security Policy

No security policy was framed and documented by the Department. The only security available in the MIS software was the log in password. Audit scrutiny revealed that the software allowed any person to create a new user ID with System Administrator rights. This amounted to serious shortcoming in the software and this would affect the confidentiality and security of data.

3.7.6 Documentation Policy

Apart from the User Requirement Specification, System Requirement Specification and User Manuals, the consultant had supplied only a) Guideline for implementation, b) Database Strategy, c) Output-Input cross-reference and d) Output Tables Cross Reference to the department. The existing documentation was not sufficient to carry out modifications and enhancements to the existing system.

The matter was referred to the PCCF, Nagpur and to the Secretary to the Government in May 2001. No reply has been received from the Secretary (December 2001).

3.8 Unproductive expenditure on computerisation of land records

Incompatibility of the software developed by a consultant and slow speed of old computers resulted in non-realisation of the objective of computerisation of land records and the expenditure of Rs 45.64 lakh proved unproductive.

With a view to reduce the workload of talathis, minimise unauthorised interpolation and facilitate instantaneous copying of land records, computerisation of the land records in the Revenue offices in Wardha district was taken up under the Centrally Sponsored Scheme (Scheme) in the year 1989-90. In February 1990, Government appointed Raas Infogen Consultants Private Limited (Consultant) for developing the required software within one year.

Audit scrutiny of the records (May 2000) of the Collector, Wardha revealed that the Collector spent Rs 45.64 lakh on computerisation of the land records during 1989-90 and 1999-2000, out of which Rs 29.89 lakh was spent on procurement of seventeen computers (286 AT personal computers) upto 1994-95. Due to slow processing speed of the 286 AT personal computers, eight Personal Computers (PCs) were upgraded in March 1996 at a cost of Rs 8.59 lakh. Before carrying out this upgradation, technical advice of National Informatics Centre, Pune (NIC) was sought by the Collector, Wardha. NIC advised that the software developed by the consultant should be usable on the upgraded machines without any change. The department, however, upgraded the eight PCs without ensuring compatibility of the software developed by the consultant. Therefore, the software did not work properly on the eight upgraded PCs and also corrupted the data. Thus, upgradation of the eight 286-AT PCs to 486-DX-2 computers resulted in unfruitful expenditure of Rs 8.59 lakh.

Despite pursuance by the Collector, Wardha, the consultant did not rectify the software incompatibility even after a lapse of six years (February 1990 to May 1995). The work was, therefore, being carried out on the non-upgraded nine 286-AT PCs only. In these nine PCs, the response time for posting and retrieval of data ranged from 5 to 15 minutes and 5 to 7 minutes respectively. As a result, upto date details of the land and crops could not be fed into the computers and the land records were continued to be maintained/issued by the talathis in manual form and the workload of talathis was not reduced. Thus, the objectives of the Scheme were not achieved and the overall expenditure of Rs 45.64 lakh incurred till 1999-2000 on procurement and upgradation of the computers proved largely unproductive.

The Secretary, Revenue and Forests Department admitted (September 2001) the defeat of objective of the Scheme and added that due to advancement of technology, it required to be converted into Window-NT. He also stated that Government has now undertaken an ambitious programme of computerisation of land records, computerisation of Collectorate etc and this would take care of the shortcomings of the Wardha project.

WOMEN AND CHILD DEVELOPMENT DEPARTMENT

3.9 Unjustified Insurance Scheme

Implementation of an insurance scheme without verifying the full financial implication resulted in unfruitful expenditure of Rs 2.80 crore.

The State Government introduced an insurance scheme called “Jijamata Mahila Adhar Vima Yojana” in May 1999. Under the scheme, in case of accidental demise of head of the family having income up to Rs 1 lakh, the widow, son/daughter would be entitled for lump sum assistance of Rs 25,000. The Government after negotiation with the National Insurance Company (NIC) decided to cover under the Vima Yojana 1.60 crore families, to whom yellow/saffron coloured ration cards were issued under the targeted Public Distribution System, with an annual premium of Rs 1.75 per family. Accordingly, an amount of Rs 2.80 crore was paid to the NIC in May 1999.

Scrutiny of the related records in Commissionerate of Women and Child Welfare, Pune in October 2000 and in Women and Child Development Department, Mantralaya in January 2001, revealed the following:

- The Department did not have any data regarding the accidental deaths for the past several years and thus no actuarial analysis was made prior to taking up the scheme.
- No estimate was made regarding the actual number of families to be covered.
- No such schemes were run by the State Government or the Central Government and thus potential benefit of the scheme could not be compared with any similar scheme.

- No formal agreement was executed by the Government with the NIC for operation of scheme.
- Premium for second year was not paid to the NIC.

Since the objective of the scheme was to give financial assistance to the family in case of accidental death of head of the family, and the insurance coverage was to be given on the basis of number of families and not by individual names, the decision to cover 1.60 crore families on the basis of annual income below Rs 1 lakh was hardly justified and imposed avoidable financial burden on the Government without corresponding benefit.

In the first year of the scheme, 1639 accidental death claims were received by the NIC and Rs 1.74 crore only was disbursed in respect of 695 claims (September 2001) and 577 claims were rejected since the claims pertained to death of other members of the family. Assuming that the NIC fulfills its assurance of settling all the 367 pending claims the total outgo of NIC would be Rs 2.65 crore; as against this, the Government paid premium of Rs 2.80 crore by insuring 1.60 crore families. The Government's objective of providing financial assistance in case of accidental death could also have been achieved by directly giving assistance to the families instead of through an insurance company. By insuring all the 1.60 crore families who would certainly not be the subject matter of the insurance coverage in one year, the risk taken by the Insurance Company is apparently not evident. This is also proved by the number of claims received in the first year.

The Secretary stated (July 2001) that in view of the audit observation the scheme is being re-examined.

GENERAL

3.10 Functioning of Treasuries

Annual Inspection of the Treasuries is carried out by Accountant General (Accounts and Entitlement). The major irregularities noticed during inspection of 18 treasuries by the Accountant General (Accounts and Entitlement) and by inspection of Pay and Accounts Office, Mumbai by audit during 2000-2001 are mentioned in the succeeding paragraphs.

3.10.1 Overpayment of pensionary benefits

Overpayment of pensionary benefits of Rs 19.09 lakh was made to 152 pensioners/family pensioners during the period 2000-2001. The overpayment of pensionary benefits was due to wrong fixation, enhanced rates, Pension arrears etc due to award of Fifth Pay Commission.

3.10.2 Non-remittance of unpaid family pension/pension

As per the provisions of Pension Rules, pension/family pension which remained unpaid for more than six months should be called from the respective Banks and remitted into Government accounts. However, Rs 3.61 lakh in respect of 50 cases remained unpaid for more than six months were not remitted to government accounts.

3.10.3 Recovery from pension/gratuity

Though the Accountant General (Accounts and Entitlement) requested to recover the amounts from pension/gratuity, Rs 14.40 lakh in respect of 30 cases remained to be recovered from the pension/gratuity.

3.10.4 Unauthorised payment of pension/gratuity

As per the provisions of Pension Rules, 1982, the Heads of Offices are empowered to authorise 100 *per cent* provisional pension upto first six months. However, Rs 1.68 lakh in respect of 3 cases in Thane treasury were paid to the pensioners for more than six months resulting in unauthorised payment of pension/gratuity.

3.11 Follow-up on Audit Reports

Serious irregularities noticed by Audit were included in the Reports of the Comptroller and Auditor General (Audit Reports) which were presented to the State Legislature. According to instructions issued by the Finance Department in March 1981, Administrative Departments were required to furnish Explanatory Memoranda (EMs) duly verified by Audit to the Maharashtra Legislature Secretariat in respect of paragraphs included in the Audit Reports within one month of presenting the Audit Reports to the State Legislature. The Administrative Departments were, however, not complying with these instructions.

The position of outstanding EMs from 1995-96 to 1998-99 is depicted as follows :

Audit Report	Date of tabling the Report	Number of Paras/Review	Number of EMs received	Balance
1995-96	22 July 1997	55/6	51/5	4/1
1996-97	7 August 1998	64/9	53/7	11/2
1997-98	20 December 1999	59/10	38/6	21/4
1998-99	30 November 2000	39/8	12/3	27/5
Total		217/33	154/21	63/12

In addition to the above, EMs in respect of 57 paras relating to the period prior to 1995-96 were also outstanding. Departmentwise details are given in Appendix XX.

Even in case of paras selected for discussion by the Public Accounts Committee (PAC), EMs were sent to Audit for vetting only after the selected paras were communicated to the Administrative Departments and in many cases, only a few days before the meeting of the PAC.

3.12 Action Taken Notes

The Maharashtra Legislature Secretariat (MLS) Rules stipulate that the Action Taken Notes (ATN) indicating action taken on the recommendations of the Public Accounts Committee (PAC) on those paragraphs in the Audit Reports that are discussed are required to be forwarded to MLS duly verified in Audit. Likewise, ATNs indicating remedial/corrective action taken on the paras that are not discussed are also required to be forwarded to the PAC duly vetted by Audit. It was observed that the Administrative Departments were not observing these instructions. There were inordinate delays and persistent failures on the part of a large number of departments in forwarding ATNs on audit paragraphs. Reports of the PAC on Audit Reports upto 1996-97 have been received in Audit (November 2001) and a review of the position regarding receipt of ATNs on the paras included in the Audit Reports upto 1996-97 revealed that ATNs in respect of 101 paras discussed and 691 paras not discussed in the PAC were awaited. Yearwise details of such paragraphs are indicated as follows :

Audit Report	Number of paras discussed	ATNs awaited	Number of paras not discussed	Total Number of paras in Audit Report
1985-86 to 1988-89	36	28	261	297
1989-90	11	1	46	57
1990-91	7	7	46	53
1991-92	7	7	55	62
1992-93	5	5	48	53
1993-94	20	20	49	69
1994-95	10	10	55	65
1995-96	12	12	49	61
1996-97	11	11	62	73
Total	119	101	671	790

3.12.1 Action taken by the Government on important system deficiency

The Maharashtra Legislature Secretariat (MLS) Rules stipulate that the Action Taken Notes (ATN) indicating remedial/corrective action taken on the paras that are not discussed are also required to be forwarded to the PAC duly vetted by Audit. However, inordinate delays and persistent failures on the part of the Departments in forwarding the ATNs on the paras featuring in the earlier Audit Reports, resulted in recurrence of the irregularities. A few cases where the irregularities/omissions though pointed out in the previous Audit Reports continued to persist are given in the succeeding paragraphs (3.12.1.1 to 3.12.1.3).

AGRICULTURE, ANIMAL HUSBANDRY, DAIRY DEVELOPMENT AND FISHERIES DEPARTMENT

3.12.1.1 Unfruitful expenditure on Brackish Water Prawn Farm Project

Non-operation of the prawn farm for more than six years rendered the expenditure of Rs 3.39 crore largely unfruitful, and led to loss of revenue.

Mention was made in para 3.1.9.1 of the Report of the Comptroller and

Auditor General of India for the year ending 1992 No.1 (Civil) regarding the non-completion of brackish water prawn farm at Asangaon, District Thane. The project approved initially in March 1984 at a cost of Rs 24.78 lakh was incomplete as of May 1992. No reply was received from the Secretary of the Department (November 2001).

Scrutiny of the records of the Department (January 2001) revealed the following :

After consulting the Central Institute of Coastal Engineering for Fisheries (CICEF), Bangalore, the State Government forwarded the revised estimates (May 1992) of Rs 2.18 crore for the Asangaon farm to the Government of India (GOI) for approval, as the project was taken up under the Centrally sponsored scheme for the development of Brackish Water Fish Farming. The GOI did not approve the revised estimate till September 2001. The project was completed by the State Government in August 1994 at a cost of Rs 3.39 crore.

The 26 pump-fed culture ponds with 10 pre-growing ponds, which were completed in August 1994 were not utilised till date (September 2001) for want of staff. Only 8 tide-fed ponds were given on rent and on lease to a co-operative society in April 1998. Further, the Government took no decision to either lease out the farm as proposed by Commissioner of Fisheries in July 1999 or to privatise it. As a result, the farm was mostly idling since 1994.

Due to non-operation of the farm, major repairs became necessary for pre-growing ponds, drainage channels, nursery ponds, storage tank, pump room and approach road etc. These repairs estimated to cost Rs 65.06 lakh in June 2000 was yet to be sanctioned by Government.

Thus failure of Government to decide on the mode of utilisation of the farm resulted in the expenditure of Rs 3.39 crore becoming largely unfruitful.

The Secretary accepted the facts (September 2001) and stated that privatisation of the farm on tender basis is under consideration.

HOUSING AND SPECIAL ASSISTANCE DEPARTMENT

**MAHARASHTRA HOUSING AND AREA DEVELOPMENT
AUTHORITY**

3.12.1.2 Undue favours to a contractor

Lacunae in the contract, inclusion of superfluous clause and unjustified payment of incentive resulted in undue favours to the contractor and led to extra payment of Rs 22.13 crore.

The State Government, in order to facilitate the implementation of their Slum Rehabilitation Scheme, entrusted (May 1996) the Maharashtra Housing and Area Development Authority (MHADA) with the construction of transit tenements on lands in its possession. The State Cabinet decided (December 1996) to award the construction of transit tenements to B.G.Shirke Construction Technology Ltd. (BGSCTL) on turnkey basis by invoking a Government Resolution of December 1984, which permitted award of contract to the firm without calling tenders. Accordingly, Government directed (March 1997) MHADA to entrust construction of 10,000 transit tenements in two phases of 5000 tenements each to BGSCTL on rates to be negotiated by a Committee constituted by the Government. The Committee constituted by the Government fixed the rate (October 1997) at Rs 750 per sq. foot, which included an incentive of Rs 50 for timely completion. Accordingly, MHADA executed 3 separate agreements during December 1997 and March 1998 for construction of 5000 tenements at Mankhurd (2546 tenements), Sion (2125 tenements) and Wadala (329 tenements) in the first phase and two separate agreements during August 1998 and September 1998 for construction of 5000 tenements at Malwani (3473 tenements) and Wadala (1527 tenements) in the second phase.

The grave improprieties committed at various stages of the contract, like fixing the agency before hand, deciding the rates without competitive bids, defective agreement, unjustified extra payment etc have been commented upon in paragraphs 6.30, 6.18 and 6.18 of the Reports of the Comptroller and Auditor General of India for the year ended 31 March 1998, 31 March 1999 and 31 March 2000 respectively. The irregularities that took place in the final stages of execution are brought out in the succeeding paragraphs.

3.12.1.2.1 The contract (August 1998) with the BGSCTL for construction of 3484* tenements at Malwani provided for *cast-in-situ* piles with a special condition of providing sacrificial concrete cover of 50 mm thickness to the piles. The contract did not fix the rate payable for the sacrificial concrete cover, which was to be paid separately after approval of MHADA.

Despite the specific provision for *cast-in-situ* piles in the contract, BGSCTL proceeded with the work of pre-cast pre-bored piles without the approval of MHADA (October 1998). When MHADA sought justification from the agency for the deviation from the specifications in the contract, the contractor got the soil investigation done (November 1998) through an agency. The soil investigation report recommended pre-cast pre-bored piles foundation for the project. MHADA, in view of its letter of intent of May 1998, which mentioned that in case the site required pre-cast pile foundation the matter should be referred to the rate deciding committee for fixing the rate or the rate for such piles as may be fixed by Government in the case of the project in the first phase at Wadala would be considered in the contract, decided to pay the contractor for the pre-cast piles at a rate of Rs 14,055 per tenement, the rate at which the award for the project at Wadala was given by the Arbitrator in November 1998. The amount of additional payment required for the sacrificial concrete cover for the *cast-in-situ* piles could not be worked out as the rate payable was left undecided.

As per the soil investigation report available with MHADA before the contract was signed, both the options i.e. *cast-in-situ* pile with sacrificial cover or pre-cast pre-bored piles were available to MHADA evidently exercised this option by providing for *cast-in-situ* piles with sacrificial cover in the contract. As such the use of pre-cast piles by the contractor in disregard of the decision of MHADA amounted to breach of the terms of contract and MHADA objected to this. However, MHADA finally accepted the deviation and agreed to make payment at the rate awarded by an Arbitrator in the Wadala project of MHADA, only on the basis of its letter of intent of May 1998. As the signing of a formal contract followed the letter of intent, it is the contract and not the letter of intent that would be binding on both the parties, and the above mentioned condition in the letter of intent did not find any mention in the contract. Moreover, the award given by an arbitrator in a specific case cannot be automatically applied to any other case, and therefore the adoption of the same rate for the project lacked justification. The execution of the work in deviation from the specifications in the contract, payment of additional cost with no contractual obligation on the part of MHADA at the rate awarded by the Arbitrator in another case resulted in unintended benefit of Rs 4.90 crore to the contractor.

* As per Audit Report 1998-99, 3473 tenements + shortfall of 11 tenements at Mankhurd and Sion adjusted by constructing 11 additional tenements at Malwani. Contractor accommodated four more tenements in one building and accordingly he constructed 3488 tenements.

3.12.1.2.2 All the five contracts signed with BGSCTL stipulated that the work should be carried out strictly in accordance with the various specifications including the relevant Indian Standard (IS) specification, as incorporated in the contracts.

As per IS specification the area of the columns projecting beyond the cladding is to be excluded in the measurement of plinth area. However, the built up area calculations submitted (June 1999) by BGSCTL for the purpose of payment included areas of column projections. The Project Management Consultant (PMC) for the Mankhurd Project held the column projection ineligible for payment in view of the IS specification. Since, the contract incorporated a special condition defining the built up area as the actual construction area of building along with lift, staircase etc the department did not accept the views of the PMC. Though the Chief Engineer clarified (December 1999) that as per IS definition the area under columns projecting beyond cladding is to be excluded, yet he expressed the view that as per the special condition incorporated in the agreement, measurements of column projections are deemed to be construction areas and the provisions of the agreement shall prevail over the IS specification. With the concurrence of the Legal Advisor, MHADA decided (December 1999) to count the column projections towards built up area for the purpose of payment. The area of column projection of the buildings at Mankhurd and Wadala worked out to 6925.65 sq. ft. and the payment at the rate of Rs 750 per sq. ft. amounted to Rs 51.94 lakh.

MHADA stated (April 2001) that the payment was in accordance with the special condition in the contract and that the column projects were an integral part of the construction. The contention was not tenable as the contract stipulated that the work should be carried out as per the various specifications for the purpose of measurement of plinth area. The special clause in the contract, which only defined the area that each allottee of rehabilitation tenements was entitled for under the SRA norms, was not relevant to the contract for construction and its incorporation in the contract was superfluous. This had an overriding effect on the IS specification in regulating the method of measurement, benefiting the contractor with an extra payment of Rs 51.94 lakh.

Though the built up area calculations submitted in respect of the Projects at Sion and Malwani also included area of column projections, the extra payment involved could not be computed, as the PMC had not recorded the area of column projections separately.

3.12.1.2.3 The committee constituted for deciding the rate to be given to the agency, fixed a rate of Rs 700 per sq. ft. Though the Government had not identified any beneficiaries to be rehabilitated on priority basis, the Government, offered an additional incentive of Rs 50 per sq. ft. to the contractor, for timely completion of the project i.e. within the stipulated period

of 18 months, on the plea of priority to be given to the rehabilitation of slum dwellers.

The agency completed the construction of all 10,000 tenements at the four* sites between June 1999 and May 2000, within the stipulated period and accordingly incentive of Rs 16.71 crore was paid.

Normally, incentive is paid for completion before the stipulated period and penalty is payable for non-completion in time. However, in the instant case the incentive was offered for timely completion, which is in any case stipulated in the contract. Moreover, though the agency completed construction as per the schedule, the tenements were not available for allotment/occupation, as the related infrastructure was not yet in place. As the slum areas to be developed and slum dwellers to be rehabilitated were not identified by the Government, as many as 4534 (96 *per cent*) of the 4698 tenements earmarked for rehabilitating slum dwellers were finally allotted to other bodies and organisations for the rehabilitation of project affected persons (PAP). Only 2073 out of the 5302 free sale tenements had been sold as of August 2001.

As the scheme was taken up without pre-identification of beneficiaries, the scheme did not meet its objective of rehabilitating slum dwellers and the payment of incentive amounting to Rs 16.71 crore for timely completion of tenements for the speedy rehabilitation of slum dwellers proved to be completely unnecessary.

The matter was forwarded to the Secretary in July 2001. The Secretary replied (November 2001) to the comments at para 3.12.1.2.1 that:

- a. Though 4 different agreements were executed for operational and administrative convenience, the work at the four sites formed part of the work of construction of 10,000 tenements approved by Government and as the contract conditions and rates were decided before hand, it was not feasible to change the type of foundation to be adopted for the work at Malwani;
- b. It was not correct to say that the contractor had taken up the pre-casting work without approval of MHADA and
- c. It was agreed by both the parties at the time of signing the contract that whatever be the award of the Arbitrator for the Wadala Project the same would be made applicable to Malwani project also.

The reply of the Secretary is not tenable as :

- a. Although the works covered under all the five agreements formed part of the 10,000 tenements approved by Government, each work was executed

* Malwani (3473 tenements), Mankhurd (2546 tenements), Sion (2125 tenements) and Wadala (1856 tenements).

under separate contracts, the terms and conditions of which would regulate the execution of the respective work. The contract conditions would also require variation as per the site conditions.

b. MHADA in its letters of 30 October 1998 and 5 November 1998 to the BGSC TL made it clear that the Contractor had started the work of pre-cast pile without proper approval which amounted to violation of tender provisions, and

c. Awards of arbitration are declared on a case to case basis, the award declared by the Arbitrator in a specific case referred for arbitration cannot be imposed on another case which did not fall under the purview of that award. Further the terms of contract did not include any provision for such payments.

The Secretary's reply, in respect of comments at paras 3.12.1.2.2 and 3.12.1.2.3 has not been received (December 2001).

3.12.1.3 Loss on sale of tenements

Fixation of sale price of tenements without considering the actual cost of construction resulted in a loss of Rs 13.30 crore.

Maharashtra Housing and Area Development Authority (MHADA) awarded the construction of 3488 transit tenements at Malwani in Mumbai to a pre-determined agency in August 1998. Award of the contract without competitive bidding was commented upon in paragraph 6.18 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1999 (Civil), Government of Maharashtra.

The scheme consisted of 3200 tenements to be handed over to Slum Rehabilitation Authority (SRA) free of cost for the allotment to pre-identified beneficiaries and 288 tenements for sale in open market. The estimated cost of the scheme was Rs 151.94 crore and the scheme was expected to yield revenue of Rs 49.07 crore, projecting a loss of Rs 102.87 crore.

In consideration of the magnitude of the loss being incurred on the scheme, MHADA decided (March 2000) to reduce the SRA component to 320 tenements only and increase the free sale components to 3168 tenements. MHADA submitted the revised proposal to SRA for approval in October 2000. The scheme was subsequently withdrawn from SRA and converted into a normal scheme of MHADA after obtaining approval of Brihanmumbai Municipal Corporation considering the views expressed by SRA (December 2000). The total expenditure on the scheme was Rs 132.86 crore and the actual cost of construction came to Rs 1120 per sq.ft. However, MHADA had fixed

the sale price of the tenements at Rs 995 per sq.ft. with a floorwise rise in the rate by Rs 5 per sq.ft. for each floor from second floor onwards and hence the receipts anticipated from the sale of 3488 tenements was only Rs 119.56 crore resulting in a loss of Rs 13.30 crore. The basis on which the sale price of Rs 995 per sq.ft. was decided by MHADA was not furnished. This rate appears unreasonably low as the market price fixed for Malwani in Mumbai was ranging between Rs 1140 and Rs 1265 per sq.ft. during this period, based on the valuation of Sub Registrar, Bandra, Mumbai for levy of stamp duty.

Thus, the construction of tenements without identifying the target group to be rehabilitated, fixation of sale price far below the cost of construction and without any assessment of prevailing market conditions resulted in a loss of Rs 13.30 crore.

The matter was forwarded to the Secretary in July 2001. The Secretary contented in November 2001 that MHADA would make good the loss by revenue generated from construction and sale of commercial complex, open plots and residential plots, etc by utilising Transferable Development Right (TDR). The reply is not tenable, as the TDR to be utilised for acquiring the additional FSI is required to cover the additional FSI already consumed in the scheme. The proposed development of plots, commercial complex etc will therefore require extra TDR, which will constitute a scheme by itself.

3.13 Outstanding Inspection Reports

Failure of senior officials to enforce accountability and protect the interest of Government.

Accountant General (Audit) (AG) arranges to conduct periodical inspection of the Government Departments to test-check the transactions and verify the maintenance of important accounting and other records as per prescribed rules and procedures. These inspections are followed up with Inspection Reports (IRs) which are issued to the concerned Heads of Offices with a copy to the next higher authorities. Government circular of July 1967 provides for prompt response by the executive to the IRs issued by the AG to ensure rectificatory action in compliance of the prescribed rules and procedures. The Heads of Offices and next higher authorities are required to comply with the observations contained in the IRs and rectify the defects and omissions promptly and report their compliances to the AG. Serious irregularities are also brought to the notice of the Heads of the Department by the AG. A half yearly report of pending IRs is sent to the Secretary of the Department concerned to facilitate monitoring of the action taken on audit observations in these IRs.

Inspection reports issued up to December 2000 pertaining to 26 Departments disclosed that 22431 paragraphs relating to 9391 IRs were outstanding at the end of June 2001. Of these, 1317 IRs (54 of Principal Accountant General, Mumbai + 1263 of Accountant General, Nagpur) containing 2330 paragraphs (69 of Principal Accountant General, Mumbai + 2261 of Accountant General, Nagpur) had not been replied to/settled for more than 10 years. Yearwise position of the outstanding IRs and paragraphs are detailed in the Appendix XXI. As a result, the following 16559 paragraphs involving money value of Rs 2899.33 crore commented upon in these IRs had not been settled as of 30 June 2001.

S. N.	Nature of irregularities	Number of paragraphs	Amount (Rupees in crore)
1	Miscellaneous irregularities	5246	759.67
2	Blocking of Government money on idle equipment/incomplete works	2917	989.32
3	Procedural irregularities	2054	216.06
4	Excess/Irregular expenditure	1948	229.85
5	Outstanding loans and advances	1619	484.81
6	Losses, theft and misappropriation of government money	1056	58.33
7	Irregularities in payment of grant-in-aid	621	80.68
8	Non-maintenance/Improper maintenance of Cash Book/PLA account	328	5.89
9	Irregularities in acceptance of tender/contract	273	19.78
10	Heavy balances lying unutilised	241	29.51
11	Drawal of funds at the fag end of the year to avoid lapse of grant	196	23.40
12	Diversion of funds	60	2.03
	Total	16559	289.33

A review of the IRs which were pending due to non-receipt of replies in respect of Social Welfare, Cultural Affairs and Sports Department revealed that the Heads of Offices, whose records were inspected by the AG did not discharge due responsibility as they did not send any reply to 102 IRs/244 Paragraphs indicating their failure to initiate action in regard to the defects, omissions and irregularities pointed out in the IRs by the AG. The Secretary, Social Welfare, Cultural Affairs and Sports Department who was informed of the position through half yearly reports, also failed to ensure that the officers concerned of the Department take timely action nor was any action initiated against the defaulting officers, thereby facilitating the continuation of serious financial irregularities and loss to the Government.

It is recommended that Government should address this issue seriously and ensure that an effective procedure is put in place for (a) action against the officials who fail to send replies to IRs/Paragraphs as per the prescribed time schedule and (b) action to recover loss/outstanding advances/overpayments in a time bound manner.

3.14 Departmental Audit Committee Meetings

In order to expedite the settlement of outstanding audit observations contained in the Inspection Reports, Departmental Audit Committees have been constituted by the Government. These Committees are chaired by Joint Secretary/Deputy Secretary of the concerned Administrative Department and attended among others by the concerned Drawing and Disbursing Officers and the Officers from the Office of the Principal Accountant General (Audit), Mumbai/Accountant General (Audit) Nagpur respectively.

In order to expedite the clearance of the outstanding audit observations, it is necessary that the Audit Committees meet regularly and ensure that final action is taken on all audit observations outstanding for more than a year, leading to their settlement. During the year 2000-2001 only 7 out of 26 departments convened 9 meetings of the Audit Committee. Out of 14335 paras outstanding against these 7 departments, 1313 paras were discussed in Audit Committee meetings of which 634 paras were settled. This indicated that most Departments were not taking initiative in using the machinery created for settlement of outstanding audit observations.

3.15 Misappropriation of Government funds

Mention was made in paragraph 3.22 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 2000 (Civil) that final action was pending on 466 cases of misappropriation of Government funds upto September 2000. The position in regard to fresh cases reported during 2000-2001 and disposal of pending cases upto September 2001 is as follows :

	Number	Amount (Rupees in lakh)
Cases pending on 30 September 2000 out of cases reported upto March 2000	466	547.13
Add : Fresh cases reported during 2000-2001	8	36.17
Less : Cases finalised during October 2000 to September 2001	19	3.61
Cases pending on 30 September 2001	455	579.69

The departmentwise analysis of the outstanding cases is given in Appendix XXII.

Out of 455 pending cases, 437 cases (Rs 471.55 lakh) were pending for more than four years.

Out of the 437 cases, in 217 cases orders of recovery/write-off, were awaited, 100 cases were pending in court of law, 18 cases were awaiting investigation, in respect of 92 cases departmental action had not been concluded and 10 cases were pending due to other reasons.

3.16 Write-off of losses, waiver of recoveries etc

According to information received by Audit, sanctions for write-off of Rs 74,409.04 lakh in 886 cases were issued by Government/Departments during 2000-2001 as indicated below.

Sr. No.	Department	Losses, irrecoverable revenues, advances etc written-off	
		Number of cases	Amount (Rupees in lakh)
1.	Agriculture, Animal Husbandry, Dairy Development and Fisheries	15	2.79
2.	Co-operation and Textiles	4	74257.56
3.	Finance	3	5.53
4.	Food, Civil Supplies and Consumer Protection	844	16.70
5.	General Administration	2	0.61
6.	Housing and Special Assistance	1	0.46
7.	Industries, Energy and Labour	1	0.01
8.	Irrigation	2	2.12
9.	Medical Education and Drugs	1	0.13
10.	Planning	2	0.68
11.	Public Health	1	1.08
12.	Public Works	1	0.11
13.	Revenue and Forests	3	118.71
14.	Rural Development and Water Conservation	1	1.61
15.	School Education	1	0.88
16.	Trade, Commerce and Mining	4	0.06
	Total	886	74409.04