

CHAPTER III: MINISTRY OF RURAL DEVELOPMENT

Department of Drinking Water Supply

Accelerated Rural Water Supply Programme

The basic objective of ARWSP (Accelerated Rural Water Supply Programme) launched in 1972-73 was to supplement the efforts of the State Governments in providing safe and potable drinking water to rural habitations on a long-term basis. Despite incurring Rs. 32,302.21 crore (including MNP) on the programmes, since First Five Year Plan, 20,073 habitations were still without any source of water and 1.55 lakh habitations remained partially covered as of March 2001. Significant re-emergence of problem habitations further negated the impact of the Programme. Impact assessment of ARWSP by independent sources also revealed the re-emergence of problem villages and shortcomings in critical parameters of adequacy, regularity, quality, distance of source of water, etc. in many States. Despite the added thrust given to the programme since 1999, planning and implementation suffered due to neglect of priority areas, sustainability, community participation, Operation & Maintenance, etc. Resultantly, schemes costing Rs.197.52 crore were abandoned and water supply modes involving an expenditure of Rs 369.20 crore remained non-operational. The Ministry and State Governments did not ensure monitoring of the quality of the water supplied as many water quality laboratories and treatment plants remained non-functional. The objective of institutionalising community participation also appears to have been largely defeated as only Rs. 6.13 crore were spent against Rs. 473.15 crore released for 58 pilot projects. Poor funds management led to large amounts being diverted or retained in deposits, apart from expenditure being incurred in excess over approved norms. Inadequate and inefficient monitoring of Programme at the Ministry and State level resulted in extension of the Programme from the 8th to the 9th Five Year Plan, raising question mark about achieving the stated objective to provide potable drinking water to all villages by 2004.

Highlights

Despite investment of Rs 32,302.21 crore, on implementation of Rural Water Supply Schemes under this Programme and the minimum Needs Programme since the First Five Year Plan, about 20,073 habitations still did not have any source of water. 1.55 lakh habitations remained only partially covered. Re-emergence of 73,197 problem habitations, as reported in 7 States, further negated the impact of the programme.

Rs 283.90 crore were spent in 11 States on coverage of partially covered habitations during 1997-2001, contrary to the priority norms at the cost of habitations having no source of drinking water.

Application of funds without adequate planning and scientific identification of water sources resulted in abandonment of 2,371 schemes midway in 19 States, after spending Rs 197.52 crore.

Scientific methods of source selection were not adopted in 10 States, resulting in failure of schemes and the expenditure of Rs 64.71 crore incurred thereon being rendered infructuous.

Inadequate maintenance of water sources resulted in failure of 3,85,854 of the 37,57,862 hand pumps installed. In 13 States, water modes, set up at a cost of Rs 369.20 crore, were non-operational.

Water treatment plants, installed at a cost of Rs 16.32 crore to control fluorosis, excess iron and salinity were non-functional in 9 States. Poor performance of water quality testing laboratories in 11 States defeated the objective of providing safe drinking water to the rural population in the affected areas.

Significant components of the Programme such as Human Resource Development and Information Education and Communication failed to achieve the objectives of creating awareness about use of safe drinking water and imparting training to the local population in 19 States.

Poor progress of the Sector Reforms Programme was observed, as only Rs 6.13 crore were spent out of Rs 473.15 crore released for 58 pilot projects, undermining the concept of institutionalised community participation.

Release of funds by the Department of Drinking Water, before arriving at decisions on suppliers and ineffective monitoring led to blockade of Central funds aggregating Rs 18.30 crore and non-achievement of the objectives of computerization.

Audit noticed diversion of funds of Rs 86.15 crore to activities not connected with ARWSP in 19 States and unauthorised retention of funds of Rs 393.77 crore in Civil/Revenue/Public Works Deposit.

Financial achievement reported was inflated to the extent of Rs 307.69 crore in 15 States.

In 10 States, excess expenditure of Rs 191.41 crore was irregularly met from ARWSP funds instead of from State Plan funds, in violation of the guidelines.

Materials costing Rs 68.79 crore were purchased in excess of requirements in 16 States.

Impact Assessment of the Programme by Audit in 10 States revealed poor performance in all the critical parameters of adequacy, regularity, distance, quality of water, maintenance of assets, cost recovery, etc.

1. Introduction

Supply of drinking water is primarily the responsibility of the State Governments. However, being a priority on the national agenda, it had also attracted the intervention of the Government of India (GOI). Considering the magnitude of the problem and in order to accelerate the pace of coverage of

problem villages, GOI launched, in 1972-73, the Accelerated Rural Water Supply Programme (ARWSP) to supplement the efforts of the State Governments, which was to be financed entirely by grant-in-aid. Following, however, the introduction of the Minimum Needs Programme (MNP) in the State Sector in 1974-75, the ARWSP was discontinued. The Programme was revived in 1977-78, when the progress in regard to provision of safe drinking water to the identified problem villages under MNP was not found to be satisfactory. In order to ensure maximum inflow of scientific and technical inputs into the Rural Water Supply Programme and to ensure availability of adequate water of acceptable quality on a long-term basis, the Programme was taken up on a Mission¹ mode and the National Drinking Water Mission (NDWM) was launched in 1986 and renamed Rajiv Gandhi National Drinking Water Mission (RGNDWM) in 1991.

Under the Programme, provision of safe drinking water of 40 litres per capita per day (LPCD) and additional 30 LPCD for animals in hot and cold desert-ecosystems in States² implementing the Desert Development Programme was to be made. The water source was to exist within 1.6 Kilometre (Km), in the plains and at an elevation of 100 meters in the hilly areas. One hand pump or stand post was to be set up for every 250 persons. Priority was to be given to problem villages (PVs)³, followed by partially covered⁴ problem villages.

The Programme envisaged coverage of all rural habitations in the country during the 8th Plan period. However, this could not be achieved due to lack of sufficient funds and re-emergence of the Not Covered (NC) habitations. Hence, the Programme continued during the 9th Plan.

In April 1999, GOI restructured the Programme and recategorised habitations with reference to adequacy and safety factors as Not Covered/No Safe Source (NC/NSS) and Partially Covered/Safe Source (PC/SS)⁵. It further introduced

¹ The Mission mode implied the provision of low cost solutions to identify problems associated with the supply of safe drinking water through the application of scientific and technological inputs.

² Desert Development Programme was being implemented in 227 blocks of 36 districts in the States of Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka and Rajasthan.

³ Problem villages included (i) those not having an assured source of water within 1.6 Km; (ii) where the available water had excessive salinity, iron, fluoride or other toxic elements; and (iii) where diseases like cholera, guinea-worm, etc. were endemic.

⁴ Till March 1999, partially covered habitations included habitations having water supply below 40 LPCD. From April 1999 onwards, these also included habitations having safe drinking water between 10 LPCD and 40 LPCD

⁵ NC/NSS category included habitations having no drinking water within 1.6 km. in plains and below 100 metres in hilly areas, habitations which had a water source but were affected with quality problems such as excess salinity, iron, fluoride, arsenic or other toxic elements, habitations where quantum of availability of safe water from any source was not enough to meet drinking and cooking needs of 8 LPCD. Habitations having a safe drinking water source/point (either private or public) within 1.6 km. in plains and below 100 metres in hilly areas, but where the capacity of the system ranged between 10 and 40 LPCD were categorized as PC habitations. These PC habitations were considered as SS habitations, subject to water quality parameters. All the remaining habitations were categorized as Fully Covered (FC).

the concept of Sector Reforms⁶ to achieve the goal of providing safe and sustainable drinking water to all rural habitations of the country through institutionalising community participation during the remaining part of the 9th Plan period. The prime objectives of the Programme as modified in April 1999 were to:

- (i) ensure coverage of all rural habitations, especially those hitherto unreached and not having access to safe drinking water;
- (ii) ensure sustainability of the systems and sources; and
- (iii) preserve quality of water by institutionalising water quality monitoring and surveillance through a catchment area approach⁷.

2. Organisational Structure

At the Central level, the Ministry of Rural Development (Ministry), Department of Drinking Water Supply (Department), was responsible for planning, policy formulation, direction, financing, monitoring and reviewing the implementation and progress of the Programme. The Ministry had set up the National Drinking Water Mission Authority with the Prime Minister as Chairman and an Empowered Committee headed by the Cabinet Secretary to review the progress of implementation of the Programme.

At the State level, the Public Health Engineering Departments, Panchayati Raj Departments, Water Boards, etc. were executing the Programme. However, in **Gujarat, Kerala, Maharashtra, Tamil Nadu and Uttar Pradesh**, the Programme was being executed through the Gujarat Water Supply and Sewerage Board, Kerala Water Authority, Maharashtra Jeevan Pradhikaran, Tamil Nadu Water Supply and Drainage Board and Uttar Pradesh Jal Nigam respectively.

3. Scope of Audit

Audit had earlier reviewed the implementation of the Programme during the period 1992-1997 in Report No.3 of 1998 (Civil) of the Comptroller and Auditor General of India. Some significant observations included in that Report related to deficiencies in planning, unscientific identification of water sources, re-emergence of problem villages/habitations, non-functional water treatment plants, expenditure on non-priority areas, incorrect reporting of financial achievements, diversion/misuse of funds, ineffective control, monitoring and review, excessive purchases of materials, etc.

In their Action Taken Note submitted in February 1999, the Ministry had stated that all rural habitations would be provided drinking water by the 9th Five-year Plan. It further stated that instructions had been issued to all States to ensure sustainability of the sources, regular monitoring of the functioning of hand pumps/tube wells, development of inventory of sources, that recourse

⁶ Sector reforms introduced in 1999-2000 aimed at institutionalizing community participation in rural water supply schemes. Users were to share at least 10 per cent of the capital cost and 100 per cent of the cost of operation and maintenance and were to follow a participatory demand driven approach in planning, implementation and maintenance of schemes.

⁷ Catchments area approach implied institutionalizing the water quality monitoring systems by involving various grass root level technical and educational institutions.

was not taken to diversion/misuse of funds and improvements in the monitoring and evaluation of the Programme.

Implementation of the Programme during the period from 1997-98 to 2000-01 was again reviewed through test check conducted in the Ministry, Public Health Engineering Departments, Water Supply Boards and other implementing agencies in 185 districts and 306 divisions of 25 States between November 2000 and June 2001. Thirty three *per cent* of the districts and 29 *per cent* of the divisions were test checked, details of which are contained in **Annex-1**. The review aims at examining the execution of the Programme and its overall impact in achieving the primary objective of providing adequate and safe drinking water to all rural habitations, especially to the problem ones, in the most cost effective manner.

4. Financial Outlay and Expenditure

ARWSP is a Programme sponsored entirely by the Central Government. The allocation of Central assistance under ARWSP was, however, subject to a matching provision/ expenditure by the States under the State Sector MNP. With effect from April 1999, 20 *per cent* of ARWSP funds were earmarked for Sector Reforms and States could utilise up to another 20 *per cent* for Sub-Mission Projects (SMP)⁸. Up to 15 *per cent* of the funds were to be earmarked for operation and maintenance and 35 *per cent* for drinking water supply to Scheduled Castes/Scheduled Tribes (SC/STs). Funding under ARSWP also included 100 *per cent* assistance to States for other components like human resources development (HRD), information, education and communication (IEC), management information system (MIS), including training, etc. In addition, financial assistance for water supply schemes was also provided by UNICEF and CAPART.

Details of funds released and utilised by the States/UTs under ARWSP and MNP during the period covered by audit as compiled from the records of the Ministry, are as under:

(Rs in crore)

Year	Central Release (ARWSP)	States' Provisions (MNP)	Total Availability (ARWSP+MNP)	Expenditure (ARWSP+MNP)
1997-98	1299.91	1845.17	3145.08	2905.75
1998-99	1610.64	2167.47	3778.11	3643.62
1999-00	1717.91	2731.07	4448.98	4102.05
2000-01	1896.55	2467.02	4363.57	2945.89
Total	6525.01	9210.73	15735.74	13597.31

Note: - Data in regard to releases and expenditure relating to ARWSP are inclusive of those relating to other components like HRD, IEC and Sub-Missions as well as assistance from UNICEF and CAPART.

Details of the State-wise releases/expenditure under ARWSP and MNP and other components are contained in **Annex-2 and 2A**. Other points relating to financial aspects are contained in **Paragraph 17** of the Report.

⁸ *Sub-mission projects were to be undertaken by the States for providing safe drinking water to the rural habitations facing water quality problems like fluorosis, arsenic content, brackishness, excess iron and also for ensuring source sustainability through rain water harvesting, artificial recharge, etc.*

5. Physical Achievements

As mentioned earlier, the Programme was continued in the 9th Plan period on account of non-realisation of the intended objectives. The Ministry attributed (April 1999) the reasons for number of problem habitations not declining to fast depletion of ground water levels, deforestation resulting in sources going dry, greater emphasis on new construction and poor maintenance, non-involvement of people in the operation and maintenance of completed schemes and neglect of traditional water management system and practices. The National Agenda for Governance adopted by the new Government made a commitment to provide potable drinking water to all the habitations by March 2004. Though the Ministry of Rural Development claimed coverage of more than 95 per cent as of March 2001, independent surveys revealed a different picture. The critical issue here has been that the number of problem villages has been changing from time to time and despite substantial coverage, such villages have continued to grow.

Surveys conducted in 1972 revealed that of the 5.80 lakh revenue villages in the country, 1.5 lakh were Problem Villages (PVs). By 1980, 94,000 PVs were covered by the Government and 56,000 villages were left uncovered. However, a subsequent survey undertaken in 1980 had estimated that there were 2.31 lakh PVs. Of these, 1.92 lakh villages were covered in the Sixth Plan (1980-85), leaving only 39,000 villages uncovered. A fresh survey conducted in 1985, however, identified 1.62 lakh problem villages as on April 1, 1985. All the PVs other than 20 of them were stated to have been covered as of April 1, 2001. A habitation driven approach was adopted in preference to a purely village centred approach. A survey conducted by the States at the instance of the Mission in 1991-93, the findings of which were revalidated through reputed independent Research Engineering Organisations in 1994, revealed 13.18 lakh habitations as on April 1, 1994, of which 1.41 lakh habitations did not have any source of water provided by the Government and 4.30 lakh habitations were partially covered. It would therefore, be evident that each successive survey reflected different pictures in regard to problem habitations/villages.

The status of the total number of FC, PC and NC habitations as per surveys conducted and coverage of habitations during the years 1997-2001 were as follows:

Status of habitations as on 1 April	Habitations				PC habitations covered during the year			NC habitations covered during the year		
	Total	Fully covered (FC)	Partially covered (PC)	Not covered (NC)	Target	Achievement	Percent achieved	Target	Achievement	Percent achieved
1.4.1997	1430543	954470	391047	85026	69061	85410	124	30552	31584	103
1.4.1998	1430543	1060137	316919	53487	73367	93925	128	31535	19008	60
1.4.1999	1422664	1116103	268496	38065	72732	62769	86	17329	11868	68
1.4.2000	1422664	1183316	213151	26197	65198	58638	90	14270	6124	43

Source: Statement of Status of Habitations prepared by the Ministry based on the survey conducted by the States/as per Comprehensive Action Plan sent by all the States in 1999.

Despite investment of Rs 32,302.21 crore, 20,073 NC and 1.55 lakh PC habitations remained to be covered.

As of April 2001, of the total 14,22,664 rural habitations, 1,54,513 PC and 20,073 NC habitations still remained to be covered notwithstanding large investments aggregating to Rs 32,302.21 crore made on various water supply schemes since the First Five-year Plan. This by itself would also not appear to reveal the total magnitude of the problem because of the reported re-emergence of PC/NC habitations that were earlier reported to have been covered.

5.1 Re-emergence of problem habitations

As seen from table above, at the beginning of the 9th plan period, there were .85 lakh NC habitations and 3.91 lakh PC habitations. During the first three years of the 9th Plan, 0.62 lakh NC and 2.42 lakh PC habitations respectively were covered, following which 0.23 lakh NC habitations and 1.49 lakh PC habitations respectively should have remained uncovered. However, based on the updated figures received from the State Governments as on April 1, 2000, there were 0.26 lakh NC habitations and 2.13 lakh PC habitations respectively remaining uncovered. This indicated the re-emergence of NC and PC habitations during the years 1997-2000, thus negating the impact of Programme.

Re-emergence of 73,197 problem habitations in 7 States.

Sample check of records in various States also revealed re-emergence of 73,197 problem habitations in 7 states, as detailed below:

In **Gujarat**, 3,911 habitations had re-emerged as 'No source' habitations. In **Haryana**, there were 1,087 deficient villages as of April 1997. However, a fresh survey carried out in June 1999 revealed another 331 deficient villages.

In **Karnataka**, as against 3,410 NC and 18,960 PC habitations as of April 1997, the State Government had reportedly covered all NC habitations and 9,185 PC habitations as of March 2001. However, a survey conducted by the Agricultural Finance Corporation, Bangalore, in December 2000 revealed that there were 2,386 NC and 22,980 PC habitations indicating the re-emergence of 2,386 NC and 13,205 PC habitations.

In **Maharashtra**, the Comprehensive Action Plan for the period 1999-2004 furnished to the Government of India indicated re-emergence of 11,943 problem habitations.

In **Tamil Nadu**, despite 25,931 habitations having been fully covered by the end of 1998-99, a survey conducted during 1999-2000 revealed that these habitations had reemerged as 17,149 PC habitations and 8,782 NC habitations. In addition, 2,315 NC and 7,290 PC habitations were also identified.

In **Tripura**, as on April 1999, there were 1,849 NC/NSS, 5,434 PC and 129 FC habitations as against 982 NC, 2,400 PC and 4,030 FC habitations identified in a survey conducted in 1997, showing re-emergence of 867 NC and 3,034 PC habitations.

In **West Bengal**, despite coverage of 79,031 habitations either partially or fully out of a total of 79,036 habitations, 1,984 habitations re-emerged as problem habitations, due to arsenic pollution of the ground water.

Re-emergence of NC/PC habitations throws up the issue of '**indefinite continuity**' of the Programme. Moreover, the Ministry's efforts to reorient the Programme in April 1999 by recategorisation of habitations to include water quality parameters was defeated as the States were not reporting the coverage of NSS habitations separately as stipulated in the guidelines. The Ministry did not also insist on reports of coverage based on the revised categorisation.

5.2 Non-prioritisation

Rs 283.90 crore spent on non-priority areas at the expense of NC habitations in 11 States.

The guidelines of 1996 emphasized prioritisation of PVs having no assured source of water or where the available quantity had excessive salinity, iron, fluoride problems, followed by partially covered problem villages. The guidelines introduced in April 1999 also accorded priority to the coverage of NC and quality-affected habitations followed by PC habitations.

According to the coverage reported by the Ministry, 3,00,742 PC habitations were covered during 1997-2001 while only 68,584 NC habitations could be covered in violation of the norms of priority evolved by Ministry.

Sample check of records also revealed that **Rs 283.90 crore** were spent in 11 States on non-priority areas as discussed below, at the expense of the rural population which had no safe source of drinking water:

Arunachal Pradesh: In nine divisions, expenditure of Rs 128.44 lakh was incurred during 1997-2001 on 23 RWSS implemented in FC habitations, at the expense of the population residing in habitations with no drinking water.

Gujarat: The achievement in respect of coverage of NC habitations declined from 91 *per cent* in 1997-98 to 20 *per cent* in 2000-2001. In the result, 190 habitations were still without potable water as of March 2001.

Haryana : In Hissar district, Rs 104.76 lakh were spent as of February, 2001 for construction of 3 independent water works for villages, which were already covered under the scheme 'Augmentation of water supply for 70 LPCD' and on which expenditure of Rs 123.48 lakh had been incurred upto October 2000. Similarly in the same district, an expenditure of Rs 20.82 lakh was incurred upto October 2000 on independent water works constructed for two such villages, where the water availability was already 93 LPCD. Thus Rs 125.58 lakh were spent on non-priority areas when there were 617 priority villages at least some of which could instead have been extended the benefit of the Programme.

Jammu & Kashmir: During 1998-2000, the achievement in respect of NC habitations was only 38 *per cent* as against 115 *per cent* in respect of PC

habitations This appeared to indicate that the priority norms were not adhered to.

Karnataka: Nine Zilla Parishad Engineering Divisions (ZPEDs) executed 267 Piped Water Supply and 314 Mini Water Supply schemes at a cost of Rs 1301 lakh during 1997-2001 in FC habitations, ignoring the requirements of the population in habitations with no drinking water source. The ZPEDs concerned had irregularly included these schemes in disregard of the norms.

Madhya Pradesh: In Bastar region, a project was sanctioned at a cost of Rs 5.45 crore covering 173 villages. However, only 2 of these villages had no safe drinking water source, while water availability in a third village was less than prescribed. An expenditure of Rs 43.55 lakh has been incurred on the project so far.

Maharashtra: In 8 districts, Rs 214.35 crore were spent on execution of 127 water supply schemes during 1997-2001 in PC villages, receiving water between 11-40 LPCD at the expense of NC habitations.

Nagaland: During 1995-2000, Rs 242 lakh were spent on execution of the water supply programme in 33 villages. Of these, 11 villages were already included in the covered habitations under other rural and urban water supply programmes and 22 villages had not been identified as PVs in the survey conducted by the State in April 1999. Further, the Department spent Rs 618 lakh on 68 FC habitations during 1997-2001, neglecting 417 NC habitations, which had to be accorded priority.

Tamil Nadu: The coverage in respect of NC/NSS habitations during 1999-2001 ranged between 59 *per cent* and 63 *per cent*, whereas the coverage of PC habitations was 125 *per cent* during the same period.

Tripura: During 1997-2001, 2,252 of the 2,400 PC habitations were covered in the State, though 287 NC habitations were yet to be covered.

Uttar Pradesh: The UP Jal Nigam installed 21,607 hand pumps at a cost of Rs 44.96 crore during 1998-2001 in 11 districts already having 12,488 hand pumps in excess of requirements, while 3,461 PC and 45 NC habitations in the State were left uncovered.

5.3 Abandoned schemes

Sample check revealed that in 19 states, implementing agencies abandoned 2,371 schemes in the course of their execution after incurring an aggregate expenditure of Rs 197.52 crore, rendering the entire expenditure infructuous. Of the 2,371 schemes, 1,549 schemes involving an expenditure of Rs 129 crore, failed due to various reasons such as sources drying up, failure of tube wells, low discharge of water, non-availability of ground and raw water and wrong selection of sites. Further, 789 schemes on which Rs 54.37 crore were spent were abandoned due to non-availability of land, objections raised by the

Abandonment of 2,371 schemes led to infructuous expenditure of Rs 197.52 crore.

local people, other disputes, non-completion of dam work, non-construction of treatment plant, non-availability of critical materials, etc. Thirty-three schemes (expenditure incurred: Rs 14.15 crore) were suspended by the Executive Engineer, of which the suspension of 29 schemes was attributable to errors in designs and drawings. Reasons for suspending the remaining schemes were not on record. The abandonment or suspension of these schemes would appear to be indicative of serious defects in planning and ineffective implementation.

5.4 Rig management

Rig performance was critical to the success of the Mission in bore well areas. 671 departmental and 166 UNICEF supplied rigs of different types were available as on January 2001 for deployment in 22 States and one Union Territory for drilling borewells. Test check of the performance of 260 rigs revealed that 131 rigs in 9 States [**Assam (16), Andhra Pradesh (6), Gujarat (47), Jammu and Kashmir (16), Manipur(2), Meghalaya (1), Orissa (20), Tripura (7) and West Bengal (16)**] were lying unused or were beyond economic repairs since 1996. The performance of rigs in terms of drilling of bores ranged between 14 and 66 *per cent* during 1997-2001 in 5 States (**Assam, Gujarat, J&K, Madhya Pradesh and Tripura**) which was attributable to delays in repairing malfunctioning rigs, failure of the Department concerned to shift the rigs, etc. Other findings were as follows:

(i) In order to ensure successful implementation of scheme, it was essential that the rigs achieved the maximum success rate of drilling bores. In **Gujarat**, of the 45,000 bores drilled during 1997-2000, 7,000 bores drilled at

a total cost of Rs 10.16 crore failed due to wrong selection of sites based on the opinions of the MLAs and Sarpanches. In **Orissa**, of the 24,722 bores drilled during 1997-2001, 1,755 bores drilled at a cost of Rs 3.86 crore failed because the water yield was either less than anticipated or there was no yield at all. The implementing agency had not utilized the available data of the Central Ground Water Board before selecting sites for drilling. As a result, the expenditure of Rs.3.86 crore had proved unfruitful.

(ii). Drilling Division, Srinagar (**Jammu & Kashmir**) incurred an expenditure of Rs 0.96 crore during 1996-2001 on repairs to old rigs, without any technical survey and obtaining approval to the estimate.

(iii) In **Orissa and West Bengal** the department got tubewells drilled through private contractors during 1997-2001 at a cost of Rs 15.68 crore, notwithstanding the fact that departmental rigs available at the relevant time were under utilised.

Rs 15.68 crore spent on drilling tube wells through private contractors while departmental rigs were under -utilised.

5.5 Other findings

In **Himachal Pradesh**, a water supply scheme, covering a group of 38 villages in Kangra District and executed at a cost of Rs.19.87 lakh failed to provide

adequate water. The scheme was further augmented by incurring an expenditure of Rs.14.51 lakh without obtaining the necessary technical sanction. Even thereafter, the availability of water to the villages was inadequate. An expenditure of Rs. 1.36 crore (including Rs 1.02 crore spent on maintenance) had been incurred on the scheme as of March 2001.

In **Maharashtra**, the Pomendi Water Supply Scheme in Ratnagiri district was executed at a cost of Rs.410.55 lakh, as against the sanctioned cost of Rs.331.49 lakh, based on a temporary connection obtained from the Maharashtra Industrial Development Corporation (MIDC). Though the agreement with MIDC spelt out the need for locating an alternate source in view of the temporary nature of tapping, the implementing agency had not taken action to identify an alternate source. The execution of the scheme using a temporary source would not appear to have been appropriate in the context of providing an assured supply of water on a long-term basis.

Similarly, in Gumgaon, the source for the Regional RWSS, sanctioned under ARWSP in August 1998 to cover 11 villages in Nagpur district was located 8 km downstream at a point where a drain carrying industrial effluents met the Vena River. The Maharashtra Pollution Control Board (MPCB) asked the implementing agency to change the site. However, instead of shifting the source to an upstream site, the Department incurred an expenditure of Rs 1.61 crore on execution of various components of the scheme up to February 2001. Non-implementation of the MPCB suggestions could result in supply of unsafe water and thereby render the expenditure wasteful.

6. Sustainability of water sources

Sustainability did not get the desired priority resulting in failure of schemes in 10 States.

In order to ensure supply of safe drinking water to the rural population, it was essential to establish the sustainability of the water sources. The guidelines introduced in April 1999 accorded the highest priority to the sustainability aspect. Twenty *per cent* of ARWSP funds were to be earmarked and utilized for addressing problems related to water quality and sustainability of sources.

Sample check of records in various States, however, revealed that sites were selected without using satellite imagery, data of the Central Ground Water Board, scientific technology or taking advantage of the assistance of expert agencies like the National Remote Sensing Agency (NRSA) as was envisaged in instructions of the Ministry. This contributed substantially to failure of schemes in **Bihar and Jharkhand, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Mizoram, Nagaland, Orissa, and Sikkim.**

In **Karnataka**, no water harvesting structures like check dams, percolation tanks, etc. were constructed and there was no tie up with other line departments for implementing the water conservation measures.

In **Madhya Pradesh**, despite the State Government's direction that tube wells be surveyed by the Departmental hydrologist in areas where failure exceeded 10 *per cent*, this was not done. Non-adoption of scientific techniques for

identification of sources resulted in failure of 15,842 tube wells and wasteful expenditure of Rs 63.37 crore incurred during 1997-2001.

In **Nagaland**, 6 deep tube wells (DTWs) were got dug during 1998-2000 by the PHED through a private firm, without taking advantage of expertise from agencies like NRSA and the Department of Geology and Mining of the State Government. Two of the DTWs were unsuccessful, resulting in an infructuous expenditure of Rs 35.02 lakh.

In **Sikkim**, though the water supply schemes were taken up as early as in 1977-78, no survey had ever been conducted till February 2001 to identify the sources and to determine their sustainability. Further, though the State Government received Rs 50.40 lakh during 2000-2001 for augmentation of traditional water sources, no work was taken up.

In **West Bengal**, contrary to the instructions of the State Government, the Divisional Officer incurred an expenditure of Rs. 48.89 lakh on execution of ancillary works of the Juranpur water supply scheme (Nadia), though the water from the tube wells was found to be high in arsenic content and was also inadequate. A suitable alternate aquifer had also not been tapped as of February 2001. In the circumstances, the expenditure incurred on the ancillary works continues to remain unfruitful.

Thus, despite the added emphasis placed on establishing the sustainability of sources with effect from April 1999, this aspect was not accorded the desired priority, resulting in failure of sources/schemes.

7. Operation and Maintenance

Proper upkeep and maintenance of drinking water sources was essential for sustained availability of drinking water on a long-term basis to the rural population. Data in regard to the status of hand pumps, piped water supply schemes and public stand posts as on April 1, 1999 as available with the Ministry/State Governments are presented in the following table:

Sl. No	Water Supply mode	Installed	Functional	Non-functional
1.	Hand Pumps	37,38,039	33,54,753	3,83,286
2.	Piped Water supply Scheme	1,04,119	99,255	4,864
3.	Public Stand posts	9,85,855	9,59,471	26,384

Water supply modes costing Rs 369.20 crore lying non-functional in 13 States depriving rural population of safe drinking water.

According to the information made available by the Ministry, 3,85,854 of the 37,57,862 hand pumps installed till then were non-functional as of March 2001. Information on functional/non-functional Piped Water Supply Schemes and Public Stand Posts was, however, not furnished. The Working Group on Rural Water Supply for the 9th Plan had estimated the cost of installation of hand pumps at Rs 30,000 and that of rejuvenation Rs 10,000 per hand pump. Assuming that all these hand pumps could be made functional, an investment of Rs 385.85 crore approximately would be required for their rejuvenation.

Sample check of records in 13 States also revealed that 85,301 hand pumps, 80,046 tube wells, 752 piped water schemes, 687 power pumps, 1,268 mini water schemes and 35 RWSS involving a total investment of Rs 369.20 crore were not functioning at all or were non-operational on account of various reasons such as drying up of sources, collapse of assemblies, lowering of water table, filling up of bore wells, blocks in pipes, failure of pumping machinery and distribution system, poor maintenance by local bodies and non-adoption of scientific technology for identification of sources, etc.

7.1 Inventory of assets

Inventory of assets not maintained in 16 States.

A complete inventory of drinking water sources under different programmes like ARWSP, MNP, other sources, etc. was also to be maintained by each village panchayat, block and district. Sample check of records in various States revealed that implementing / executing agencies did not maintain inventory of assets in 16 States (**Andhra Pradesh, Arunachal Pradesh, Assam, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Mizoram, Nagaland, Orissa, Rajasthan, Sikkim, Tamil Nadu, Tripura and Uttar Pradesh**). Without an inventory of assets, the actual availability of the assets created could not be vouchsafed in Audit. Sample check further revealed that in **Maharashtra** and **Sikkim**, assets were only partially handed over to the local bodies/Pachayats. In **Mizoram** and **Orissa**, none of the assets had been handed over to the local bodies.

8. Solar Photo Voltaic Pumping System

The Solar Photo Voltaic Pumping System is intended for lifting water from depths by tapping solar energy. In 16 states, 308 such systems had been installed as of March 2001. Sample check of records in the States revealed that 104 SPV pumping systems were not operational in **Andhra Pradesh (11), Assam (4), Gujarat (7), Madhya Pradesh (35), Rajasthan (44) and Sikkim (3)**, for reasons such as theft of solar panels, inadequate upkeep and maintenance, repairs, failure of sources, etc.

9. Water quality

9.1 Problems faced in Rural Water Supply

5674 Water treatment plants costing Rs 16.32 crore remained inoperative.

To provide safe drinking water to rural habitations facing water quality problems like fluorosis, arsenic content, brackishness, excess iron, etc. ARWSP provided for execution of Sub-Mission projects in States involving the setting up of desalination, defluoridation and iron removal plants.

9.1.1 Excess Brackishness

Excess brackishness of water affects taste and has laxative effects. Control measures included supply of water with dissolved solids within permissible limits (1500 PPM) by providing alternative sources and supply of water after treatment by desalination process. Excess salinity in drinking water, as per

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Ministry's records, was prevalent in 7 states and 2 UTs. For treating brackish water, the Ministry had approved the setting up of 194 desalination plants. Of these, 150 plants had been commissioned, as of March 2001.

Sample check of records in various states revealed that of the 89 plants installed in **Rajasthan** during 1989-92, 64 plants were not put to use as of August 2001 for the following reasons:

- (i) Nine plants (Rs 56.06 lakh) were not required as potable water was made available subsequently through regular water supply schemes.
- (ii) Two plants in Barmer district (Rs 5.82 lakh) were not utilised in the absence of trained staff.
- (iii) One plant in Jaipur (Rs 13.32 lakh) was installed in 1990-91 but was not commissioned by the contractor due to delay in development of source.
- (iv) Forty-six plants (Rs 3.79 crore) required repairs, which were not done since 1997.
- (v) Parts of 6 plants in Barmer (Rs 17.47 lakh) were used in other plants.

Of the 25 plants installed in Barmer district at a cost of Rs 563.22 lakh during 1996-97, 11 plants installed at a cost of Rs 247.82 lakh were not functioning since 1999 due to technical defects and non-availability of skilled staff.

In **Andhra Pradesh**, of 16 desalination plants, 7 plants installed at a cost of Rs 42.64 lakh were not working for periods ranging between 2 months and 156 months and 3 plants installed at a cost of Rs.35.58 lakh were not commissioned as of May 2001.

In **Madhya Pradesh**, excess salinity in drinking water was prevalent in 1,729 water sources of 822 villages in 12 districts. No remedial measures had been initiated in any district other than Ujjain as of June 2001. In Ujjain district, a project was sanctioned for control of brackishness. Though the project was due for completion by February 2001, physical progress was only 29.33 *per cent* as of March 2001. Further, 78 of the 187 tube wells drilled in the districts upto March 2001 were not found suitable for installation of power pumps.

9.1.2 Control of fluorosis

Presence of excessive fluoride in drinking water causes dental and skeletal fluorosis, which could be controlled by supply of water containing fluoride within permissible limits (1.5 PPM) by providing alternative sources and supply of defluoridated water after treatment. The Ministry had approved 845 defluoridation plants in 19 States (fill and draw: 448; and hand pump attached: 397), of which 632 plants had been commissioned in eleven States upto March 2001. Test check of records pertaining to 296 plants, revealed that 96 plants installed at a cost of Rs 3.93 crore were not functioning in **Gujarat (26), Haryana (1), Rajasthan (57) and Uttar Pradesh (12)** due to the

village panchayats not taking possession of the plants or not maintaining them, failure of sources, plants left incomplete by contractors, plants requiring repairs, etc. defeating the objective of providing safe drinking water to the rural population in the affected areas. Other findings are mentioned in the following paragraphs.

In **Madhya Pradesh**, schemes had been sanctioned only in 611 of the 3,340 villages identified as being prone to fluorosis. Of these, only 186 schemes had been completed and 40 had not even commenced as of March 2001. Further, in 17 villages in Shivpuri district, villages having safe sources were included under the defluoridation project at a cost of Rs 1.58 crore, resulting in avoidable extra expenditure.

In **Orissa**, excess fluoride was detected in 634 tubewells. No remedial steps were taken to install treatment plants or to provide alternative sources.

In **Jammu and Kashmir**, excess fluoride was found in water supplied in Srinagar (Rural), Budgam, Chadora and Doda.

Failure to take appropriate remedial action in all these cases exposed the affected rural population to the hazards of drinking unsafe water.

9.1.3 Removal of Excess iron

The problem of excess iron, as per Ministry's records, was prevalent in 15 States and one UT. Excess iron causes corrosion of tube wells, water supply installations and encourages growth of bacteria, apart from causing physiological disorders. The control measures included supply of water within permissible limits (1.10 PPM) by providing alternative sources and supply after treating the contaminated water with the help of Iron Removal Plants (IRP). The Ministry had approved the establishment of 16,384 iron removal plants, of which 9,524 plants had been commissioned as of March 2001. Sample check of records in various States revealed that of the 6,190 plants installed, 5,493 plants installed at a cost of Rs 4.41 crore were non-functional in **Arunachal Pradesh (21), Assam (2,796), Madhya Pradesh (2,640), and Mizoram (36)**, resulting in supply of unsafe drinking water. Other findings were as follows:

In 9 districts of **Bihar**, against a target of digging 18,245 tube wells with IRPs during 1998-2001 at a total cost of Rs. 22.70 crore, only 9,244 tube wells with IRPs were completed, after incurring an expenditure of Rs16.58 crore. Physical progress was only 51 *per cent*. The objective of providing safe drinking water free from iron content to the targeted rural people was consequently only partially met.

In three divisions of **Himachal Pradesh**, water tests conducted between March 1992 and December 2000 showed excessive iron content in 87 hand pumps. No remedial measures were taken in these cases for removal of the excess iron.

In **Orissa**, 11,297 tube wells were found to contain excess iron. In 4 districts of **Tamil Nadu**, high incidence of iron was recorded. In **Tripura**, only 8 plants were commissioned during 1998-2000, after incurring an expenditure of Rs 1.78 crore on construction of 38 IRPs.

9.1.4 Removal of Arsenic

Continuous consumption of arsenic contaminated water (beyond the permissible limit of 0.05 mg/litre) causes respiratory, gastrointestinal and cardio vascular problems which may ultimately result in death. Considering the gravity of the situation in West Bengal, the State government and GOI constituted three Committees in 1983, 1988 and 1992 to conduct an in depth study into the causes of pollution and recommend remedial measures. The Committees found that ground water in 68 blocks in 8 districts of the State, with a population of 44.42 lakh, contained arsenic beyond the permissible limit of 0.05 mg./ltr. They further opined that:

- a) arsenic contamination occurs in aquifers at depths ranging from 30 to 70 metres below ground level;
- b) sand grains in these aquifers are generally coated with iron and arsenic rich materials;
- c) source of arsenic is considered to be geological and not anthropogenic; and
- d) use of heavy duty pumps for irrigation in the arsenic zone leads to wide incidence of arsenic contamination.

On the basis of the aforesaid reports, the PHED launched action plans in two phases and two Surface Water Supply Schemes to combat arsenic pollution and supply arsenic free drinking water. GOI accorded sanction for implementation of these Programmes under the 'Sub-Mission Programme' with financing in the ratio of 75:25. However, none of the targets could be achieved for reasons like preparation of projects without proper survey and investigation, lack of planning, slow progress of work, etc.

In Murshidabad district, the Zila Parishad (ZP) sank 19,321 tube wells in arsenic affected zones at depths varying from 40 to 90 meters as against the recommendation of one of the committees to construct tube well tapping aquifers occurring below 200 metre of depth. Since the water obtained from these tube wells contained arsenic beyond the permissible limit, and in order to mitigate the problem, the ZP installed arsenic removal plants in 573 tube wells at a cost of Rs 3.02 crore. The committee had also cautioned that the candles installed in these plants, if not properly disposed of, would further pollute the surface water and ground water. The ZP did not have the technology for proper disposal of the candles. Thus, non-adherence to the committee's recommendations defeated the basic objective of removing arsenic contamination and providing safe drinking water.

In 11 villages of Rajnandgaon district in **Madhya Pradesh**, arsenic was found in water. No remedial measures were taken as of March 2001.

9.2 Water Quality Surveillance

Regular monitoring of water quality both at source and supply points, was essential for safeguarding potable drinking water from chemical and biological contamination. The Ministry sanctioned the establishment of 567 stationary laboratories, of which 215 stationary laboratories and 32 mobile laboratories had been set up in various States as of March 2001. It was envisaged that each laboratory would be capable of testing 6,000 samples per annum providing the service to two or three districts. Premier technical institutions, schools etc. were also to be involved in the water quality testing/surveillance network. Sample check of records in various States revealed that in 11 States, percentage of water samples tested was very low and ranged between only one *percent* and 35 *per cent* in 97 laboratories, resulting in the capacity created not being utilized fully.

Fifty-six laboratories in **Arunachal Pradesh (1), Assam (2), Jammu & Kashmir (3), Karnataka (19), Madhya Pradesh (26), Mizoram (2), Sikkim (1) and Uttar Pradesh (2)** were not functioning, due to non-posting of qualified/technical staff or because of non-availability of buildings to house the laboratories.

In 9 districts of **Bihar**, out of Rs 18.00 lakh released for the establishment of water testing laboratories during 2000-2001, Rs 16.74 lakh were spent on procurement of equipment for chemical and bacteriological tests, glassware, etc., but the laboratories had not been established as of September 2001. Besides, there were no chemists or laboratory assistants for conducting tests, rendering the entire expenditure unfruitful.

Due to non-functioning of plants/laboratories and inadequate surveillance, unsafe drinking water continued to be supplied to the affected rural population. Health Departments in 18 States also reported increase in the incidence of water-borne diseases such as Jaundice, Gastroenteritis, Diarrhea, Cholera, Typhoid, etc. during this period.

In **Karnataka**, 4,291 habitations (excessive fluoride), 4,309 (brackishness), 4,064 (excessive nitrate) and 6,359 (excessive iron) in the State were reported to have been affected. District Health and Family Welfare officers of Gulbarga and Tumkur reported that 1.29 lakh persons were affected by dental and skeletal fluorosis due to continuous use of water contaminated by excess fluoride.

In Rajouri District of **Jammu and Kashmir**, water contained bacteria and was declared unfit for drinking. Water was supplied without testing/treatment in Udhampur and Doda Districts, which resulted in spread of water-borne diseases and death of 21 people in December 1997.

The Director General, Health services, **Haryana** reported (April 2001) 143 cases of Cholera, 4,102 cases of gastroenteritis, 6,00,678 cases of diarrhea, 4,690 cases of jaundice, 2,234 cases of enteric fever and 62 cases of meningitis. 160 deaths occurred during 1997 to 2000, which were attributable to waterborne diseases.

In **Madhya Pradesh**, the incidence of diarrhoea increased from 1.52 lakh cases during 1997 to 2.33 lakh cases during 2000. As many as 1,872 deaths were also reported during this period.

In **Sikkim**, sample testing during 1992-97 revealed bacteriological contamination. No water testing was done after 1997. During April to August 1998, there was an outbreak of cholera in West District, apart from 300 cases (including 7 deaths) of gastroenteritis.

These cases indicate that the objective of providing safe/potable water was yet to be achieved.

10. Human Resources Development

Under ARWSP, a National Human Resource Development Programme (NHRDP) was launched in 1994 to build a human resource base of appropriately trained personnel to serve the needs of rural water supply with 100 *per cent* Central assistance. Implementation of NHRDP involved establishment of HRD cells in States, creation of a resource pool of trainers for training the grass root level functionaries and imparting training to beneficiaries. The Ministry had released Rs 2,047.05 lakh for this component between April 1997 and March 2001 against which an expenditure of Rs 425.96 lakh was incurred as detailed below:

(Rs in lakh)

Year	Amount Released	Expenditure
1997-98	500.00	352.16
1998-99	191.75	73.80
1999-2000	565.77	-
2000-01	791.53	-
Total	2047.05	425.96

Test check of records in the States revealed that no HRD cell was established in **Jammu and Kashmir and Sikkim**. Though HRD cells were established in **Bihar and Jharkhand, Himachal Pradesh and Karnataka**, training at the grass root level was not imparted. In **Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Rajasthan, and Tamil Nadu**, training imparted at the grass root level was less than the targets fixed, the shortfalls ranged between 14 and 92 *per cent*. Similarly in **Andhra Pradesh, Manipur and Rajasthan**, professional training imparted was less than the target fixed, the shortfalls ranged between 20 and 91 *per cent*. In **Arunachal Pradesh, Meghalaya and Mizoram**, the services of the trained personnel were not utilized, defeating the very purpose of creation of the cells.

Shortfall ranging from 14 to 92 *per cent* in training in 12 States.

11. Information, Education and Communication (IEC)

IEC strategy was prepared by the Ministry of Rural Development for creation of public awareness on the water and sanitary sector. The objective was to provide publicity through mass media to disseminate information about the programme, highlighting the achievements and emphasising the use of safe water to overcome waterborne diseases. This component was to be funded entirely by the Central Government. The Ministry released Rs 15.78 crore during 1997-2001, against which expenditure of Rs 5.79 crore was incurred as detailed below:

<i>(Rs in lakh)</i>		
Year	Amount Released	Expenditure
1997-98	576.70	576.70
1998-99	179.87	2.16
1999-2000	81.59	-
2000-01	740.00	-
Total	1578.16	578.86

Sample check of records of various States revealed that in **Haryana, Manipur and Meghalaya**, no IEC activity was taken up. In **Assam** (release by GOI : Rs 23.05 lakh) and **Mizoram**, no IEC cell was established. In **Punjab**, no awareness campaign was taken up. In **Kerala and Himachal Pradesh**, IEC projects were not implemented within the time frame. In **Uttar Pradesh**, no IEC strategy was adopted. Of Rs 80.04 lakh released by GOI to the UP Jal Nigam for telecasting of awareness programme, Rs 75 lakh remained unutilised with the implementing agency and the State HRD cell.

Due to non-implementation of IEC Programme in the above States, the objective of creating awareness of rural habitations could not be achieved.

12. Community participation

Involvement of the community was essential to ensure successful implementation of the Programme. With a view to institutionalising community participation and giving the Programme a participatory demand-driven approach instead of a target based supply-driven approach, the Ministry introduced Sector Reforms from April 1999. This envisaged at least 10 *per cent* capital cost sharing in cash or kind or both and 100 *per cent* sharing of O&M cost by users. The focus was on village level capacity building by setting up of Village Water and Sanitation Committees. 20 *per cent* of the ARWSP outlay was to be earmarked and kept aside for implementation of Sector Reforms (Pilot Projects).

Poor progress as Rs 6.13 crore only spent against Rs 473.15 crore released for 58 pilot projects

Under the Programme, GOI had sanctioned 58 pilot projects in 22 States at a cost of Rs 1,690.71 crore. The projects were sanctioned without conducting any initial survey of the people's willingness for participation. Of the Central Government share of Rs 1,577.18 crore, Rs 473.15 crore had been released as of March 2001, against which expenditure of only Rs 6.13 crore was incurred,

indicating that the progress was very poor. Sample check of records of various States revealed the following:

In **Sikkim**, beneficiaries were stated to be not willing to participate and no expenditure under Sector Reforms was reported. In **Maharashtra**, expenditure reported was negligible and projects were reported to be at their initial stage in **Andhra Pradesh, Arunachal Pradesh, Assam and Tripura**. No activity or progress under Sector Reforms Programmes was reported in **Madhya Pradesh, Nagaland and Rajasthan**. District Water and Sanitation Committees were formed only in **Assam, Gujarat, Tamil Nadu and Tripura**, and Village Level Water and Sanitation Committees in **Assam, Jammu and Kashmir, Tamil Nadu and Tripura**.

In **Tamil Nadu**, only 1,409 of the 2,146 Village Level Water Sanitation Committees were formed and Rs 174.72 lakh were collected as community contribution as of November 2000.

In **Jammu and Kashmir**, against 618 villages, Village Committees were set up in 55 villages only as of March 2001 and the collection of beneficiary contribution was not on record.

The guidelines stipulated that ARWSP funds were not to be utilised for rural water supply activities in districts where Sector Reforms were introduced. Contrary to this stipulation, ARWSP funds of Rs 12.09 crore were spent in **Madhya Pradesh**, in districts approved under pilot projects under Sector Reforms. In Cuddalore district of **Tamil Nadu**, Rs 78 lakh were spent on ARWSP activities during 2000-2001 from the funds earmarked for Sector Reforms.

13. Involvement of Women

For efficient performance and effective maintenance of water supply systems, the guidelines of the Programme provided for the involvement of women at all stages, particularly in decision-making on the location of the spot sources in the villages/habitations. At least 30 *per cent* of hand pump mistries under the National Human Resources Development and other training schemes were to be women of the local areas/habitations for better operation and maintenance of hand pump schemes. The guidelines also envisaged the engagement of women caretakers for hand pumps in the habitations and that certificates of completion of schemes should be obtained from women groups in the habitations. Scrutiny revealed that there was no involvement of women in **Arunachal Pradesh, Assam, Sikkim, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Manipur, Nagaland, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal**.

14. Coverage of Rural Schools/Anganwadis

The Programme was to provide safe drinking water to rural schools, which could not obtain allocations for this purpose from the 10th Finance

Commission. Funding was to be shared equally between the Centre and the States. All rural schools were to be provided drinking water facilities by the end of the 9th Plan. As per the Sixth All India Educational Survey (September 1993), there were about 6.37 lakh rural primary/upper primary schools in the country and 3.52 lakh rural primary/upper primary schools were not having drinking water facilities. Sample check of records of various States revealed the following shortcomings:

(i) In **Madhya Pradesh**, test check of eight divisions revealed that 620 rural schools were targeted to be connected with existing piped water supply schemes, besides drilling of 2,461 tube wells, against which only 40 schools (6.45 per cent) were connected with PWSS and 1,138 tube wells (46 per cent) were drilled at a cost of Rs 4.80 crore during 1996-2000. For covering the 2,947 schools in Indore Zone, 2,623 tube wells were drilled during 2000-01. 341 tube wells were unsuccessful, resulting in unfruitful expenditure of Rs 1.36 crore. Hand pumps were not installed on 130 successful tube wells drilled during 2000-01 in Khargone district depriving children of drinking water in 130 schools, besides resulting in idle outlay of Rs 52 lakh.

(ii) No targets were fixed for coverage of schools in **Himachal Pradesh, Karnataka, Sikkim and West Bengal**. The Department did not have information regarding the number of schools having safe drinking water facilities in the above States except Karnataka. In **Karnataka**, 11,782 schools out of 13,863 rural schools did not have drinking water facilities. In **Sikkim**, only 7 schools under MNP and one school under ARWSP were covered under the Programme during 1997-2001. In **West Bengal**, 1,171 schools were covered upto March 2001 at a cost of Rs 4.79 crore.

(iii) In **Rajasthan**, as against 1,417 hand pumps required for 1,417 Anganwadis, only 100 hand pumps were drilled during 2000-01.

(iv) In **Tamil Nadu**, as against the target of providing 1,000 litres per day per school for 18,511 schools at a total cost of Rs 18.51 crore only 3,254 schools were covered in 1999-2000 and 2,257 in 2000-01 utilizing ARSWP funds.

It is, therefore, evident that the objective of coverage of all schools by end of 9th Plan is not likely to be achieved.

15. Management Information System (MIS)

For effective planning, monitoring and implementation of various schemes under different Programmes, the Mission envisaged the introduction of Information Technology based MIS in the States. The Ministry released Rs 5,944.55 lakh during 1997-2001 for the purpose against which only Rs 17.51 lakh were spent as detailed below:

(Rs. in lakh)

Year	Amount released	Expenditure
1997-98	2899.00	-
1998-99	357.00	17.51
1999-2000	1283.55	-
2000-01	1405.00	-
Total	5944.55	17.51

The Ministry accorded sanction for implementation of computerization projects in various States and released funds from March 1996 onwards, subject to the condition that the hardware and software should be procured under a central umbrella arrangement from an agency to be finalised by the former. In October 1996, the Ministry entered into a memorandum of understanding (MOU) with the National Informatics Centre (NIC) for 30 months for providing technical consultancy for deciding the modalities for procurement of computers, peripherals, etc. and finalising the supplies. Procurement of computers, peripherals, Constant Voltage Transformer (CVT), Uninterrupted Power Supply (UPS) systems, etc. was on open tender basis adopting the two bid system, viz. technical and price bids.

Four vendors for hardware, and three vendors for CVT/UPS were, however, finalised by the Department only in May 1998, after a delay of more than two years since the release of funds. The Ministry did not stipulate any time frame within which the supply orders were to be placed and did not fix or intimate the validity period of the rates approved. It did not also regularly monitor the procurement and installation and use of computers. Test check of records of States revealed the following shortcomings:

(i) Delay in placing the supply orders for procurement of computers on the agencies selected by the GOI ranged between 10 months and 35 months in 5 States (**Arunachal Pradesh, Meghalaya, Orissa, Rajasthan and Sikkim**).

(ii) Computers were not supplied/purchased despite purchase orders having been placed in 3 States (**Arunachal Pradesh, Meghalaya and Tripura**). In **Tripura**, the Department failed to purchase computers but spent Rs 4.79 lakh on the purchase of UPS systems, which was rendered unfruitful. In **Meghalaya**, the firm failed to supply computer hardware as per specifications in response to the supply order placed in June 1999. The Department again placed an order for supply of desktop computers in November 2000 on the vendor finalised by the GOI. However, the computers had not been supplied as of April 2001. As such, the UPS systems procured with accessories at a cost of Rs 7.78 lakh by the Department during May to August 2000 remained unutilised. Due to non-supply of computers, the Department also did not undertake the training programme and introduce the office automation package for which GOI released Rs 7.92 lakh. In **Arunachal Pradesh**, the PHED placed supply orders, one for hardware in March 1999 at a cost of Rs 23.84 lakh and another for UPS systems at a cost of Rs 17.28 lakh in April 1999. The UPS systems were supplied but the firm

did not supply the computers as of March 2001. The delay was attributed to non-availability of clarification of configuration from the Ministry.

(iii) In **Orissa**, computers procured for use in 32 sites were installed in 12 sites without net working among the sites. The remaining 20 sites were not ready for installation. Further, against a requirement of 96 skilled operators, the Department could train (October 2000) only 75 personnel at a cost of Rs 2.24 lakh. Due to non-synchronization of purchase of computers accessories/peripherals, training of personnel and non-installation, the investment of Rs 110.52 lakh was idle.

(iv) Computers, hardware and accessories were installed but were not utilised due to non-availability of trained staff, non-installation of operating system, absence of office automation and customized software in 9 States (**Andhra Pradesh, Assam, Haryana, Karnataka, Kerala, Maharashtra, Mizoram, Nagaland and Rajasthan**) resulting in an idle expenditure of Rs 850.48 lakh.

(v) In **Uttar Pradesh**, GOI release of Rs 831 lakh for the MIS Programme was spent on other works not connected with MIS.

Ineffective monitoring led to non-achievement of Computerisation Programme in 15 States.

Further, the contract with NIC had also expired without completion of all modalities of procurement of hardware/software and pre-despatch inspection. Thus, sanction of the project and release of funds by the Ministry without deciding the suppliers, and without specifying the schedule for placement of supply orders by the States and ineffective monitoring by the Ministry had led to blockade of Rs 18.30 crore and non- achievement of the objectives of the Computerisation Programme in 15 states.

16 Bilateral Projects

Various external agencies like the World Bank and DANIDA also supported rural water supply projects. There were 18 projects being implemented in 11 States through bilateral and multilateral assistance. Sample check revealed the following:

Gujarat: In the Netherlands Government-aided Ghoga Regional Water Supply Scheme, out of 235 bores drilled at a cost of Rs.45 lakh, 199 bores failed to yield potable water, resulting in infructuous expenditure of Rs.38.25 lakh on these bores.

Karnataka: In the World Bank assisted Karnataka Integrated Rural Water Supply and Environmental Sanitation Project, there were delays ranging from 12 to 36 months in implementation of individual schemes, with a resultant cost over run of Rs 128.52 crore. Laboratory equipment costing Rs.33 lakh purchased during 1999-2000 with the assistance of the World Bank remained idle in seven divisions in the absence of staff. Further, the Executive Engineer, World Bank Division, Bellary, rescinded the contract of an agency in July 1999 due to poor progress but failed to encash the bank guarantee given by the

agency towards mobilisation advance within the validity period resulting in non-recovery of Rs 5.10 lakh due from the agency.

Madhya Pradesh: In a World Bank aided project in 32 divisions during 1997-2000, Rs.21.24 crore were provided for drilling 4,918 tube wells at Anganwadi centres. The Division spent Rs 17.30 crore up to July 2000 for drilling 4,483 tube wells and the balance Rs 3.94 crore was lying in civil deposits. An excess expenditure of Rs 1.61 crore was incurred on drilling and Rs 2.87 crore on 589 unsuccessful tube wells. The Department failed to provide safe drinking water to 1,024 Anganwadis.

Rajasthan: In the externally aided project in Churu, following irregularities were noticed:

(a) Irregular acceptance of the liability of the contractor entrusted with the work of laying and commissioning of the pipelines from Dhannasar water treatment plant to Sardarshahar for replanting trees felled by him (Rs 13.97 lakh), incorrect computation of the escalation admissible to him under the price variation clause (Rs 22.21 lakh) and changes introduced in the alignment after certain works had been partially completed (Rs 15.92 lakh) resulted in avoidable additional expenditure of Rs 52.10 lakh.

(b) Tender premium of Rs 67.08 lakh was incorrectly paid to the contractor entrusted with the construction of a raw water reservoir in respect of items not included in the Basic Schedule of rates, instead of regulating the payment only on the basis of prevailing market rates.

(c) An amount of Rs 28.43 lakh was overpaid to Rajasthan State Electricity Board due to incorrect calculation of overhead and workshop charges.

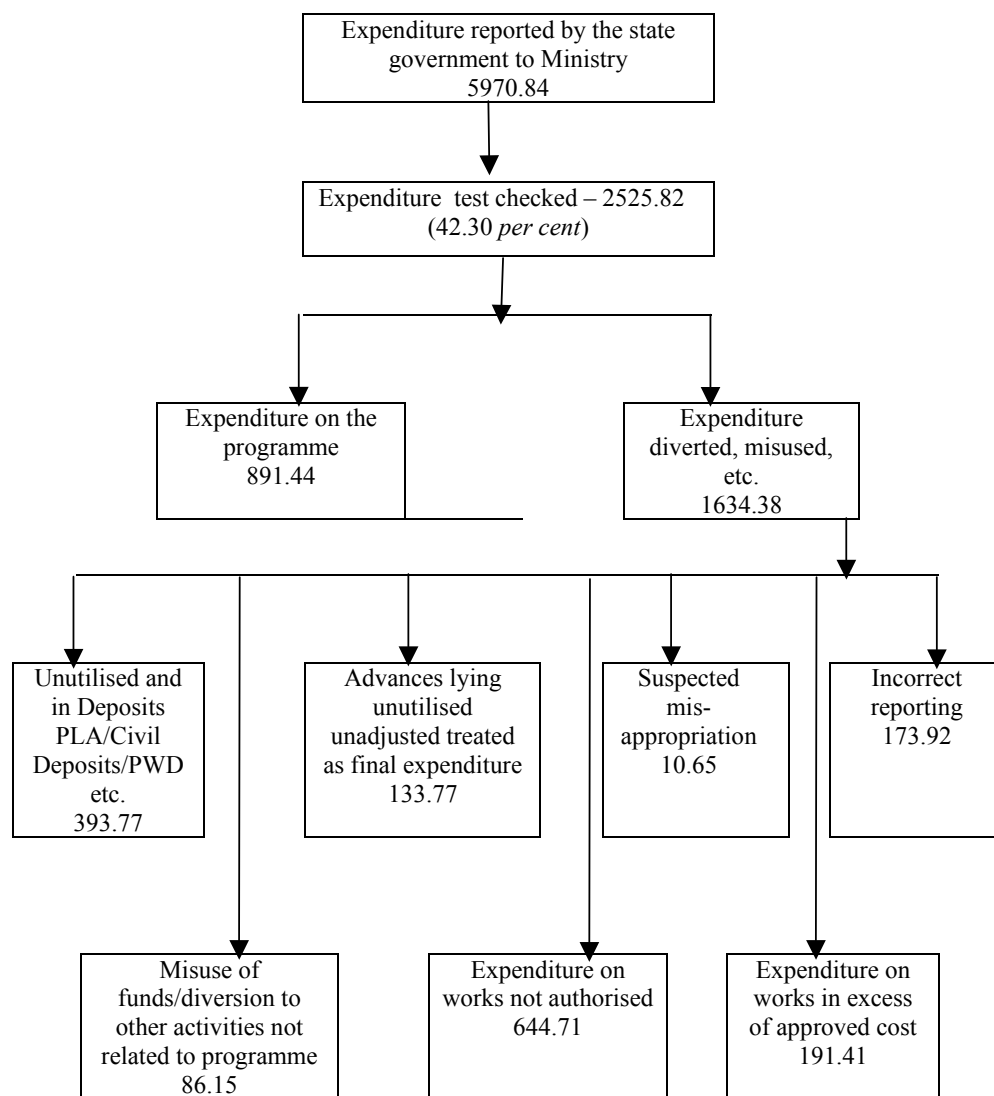
(d) Rs 18.28 lakh were spent on the purchase of bulk water meters without any analysis of the justification for the rates.

17 Financial Management

Against the total available funds of Rs 15735.74 crore under both ARWSP and MNP, the reported expenditure was Rs 5970.84 crore (91 *per cent*) under ARWSP and Rs 7626.47 crore (83 *per cent*) under MNP. The amount reported as spent under ARWSP was however, inflated and not actually utilized to the extent of Rs 1634.38 crore (65 *per cent*), as it included various deposits (Rs 179.89 crore), funds remaining unutilised with State governments/implementing agencies (Rs 213.88 crore), advances treated as expenditure though actually not adjusted (Rs 133.77 crore), diversions to other activities not connected with ARWSP (Rs 86.15 crore), suspected misappropriation of funds (Rs 10.65 crore), expenditure incurred on unapproved works (Rs 644.71 crore), expenditure in excess of provisions (Rs 191.41 crore) and expenditure incorrectly reported (Rs 173.92 crore). Deficiencies noticed in the course of test check have been dealt with in succeeding paragraphs.

**FINANCE INVERSE TREE IN RESPECT OF ARWSP FOR THE PERIOD
1997-2001**

(Rs in crore)



17.1 Delay in release of funds

According to the guidelines, the States/UTs were to release the entire amount of Central assistance received, alongwith the matching MNP share, to the executing agencies without delay, and in any case not later than one month (changed to 15 days with effect from April 1999) after its release. Scrutiny revealed that in **Andhra Pradesh, Arunachal Pradesh, Bihar & Jharkhand, Jammu & Kashmir, Karnataka, Maharashtra and Punjab** the State Governments released Central funds amounting to **Rs 533.05 crore** to the implementing/executing agencies only belatedly, the extent of delay ranging from **2 to 57 months**. Relevant details are contained in **Annex-3**.

17.2 Non-release/Short release of Central/State share to implementing agencies

Delays in release of funds upto 57 months and non-release/short release of Rs 97.42 crore in 9 States.

Sample check of records in States revealed instances of non-release or short release of Central/State funds aggregating to **Rs 97.42 crore** (not released : Rs.27.85 crore; short released : Rs.69.57 crore) by the State Governments to the implementing agencies in 9 States, as indicated in **Annex-4**.

17.3 Advances lying unutilised/unadjusted treated as final expenditure

Rs 133.77 crore lying unadjusted in 12 States.

In twelve States, advances totalling **Rs 133.77 crore** made by them or various executing agencies to other agencies like Electricity Boards, State Trading Corporations, Civil Supply Corporations, etc. were treated as final expenditure though the amounts advanced were not actually adjusted or the related utilisation certificates were not received. State-wise details are contained in **Annex-5**. This resulted in inflation of expenditure figures.

17.4 Diversion of funds

Rs 479.92 crore diverted to other activities/retained in deposit accounts.

Sample check of records in the States disclosed the following instances of irregular diversion of funds aggregating to **Rs 479.92 crore** during 1997-2001 to activities not connected with the Programme and retention of funds in Personal Ledger Accounts/Deposit Account/Revenue Deposits, etc:

(i) Diversion to activities not connected with Programme

In **19 States**, expenditure totalling **Rs. 86.15 crore** was incurred on purchase of vehicles, spare parts, carpets, curtains, office expenses, muster-roll payments, salaries of staff, meeting cost escalation, expenses on inaugural ceremony, dinner, construction of office building, meeting hall, residential flats, godowns, etc. Details are contained in **Annex-6**.

(ii) Retention of funds in deposits

In 18 States, **Rs 393.77 crore** were retained in Personal Ledger Accounts, Public Works Deposit Accounts, Civil deposits, revenue deposits, etc. for periods ranging from 1 month to 276 months, though drawal of money for retention in such deposits was not permissible. Relevant details are contained in **Annex-6A**.

17.5 Unauthorized expenditure

In 12 States, Rs 644.71 crore were spent on 20,777 unapproved works.

During 1997-2001, implementing agencies executed 20,777 works, at a total cost of **Rs 644.71 crore** without obtaining the approval and technical sanction of the competent authority in **Assam** (Rs 120 crore), **Haryana** (Rs 38.21crores), **Himachal Pradesh** (Rs 51.60 crore), **Jammu & Kashmir** (Rs 0.31 crore), **Karnataka** (Rs 1.80 crore), **Maharashtra** (Rs 0.98 crore), **Meghalaya** (Rs 0.84 crore), **Orissa** (Rs 37.90 crore), **Punjab** (Rs 7.71 crore), **Rajasthan** (Rs 5.45 crore), **Tamil Nadu** (Rs 379.45 crore) and **Uttar**

Pradesh (Rs 0.46 crore). The entire expenditure had not been regularised as of March 2001.

17.6 Inflated reporting of expenditure

Expenditure reported was in excess of that actually incurred to the extent of **Rs 173.92 crore** in **Gujarat** (Rs 25.33 crore), **Himachal Pradesh** (Rs 0.20 crore), **Kerala** (Rs 2.06 crore), **Madhya Pradesh** (Rs 6.84 crore), **Maharashtra** (Rs 0.40 crore), **Rajasthan** (Rs 5.13 crore) and **Tamil Nadu** (Rs 133.96 crore), resulting in inflated reporting of expenditure.

17.7 Expenditure incurred in excess of approved project cost

The guidelines provided that any expenditure in excess of the approved cost of schemes necessary for their completion was to be met from State funds. Contrary to the guidelines, **Rs 191.41 crore** were spent in excess of the sanctioned cost/provisions and the expenditure met out of ARWSP funds during 1997-2001 in **Arunachal Pradesh (Rs 2.23 crore)**, **Gujarat (Rs 25.44 crore)**, **Himachal Pradesh (Rs 109.18 crore)**, **Karnataka (Rs 29.17 crore)**, **Maharashtra (Rs 13.65 crore)**, **Meghalaya (Rs 1.19 crore)**, **Mizoram (Rs 0.04 crore)**, **Rajasthan (Rs 0.81 crore)**, **Tamil Nadu (Rs 6.95 crore)** and **Uttar Pradesh (Rs 2.75 crore)**.

Excess expenditure of Rs 191.41 crore over the provisions met from ARWSP fund, in violation of guidelines in 10 States.

17.8 Suspected misappropriation of funds/material

Sample check of records revealed the following cases of suspected misappropriation or defalcation in 5 States;

Assam: Mention was made in Para 6.6.4 of the Audit Report No. 3 (Civil) of the Comptroller and Auditor General of India for the year ended 31 March 1997 that materials worth Rs one crore was lying at 16 sites at the time of transfer of a Junior Engineer in-charge who failed to hand over the materials. Further examination revealed that as of March 2001, even after a lapse of seven years, no action had been initiated by the Chief Public Health Engineer to verify the availability of the materials at site and to investigate the shortages, if any.

Bihar and Jharkhand: In 5 divisions test checked, hand receipts for works departmentally executed for Rs 50.07 lakh did not indicate details of the actual labour engaged and duration of execution of work. Payments were made to the same agency through different vouchers. Prescribed check of measurement of work was also not done by the Assistant Engineer/Executive Engineer. In the circumstances, it was doubtful if the works were actually executed. This would require to be investigated.

Gujarat: In Panch Mahal district, drilling was done to a depth of 49 metres for the installation of a hand pump. However, payment to the rig operator was made for a depth of 60 metres. In Bedala village of Rajkot district, shortage of

two hand pumps was noticed during spot verification of hand pumps, contrary to the divisional records.

Mizoram: - Khazawl PHE Division spent Rs 21.54 lakh towards payment of wages of muster roll labourers engaged in repairing different water supply schemes and also issued materials like GI Pipes, fittings, special valves, etc. No entries in support of the works having been executed were, however, available in the Measurement Book.

Orissa: In 5 RWSS Divisions, Rs 481 lakh were released during 1991-2001 for execution of 12 Piped Water Supply schemes. Though the works could not be taken up due to non-finalisation of water sources and non-availability of materials, the entire amount was shown as having been utilized by fictitious booking of materials against the works.

18 Materials Management

Shortcomings in purchase and management of materials costing Rs 118.39 crore

(i) In terms of Rule 103 of the General Financial Rules, purchases of stores should be made in the most economical manner and after assessing definite requirements. Advance purchase of stores in excess of actual requirements is to be avoided. Sample check of records in various States revealed shortcomings in purchase and management of materials such as pipes, pumping machinery, DG sets etc. worth Rs. 118.39 crore (**Annex-7**) as detailed below:

- In 16 States, materials costing Rs 68.79 crore were lying idle due to purchases having been made in excess of actual requirements. In **Arunachal Pradesh and Orissa** materials costing Rs 4.54 crore were purchased without provision / allotment in the sanctioned estimate.
- In 4 States, materials valued at Rs 4.93 crore were found short. In **Jammu & Kashmir** materials costing Rs 0.12 crore were outstanding against concerned Junior Engineers. In **Assam** materials costing Rs 0.45 crore were lying in the site accounts even after completion of schemes between August 1979 and February 2001.
- In **Orissa and Madhya Pradesh**, materials costing Rs 3.32 crore were declared obsolete or were damaged, but these continued to be retained in stock.
- In **Bihar and Jharkhand, Madhya Pradesh, Rajasthan and Assam** materials-at-site accounts were not maintained in respect of materials costing Rs 14.68 crore.
- In **Mizoram** (Rs 60.66 lakh) and **Nagaland** (Rs. 997.00 lakh), materials at a total cost of Rs. 10.58 crore were purchased without inviting tenders, obtaining bank guarantee and without execution of agreements.

- In **Karnataka**, materials valued at Rs 0.76 crore were issued without any indents and were not accounted for.
- In **Meghalaya** (Rs 64.36 lakh), and **Orissa** (Rs 7.95 lakh), materials aggregating Rs 0.72 crore were stolen and had not been recovered as of March 2001.
- In **Madhya Pradesh** (Rs.920 lakh) and **Rajasthan** Rs. 7.86 lakh), old pipes costing Rs 9.28 crore were not retrieved or were not returned from abandoned/ dry bores.
- In **Tripura** materials worth Rs.0.12 crore were lying with contractors who had gone in for arbitration.

(ii) **Extra expenditure of Rs. 78.69 crore on use of costlier pipes**

The Manual on Water Supply and Treatment, 3rd edition (issued by the Ministry of Urban Development) emphasized the use of rigid AC/PVC pipes instead of conventional GI pipes for tube wells and piped water supply schemes as AC/PVC pipes are resistant to corrosion in iron bearing water, better in toughness and rigidity, easy in transportation, handling, laying and jointing, etc. being of light weight. Though AC/PVC pipes were cheaper than iron pipes, the PHED in **Madhya Pradesh** used GI pipes in tube wells and piped water supply schemes. Test check of 6 Divisions in Raipur Zone and 5 other Zones (including Mechanical) revealed the use of costlier GI pipes in tube wells during 1997-2001, resulting in extra expenditure of Rs 76.11 crore. Similarly, purchase of costlier GI pipes by CE, Raipur, between January and March 2001 resulted in additional expenditure of Rs 2.58 crore.

19 Monitoring

At the Central level, the Ministry is responsible for monitoring the performance of the Programme. The RGNDWM Authority (the Authority) and the Empowered Committee (EC) of the Ministry were also to review the progress of the implementation of the Programme. The Authority was to meet once a year and the Empowered Committee as often as necessary but not less than once in three months to review progress. The Ministry was also to review the progress of the implementation of Programme through Area officers. The guidelines also provided for submission of periodical financial and physical progress reports.

At the State level, progress of implementation was to be reviewed by State committees. Special monitoring cells and investigating units were to be set up at the State headquarters. The Monitoring unit was responsible for collecting information from the executing agencies, maintenance of data and timely submission of the prescribed reports and returns to the Central Government. Besides, it was also to maintain water quality data, details of technologies developed by Institutions for tackling different problems and to provide the same to field level executing agencies. The guidelines also envisaged regular

field inspections by officers of the State headquarters by undertaking visits to the districts, blocks and villages for effective implementation of the Programme.

Inadequate and ineffective monitoring and review mechanisms at both Central and State level

The monitoring, inspection and review of the Programme at the Central and State levels was inadequate, particularly in the context of ensuring the correctness of physical and financial achievements. The Authority at the Central level had not met even once to review the progress of the Programme. The Empowered Committee did not also meet after October 1997. Records in the Ministry did not reveal any evidence to indicate that achievement of the basic objective of providing 40 litres of water per day for each person on a sustainable basis was monitored. The Ministry was compiling data on physical and financial achievements, but there was no follow-up action on the irregularities noticed in the progress reports received. The field inspections by the Area officers were inadequate, both quantitatively and qualitatively.

Monitoring of the Programme was not done or was inadequate in **Assam, Bihar and Jharkhand,, Goa, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal**. In **Karnataka**, the high-level Committee appointed by the State Government met only once after its formation in January 2000. The Empowered Committee did not meet at all and district level Committees were not constituted. Schedule of inspections was not prepared in **Meghalaya** and inspections were not conducted in **Jammu & Kashmir**. Records of inspection carried out were not maintained in **Arunachal Pradesh, Gujarat, Himachal Pradesh, and Mizoram**.

20. Evaluation/Impact Assessment

Evaluation of impact of implementation of the Programme is the key to its effective administration. The Ministry and State governments were to undertake evaluation studies from time to time to assess the extent to which the Programme had been successful in ensuring the provision of adequate safe drinking water to rural people in a sustained manner and whether achievements and performance were commensurate with the investments made. In 1998, the Ministry got comprehensive evaluation studies conducted of the impact of the Programme in 12 States (**Punjab, Haryana, Bihar, Andhra Pradesh, Tamil Nadu, Maharashtra, Gujarat, Karnataka, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal**) in approximately 50 sample districts by various agencies. The Planning Commission commented on the Programme in their Mid term Appraisal of the Ninth Five Year Plan in 1998 in respect of 74 districts. The National Sample Survey Organisation (NSSO) conducted its 54th round of survey during January 1998 to June 1998 in 24 States covering 78,990 households.

Impact Study by AsG

Impact Assessment of the Programme was also got done in August 2001 by the State AsG in test checked blocks⁹ by Panchayat Samities / executing divisions in respect of 10 States which furnished the evaluation on key parameters. Some of the important findings emerging from various studies are detailed below:

	Parameters of Evaluation	Ministry	PEO	NSS0	AsG
1	Adequacy of water supply	Inadequacy of water supply in 4 States ranged between 12 to 60 per cent. (Madhya Pradesh - 12 %, Rajasthan - 30%, Andhra Pradesh - 60% & Bihar - 39.5 %)	59 per cent people felt supply was inadequate	-	5 States reported inadequacy of water supply, ranging between 5 to 50 per cent of habitations. (Madhya Pradesh - 5%, Gujarat - 8% Rajasthan - 20%, Andhra Pradesh - 37% & Karnataka - 50%). In Maharashtra, 825 habitations out of 1,394 habitations in 3 blocks reported inadequacy.
2	Regularity of water supply	During summer water supply was irregular in Andhra Pradesh, 56.24 per cent households reported water scarcity for 1-2 months in Bihar.		13 per cent of households suffered from irregular water supply.	4 States reported irregular water supply ranging between 5% - 62% of habitations (Madhya Pradesh - 5%, Rajasthan - 13%, Andhra Pradesh - 37% and Karnataka - 62%). In Gujarat and West Bengal water scarcity was reported during summer. In Maharashtra 824 habitations out of 1394 habitations in 3 blocks reported irregular water supply.
3	Convenient/ Inconvenient location of source	36.85 per cent of households in surveyed districts of Bihar reported water sources at a long distance.	-	-	3 States reported inconvenient source location viz. Madhya Pradesh - 5%, Andhra Pradesh - 15% and Rajasthan - 8%. In Maharashtra, 825 habitations out of 1,394 in 3 blocks reported inconvenient location of source.
4	Quality of Water	Poor quality of water reported in Rajasthan, Gujarat (25% households), and Haryana - 17% households and also in 18 out of 72 sources in Punjab quality of water perceived was reported as not good.	12 per cent of household said that quality of water was not potable.	15 per cent households suffered from quality-affected water.	5 States reported unsatisfactory Water quality. Percentage of habitations ranged between 6 and 37 (Madhya Pradesh - 6%, Gujarat - 15%, Rajasthan - 12%, Andhra Pradesh 18% and Karnataka 37%). In West Bengal, water supply quality was reported to be unsatisfactory. In Maharashtra 46 habitations in 2 blocks reported unsatisfactory water quality.
5	Frequency of testing of water	Water quality testing was reported as irregular in Rajasthan, Andhra Pradesh, Maharashtra, Uttar Pradesh, Madhya Pradesh, West Bengal and Bihar (98.66% households in Bihar). In Bihar, 79.03 per cent households were of the opinion that there was no facility for testing drinking water.	98 per cent households reported that there was no regular quality testing of drinking water sources.	77 per cent of households reported to be consuming water without treatment.	5 States reported that water testing was not being conducted regularly (Madhya Pradesh, West Bengal, Gujarat, Bihar and Karnataka). In Karnataka, it was reported that Water testing was conducted during 2000-01 only. In Andhra Pradesh - (14 per cent) and Rajasthan - (41 per cent) habitations supplied water without any test for water quality.

⁹ Blocks-170, Divisions-32 (Karnataka-35 Blocks, Madhya Pradesh-33 Blocks, Maharashtra-30 Blocks, Tamil Nadu-63 Blocks, West Bengal-9 Blocks, Andhra Pradesh-13 Divisions, J&K-9 Divisions, Rajasthan-10 Divisions, Bihar & Jharkhand and Gujarat-not known).

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	Parameters of Evaluation	Ministry	PEO	NSSO	AsG																	
6	Constitution/ functioning of Water and Sanitation Committee.	No water Committees were formed in West Bengal.	-	-	5 States reported not having Water and Sanitation Committees (Madhya Pradesh, Gujarat, West Bengal, Bihar & Jharkhand and Jammu & Kashmir.) and 5 States reported having Water and Sanitation Committees partially (Karnataka, Tamil Nadu, Andhra Pradesh, Rajasthan and Maharashtra)																	
7	Maintenance of Assets by Beneficiaries	-	-	-	4 States reported that assets were not being maintained by beneficiaries/public (Bihar & Jharkhand, Karnataka, Jammu & Kashmir, and Rajasthan) and 4 States reported partial maintenance (Madhya Pradesh, West Bengal, Gujarat and Tamil Nadu)																	
8	Extent of Cost Recovery	-	54 per cent of people were willing to pay for water.	-	5 States reported nil recovery (Madhya Pradesh, Bihar & Jharkhand, Karnataka, Tamil Nadu, Jammu & Kashmir) and 4 States reported negligible recovery (West Bengal, Gujarat, Andhra Pradesh & Rajasthan). In Maharashtra, the recovery was partial in one block and nil in 3 blocks out of 30 blocks.																	
9	Contribution to capital cost	-	-	-	8 States reported nil contribution to capital cost (Madhya Pradesh, West Bengal, Gujarat, Bihar and Jharkhand, Karnataka, Tamil Nadu, Rajasthan and Jammu & Kashmir. In Maharashtra, contribution to capital cost was reported nil in 28 blocks out of 30 test checked blocks and in Andhra Pradesh it was reported as 70 habitations in test checked districts.																	
10	Adequacy of operating staff	Strength of operating staff was reported as inadequate in Bihar.	-	-	Inadequate operating staff reported in 5 States (West Bengal, Karnataka, Andhra Pradesh, Rajasthan and Jammu & Kashmir).																	
11	Incidence of water Borne diseases	Prevalence of water borne diseases was reported in Punjab.	-	-	Incidence of water borne diseases was reported as increasing in 4 States (Madhya Pradesh, Bihar and Jharkhand, Karnataka and Rajasthan). In Tamil Nadu, Karnataka partial decline was reported and no change reported in Gujarat.																	
12	Non-functioning assets	In Andhra Pradesh, 26 per cent and 35 per cent of the hand pumps were not working due to lowering of water table. 42 per cent of hand pumps were reported not working in Tamil Nadu (Out of 58 per cent hand pumps working only 41 per cent reported fit for drinking purpose). In Karnataka, 34 per cent hand pumps, 15 per cent Public stand posts, 8 per cent MWS	20 per cent of sources were non-functional at any time. (35 per cent of defects remained unattended for more than a month).	-	<table border="1"> <thead> <tr> <th rowspan="2">States</th> <th colspan="2">Hand pumps</th> </tr> <tr> <th>Functional</th> <th>Non-functional</th> </tr> </thead> <tbody> <tr> <td>M.P.</td> <td>23816</td> <td>9589</td> </tr> <tr> <td>Karnataka</td> <td>24153</td> <td>8328</td> </tr> <tr> <td>Rajasthan</td> <td>66137</td> <td>853</td> </tr> <tr> <td>Maharashtra</td> <td>662</td> <td>18</td> </tr> </tbody> </table>	States	Hand pumps		Functional	Non-functional	M.P.	23816	9589	Karnataka	24153	8328	Rajasthan	66137	853	Maharashtra	662	18
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	Parameters of Evaluation	Ministry	PEO	NSSO	AsG		
		stand posts, 8 per cent MWS and 5 per cent house connection was defunct due to lack of sufficient ground water salinity/fluoride problems, lack of repairs etc. In Maharashtra, 40 per cent hand pumps and 18 per cent stand posts were not in working condition. In Bihar, 60.8 per cent reported sources got dried up. None of the tube wells was functional in some of the villages of Bihar, which as per records were reported fully covered. In Khalka village of Bihar it was reported not even a single tube well as functioning.			States	Piped water supply	
						Functional	Non-functional
					M.P.	824	136
					Karnataka	2402	222
					States	Mini water supply	
						Functional	Non-functional
					Karnataka	3742	343
				Maharashtra	1	3	
13	Re-emergence of FC habitations as PC, NC and quality affected habitations.	In Bihar some of the villages which were reported as FC, not a single tube well installed was functioning during the survey team's visit. In Karnataka, 3 per cent PC villages were reported to have become 'No source villages'. In Maharashtra, 6.7 per cent PC villages reportedly became 'No source villages' due to drying of sources.	-	-	Re-emergence of 29,583 PC habitations, 403 NC habitations, 6,825/60,000 Quality Affected habitations/population reported in 9 States (Andhra Pradesh, Karnataka, Madhya Pradesh, Tamil Nadu, West Bengal, Rajasthan, Gujarat and Uttar Pradesh) due to various reasons, like deterioration of ground water, failure of borewells, sources drying up, presence of excess fluoride, brackishness, nitrate and arsenic contamination etc.		

As seen from above, evaluation of the Programme by different agencies along critical parameters of adequacy, regularity, quality, distance, community participation, O&M, etc. revealed poor performance in the States of Andhra Pradesh, Rajasthan, Karnataka, Maharashtra, Madhya Pradesh, Gujarat, West Bengal, and Bihar. Significant re-emergence of NC/PC habitations was also revealed in Karnataka, AP, UP, MP, Rajasthan, West Bengal due to drying up of sources, failure of borewells, etc. These issues need to be addressed by Ministry to ensure safe drinking water supply to all its rural habitations, as envisaged under the Programme.

Conclusion

From the foregoing paragraphs, it is evident that in terms of providing adequate and potable water to the rural population the picture was far from satisfactory, despite incurring an expenditure Rs 32302.21 crore on the Rural Water Supply Programme since the First Five Year Plan. As of April 2001, there were still 1.55 lakh PC habitations and 20,073 NC habitations uncovered. These figures will go up further if one takes into account the significant re-emergence of PC/NC habitations, despite their reported coverage in many States. In the present monitoring system of the Ministry,

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this negative coverage was not being accounted for. The impact assessment of ARWSP by independent sources reveals the problem of re-emergence and also shortcomings in critical parameters of adequacy, regularity, quality and distance of source of water in many States. Despite the added thrust given to the Programme since 1999, planning and implementation suffered due to neglect of priority areas like sustainability, community participation and O&M. Resultantly, many schemes were abandoned midway and a large number of non-functional assets and unsustainable systems/sources were created which were indicative of serious planning weaknesses. Poor funds management resulted in substantial amounts being diverted to unapproved works and also being retained in Deposit Accounts. There is a strong question mark about the possibility of the achievement of the new envisaged objective of providing potable drinking water to all villages by 2004.

The matter was referred to the Ministry in November 2001; their reply was awaited as of January 2002.

Annex-I
(Refers to Paragraph 3)
Scope of Audit

State	Districts		Divisions		Blocks		Period of Audit	Name of District Test checked
	Total	Test checked	Total	Test checked	Total	Test checked		
Andhra Pradesh	22	6	52	16	1098	317	February-June 2001	Chittoor, East Godavari, Medak, Krishna, Kurnool, Khammam
Arunachal Pradesh	13	4	13	4	110	32	January-April 2001	Lower subansiri Distt., Upper Subansiri Distt, West Kamang Distt. ,Papumpare Distt .
Assam	23	9	41	11	219	88	January-May 2001	
Gujarat	25	8	70	20	-----	-----		Ahmedabad, Mehsana, Palanpur, Vadodara, Junagarh, Rajkot, Jamnagar & Godhra
Haryana	19	10	41	12	114	50		Ambala, Bhiwani, Hissar, Kaithal, Karnal, Kurukshetra, Narnaul, Panchkula, Rewari, Sirsa
Himachal Pradesh	12	7	41	11	69	-	Dec 2000-Mar 2001	Bilaspur, Hamirpur, Kangara, Mandi, Shimla, Solan and Una.
Jammu & Kashmir	14	5	29	09	NA	NA	Jan-May 2001	
Kerala	14	4	32	11	-	-	Feb-June 2001	
Maharashtra	33	9	106	32	323	111	Jan-June 2001	Amarawati, Ahmednagar, Nagpur, Nasik, Nanded, Pune, Raigarh, Ratnagiri, Solapur
Goa	2	2	4	4	11	11	Apr-June 2001	
Meghalaya	7	3	14	4	32	9	Jan-April 2001	East Khasi Hills West Garo Hills South Garo Hills
Mizoram	8	4	10	5	22	5	January-March 2001	
Madhya Pradesh & Chattisgarh	61	11	78	16	459	102	November 2000-June 2001	Rajgarh, Shajapur, Guna, Kanker, Ujjain, Indore, Durg, Raipur, Jagdalpur, Dantewara, Bilaspur
Nagaland	8	6	10	6	52	-	Feb-May 2001	Kohima, Dimapur, Thensang, Phek, Zunheboto, Mon
Punjab	17	7	30	8	137	35	Nov 2000-March 2001	Gurdaspur, Faridkot, Patiala, Ropar, Amritsar, Ferozepur, Ludhiana
Orissa	30	14	24	12	314	152	Dec 2000-May 2001	Cuttak, Jagatsinghpur, Kedrapara, Rayagada, Kalahandi, Nuapada, Nabrangpur, Malkangiri, Bolangir, Sonapur, Boudh, Kandhamala, Mayurbhanj, Ganjan (PT)
Sikkim	4	4	4	4	4	447	February-April 2001	North District(Mangan),East District(Gangtok),West District(Gyalshing),South District(Namchi)
Rajasthan	32	9	82	21	-----	-----	November 2000-May 2001	Barmer Bikaner , Chittor , Churu ,Dausa , Jalore ,Udaipur , Jhunjhunu , Rajsamand

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State	Districts		Divisions		Blocks		Period of Audit	Name of District Test checked
	Total	Test checked	Total	Test checked	Total	Test checked		
Tamil Nadu	28	9	41	11	385	147	November 2000- March 2001	Kancheepuram Dharmapuri , Cuddalore Erode ,Salem , Thiruchiyapalli Ramanathah puram, Vellore Thiruvannamalai
Uttar Pradesh	83	17	153	32	809	209		Agra ,Allahabad , Barabanki, Bijnor Gorakhpur , Hardoi, Jaunpur , Maharajganj, Meerut ,Muzaffar nagar , Pratapgarh, Sitapur, Unnao, Almora Dehradun , Tehri, Pithoragarh.
West Bengal	17	9	46	21	341	14	October 2000- April 2001	Darjeeling , Malda , Murshidabad Nadia , North- 24 Paragana , South-24 Paragana, Bankura, Medinapore, Purilea
Tripura	4	4	4	4	38	10	February - January2001	West Tripura, South Tripura, North Tripura and Dhalai
Manipur	9	5	12	6	31	20	April - June 2001	--
Bihar & Jharkhand	55	12	84	14	727	30	May -June 2001	Darbhangha, East Champaran, Mdhutrani, Patna, Samastipur, Sasaram, Bokaro, Dhanbad, Dumka, Garhwa, Jamshedpur and Ranchi
Karnataka	27	7	38	12	175	60	January-June 2001	-----
Total	567	185	1059	306	5470	1849		

Annex- 2
(Refers to Paragraph 4)

State-wise details of releases/provison and expenditure under ARWSP and MNP

(Rs. in lakh)

S.No	State/UT	(1997-2001)			
		Central Release (ARWSP)	Provision (MNP)	Total Availability (ARWSP + MNP)	Expenditure (ARWSP + MNP)
1.	Andhra Pradesh	44633.59	41265.66	85899.25	83018.85
2.	Arunachal Pradesh	8803.12	10215.00	19018.12	15792.02
3.	Assam	16343.30	25851.00	42194.30	38983.71
4.	Bihar (Including Jharkhand)	7049.50	23866.00	30915.50	19369.18
5.	GOA	1085.09	2518.31	3603.40	3438.93
6.	Gujarat	38365.17	70240.00	108605.17	100301.11
7.	Haryana	12493.48	14457.04	26950.52	27550.26
8.	Himachal Pradesh	13141.01	26225.76	39366.77	32149.81
9.	Jammu & Kashmir	16238.13	26745.32	42983.45	33238.77
10.	Karnataka	40316.14	36679.29	76995.43	63406.37
11.	Kerala	16828.86	22513.00	39341.86	29778.97
12.	Madhya Pradesh (Including Chattisgarh)	42846.26	49071.47	91917.73	73800.35
13.	Maharashtra	62708.24	186366.20	249074.44	258808.04
14.	Manipur	1573.74	6659.97	8233.71	6432.51
15.	Meghalaya	4875.48	7254.73	12130.21	10152.86
16.	Mizoram	3459.28	3452.79	6912.07	5042.69
17.	Nagaland	2409.71	5203.80	7613.51	4871.28
18.	Orissa	17786.57	21907.33	39693.90	30288.88
19.	Punjab	8022.91	13499.50	21522.41	13786.54
20.	Rajasthan	66456.06	74221.01	140677.07	119523.55
21.	Sikkim	3207.31	3607.00	6814.31	6050.84
22.	Tamil Nadu	32628.17	95771.12	128399.29	130297.53
23.	Tripura	6073.95	7683.86	13757.81	12525.90
24.	Uttar Pradesh & Uttranchal	59493.67	108114.65	167608.32	137311.36
25.	West Bengal	24282.13	27500.00	51782.13	48129.85
26.	Andeman & Nicobar Islands	00.00	4113.30	4113.30	3439.94
27.	Dadra & Nagar Haveli	3.50	1346.30	1349.80	1301.17
28.	Daman & Diu	00.00	680.00	680.00	508.93
29.	Delhi	00.00	2756.65	2756.65	2031.96
30.	Lakshadweep	00.00	575.52	575.52	587.11
31.	Pondicherry	10.00	711.43	721.43	571.86
	Total	551134.37	921073.01	1472207.38	1312491.13

Annex- 2A
(Refers to Paragraph 4)

**Details of releases and expenditure under ARWSP &
other components of the programme for 1997-2001**

(Rs. in lakh)

Name of component	Releases					Expenditure				
	1997-98	1998-99	1999-2000	2000-2001	Total	1997-98	1998-99	1999-2000	2000-2001	Total
ARWSP (Sector Reform)			21265.44	20491.99	41757.43					
ARWSP (Normal+DDP)	112956.30	143988.16	141879.00	152310.91	551134.7	111430.6	158247.62	162374.3	136398.08	568450.09
Monitoring & Evaluation	16.90	68.60	10.10		95.60	16.90	68.60	10.10		95.60
ARWSP (M&I Units)	185.99	232.55	174.45	203.55	796.54	185.99	232.55	174.45		592.99
Mini-Mission / DDP Areas	0.00	0.00	0.00			0.06	0.00			0.06
Sub-Mission	12200.41	15622.69	6140.34	13209.63	47173.07	9371.10	15284.56			24655.66
Professional Services	466.58	270.00	300.00	401.00	1437.58	466.58	270.00	300.00		1036.58
Research	150.00	138.60	52.81	60.00	401.41	150.00	138.60	52.81		341.41
CAPART	0.00	0.00				342.00	378.35	79.00		799.35
HRD/ TRAINING	500.00	191.75	565.77	791.53	2049.05	352.16	73.80			425.96
IEC	576.70	179.87	81.59	740.00	1578.16	576.70	2.16			578.86
MIS	2899.00	357.00	1283.55	1405.00	5944.55		17.51			17.51
Exhibition	17.19	0.00	10.00	9.86	37.05	17.19	0.00	10.00		27.19
Seminar / Conference	1.54	2.82	9.08	15.47	28.91	1.54	1.35	9.08		11.97
Assistance from UNICEF	10.00	12.16	18.91	15.03	56.10	10.00	12.16	18.91		41.07
Other Charges	10.00	0.00	0.00	1.30	11.30	10.00	0.00			10.00
Total	129990.61	161064.2	171791.04	189655.27	652501.12	122930.58	174727.26	163028.38	136398.08	597084.3

Annex-3
(Refers to Paragraph 17.1)

Delay in release of funds

State	By whom released	Period of release	Amount (Rs in lakh)	Period of (delay in months)	Remarks
Punjab	(i) State Govt.	1997-2001	6341.00	One – 6	Central Share
	(ii) State Government	March 2001	26.34	Above 24	Delayed release of Central fund for Computer training
Arunachal Pradesh	(i) State Government	1997-2001	8803.12	3-10	Delayed release of Central fund to implementing agencies
	(ii) -do-	March 1999 December 2000	25.35 42.80	12-36	Delayed release of Central fund to the implementing agencies.
Sikkim	Rural Development Department	1997-2001	-	-	No records for release of Central fund were maintained
Jammu & Kashmir	State Government	1997-2000	7042.00	Between 8 and 57	Delayed release of fund to implementing agency.
Andhra Pradesh	(i) State Government	1998-99	112.98	3-16	Delay release of Central fund to the implementing agencies
	(ii) -do-	2000-2001	581.00	--	-do-
	(iii) -do-	1999-2000	148.75	Above 12	-do-
Maharashtra	State Government	March 1999	957.00	12	Delayed release of Central fund
Bihar & Jharkhand	Engineer-in-Chief	1997-2001	7062.45	3-11	Delayed release of funds to Divisions.
Karnataka	(i) State Government	1997-2001	12845.00	One to 5	Delayed release of Central fund on 320 occasions.
	(ii) Zila Panchayats	-----	9317.00	One to 24	Delayed release of fund to the executing agencies on 267 occasions.
Total			53304.79		

Annex-4

(Refers to Paragraph 17.2)

Non-release/ Short release of Central/State share to implementing agencies

(Rs. in lakh)

State	By whom released	Period of Release	Amount	Remarks
Punjab	(i) State Government	1998-99 1999-2000 2000-2001	1216.00 1460.00 592.00	Central fund short released to executing agencies.
	(ii) -do-	October 2000	23.18	Central fund not released as of May 2001.
	(iii) State Government	March 2000	40.67	Central fund for purchase of Computer Hardware, software not released as of March 2001.
	(iv) State Government	1997-98	18.00	Central Fund for establishment of labs not released as of March 2001.
Assam	(i) State Government	1999-2000	823.00	Central fund short released to District Water and Sanitary Mission (implementing agency). Besides, Rs. 145 lakh was released with a delay of 6 months.
	(ii) -do-	-	164.63	Central Funds of MIS not released by State Govt.
Kerala	Kerala Water Authority (KWA)	1997-2001	2866.00	Central fund short released and lying with the KWA.
Rajasthan	State Government	1997-2001	128.74	State share not released as of June 2001.
Tamil Nadu	-do-	March 2000	1122.00	Central fund not released as of March 2001.
Andhra Pradesh	(i) State Government	February 2001	111.27	Central fund not released as of July 2001.
	(ii) ----	1997-98 and 1999-2000	48.56	State matching share not released as of March 2001.
Nagaland	(i) State Government	--	7.00	State share not released.
Manipur	State Government	1997-2001	506.43	Central fund not released to implementing agencies.
Bihar & Jharkhand	State Government	1997-2001	615.00	Central fund not released as of June 2001
Total			9742.48	

Annex-5

(Refers to Paragraph 17.3)

Advances lying unutilised/unadjusted treated as final expenditure

(Rs in lakh)

State	District/ Divisions	To Whom advanced	Period	Amount of advance	Remarks
Sikkim	(i) South District	State Trading Corporation, Sikkim	March 2000	2.00	Central fund received for setting up of laboratory was advanced for purchase of water testing equipment and chemicals. Neither laboratory was set up nor specifications of the equipment were given as of April 2001.
	(ii) Head Office East District	-do-	March 2000	95.00	Amount released in March 1998 for purchase of computers was kept outside the Government account for one year.
	(iii) Head Office East District	-do-	--	--	Advance payment made for procurement of cement, rods, GI pipes/fittings was not adjusted. Instead adhoc/part payment was released.
	(iv) Head Office East District	-do-	October 1997 to March 2001	1568.86	Advance payment made for purchase of cement, steel, GI pipes, fittings etc. shown as final expenditure. Out of total funds advanced, Rs. 841.92 lakh was paid on 31 March 1999, 31 March 2000 and 13 March and 29 March 2001.
Assam	Biswanath, Chariali and Jochat Division	Assam State Electricity Board, (ASEB)	Between June 1989 and April 1999	8.58	Advance payment made to ASEB for Power Connection to 16 PWSS without any agreement. Connection was not given to any of the schemes. Amount kept outside the Government account for period ranging between 2 and 12 years.
West Bengal	State Government	West Bengal State Electricity Board	March 2000	198.00	Advance lying unadjusted due to non-providing of site by the Department. Loss of interest of Rs. 26.65 lakh.
Kerala	14 Divisions	--	1995-2001	5177.00	The advance paid for the benefit of SC/ST treated as final expenditure pending adjustment.
Himachal Pradesh	(i) Shimla Division No. 1	HPCSC (Himachal Pradesh State civil Supplies Corporation)	1997-2000	41.86	Advance lying unadjusted/unutilized.
	(ii) 11 Divisions	HPSEB	1997-2001	370.00	Amount charged to final head of account. UCs awaited.
	(iii) Shimla Division No. 1	HPCSC	1999-2001	2548.00	Material for advance made was not received. (December 2000)

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State	District/ Divisions	To Whom advanced	Period	Amount of advance	Remarks
	(iv) State Government	State Council for Science Technology & Environment, Director, Social and Women Welfare and Kangra and Sirmoui District agencies	Between March 1997 and March 1999	35.20	Advances remained unutilized/unadjusted.
Rajasthan	(i) PHE Divisions	32 Zila Parishads	2000-01	661.00	Advance payment treated as final expenditure although UCs were pending as of March 2001.
	(ii) PHED City division and South Division, Barmer	Ground water Department, Jodhpur Vidyut Nigam and Zila Parishad, Barmer	1999-2001	209.00	Advance treated as final expenditure, of which Rs. 109 lakh was lying unadjusted as of April 2001.
	PHED Production and distribution Division (South), Jaipur	Rajasthan state agency for computer service	March 1996	93.91	Advance treated as final expenditure. Computers. not supplied as of May 2001.
Karnataka	7 ZPED	Executing agencies	--	363.00	Unadjusted advance treated as final expenditure.
Madhya Pradesh	State level	UNICEF	Between March 1998 and March 2000	66.64	Advance paid for procurement of hydro fracturing unit, machine was treated as final expenditure though the machine not supplied as of June 2001.
Andhra Pradesh	5 Divisions	Field Offices	1997-2001	30.17	Unadjusted advances.
Jammu & Kashmir	(i) PHED Jammu	Sister Divisions	1997-2001	372.60	The amount advanced for procurement of stores and execution of work to avoid lapsing of the grant.
	(ii) PHED Jammu	Seven Divisions	1997-2000	1006.00	Amount advanced for procurement of material/rendering services. Reconciliation for material received/services rendered, not conducted with the divisions.
	(iii) CE, PHE Jammu	Mechanical Procurement Division, Jammu	1999-2000	236.41	Advanced for supply of material. Amount transferred from civil components of various works to avoid lapsing of budget grant.
Tripura	(i) PHED	4 District Magistrates	Between January 2000 and February 2000	220.00	Amount was given for creation of spot sources for NC habitation. UCs were awaited as of June 2001. The amount was treated as final expenditure though Rs. 8.90 lakh remained unspent as of March 2001.
Manipur	2 Divisions	--	1997-99	73.67	Advance made for procurement of construction material remained unadjusted.
Total				13376.90	

Annex-6
(Refers to paragraph 17.4(i))

Diversion to activities not connected with programme

State	District/ Division	Year	Amount (Rs. in lakh)	Remarks
Arunachal Pradesh	(i) 2 PHE Divisions	1999-2000	3.94	Diverted to activities not connected with the programme.
	(ii) 3 PHE Divisions	Between March 1997 and August 2000	17.16	Purchase of spare parts, repairs and maintenance of departmental vehicles from the ARWSP Schemes fund.
Mizoram	Aizwal and Lunglei PHED	February 1998 to March 2000	12.51	Purchase of Carpets, Curtains, Spare parts of vehicles, office stationery etc. Expenditure charged to various schemes under ARWSP.
Sikkim	--	1997-98 to 2000-01	2.47	Purchase and repair of furniture, coolie Charges, muster Roll payments, dinner/lunch provided to Union Ministry officials etc.
Karnataka	2 ZPED	--	44.00	Diverted to works under India Population Project.
Nagaland	(i) 4 PHED and Directorate	--	13.88	Purchase of vehicles
	(ii) State level	1996-2001	25.06	Fund released for HRD activities diverted to office expenses, purchase of vehicles and miscellaneous items.
West Bengal	(i) PHED	1997-2001	66.36	Executive Engineers in-charge diverted the amount for maintenance and guarding charges of water supply schemes (WSS) meant for Kalimpong and Siliguri Municipality and defence personnel.
	(ii) Bankura Division	1997-98	23.33	Executive Engineer constructed office building-cum -meeting hall and garage without administrative approval.
	(iii) Malda Arsenic Division-I	August 1998	32.92	Construction of 12 residential flats. The Executive Engineer however, failed to allot any flat as there was no demand for the same as of January 2001.
	-do-	February 2000	14.13	Diverted for inaugural ceremony.
Uttar Pradesh	(i) UP Jal Nigam	1998-2001	873.00	Diverted for disbursement of salary to staff.
	(ii) Zonal Chief Engineer Garhwal and Kumaun	1997-2001	3389.00	Diverted for disbursement of salary to staff.
Jammu and Kashmir	(i) 3 PHED	January 2000	36.00	Amount diverted for meeting cost escalation in respect of incomplete water supply schemes.
	(ii) CE, PHE Jammu and Kashmir, PHE Division	1997-98	57.29	Diverted for other activities.
	(iii) CE, PHE Kashmir Division	1998-99 and 2000-01	55.46	Payment of wages, creation of assets out of O&M grants and expenditure on Amarnath Yatra.
	(iv) 5 PHE Divisions	1998-99 and 2000-01	38.10	Purchase of Coal, tyres, tubes payment of wages, etc.
	(v) CE, PHE Jammu	1997-98 and 1999-2000	18.50	Diverted to unapproved schemes.
	(vi) one division	1991-2001	119.00	Urban Water Supply Scheme
Assam	Biswanath Chariali and Silchar Division-I	Between June 1990 and September 1999	108.00	Expenditure incurred for providing water supply to Commercial Organizations.
Rajasthan	(i) State level	January/February 2000	50.70	Computer purchased under the programme installed-in divisions/offices not dealing with rural water supply.
	(ii) District Division-I, Jaipur	Between May 2000 and March 2001	428.00	Urban Water Supply Scheme.
Tripura	(i) 3 Divisions	April 1997-2001	18.98	Purchase of Jeeps and construction of Office Building.
	(ii) DM (West)	1999-2000	14.75	Purchase of compressors., boring machines and repair.

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State	District/ Division	Year	Amount (Rs. in lakh)	Remarks
Haryana	State level	1997-98	116.00	Diverted to Operation and Maintenance beyond norm fixed.
Punjab	State level	1997-2001	799.00	Diverted to Operation and Maintenance beyond norms fixed.
Madhya Pradesh	(i) Jhabua District	May 1998	17.54	Purchase of vehicles.
	(ii) Ujjain District	2000-2001	40.87	Diverted for meeting the escalation in RCC cost.
Andhra Pradesh	(i) 5 RWS Divisions	1997-2001	1015.00	The Executive Engineer diverted the funds for payment of salaries and maintenance of schemes beyond permissible limits.
	(ii) 3 Districts	July 1999	6.00	Construction of office building.
Orissa	6 RWSS Divisions	1997-2001	295.00	Less expenditure incurred on sinking of tube wells under ARWSP was diverted for adjustment of excess expenditure on other works.
Himachal Pradesh	(i) 7 Division	1997-2001	--	Provision of house connections not contemplated under ARWSP.
	(ii) Una District	--	33.85	Augmentation of water supply scheme not envisaged under the Programme. The scheme failed to provide adequate water, as the Department failed to develop the tube-well properly.
	(iii) 9 Divisions	1997-2001	527.00	State Sector Scheme
Manipur	4 Division	1997-2001	58.12.	Diverted to repairs and maintenance of vehicles, purchase of office equipment, furniture and office expenses etc.
Bihar and Jharkhand	(i) 3 Divisions	1997-2001	46.37	Diverted/ misutilised for work undertaken by the state under MNP and clearance of other old liabilities of contractor.
	(ii) 8 Divisions	1997-2001	189.00	Material procured for ARWSP diverted to other works under MNP , special repairs and deposit works.
	(iii) Engineer-in-Chief	March 2001 to Sept.2001	8.53	Vehicles purchased out of HRD funds.
Total			8614.82	

Annex -6 A
(Refers to Paragraph 17.4.(ii))

Retention of funds in deposits

(Rs. in lakh)

State	District/Division	Year	Amount	Remarks
West Bengal	PHED	1997-2001	4691.00	Kept in PL Account and Public Works Deposit.
Mizoram	Lunglei	March 2000	33.48	Lying in Civil deposits to avoid lapse of budget grant as of April 2001.
Assam	(i) 3 Divisions	Between 1978-79 and 1992-93 and March 1998	123.54	Amount lying in Public Works Deposits as of March 2001.
	(ii) State Government	1993-96	1022.00	Lying in Revenue deposit as of March 2001.
Kerala	(i) 6 Districts	as of March 2001	1048.00	Unspent balance lying in treasury accounts and State Government reported to Government of India as final expenditure.
	(ii) State Government	December 1999	113.33	Amount remained unutilized as of May 2001.
	(iii) -do-	1997-98	269.04	Lying unspent as of March 2001.
Jammu & Kashmir	Drilling Division, Srinagar	January 1996	62.00	Lying in the deposit head as of May 2001.
Himachal Pradesh	(i) Hamirpur Division	February 1996	20.00	Amount lying unutilized under deposit head as of March 2001.
	(ii) Shimla Division NO. 2	March 1996 and March 1999	4.75	Lying unutilized under Public works Deposits.
Rajasthan	(i) State Government	As of March 2001	12241.00	Central funds remained unutilised with the State Government as of March 2001.
	(ii) -do-	1997-98	21.60	Lying unutilised as of March 2001.
	(iii) State level	1996-98	35.83	Central fund released for MIS programme lying unutilized.
Madhya Pradesh	(i) Engineer-in-Chief PHED	1996-97 to 1999- 2000	10152.00	The E-in-C drew the amounts on 31 March each year and credited to Civil Deposits. Rs.. 98.52 crore was remitted to the Division in subsequent years, of which Rs. 41.05 crore is lying in Civil deposits as of June 2001.
	(ii) 13 divisions	October 2000	18.70	Kept in Civil deposits.
	(iii) CE Raipur	31.3.2001	932.00	Kept in civil deposits by debit to ARWSP

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State	District/Division	Year	Amount	Remarks
Punjab	3 Divisions	January 1999 and January 2001	-	The Executive Engineer kept funds ranging from Rs. 6.79 lakh to Rs 215 lakh in current account in Commercial Bank, resulting in loss of interest to the tune of Rs. 8.54 lakh.
Nagaland	(i) District Water and Sanitation Mission, Dimapur	March 2000	167.00	Central fund remained unutilized as of May 2001.
	(ii) State Govt.	1997-98	7.00	Central funds released under MIS component remained utilized in the department.
Haryana	State Government	1999-2001	70.51	Central funds released for computerization remained unutilised/not refunded.
Maharashtra	(i) Zila Parishads	---	3849.96	Lying unspent as of March 2001.
	(ii) State Government	1995-2001	110.37	Lying unspent as of June 2001.
Andhra Pradesh	(i) 4 districts	1997-2000	52.43	Lying unutilised as of May 2001.
	(ii) Executive Director HRD	1997-2001	57.94	Lying unspent in Personal Deposit A/c as of March 2001
	(iii) Executive Director HRD	-do-	283.68	Lying unutilised in Personal Deposit A/c as of March 2001.
Bihar and Jharkhand	(i) Engineer-in-Chief	1994-95	69.95	Lying in Civil Deposit as of June 2001.
	(ii) State Govt.	1997-2001	3257.00	Lying unutilised as of June 2001.
Manipur	(i) State Govt.	March 1998 March 2000	293.48 196.98	Lying in 8449 other deposit of which Rs 293.88 crore utilised and Rs 196.58 crore lying unutilised and retained in deposit account as of March 2001.
	(ii) -do-	1996-1997 to 2000-2001	32.80	Remained unutilised
Uttar Pradesh	UP Jal Nigam	March 1997 & March 1998	75.00	Remained unutilised as of April 2001
Tripura	State Govt.	1997-2001	13.80	Central funds released for computer, hardware lying unutilized.
Arunachal Pradesh	PHED	March 1999 & December 2000	50.87	Central funds released for computer, hardware lying unutilized as of March 2001.
Total			39377.04	

Annex –7
(Refers to Paragraph 18)

Materials Management

(Rs. in lakh)

State	District/ Division	Year	Material	Amount	Remarks
Meghalaya	(i) 3 Divisions	Prior to 1981-82 to 1993-94	GI Pipes Water supply fittings	109.23	Lying in Stock as of March 2001
	(ii) Hills Division Shillong	April 1997 to December 2000	Water Supply fittings	3.28	Purchased despite availability of material in the stock
	(iii) 6 Divisions	Between April 1997 to December 2000	GI pipes, Polyethene pipes, pumps & WS fittings	64.36	Stolen. Reported to Police
Arunachal Pradesh	(i) Zero PHE division	February 2000 to February 2001	GI fittings Bleaching Powder	9.20	Lying unutilized in the stock even after completion of the work
	(ii) 3 Divisions	December 1996 to September 2000	GI fittings	24.62	Lying idle in stock
	(iii) Zero PHE division	August and September 2000	Pipe wrench	7.79	Purchased without provision in the sanctioned estimate.
	(iv) Daporijo PHE division	February 2000 to February 2001	GI pipes, GI fittings, T & P	6.47	Lying in stock as of March 2001
West Bengal	(i) Malda Arsenic Division-1	Between June 1996 and May 1998	“Z” type sheet piles DI pipes	216.00	Lying in stock as of April 2001
	(ii) South – 24 Parganas Water Supply Division-I	1998	CI pipes	2034.00	Lying in stock Division did not commence any work as of December 2000.
	(iii) South – 24 Parganas Mechanical Division	March 2000 to September 2000	Pumping machines	845.00	Lying in Godown as of June 2001 due to non completion of civil work
	(iv) South – 24 Parganas water supply Division-II	1998-99	DI pipes	70.00	Pipes lying idle in stock due to non completion of related work

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State	District/ Division	Year	Material	Amount	Remarks
Karnataka	(i) 9 ZPED	1991-2000	Material	323.27	Shortage of material. Cost of shortages not recovered as of May 2001
	(ii) ZPED Gulbarga	1995-1999	Material	76.00	Storekeeper issued material without indent and were not accounted for. Action to fix responsibility is awaited as of May 2001
	(iii) 11 ZPED		Water Supply Material	310.00	Lying in stock from 1 to 14 years
Uttar Pradesh	State level	1997-2001	Material	-	Material account not being maintained
Sikkim	State level	1997-2001	Material	-	Records of material account not being maintained. Physical verification of stores was not conducted
Kerala	2 PH Divisions	June 1997 to January 2001	AC Pipes CI Pipes	410.73	Lying in stock due to non commencement of work
Assam	(i) 8 Divisions	-	Polyvinyl, Chloride pipes Joints, Cast iron joints, Solvent Cement, Sockets etc.	55.30	Material lying in site accounts of the PWSS completed between August 1979 and February 2001
	(ii) Biswanath Chariali Division	Since September 1994	GI pipes, Cement, BJ Strainer Tara pumps, PVC pipes etc.	55.81	Material account not maintained
	(iii) CPHE	1997-2001	Hand pumps	748.00	13501 Hand pumps procured in excess of requirement. 2265 hand pumps (Mark-III) valuing Rs.. 2.70 crore and 163 hand pumps (others) lying in stock as of March 2001
	(iv) Store and workshop Division Guwahati	1997-2001	CID Joints MSBE pipe slotted strainers UPVC pipes spare parts	228.00	Lying in stock as of April 2001. Physical verification of material not conducted
	(v) Store and Workshop Division Guwahati	1997-2001	Mark-III Hand pump Tara Hand pump Singer Hand pump Pipes, Spare parts tool kits etc.	346.00	Material donated by UNICEF were lying unused and some material were kept on the open ground
	(vi) Dibrugarh PHE Division	-	-	55.01	Shortage of material noticed and departmental proceedings under process. Physical verification of material was not conducted after December 1991.

State	District/ Division	Year	Material	Amount	Remarks
Mizoram	Khawzawl PHED Division	Between July 1997 and November 2000	GI special valves etc.	60.66	Material purchased locally and without inviting tender/quotations
Orissa	(i) Cuttack RWSS Division-I	1994-95 to 1999-2000	Material	35.95	Material procured out of allotted fund remained unutilized due to non- finalisation of water source for 4 PWSS
	(ii) Mechanical Division, Sambalpur	1981-1996	Spares of rigs	41.56	Material valued at Rs. 24.80 lakh were declared obsolete/damaged due to prolong storage.
	(iii) RWSS Division, Baripada	June 1998	Material	30.50	On transfer Junior Engineer did not handover material to his successor. Recovery pending as of March 2001.
	(iv) 6 RWSS Divisions	1999-2001	Material	7.95	Material were stolen and the cases were under investigation by police/departmental officers.
	(v) Balasore RWSS Division	March 1999	Pre Pipes, Hand Pumps, Riser Pumps, etc.	446.00	Excess Expenditure over the allotment of Rs. 91 lakh was charged to miscellaneous works Advance and not cleared as of March 2001.
Himachal Pradesh	Arki and Dehra Divisions	Between October 1996 and November 1997	Pumping machinery	19.92	Lying unutilized due to non completion of Civil Works and non providing SOP.
Jammu & Kashmir	(i) 6 Divisions	1997-2000	Material	250.00	Lying in stock
	(ii) Rajouri and Jammu rural Divisions	1997-2000	Material	12.34	Material was outstanding in site accounts of the Junior Engineers as of January 1999 neither cost was recovered nor material retrieved as of May 2001. Physical verification not conducted in seven test checked divisions
	(iii) Procurement Division Jammu	2000-2001	Black ended pipe	34.20	Lying in stock due to purchase in excess of actual requirement

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State	District/ Division	Year	Material	Amount	Remarks
Punjab	(i) State Level	February 1990 to March 1999	Diesel Generating Sets / Engines	105.00	Lying unused since April 1996
	(ii) Executive Engineer RWS Division Patiala	December 1992 to May 2000	–	42.30	Lying unutilized as of May 2001 but was booked as issued to 17 RWS schemes
Haryana	PHD Ambala	August 1998	4 Diesel Generating Sets	16.31	Purchased without ascertaining the demand from the field Offices lying unutilised as on March 2001
Madhya Pradesh	(i) 2 Divisions	-	Suction pipe	7.59	Lying idle since 1998-1999
	(ii) 21 Divisions	-	Pipes, Pipe fittings, spare parts etc.	627.00	Material lying unutilized 6 – 360 months
	(iii) 36 Divisions	-	Pipes, Pumps etc.	83.84	Shortage of stores revealed during Physical verification (Aug 2000)
	(iv) 56 divisions	August 2000	Pipes, Pumps and spares	291.00	Non disposal of unserviceable stores
	(v) 7 Divisions	-	Pipes, Hand pumps and spares	1235.00	Material Changed to work between Sep.87 to Jan. 2001 but no MAS A/c maintained.
	(vi) State level	1997-2001	Casing pipes	920.00	14187 dry bores/ abandoned bores were not extracted by contractors/Department.
Andhra Pradesh	(i) Medak District	August 1998 to October 1998	Duct Iron pipes	29.59	Left unutilized
	(ii) Kurnool District	July 1999	Pipes	4.67	Lying unutilized
	(iii) RWS Divisions Kakinada	Prior to 1997-1998	AC pipes, PVC pipes	13.53	-do-
Nagaland	PHED Kohima & Store Division Dimapur	1997-2001	Pipes	997.00	SO's placed without executing agreement and obtaining B.G.

State	District/ Division	Year	Material	Amount	Remarks
Rajasthan	(i) 3 PHED Division	Between July 1997 and December 2000	Pipes, Pumps and other material	34.03	Lying in divisional stores for last one to four years
	(ii) 7 PHED Divisions	1995-2001	-do-	147.00	Material shown as issued to various RWSS during 1995-2001 but was lying in store.
	(iii) 5 PHED Divisions	1999-2000	-do-	26.86	Material issued to various RWSS schemes not taken in the stock / MAS register maintained by JE.
	(iv) 1 Division	1996-97	Old pipes & other material	7.86	Old pipes dug out were not returned as of April 2001.
Tripura	(i) PHE Divisions II & III	-	-	11.65	Material lying with contractor since December 1997 i.e. suspension of works.
	(ii) State Level	1997-2001	Pump sets	106.00	Cost of excess 225 pumps purchased.
Bihar and Jharkhand	(i) 3 divisions	1997-2001	Hand pump, PVC pipes, GI pipes Strainer, etc.	150.00	Doubtful utilisation of material due to non-maintenance of site account.
	(ii) 4 divisions	1997-2001	Hand pump, GI pipes, Tara pump, Strainer etc.	45.18	Purchase of material in excess of requirement
Total				11838.56	