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Preface

This report of the Comptroller and Auditor General of India containing the results of performance audit of Accelerated Rural Water Supply Programme (ARWSP) has been prepared for submission to the President of India under Article 151 of the Constitution.

The audit was conducted through test check of records of the Department of Drinking Water Supply (Union Ministry of Rural Development), State Public Health Engineering Departments and other implementing agencies in 26 States between June and October 2007. The period covered under the audit was 2002-03 to 2006-07.

Executive Summary

The Accelerated Rural Water Supply Programme (ARWSP) was originally introduced by the Government of India (GoI) in 1972-73 and given a mission approach with the introduction of the National Drinking Water Mission (NDWM) in 1986. In 1999, a Comprehensive Action Plan (CAP 99) was prepared to identify and cover Not Covered (NC) and Partially Covered (PC) habitations, which were not receiving the stipulated norm of 40 litres per capita per day (lpcd) of potable drinking water supply. Further, the Bharat Nirman programme, which was launched in 2005, had a rural drinking water supply component, which envisaged covering of all uncovered habitations and addressing the problems of slip-back and water quality by 2008-09.

The programme was previously reviewed in audit and included in the Comptroller and Auditor General of India's Report No. 3 of 1998 (Chapter 6-National Drinking Water Mission) and No.3 of 2002 (Chapter III-ARWSP). Significant observations in the latter report viz re-emergence of problem habitations, poor planning in implementation of schemes, lack of adequate monitoring of quality of water, inadequate community participation and poor fund management, inadequate and inefficient programme monitoring etc. are still relevant.

Of the total Central Assistance of Rs. 16,104 crore received during 2002-03 to 2006-07, State Governments could utilize Rs. 11,323 crore (70 *per cent*).

A performance audit of the implementation of ARWSP in 26 States, covering the period from April 2002 to March 2007, was conducted between June and October 2007. The draft performance audit report was issued to the Ministry, which sent its response, and also forwarded the comments of 24 states.

The performance audit revealed that despite the investment of more than Rs. 66,000 crore in the rural water supply sector since the I Five Year Plan, there remains considerable need for improvement in rural drinking water supply. Slip back of fully-covered habitations and re-emergence of problem habitations continued to be a major problem.

Surveys of habitations at periodic intervals are important in assessing ground-level coverage of access to safe drinking water. However, there were significant deficiencies in the conduct of 2003 National Habitation Survey at the States, adversely affecting assurance regarding the quality and reliability of the survey data and its utility for planning purposes.

Annual Action Plans (AAPs) in many States were not based on a detailed and comprehensive habitation-wise analysis. Consequently, targets were fixed in an ad hoc manner, which adversely impacted the coverage of problem; priority should have been accorded to completion of incomplete works as well as the habitations based on the extent of problem. Audit recommends that the Ministry should not only insist on timely preparation and submission of AAPs by the States, but also ensure that these plans are habitation-wise; further, details of schemes for SC/ST populations should be specifically indicated in these plans.

There were several instances of deficient financial control, besides instances of inadmissible expenditure and diversion of ARWSP funds in several States. Audit recommends that the Ministry should take penal action against the State Governments in cases of diversion of ARWSP funds for non-approved purposes.

Audit scrutiny revealed numerous deficiencies in execution and implementation of works. These included cases of time and cost overrun, non-completion/ delayed completion of works, non-functional/ defunct works, incorrect prioritization of works, and other cases of wasteful and unfruitful expenditure.

States were not paying adequate attention to water quality, with inadequate infrastructure for testing at the district level, and non-compliance with the periodic testing requirements. Distribution and utilization of field testing kits at the village level was also poor, and projects under the Water Quality Sub-Mission were often delayed or non-functional. State Governments must ensure testing of water samples, including positive samples from the village level, at the stipulated periodicity. Further, requisite number of Field Testing Kits should be procured and distributed to village level functionaries, so that the objective of institutionalizing water quality testing at the grass root level is achieved.

Some States had initiated innovative practices for water sustainability, including implementation of a State-wide water transmission grid, use of IEC campaigns for promoting water conservation, and use of remote sensing technology for assessment of impact of recharge structures. However, many States did not take adequate measures for ensuring sustainability of water resources, especially ground water. The proportion of schemes relying on ground water sources was very high. The Ministry should ensure that States accord due importance to the sustainability component, as suited to their local environment. In the absence of adequate attention being paid to sustainability, the slip back of habitations may continue to remain major area of concern.

There were significant deficiencies in the implementation of the demand-driven, participatory approach of Swajaldhara. In many cases, the beneficiary contribution, which is at the core of Swajaldhara, had not been fully received. Further, there were numerous cases of non-execution and delayed execution of Swajaldhara schemes.

Thus the performance audit findings reflect that there is low assurance regarding (a) realistic identification of all problem habitation, (b) proper matching of execution of works with problem habitations, (c) quality of water and (d) sustainability of the resources. These areas need to be addressed with ground level approach as the efficacy of simply pouring money into schemes and achievement of some numbers (coverage of problem habitation & works executed) disregarding ground situation will remain questionable for addressing the drinking water needs of the problem habitations.

Highlights

A performance audit of ARWSP, covering the period from April 2002 to March 2007, was conducted between June and October 2007. This involved field audit of the relevant records of the Department of Drinking Water Supply (Ministry of Rural Development), State Governments, and District and State Implementing Agencies (Public Health Engineering Departments, Jal Nigams etc.) in 26 States. The audit revealed the following:

- Surveys of habitations at periodic intervals are important in assessing ground-level coverage of access to safe drinking water. There were significant deficiencies in the conduct of the 2003 National Habitation Survey at the States, adversely affecting assurance regarding the quality and reliability of the survey data, and thus its utility for planning purposes.

(Paragraph 2.1)

- In the absence of Annual Action Plans based on a detailed and comprehensive habitation-wise analysis in many States, targets were being fixed on a numerical basis, and works taken up in an ad hoc manner. This adversely impacts the coverage of habitations, especially the prioritization for incomplete works and Not Covered (NC)/ Partially Covered (PC) habitations.

(Paragraph 2.2)

- There were several instances of deficient financial control, besides instances of inadmissible expenditure and diversion of ARWSP funds.

(Paragraph 2.4 and Chapter 3)

- Contrary to the scheme's objectives, slip back of fully-covered habitations and re-emergence of problem habitations continued to be a major problem, thus raising the issue of indefinite continuity of the programme.

(Paragraph 2.5)

- States did not pay adequate attention to water quality. The infrastructure for testing and monitoring water quality, especially at the District level, was inadequate and periodic testing requirements were not complied with. Distribution and utilisation of field testing kits at the GP/ VWSC level was also poor.

(Paragraph 2.6)

- Some States had initiated innovative practices for water sustainability, including implementation of a State-wide water transmission grid, use of IEC campaigns for promoting water conservation, and use of remote sensing technology for assessment of impact of recharge structures. However, many States did not take adequate measures for ensuring sustainability of water resources especially ground water. The proportion of schemes relying on

ground water sources was very high in many States. In the absence of adequate attention being paid to sustainability, the slip back of habitations may continue to remain a major area of concern.

(Paragraph 2.7)

- There were significant deficiencies in the implementation of the demand-driven, participatory approach of Swajaldhara. In many cases, the beneficiary contribution, which is at the core of Swajaldhara, had not been fully received. There were numerous cases of non-execution and delayed execution of Swajaldhara schemes and the financial control, in terms of maintenance of records, audit of accounts and adherence to stipulated procedures was weak.

(Paragraph 2.9 and Chapter 3)

- There were numerous deficiencies in execution and implementation of works. These included cases of time and cost-overrun, non-completion/delayed completion of works, non-functional/defunct works, delayed completion and non-completion of water quality mission projects, incorrect prioritization of works, wasteful and unfruitful expenditure, and expenditure on unapproved items.

(Chapter 3)

Summary of Recommendations

- ***Department of Drinking Water Supply (DDWS) should not only insist on preparation and submission of Annual Action Plans (AAP) in time by the State Government, but also insist that these plans are habitation-wise. Details of schemes for SC/ST populations should be specifically indicated in the AAPs, and implemented as per the plans.***

- ***GoI may take action for recovery in respect of cases of inadmissible expenditure/ diversion of funds.***

- ***DDWS may direct all State Governments to ensure adequate infrastructure for water testing like laboratories equipped with adequate qualified manpower and required equipment.***

- ***State Governments should ensure testing of water samples, including positive water samples from GPs/ VWSCs, at the stipulated periodicity, and also maintain appropriate records of such testing. This may be structured as part of a comprehensive State-wide water quality monitoring programme.***

- ***Requisite number of Field Testing Kits should be procured and distributed to Gram Panchayat level functionaries who should be imparted adequate training, so that the objective of institutionalizing water quality testing at the grass root level is achieved.***

- ***DDWS should ensure that States accord due importance to the sustainability component as suited to their local environment. Further, State Governments should be encouraged to adopt measures for rainwater harvesting, controlling utilization of ground water, studying ground water levels and impact of recharge structures and use of remote sensing and related technologies for such studies, and promoting ground water recharge in WSSs.***

- ***State Governments may also consider launching localized Information, Education and Communication (IEC) campaigns to promote the urgency of, and need for adopting water conservation and sustainability measures amongst the local population.***

- ***State Governments may be encouraged to carry out independent third-party evaluations of a representative sample of water supply schemes to assess their effectiveness and the level of satisfaction of the local community.***

- ***DDWS may direct States to ensure that Vigilance and Monitoring Committees are constituted and are functional. Further, States should also set up Special Monitoring and Inspection Units with adequate complement of technically qualified staff.***

Performance Audit of Accelerated Rural Water Supply Programme (ARWSP)

Chapter 1 - Introduction

1.1 Overview of the Programme

1.1.1 Background

Drinking water supply is a State subject, and the Government of India (GoI) supplements efforts made by the States, by providing necessary and financial technical assistance. The investment made by the State and Central Governments in the rural water supply sector since the I five year plan is of the order of Rs. 66,000 crore.

The Accelerated Rural Water Supply Programme (ARWSP), originally introduced by the Government of India (GoI) in 1972-73, was withdrawn from 1974-75 with the introduction of the Minimum Needs Programme (MNP). Since the MNP was not found to be satisfactory, ARWSP was reintroduced in 1977-78. The entire programme was given a mission approach with the introduction of the National Drinking Water Mission (NDWM) in 1986. The NDWM was renamed as the Rajiv Gandhi National Drinking Water Mission (RGNDWM) in 1991.

In 1999, a Comprehensive Action Plan (CAP 99) was prepared to identify and cover Not Covered (NC) and Partially Covered (PC) habitations. Further, the Bharat Nirman programme, which was launched in 2005, had a rural drinking water supply component, which envisaged covering of all uncovered habitations identified under CAP 99, and also addressing the problems of slip-back and water quality in four years by 2008-09.

As part of a transformation from a target-based supply-driven approach to a participatory, demand-driven approach, the Sector Reform Programme was launched on a pilot basis in 1999-2000 in 67 districts of 26 States. This was then modified and launched as Swajaldhara in December 2002, with two Dharas (streams) – the first Dhara (Swajaldhara-I) for a Gram Panchayat (GP) or a group of GPs or an Intermediate Panchayat, and the second Dhara (Swajaldhara-II) with a District as the project area.

1.1.2 Programme Objectives

The prime objectives of ARWSP are to:

- Ensure coverage of all rural habitations with access to safe drinking water;
- Ensure sustainability of drinking water systems and sources;
- Tackle the problem of quality in affected habitations; and
- Institutionalise the reform initiative in the rural drinking water supply sector.

1.1.3 Coverage Norms

The following norms have been adopted for providing potable drinking water supply to the population:

- 40 litres per capita per day (lpcd) for human beings;
- 30 lpcd of additional water for animals in areas under the Desert Development Programme (DDP); and
- One hand pump or stand post for every 250 persons.

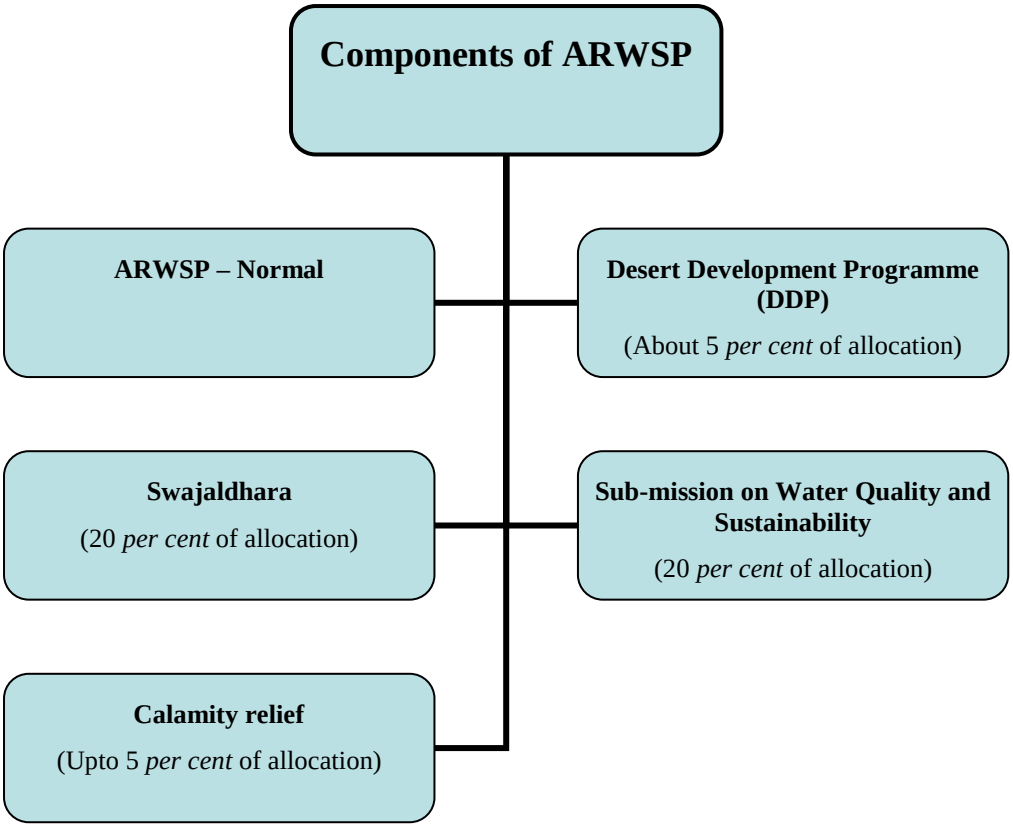
Habitations are categorized as follows:

- **Not Covered (NC)/ No Safe Source (NSS)** habitations, where a drinking water source/ point is not available with 1.6 km of the habitations in the plains or 100 metre elevation in hilly areas, or where the habitations have a water source which is affected by quality problems;
- **Partially Covered (PC)** habitations, which have a safe drinking water source, but the capacity of the system ranges between 10 lpcd to 40 lpcd.
- **Fully Covered (FC)** habitations, which would cover all remaining habitations.

A **Dual Water Supply Policy** has been prescribed for rural habitations facing acute water quality problems. In such habitations, even if 10 lpcd of safe water, which would be sufficient for drinking and cooking purposes, is provided, the habitation would be considered to have a safe source, since water available from the unsafe sources can be used for other activities like washing, ablution etc.

1.1.4 ARWSP Components

An overview of the different components of ARWSP is as follows:



1.1.5 Funding Pattern

The funding pattern for the programme is as follows:

- State Governments should match funds released by the GoI on a 1:1 basis; however, for projects under the Sub-Mission for water quality and sustainability, funding is in the ratio of 3:1 between the GoI and the State Governments, and allocation under DDP is funded 100 *per cent* by the GoI.
- Up to 20 *per cent* of the funds can be utilized by the State Governments (a) to take up projects under the Sub-Mission programme for tackling water quality problems like fluorosis, arsenic, brackishness, excess iron and nitrate (15 *per cent* of funds) and (b) to ensure source sustainability by conserving water, recharging aquifers etc. (5 *per cent* of funds).
- Up to 15 *per cent* of the funds can be utilized for Operation and Maintenance (O&M) of assets created.
- At least 35 *per cent* of funds must be utilized for drinking water supply to SC/ST populations.
- For projects under Sector Reform Programme and Swajaldhara, the funding pattern is 90 *per cent* from GoI and 10 *per cent* by way of community contribution.

1.1.6 Organisational Structure

The Department of Drinking Water Supply (DDWS) in the Ministry of Rural Development is the nodal department in the GoI for providing scientific, technical and

financial assistance to the States in the drinking water and sanitation sector. ARWSP is executed in mission mode through the RGNDWM.

At the State level, the programme is executed by Public Health Engineering Departments/Water Boards/ Nigams/autonomous bodies/ authorities under the concerned State Government.

1.2 Programme Performance during 2002-07

1.2.1 Physical Performance

Achievement in terms of coverage of problem habitations viz. Not Covered (NC) and Partially Covered (PC) habitations under ARWSP vis-à-vis targets set during the period 2002-03 to 2006-07 is depicted below:

Table 1: Physical Progress of Coverage of NC/PC Habitations

(In lakh)

Year	Targets			Achievements		
	NC	PC	Total	NC	PC	Total
2002-03	0.12	0.65	0.77	0.10	0.38	0.48
2003-04	0.17	0.73	0.90	0.10	0.42	0.52
2004-05	0.22	0.99	1.21	0.15	0.48	0.63
2005-06	0.51	0.55	1.06	0.31	0.52	0.83
2006-07	0.48	0.94	1.42	0.34	0.67	1.01

Source: Data furnished by State-level implementing agencies to audit

1.2.2 Financial Performance

Details of funds released and funds utilized by the States during the period 2002-07 are as follows:

Table 2: Fund utilization

(Rs. in crore)

Year	Opening Balance with States	Releases made by DDWS	Funds Available with States	Expenditure reported by States out of GoI funds	Expenditure as percentage of Available Funds
2002-03	307	2101	2408	1816	75
2003-04	401	2565	2966	1973	67
2004-05	398	2931	3329	2188	66
2005-06	356	4098	4454	2857	64
2006-07	1096	4409	5505	2489	45
Total		**16104**		**11323**	**70**

1.3 Audit Objectives

The main objectives of the Performance Audit were to ascertain whether:

- The survey of habitations was conducted effectively, and resulted in authentic and reliable data;

- There was an effective process of planning for ARWSP;
- Financial control was adequate and effective, and funds were released in timely fashion;
- Individual projects were implemented within the stipulated time and cost, and were executed economically, efficiently and effectively;
- The mechanism for monitoring of water quality and surveillance was adequate and effective;
- Adequate attention was accorded to sustainability of water sources and Operation and Maintenance of existing water supply assets;
- The objective of participatory, demand-driven rural water supply through Swajaldhara was achieved effectively; and
- There was an adequate and effective mechanism at different levels for monitoring and evaluation of the scheme.

1.4 Audit Criteria

The main sources of audit criteria used for the Performance Audit were the following:

- Guidelines for Implementation of Rural Water Supply Programme (August 2000);
- Guidelines on Swajaldhara (June 2003);
- Guidelines on Survey of Drinking Water Supply Status in Rural Habitations (February 2003);
- Guidelines for National Rural Drinking Water Quality Monitoring and Surveillance Programme (January 2006);
- National Water Policy (April 2002);
- Guidelines for Implementation of Schemes and Projects on Sustainability under ARWSP and PM's Gramodaya Yojana – Rural Drinking Water (October 2000); and
- Draft Project Reports and Project Implementation Plans for individual schemes.

1.5 Audit Scope, Sampling and Methodology

1.5.1 Earlier Audits

The programme was previously reviewed in audit and reported in the Comptroller and Auditor General of India's Report No. 3 of 1998 (Chapter 6-National Drinking Water Mission) and No.3 of 2002 (Chapter III-ARWSP).

Significant observations in the latter report included large number of NC/PC habitations, re-emergence of problem villages, poor planning in implementation of schemes, lack of adequate monitoring of quality of water, inadequate community participation and poor fund management, and inadequate and inefficient programme monitoring.

In their Action Taken Note submitted in June 2003, the Ministry had stated that fresh surveys were conducted to assess the real magnitude of the problem of reemergence of problem habitations. Further, instructions had been issued to the State Governments for careful prior examination to minimize abandonment of schemes, and effective monitoring of rigs to ensure optimum utilization. Also, in order to institutionalize community participation, the Swajaldhara scheme had been introduced, and instructions had been issued for timely release of full funds to implementing agencies, correct treatment of advances, not diverting funds and investigation of cases of suspected misappropriations.

1.5.2 Scope of Current Performance Audit

The scope of the performance audit covered 26 States, with the period of audit coverage from 2002-03 to 2006-07. Field audit of the relevant records of the DDWS, State Governments, and District and State Implementing Agencies (Public Health Engineering Departments, Jal Nigams etc.) was conducted between June and October 2007.

1.5.3 Audit Sampling

The sampling plan for audit of ARWSP was as follows:

- In each State, 25 *per cent* of ARWSP districts (subject to a minimum of two) were selected.
- In each district, 25 *per cent* of divisions/units (subject to a minimum of two) were chosen and in each sampled division/unit, ten schemes, (preferably distributed evenly over the period from 2002-03 to 2006-07), were selected for detailed examination.

Thus, records relating to 154 districts, 278 divisions/units within the selected districts, and 2010 schemes in the selected divisions, were selected for detailed examination.

For Swajaldhara projects, in each State, 25 *per cent* of districts (subject to a minimum of two) were selected. In each district/unit, ten schemes, preferably distributed evenly over the period from 2002-03 to 2006-07, were selected for detailed examination.

Details of the audit sample are given in **Annexure –A.**

1.5.4 Audit Methodology

The Performance Audit commenced with an entry conference with the DDWS in July 2007, wherein the audit methodology, scope, objectives and criteria were explained. During the meeting, DDWS also made a presentation on the status of ARWSP.

The draft audit report was issued to DDWS in December 2007. An exit conference was held (January 2007) with the Secretary, DDWS to discuss the audit findings in the draft report. A meeting was also held (March 2008) by the Secretary, DDWS with the States to expedite their responses to the findings in the draft audit report, at which audit was also present.

The Ministry sent its response (May 2008) on the draft audit report, and also enclosed the comments of 24 State Governments on the findings of the draft report. Further,

the Ministry also forwarded (June 2008) some success stories of different states in rural drinking water supply. The responses of the Ministry and the State Governments have been incorporated, as appropriate, in this report.

Audit acknowledges the cooperation and assistance extended by the DDWS and its officials, as well as those of the State Governments, at various stages of conduct of the Performance Audit.

Chapter 2 - Overall Audit Findings

2.1 Conduct of National Habitation Survey 2003

In 2003, DDWS decided to conduct a fresh survey to ascertain the exact position of drinking water supply in rural habitations; the results of the survey could form the basis for developing future strategies for the programme. DDWS issued detailed guidelines in February 2003 for conducting the National Habitation Survey 2003, according to which:

- The survey was to be completed by 31 March 2003; this deadline was subsequently extended to 30 September 2003;
- Comprehensive training on all aspects of the survey data collection was to be conducted for all staff involved in the survey;
- Maps on a scale of 1:40,000 were to be prepared in advance, and detailed maps after the survey were to be prepared and sent to the Chief Coordinator; these maps would be used for national planning and monitoring;
- The data collected was to be subject to 5 *per cent* test check at the sub-divisional and district levels, to ensure correctness of data.

Audit scrutiny revealed the following deficiencies in the conduct of the survey:

- Inconsistencies and discrepancies were noticed in the conduct of the survey in **Manipur** and **Haryana**. In **Manipur**, the survey was conducted through an NGO and a report submitted to the GoI in December 2006; however, due to inconsistencies in the survey report, the State Government was considering conduct of another survey. In **Haryana**, the survey was completed in 2005, but the survey results could not be finalized due to discrepancies between the figures with the State Government and GoI.
- Due to lack of documentation, audit could not verify the authenticity of conduct of the survey in **Chhattisgarh** (partly), **Jharkhand** and **Orissa**. In **Jharkhand**, filled-in survey forms were produced to audit in only one out of six test checked districts. In **Orissa**, filled-in survey forms were not produced to audit. In Korba District in **Chhattisgarh**, filled-in survey forms were not made available to audit.
- Detailed maps were not prepared in 130 out of 154 test-checked districts in Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand and West Bengal (22 States).
- The stipulated 5 *per cent* test check by the supervisory officers at State/District level was not conducted, or no documentation of such test check was produced to audit in 93 districts in **Andhra Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Manipur, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh** and **West Bengal (**17 States**)**.

- Training for the conduct of the survey was not conducted, or no documentary evidence of conduct of training was produced to audit in **Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Kerala, Manipur, Orissa,** and **Rajasthan (**12 States**).**

In response (May 2008), the Ministry stated that the survey of habitation was to be conducted every five years, but since the data became outdated because of the time gap, it had been made mandatory for the States to enter on-line data habitation-wise. This would ensure that the habitations, once covered, would not be eligible for funding again during the life span of the project.

Further, the Governments of **Andhra Pradesh, Assam, Haryana, Jharkhand, Maharashtra**, **Punjab**, **Rajasthan, Uttarakhand, Sikkim** and **West Bengal** accepted that there were delays and gave various reasons for the delays e.g. non-availability of census data, error in composition of data in some district centres, need for clarifications regarding data entry in upgraded software, the special nature of the survey, difficult geographical and topographical features, extreme climatic conditions etc. With regard to preparation of maps, most of the Governments accepted that the maps were not prepared and initiative was now being taken to prepare the maps.

Also, the Governments of **Andhra Pradesh**, **Bihar, Gujarat, Haryana, Karnataka, Nagaland, Orissa, Rajasthan, Sikkim** and **West Bengal** accepted that records in respect of test check by supervisory officer were not maintained or could not furnish such records. The Governments of **Andhra Pradesh**, **Jharkhand** and **Rajasthan** accepted that training was not conducted. The Government of **Haryana** stated that some discrepancies still persisted, as some of the habitations had not been depicted by the GoI.

In audit's view, reliable survey data provides the base data on current coverage of rural habitations, which is necessary for proper planning for rural water supply schemes. Non-conduct of test check of survey data, lack of training of survey staff, and non-preparation of detailed maps would adversely affect the quality and reliability of the survey data, and thus its usefulness for planning purposes.

2.2 Planning

As per the ARWSP guidelines, the States should prepare an Annual Action Plan (AAP) on the basis of a shelf of schemes, the likely size of the allocation under State Sector MNP, ARWSP, as well as likely carry over funds, if any, and submit them to DDWS by the beginning of October of the previous year for use at the Annual Plan discussions. This AAP should be reviewed and finalized by April, after the final outlay is decided.

The AAP should give priority to completion of the incomplete works over taking up of new works, and also ensure completion of works on schedule. The AAPs should also indicate:

- Target of coverage of NC/PC habitations with full details, and whether habitations would be covered fully or partially;
- Population to be benefited, indicating separately the SC/ST population;

- Activities to be taken up under sub-missions, magnitude of the problem, and steps to tackle it; and
- Provision for Dual Water Supply programme for rural habitations facing acute water quality problems.

Also, in order to ensure realistic bottom-up planning:

- The AAP at the State level should be supported by detailed plans at lower levels right down to the GP and habitation level, and ideally the State-level plan should be compiled from District proposals;
- The District AAPs should contain a review of the current position, and the status of Rural Water Supply Schemes (RWSSs) implemented in the past; identification of problem areas (in particular, the issue of sources running dry), investigation of causes and addressing these problems in the plan; and use of new sustainability methods and traditional water management systems to harvest rain water and ensure ground water recharge.

Audit scrutiny revealed that out of 26 States, two States (**Jammu & Kashmir** and **Jharkhand**) had not prepared the AAPs at all during the period 2002-03 to 2006-07**,** while seven States **(Andhra Pradesh, Assam, Gujarat, Karnataka, Madhya Pradesh[1], Punjab,** and **Uttar Pradesh)** had not submitted the AAPs, though prepared, to the DDWS. Further, even in respect of the 24 States which prepared the AAPs:

- In 15 States (**Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Haryana, Kerala, Manipur, Meghalaya, Nagaland, Orissa, Rajasthan, Sikkim, Uttar Pradesh, Uttarakhand** and **West Bengal**) the AAPs did not have habitation-wise details and were prepared at the State level *suo moto*, without having corresponding plans at the District and lower levels;
- In 9 States (**Himachal Pradesh, Karnataka, Maharashtra, Manipur, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand** and West Bengal), the AAPs did not indicate the shelf of schemes and likely size of allocations.
- In 9 States (**Himachal Pradesh, Karnataka, Maharashtra, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal**), the AAPs did not indicate the population to be benefited.
- In 9 States (**Arunachal Pradesh, Karnataka, Maharashtra, Manipur, Rajasthan, Sikkim, Tripura, Uttar Pradesh** and **West Bengal**), the AAPs did not contain a review of the current position, the status of Rural Water Supply Scheme (RWSS) implemented in the past, identification and resolution of problem areas, and use of new sustainability methods and traditional water harvesting methods.

[1] For the period 2005-07

- In 8 States (**Arunachal Pradesh, Maharashtra, Punjab, Rajasthan, Sikkim, Uttar Pradesh, Uttarakhand** and **West Bengal**), the AAPs did not indicate priority for completion of incomplete works over taking up new works.
- In 15 States (**Arunachal Pradesh, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal**), the AAPs did not include the Dual Water Policy for habitations facing acute water quality problems.
- In 11 States (**Assam, Himachal Pradesh, Karnataka, Maharashtra, Manipur, Punjab, Rajasthan, Sikkim, Uttar Pradesh, Uttarakhand** and **West Bengal**) the AAPs did not indicate the activities to be taken up under the sub-mission on water quality and sustainability.

In response, the Government of **Andhra Pradesh, Jharkhand, Orissa** and **Punjab** accepted the deficiencies in planning, and stated that suitable action for preparation and submission of AAP was being taken. The Governments of **Assam, Bihar, Chhattisgarh, Haryana** and **Kerala** stated that targets were fixed on the basis of the availability and allocation of funds. The Government of **Meghalaya** stated that targets were fixed on the basis of the availability and allocation of funds, and AAPs would now be prepared at the grass root level. The Government of **Nagaland** stated that AAPs were prepared at State level after consultations with districts and lower levels, for which, however, no documentary evidence was available. The Government of **West Bengal** stated that AAPs were prepared on the basis of feedback from field level offices, but in the test-checked districts, the concerned offices confirmed that district level AAPs were not prepared. The Governments of **Karnataka** and **Rajasthan** accepted that the AAPs did not indicate the shelf of schemes.

While the Governments of **Arunachal Pradesh, Punjab** and **Rajasthan** indicated that generally priority was given to completion of incomplete works, audit scrutiny revealed this was not borne out in the actual progress in completion of incomplete works.

In audit's view, in the absence of adequate and detailed bottom-up planning there is a risk that works are taken up in an ad hoc fashion, without a clear prioritization of problem habitations.

Recommendation

DDWS should not only insist on preparation and submission of AAPs in time by the State Government, but also insist that these plans are habitation-wise.

2.3 Coverage of SC/ST Population

According to the ARWSP Guidelines, the States/ UTs are required to earmark and utilize at least 25 *per cent* and 10 *per cent* of ARWSP funds for drinking water supply to SCs and STs respectively. As a measure of flexibility, the State may utilize at least 35 *per cent* of the ARWSP funds for the benefit of the SC/STs, particularly in those States where SC/ST coverage is less than the coverage of the general population.

Audit scrutiny, however, revealed that in eight States **(Karnataka, Maharashtra, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal)**, the AAPs did not specifically indicate the SC/ST population to be benefited. In **Chhattisgarh,** a separate target for SC/ST population was provided in the five year plan 2002-07, but this was not reflected in the annual plans.

In **Jammu & Kashmir,** only 18 *per cent* of the total ARWSP expenditure was utilized on providing drinking water to SC/ST habitations, while the corresponding expenditure under MNP was only 17 *per cent*. Further, the SC/ST population to be benefited was not indicated in any of the test-checked projects or schemes. Nor were there records indicating expenditure incurred on providing drinking water to SC/ST population.

In response, the Governments of **Rajasthan** and **Sikkim** stated that SC/ST beneficiaries were indicated in the progress reports instead of the AAPs. The Government of **Haryana** stated that from November 2006, a new programme "Indira Gandhi Drinking Water Scheme" was launched for providing free private water connections to SC households.

In audit's view, lack of focused planning for SC/ST population in the AAPs may compromise the objective of providing welfare to them.

Recommendation

Details of coverage of SC/ST populations should be specifically indicated in the AAPs, and implemented as per the plans.

2.4 Financial Control

2.4.1 Non-release of matching State share

As per the ARWSP Guidelines, the States were to match releases by the GoI on a 1:1 basis. However, audit scrutiny revealed significant cases[2] of short releases over the period 2002-07 by 10 States (**Andhra Pradesh, Arunachal Pradesh, Assam, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Nagaland, Orissa, Rajasthan** and **West Bengal**) amounting to Rs. 2773.14 crore, which are detailed in **Annexure-A**. In response, the Governments of **Assam, Jharkhand, Madhya Pradesh** and **Orissa** accepted the facts and stated that adequate provisions would be ensured in future.

In audit's view, non-release of matching State share indicated lack of seriousness on the part of the States for implementation of ARWSP.

2.4.2 Delay in release of funds by States to executing agencies

The ARWSP Guidelines stipulate that the States should release the entire amount of central assistance received, along with the matching MNP share, to the executing agency without any delay, and in any case not later than 15 days after its receipt.

[2] Exceeding Rs. 50 crore

Audit scrutiny, however, revealed delay in release of funds to the implementing agencies in 9 States. Overall, the amount of Central funds, released late, was Rs. 790.49 crore; details are indicated in **Annexure-B.** Further, in Maharashtra, scrutiny of records revealed that in Satara and Thane Districts, no scheme was implemented during 2002-07 and 2002-06 respectively due to non-receipt of funds.

In response (May 2008), the Ministry stated that despite the condition for transfer of funds to implementing agencies within 14 days, audit had pointed out that in some cases, this had not been followed and that the States had been asked to furnish instances of delays in transfer of funds.

2.4.3 Cases of Inadmissible Expenditure and Diversion of Funds

Audit scrutiny revealed cases of diversion of ARWSP funds in 12 States **(Assam, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Uttar Pradesh, Uttarakhand** and **West Bengal)** amounting to Rs. 404 crore; details are given in Chapter-3 under the relevant State.

In response, the Governments of **Assam, Madhya Pradesh** and **Nagaland** accepted the facts, while the Government of **Meghalaya** stated that corrective action had been initiated.

Recommendation

GoI may take action for recovery in respect of cases of inadmissible expenditure/ diversion of funds.

2.5 Slip-backs and Re-emergence of Problem Habitations

The following table depicts the status of habitations for the country as a whole as on 1 April 2000 (based on CAP – 99 Survey data), and as on 1 April 2003 (based on National Habitation Survey 2003 data) and 1 April 2007 (based on validated NHS Survey 2003).

Table 3: Status of Habitations

(Lakh Habitations)

Status as on	Total	FC	PC	NC
1 April 2000	14.23	11.84	2.13	0.26
1 April 2003	15.07	8.70	3.89	2.48
1 April 2007	15.05	10.30	3.13	1.62

Source: Data from DDWS

The 2003 Survey revealed a slip back of 3.14 lakh habitations from April 2000 and highlighted the problem of re-emergence of problem habitations, and slip back of FC habitations into PC and NC habitations. Despite the coverage of habitations during the period 2003-07, there was still a slip back of 1.54 lakh FC habitations between April

2000 and April 2007. The stated reasons for the alarming level of slippage were excessive drawal of ground water, inadequate/non-maintenance of tube wells, and lack of sustainability of water resources.

Audit collected state-wise status of habitations from the implementing agencies, which revealed substantial slip backs in **Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Orissa, Rajasthan, Sikkim, Uttar Pradesh, Uttarakhand** and **West Bengal;** details are given in **Annexure – C**.

Further, audit scrutiny revealed significant deficiencies in the reliability of data. Two sets of data relating to status of habitations were collected by audit; one at the central level (from DDWS) and the other collated from data collected by field audit from the respective State implementing agencies. The reconciliation of the two sets of data revealed several discrepancies:

- Even the total number of habitations in a State as per GOI and as per State level figures did not tally. In eight states (**Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh** and **West Bengal**) the total figures of habitations as per the state level agencies was higher than the DDWS figures by more than 10,000 habitations.
- The total number of NC and PC habitations in a State as per GOI and as per the State level agencies did not tally. In 12 States **(Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand** and **West Bengal**), the figures of PC habitations as per the State level agencies was higher than the DDWS figures by more than 5,000 habitations. In 14 States (**Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal**), the figures of NC habitations as per the State level agencies was higher than the DDWS figures by more than 500 habitations.

Details of the discrepancies in terms of total habitations and NC/ PC habitations between the DDWS figures and State-level figures are given in **Annexure-D.**

In response (May 2008), the Ministry stated that slippage was unavoidable, and was a part of the water supply system. Slippage took place due to a number of factors e.g. lifespan of water supply scheme, sources running dry, lowering of water table, reduction in capacity due to poor maintenance, increase in population etc. Consequently, the Government had revised its strategy, which was now focused on sustainability in all drinking water schemes so that the phenomenon of slippage was reduced.

Further, the Governments of **Bihar, Gujarat, Orissa, Karnataka, Madhya Pradesh** and **Rajasthan** accepted the problem of slip-backs.

In audit's view, the acceptance of the Ministry's response that slip backs were unavoidable and would be tackled through the strategy of sustainability in all drinking water schemes should be read with the audit findings on sustainability (paragraph 2.7), which indicates low priority being accorded by States to sustainability measures.

2.6 Water Quality

The major water quality problems in India are fluorosis, brackishness/ salinity, excess arsenic, excess iron and nitrates. There are separate sub-mission components for fluorosis[3], desalination, removal of excess iron, and other items. Under ARWSP, up to 15 *per cent* of funds could be utilised by the State Government for tackling water quality problems like fluorosis, arsenic, brackishness, excess iron and nitrates.

2.6.1 Establishment of Water Quality Laboratories and Institutions

According to the ARWSP Guidelines, establishing of water quality laboratories could be one of the components of the programme. Water quality laboratories may be implemented at three levels, consisting of a nodal unit at the top level, intermediary level units like district laboratories, and grass-root level units. State and region-specific IEC activities were to be taken up. Further, 100 *per cent* funding was to be provided to the States for strengthening water quality monitoring facilities with a view to networking the nodal unit (premier technical institution) with the State headquarters (PHED).

Audit scrutiny, however, revealed significant deficiencies in the development of infrastructure for water quality monitoring and testing. Ten States **(Arunachal Pradesh, Assam, Chhattisgarh, Haryana, Himachal Pradesh, Karnataka, Kerala, Meghalaya, Orissa** and **Uttar Pradesh)** had not assigned the task of checking water quality at the State level to premier institutes. Eleven States **(Arunachal Pradesh, Assam, Chattisgarh, Haryana, Jammu & Kashmir, Jharkhand, Maharashtra, Manipur, Meghalaya, Orissa and Sikkim)** did not take up region-specific IEC activities involving PRIs, cooperatives, women groups, Self Help Groups etc. There were also significant deficiencies in the district level laboratory infrastructure in several States, as detailed below:

- In **Arunachal Pradesh,** in six test checked districts, no qualified staff was appointed in the laboratories.
- In **Assam,** neither was any new laboratory for testing water quality established, nor were the facilities in the existing ones strengthened. No qualified staff was appointed in the laboratories and the departmental staffs like JEs, sectional assistants etc. were performing the tests.
- In **Bihar**, two out of nine test-checked districts did not have a laboratory.
- In **Chhattisgarh,** no funds were utilized for strengthening of laboratories. Further, no staff was appointed in the newly constructed Raipur District laboratory, which was being used as a guest house.
- In **Gujarat**, out of 25 districts, eight districts did not have laboratories.
- In **Haryana,** only seven chemists were posted for covering all the 19 laboratories in the State by rotation.

[3] Although, according to the WHO, guinea worm has been eradicated from India in 2000, it still figures as a component under the ARWSP sub-mission on water quality.

- In **Himachal Pradesh,** technically qualified staff was not available in one out of three test checked district laboratories.
- In **Jammu & Kashmir**, out of a total of 14 districts, only four districts had water testing laboratories, of which one was not functional.
- In **Jharkhand**, district laboratories existed in four out of six districts; of these, facilities in only one laboratory were strengthened. Further, no qualified staff were appointed in three district laboratories.
- In **Karnataka**, one out of seven test-checked districts did not have a laboratory, while two district laboratories were not functioning.
- In **Madhya Pradesh**, in one district laboratory, no regular chemist was appointed.
- In **Manipur**, there were no laboratories in the Districts.
- In **Nagaland**, only one out of eleven District laboratories was functional.
- In **Orissa,** out of 30 district level laboratories, only 15 were made operational in 2006-07.
- In **Punjab**, in three test checked districts, no district level laboratories were established, and no water tests were conducted there.
- In **Uttar Pradesh,** none of the 16 test-checked district laboratories were having the recommended staffing pattern, and 14 laboratories were being run by non-qualified staff like work agents and fitters. Further, no district laboratories were strengthened or new laboratories set up.

In response, the Governments of **Haryana, Nagaland** and **Sikkim** accepted the facts. The Governments of **Kerala** and **Meghalaya** stated that now the Quality Lab at Aluva, Ernakulam and the laboratory at the Meghalaya Pollution Control Board had now been identified as the State Referral Institutes. The Government of **Maharashtra** stated that a comprehensive region-specific IEC programme would be implemented soon. The Government of **Arunachal Pradesh** stated that regular staff had now been engaged in each of the District Level laboratories. The Government of **Assam** accepted the facts and stated that steps for establishing new district level labs and appointment of staff had been initiated. The Government of **Gujarat** stated that a proposal for setting up of labs in another 8 districts had been approved recently. The Government of **Madhya Pradesh** stated that if a regular chemist was not available, other persons were trained; this is not tenable in audit considering the need for regular and qualified chemists in each laboratory. The Government of Orissa stated that at present, all 30 district laboratories were functional. The Government of **Punjab** stated that steps were now being taken to set up labs in all the districts in the State.

In audit's view, in the absence of adequate infrastructure for testing of water quality in the district and state levels compromised the testing of water for identification of microbiological or toxin contamination that may pose a threat to public health

Recommendation

DDWS may direct all State Governments to ensure adequate water testing facilities with adequate qualified manpower so that each district is properly catered.

2.6.2 Water Quality Testing

The ARWSP Guidelines stipulate testing of 10 *per cent* of all samples tested, including all positive tested samples by the district water quality testing laboratories, at the State level. Further, District laboratories/ PHED were to test at least 30 *per cent* of water samples tested by GPs, and all cases where possibility of contamination was reported by the community. Also, all water sources were required to be tested at least once a year initially.

Audit scrutiny, however, revealed that in 17 States (**Arunachal Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Maharashtra, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Sikkim** and **Uttarakhand**) there was no system or practice of testing at the State level of a percentage of samples, including positive samples, tested by the District laboratories. Further, audit examination revealed that:

- In **Chattisgarh**, no water quality tests were conducted in any of four test checked districts.
- In **Gujarat**, the shortfall in conducting tests during 2003-07 ranged between 13 and 65 *per cent*.
- In **Haryana**, in four test checked laboratories, against the target of testing 94,000 samples during 2002-07, only 13,980 samples were tested. Of the 13,980 samples, water in 1,598 samples was found unfit for human consumption. Further, testing during 2002-06 by the Health Department in five Districts revealed that 29 *per cent* of samples were unfit for human consumption.
- In **Himachal Pradesh,** in six test-checked divisions, against the requirement of 941 tests during 2002-07, only 91 tests were conducted.
- In **Kerala**, in Thiruvananthapuram, out of 79 RWSSs, the required percentage of quality testing was done only in 12 schemes. In respect of 22 schemes, the shortfall ranged from 25 *per cent* to 75 *per cent*. 45 schemes were not tested at all.
- In **Manipur**, during 2003-07, the State laboratory tested only 83 samples, against the requirement of 1,260 samples; of these, 56 samples were found to be potable.
- In **Orissa**, no periodic tests were conducted. Only 36 *per cent* of functional rural water supply sources had been tested at least once. Departmental testing of 0.46 lakh rural habitations (out of 1.41 lakh habitations) up to March 2005 disclosed chemical contamination of ground water sources in 0.28 lakh habitations. Of these habitations, only 2 *per cent* of water quality affected habitations were provided with alternative PWS. Further, in eight test-checked districts, no testing was done, pending strengthening of laboratories.
- In **Punjab**, no periodic tests were conducted.

- In **West Bengal**, out of 174 PWSSs in 3 Districts, test results showed that 77 schemes were affected with bacteriological or chemical (excess arsenic/ iron) problems. Water from these 174 schemes was not being tested monthly, as required. Further, in Bankura District, although 10 blocks were fluoride affected, periodical chemical and bacteriological testing of water supplies from 29 PWSSs was not being conducted. Also, water quality testing was not conducted on 579 newly created tube wells sunk during 2005-07.

In response, the Government of **Punjab** stated that all samples found positive at district level were examined at State level Labs, which is not convincing as no supporting records were produced to audit. The Government of **Gujarat** accepted the facts and stated that the process of random sampling for checking of samples from positive samples had now been institutionalized. The Government of **Orissa** accepted the facts and stated that nearly 700 to 800 water samples were tested at present each month. The Government of **West Bengal** accepted the facts and stated that 32 departmental laboratories were assigned the task of looking after the quality of water.

Innovative Practices

In **Andhra Pradesh,** the sources of drinking water for Ayodhyanagar, Hasthinapuram and Vasavinagar colonies of Devangipuri GP of Chirala Mandal, Prakasam District were hand pumps and ring wells. Industries situated within a radius of 200m of these habitations had polluted these drinking water sources. After complaints by the community and action by the District authorities, the industries started treating its wastes before letting them out.

In **Gujarat,** Water Quality Monitoring through Multi District Assessment of Water Safety (M-DAWS) programme has been included to survey faecal contamination of water sources in order to contribute to a reduction in the burden of disease associated with poor water quality.

In audit's view, the periodical testing of water quality is essential to quickly identify cases of quality affected habitations and take appropriate corrective action in a timely manner.

Recommendation

State Governments should ensure testing of water samples, including positive water samples from GPs/ VWSCs, at the stipulated periodicity, and also maintain appropriate records of such testing. This may be structured as part of a comprehensive State-wide water quality monitoring programme.

2.6.3 Procurement and Distribution of Field Test Kits

ARWSP envisaged building capacity of Panchayats to own the Field Test Kits (FTKs) and take up full O&M responsibility for water quality monitoring of all drinking water sources in their respective PRI area. Further, 100 *per cent* testing of all sources at the village level was to be done by grass root level workers from Gram Panchayat (GP)/ Village Water and Sanitation Committee (VWSC).

Audit scrutiny, however, revealed that in 15 States (**Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Nagaland, Orissa, Rajasthan, Sikkim, Uttarakhand** and **West Bengal**), no procurement of field testing kits for use by GPs, was undertaken as of March 2007. Further, even in the other States:

- In **Andhra Pradesh**, field test kits were not received in any of the six test-checked districts.
- In **Arunachal Pradesh**, out of 338 multiparameter test kits and 5642 bacteriological test kits procured in March 2007, only 192 multiparameter test kits and 42 bacteriological test kits were issued to the districts. Further, no requirement of field kits was called for from the divisions, village functionaries were not involved in the testing of samples, and no kits were issued to GP level functionaries.
- In **Chhattisgarh,** field test kits were procured in only one out of four test-checked districts; even here, only 48 kits were procured against a requirement of 367 kits, and these had not been distributed.
- In **Gujarat**, in six test-checked districts, only 332 kits were received, against 582 VWSCs.
- In **Jharkhand,** field test kits were received in only one district. Further, in two divisions, Tenughat and Jamshedpur, 8676 kits for bacteriological testing were lying unused for three to eight years.
- In **Uttar Pradesh**, the UP Jal Nigam purchased 400 field test kits and 700 refill packs for 12 physical and chemical parameters, without proper planning, in December 2004, which was rectified only in October 2006 to purchase of kits for only four parameters. Out of 9860 kits received as of January 2007, only 5626 kits were dispatched to the BDOs (for distribution to GPs) as of June 2007. Further, instead of ordering 15 lakh H_2S vials along with 15000 field testing kits for bacteriological testing, the Nigam ordered 25 lakh H_2S vials. Also, because of placing orders for the vials and kits on different suppliers, there was a delay in supply of kits, as a result of which 19.30 lakh vials were lying in stock as of October 2007.

In response, the Ministry stated that they were repeatedly emphasizing to the States to ensure faster implementation of the National Rural Drinking Water Quality Monitoring & Surveillance Programme so that, in addition to testing done by the State Government/its agencies, local communities/ PRIs also carried out regular tests to check the quality of drinking water.

Further, the Governments of **Bihar, Haryana, Karnataka, Kerala, Maharashtra, Orissa, Rajasthan, Sikkim** and **Uttarakhand** stated that FTKs had now been procured or were being procured. The Government of **Arunachal Pradesh** stated that issuance of multiple parameter based testing kits was need-based and would be done shortly. The Government of **Gujarat** stated that more FTKs were being purchased. The Government of **Jharkhand** stated that the FTKs were not utilized, as they were past the expiry date.

Recommendation

Requisite number of FTKs should be procured and distributed to GP level functionaries after adequate training, so that the objective of institutionalizing water quality testing at the grass root level is achieved.

2.7 Sustainability

Ground water is the principal source of drinking water in rural habitations in the country, and almost 85 *per cent* of rural water supply is dependent on ground water. In many such habitations, due to excess drawal of ground water, environmental degradation and poor recharge, sources are becoming dry and thus systems are becoming defunct. ARWSP has a separate component to ensure sustainability of water resources. Five *per cent* of ARWSP funds were to be kept aside for sustainability projects, including ground water recharge and rain water harvesting; different technological options could be explored, depending on the local requirement. Further, the State Governments were encouraged to adopt and implement the model bill to regulate and control development of ground water, especially in water stressed areas.

Audit scrutiny, however, revealed that the proportion of schemes relying on ground water sources was very high in most States, and ranged between 91 and 100 *per cent* in eight States (**Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Punjab, Uttar Pradesh** and **West Bengal**), between 71 and 90 *per cent* in six States (**Karnataka, Maharashtra Orissa, Rajasthan, Sikkim** and **Tamil Nadu),** and between 41 and 70 *per cent* in four States (**Andhra Pradesh, Haryana, Kerala** and **Meghalaya**).

Further,

- 19 States (**Arunachal Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal**) had not passed and implemented the model bill for controlling development of ground water in water-stressed areas.
- 14 States (**Arunachal Pradesh, Assam, Bihar, Gujarat, Jammu & Kashmir, Jharkhand, Karnataka, Manipur, Orissa, Punjab, Sikkim, Tripura, Uttar Pradesh** and **Uttarakhand**) had not conducted periodical assessments of ground water potential on a scientific basis.
- 20 States (**Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal**) had not made ground water recharge compulsory in all ground water based supply schemes.
- 16 States (**Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Haryana, Jammu & Kashmir, Karnataka, Kerala, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, Tripura, Uttar Pradesh** and **Uttarakhand**) had not fully utilized the amount of five *per cent* of ARWSP funds for sustainability projects.

In response, the Governments of **Punjab** and **Rajasthan** accepted their dependence on ground water sources, while the Government of **Bihar** stated that emphasis was being laid on a shift to surface sources. The Governments of **Gujarat, Haryana, Rajasthan** and **Meghalaya** stated that enactment of the model bill was under active consideration, or would be considered in future. The Governments of **Arunachal Pradesh, Haryana** and **Punjab** stated that directions had been or were being issued for making ground water recharge compulsory. While the Government of **Karnatak**a stated that ground water recharge had been made mandatory, audit scrutiny revealed that proper implementation thereof was not done. The Government of **Madhya Pradesh** stated that recharging was being done for all piped water schemes; audit scrutiny, however, revealed that this was not provided for in any of the test-checked schemes. The Government of **Rajasthan** stated that provisions for recharge were made as per feasibility. The Governments of **Kerala** and **Punjab** stated that sustainability projects were now being planned.

Innovative Practices

Andhra Pradesh – Protection of Sources

Drinking water sources for the villages of Tadur and Thangellapally of Sircilla mandal, Karimnagar District, were designed and implemented on infiltration wells on river Maneru. The sources were affected due to illegal sand mining. After complaints, the illegal mining of sand was stopped, the drinking water sources of the above villages protected, and the sustainability element had also been introduced in these schemes.

Gujarat

Drinking Water Grid

Gujarat has a State-wide Drinking Water Supply Grid through a water transmission network. Implementation of a master plan to provide drinking water to 29 million people of 8215 villages and 135 urban centres of the State is moving under the Sardar Sarovar canal based drinking water supply project, of which 1343 kms of transmission pipeline connecting 1907 villages and 54 urban centres has been completed and commissioned.

IEC Campaign through school children

About 30 slogans were developed by school children on the issues of water conservation, drinking water, health and hygiene which had been painted at around 24000 locations in all the 1260 villages of the programme areas and along the roads and highways. Notebook labels with simple messages had also been specially designed for students.

Rain water harvesting

Rooftop rainwater harvesting had been taken up in 1858 schools on a priority basis to promote rainwater conservation and make drinking water readily available to the children. The rainwater that was collected was stored in an underground tank, fitted with a small, easy-to-operate hand pump to avoid wastage of water. To ensure drinking water security, this tank was further connected with the regional water supply system.

Meghalaya

In order to preserve and maintain the discharge from the spring source, the village authorities in Nongrah Village, under Mylliem CD block of East Khasi Hills District of **Meghalaya** had issued a blanket ban on any form of drilling within a radius of 200 m from the water source.

Tamil Nadu

Tamil Nadu Water Supply and Drainage Board (TWAD Board) had taken up a project on "Identification of Recharge Structures using Remote Sensing and GIS" during 1999-2001, and the outcome of the project was the generation of Block wise Zonation maps for the entire State. With a view to enhancing the sustainability of the drinking water sources, recharge structures were being implemented by TWAD Board under various programmes, with priority accorded to allocations falling in over-exploited blocks. The assessments of the impact of recharge structures, for sustainability of the drinking water sources indicated an appreciable rise in the water levels ranging in the vicinity of the recharge structures.

In audit's view, the absence of adequate attention being paid to sustainability by many State Governments would lead to continuation of the trend of slip back of habitations from FC to PC and PC to NC, in addition to water quality problems. Thus, the long term future of rural water supply and ARWSP would be adversely affected.

Recommendations

DDWS should ensure that States accord due importance to the sustainability component as suited to their local environment. Further, State Governments should be encouraged to adopt measures for rainwater harvesting, controlling utilization of ground water, studying ground water levels and impact of recharge structures and use of remote sensing and related technologies for such studies, and promoting ground water recharge in WSSs.

State Governments may also consider launching localized Information, Education and Communication (IEC) campaigns to promote the urgency of, and need for adopting water conservation and sustainability measures amongst the local population.

2.8 Monitoring, Reporting and Inspections

2.8.1 Organisational Arrangements for Monitoring

The ARWSP Guidelines stipulated that:

- Vigilance and Monitoring Committees (VMCs) at the State, District and Village levels were to be set up, and regular meetings of these Committees held. This would be a pre-condition for release of funds.
- Health Department officials were to be increasingly involved in the surveillance activity.
- Special Monitoring and Investigation Units (SMIUs) were to be set up at the State Headquarters. These units would be responsible for collecting information from the executing agencies, maintenance of data and timely submission of returns to the GoI. They would also be responsible for monitoring the quality of water and adequacy of service at the field level, and maintain such water quality data. Further, they would be responsible for controlling/regulating the quality of construction works in water supply schemes. Also, SMIUs should have technical posts of hydrologists, geophysicists and computer specialists, with data entry operators.

Audit scrutiny, however, revealed significant deficiencies in the organizational arrangements for monitoring:

- In 13 States (**Arunachal Pradesh, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Kerala, Maharashtra, Manipur, Meghalaya, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand** and **West Bengal**), VMCs were not constituted at the State level, while in 6 States (**Assam, Bihar, Gujarat, Jharkhand, Karnataka** and **Punjab**), VMCs did not hold regular meetings.
- 17 States (**Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Gujarat, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Tamil Nadu, Uttarakhand, Uttar Pradesh** and **West Bengal**) did not nominate officials of the Health Department for surveillance activity.
- In 9 States (**Andhra Pradesh, Assam, Chhattisgarh, Jammu & Kashmir, Jharkhand, Maharashtra, Meghalaya, Manipur** and **Uttarakhand**), SMIUs were not established.
- SMIUs in seven States (**Himachal Pradesh, Karnataka, Nagaland, Punjab, Rajasthan, Tripura** and **Uttar Pradesh**) did not have qualified technical experts, and instead used engineers from the regular Line Departments, which would not adequately serve the purpose.

In response, the Government of **Meghalaya** stated that SMIU and VMCs would be constituted at the earliest, while the Government of **Gujarat** stated that VMC meetings were held as and when required. The Governments of **Arunachal Pradesh** and **Meghalaya** stated that involvement of officials of the Health Department was being taken up now. The Government of **Karnataka** proposed to strengthen the MIU by adding technical posts, while the Government of **Rajasthan** stated that engineers and other staff were being trained for tasks undertaken by the MIU, and the Government of **Punjab** stated that as per government policy, fresh recruitment was prohibited.

Recommendation

DDWS may direct States to ensure that VMCs are constituted and are functional. Further, States should also set up SMIUs with a adequate complement of technically qualified staff.

2.8.2 Timely Submission of Reports to GoI

The States were required to submit a large number of annual, quarterly and monthly reports to GoI, covering such aspects as progress in clearance of schemes, district-wise break-up of ARWSP and MNP provisions, status of functional/ non-functional schemes, quarterly and monthly progress reports, installation of drinking water schemes in rural schools etc. However, audit scrutiny revealed that many States were not submitting these returns in time. Details of non-submission of returns are given in **Annexure-E**.

In response, the Ministry stated that submission of these reports had been made online from April 2008. Most of the States also accepted delay/ non-submission of reports and agreed to ensure their timely submission.

Recommendation

State Governments may be directed to ensure full compliance with the requirements reporting. Also, DDWS may evaluate the necessity and periodicity of all returns and take appropriate action.

2.8.3 Inspections, Evaluations and Review

As per the ARWSP Guidelines, while the GoI would take up monitoring and evaluation studies from time to time, the State Governments may also take up similar studies.

However, audit scrutiny revealed that in 18 States (**Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Madhya Pradesh**[4]**, Maharashtra, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, Tripura, Uttar Pradesh** and **Uttarakhand**), no evaluation studies were carried out by the State Governments. Further, in 16 States (**Assam, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Maharashtra, Manipur, Meghalaya, Orissa, Punjab, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal**), officers from the State Government Headquarters did not visit the districts, blocks and villages for inspection, or no such records of inspection were made available.

Innovative Practices

Gujarat – Independent Evaluations

[4] An evaluation was stated to have been conducted on the basis of the progress reports themselves, which cannot be considered to be an evaluation study.

Performance evaluation of multi-village water supply schemes and community-managed programmes in several districts to study their efficiency and user satisfaction was conducted through independent professional organizations viz. ORG Centre for Social Research, WAPCOS, Gujarat Government's Directorate of Evaluation, Gujarat Institute of Development and Research, WES-Net etc.

Recommendation

State Governments may be encouraged to carry out independent third-party evaluations of a representative sample of water supply schemes to assess their effectiveness and the level of satisfaction of the local community.

2.9 Swajaldhara

Swajaldhara is a modified form of the Sector Reform Programme launched in December 2002, and is part of the transformation of ARWSP from a supply-driven model to a demand-driven approach. Under Swajaldhara, drinking water assets were to be fully owned by the appropriate levels of PRIs, which would have the powers to plan, implement, operate and maintain all water supply and sanitation schemes. Swajaldhara involved partial capital cost sharing in cash and/or kind (including labour), with 100 *per cent* responsibility of operation and maintenance by the users.

As per the Swajaldhara Programme, States were to prepare a State Vision Statement, spelling out the goals for 2007 and 2012, as also a comprehensive policy on water supply and sanitation. They were also required to set up Communication and Capacity Development Units (CCDUs). State Governments were also required to set up four separate funds for O&M, Institutional Restructuring, Quality Improvement and System and Source Sustainability, which would be financed primarily out of their own resources. Further, random inspections of Swajaldhara Projects were to be conducted by the State Governments, and the findings of such inspections were to be followed up properly.

Audit scrutiny, however, revealed that:

- 13 States[5] (**Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Meghalaya, Nagaland, Rajasthan, Tamil Nadu, Tripura** and **West Bengal**) had neither prepared a State Vision Statement, spelling out the goals for 2007 and 2012, nor a comprehensive policy for drinking water and sanitation.
- 2 States (**Haryana** and **Karnataka**) had not set up Communication and Capacity Development Units (CCDUs).
- 18 States (**Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh** and **Uttarakhand)** had not set up any of the four stipulated funds.

[5] No details were made available by Jammu & Kashmir

- In 6 States (**Kerala, Nagaland, Tamil Nadu, Tripura, Uttarakhand** and **West Bengal**), the State Water and Sanitation Mission (SWSM) had not conducted any random inspection of Swajaldhara Projects by a team of experts. In **Gujarat, Jammu & Kashmir** and **Orissa**, random inspections were conducted, but follow-up action was not on record.

In response, the Governments of **Bihar, Karnataka, Kerala** and **Tamil Nadu** stated that a state vision plan was being prepared now. The Government of **Meghalaya** stated that after the sector status study was completed, the State Vision Statement would be prepared. The Government of **Rajasthan** stated that a draft policy had been prepared for seeking public opinion. The Governments of **Karnataka, Kerala, Meghalaya** and **Tamil Nadu** stated that a draft policy was under consideration.

Further, the Government of **Arunachal Pradesh** and **Gujarat** stated that the constitution of the funds was under consideration. The Government of **Madhya Pradesh** stated that the O&M fund was to be set up after the completion of schemes and since most of the Swajaldhara schemes were yet to be completed, it was not done. The Government of **Meghalaya** stated that funds for the relevant purposes were being/ would be provided as required. The Government of **Orissa, Punjab** and **Tamil Nadu** accepted that funds had not been constituted.

Chapter 3 - State-Specific Findings

3.1 Arunachal Pradesh

3.1.1 Non-completion of works

During the period 2002-03 to 2006-07, the State PHED took up 4,607 schemes for execution, of which only 2,443 schemes (53 *per cent*) were completed as of March 2007, and 2,164 schemes were in progress.

In the test-checked divisions, out of 1,986 schemes taken up for execution during the period 2002-03 and 2006-07, 1,866 schemes were due for completion by March 2007. Of these, only 1,000 schemes (50 *per cent*) were completed as of March 2007, 557 schemes (29 *per cent*) were incomplete, and 429 schemes (21 *per cent*) were not taken up at all**.**

The Department stated that the poor completion rate of works was mainly due to shortfall in State share. Audit scrutiny, however, revealed that during 2002-07, the Department provided only 18 to 36 *per cent* of funds required for completion of ongoing schemes, but sanctioned 2,084 new schemes. However, the allocation of funds for the new schemes constituted only 14-15 *per cent* of the total requirement of funds. Further, the Department also provided funds amounting to 14-16 *per cent* of cost in respect of schemes which were awaiting technical and expenditure sanction. Clearly, more focused and targeted planning for schemes after considering the available funds, would have resulted in fewer schemes being taken up but a higher rate of completion of works.

3.1.2 Cost and Time Overrun

- In the test-checked divisions, 22 water supply schemes taken up at an estimated cost of Rs. 3.10 crore during the period 1990-91 to 2002-03 were completed between 2002-03 and 2006-07, with a total cost overrun of Rs. 0.71 crore and delays of 2 to 12 years.

  The Government of **Arunachal Pradesh** stated that revised estimates were submitted for sanction; and excess expenditure was within the permissible limit of 5 *per cent* as per CPWA Manual. The reply is not tenable, since the revised sanction along with justification for excess expenditure incurred, ranging from 6 to 265 *per cent*, was still awaited.

3.1.3 Cases of unauthorized, irregular, or excess expenditure

- 17 schemes, completed at a cost of Rs. 2.35 crore during 2004-05 and 2006-07, covered villages, which were either uninhabited or non-existent as per the 2001 Census Report. Therefore, the possibility of some of the schemes being either non-existent or unnecessary may not be ruled out.
- Expenditure of Rs. 0.77 crore between 2004-05 and 2006-07 was incurred on 10 schemes, which did not have technical clearance of the State Level Scheme Clearance Committee (SLSCC).

- Expenditure of Rs. 0.70 crore was incurred as of March 2007 in respect of 12 schemes, which did not cover rural habitations.

3.1.4 Ineffective Execution of Water Quality Schemes

- Despite turbidity in water being above the permissible limit of five NTU[1] in eight districts, 12 WSSs in four Divisions, completed between 2003-04 and 2005-06 at a cost of Rs. 1.52 crore in water quality problem areas, did not include works for arresting turbidity and bacteriological problems; further, water testing reports of these divisions showed turbidity in these areas well above the permissible limit. In response, the Government of **Arunachal Pradesh** admitted that proper treatment plants need to be provided, but were not done since the per-capita cost of the scheme went beyond the admissible limits.

3.1.5 Execution of Swajaldhara Projects

- Rs. 4.47 crore was released by GoI between February 2004 and February 2007 for Swajaldhara. However, out of the 90 schemes sanctioned by the District Water Supply and Sanitation Committees (DWSCs) for completion by March 2007, only 35 schemes were completed by March 2007 at a cost of Rs. 3.03 crore.
- Despite expenditure of Rs. 0.21 crore on a lift water supply scheme, the scheme, though stated to be completed, was not functional. Further, material purchased for Rs. 0.12 crore was lying unutilized.

3.2 Assam

3.2.1 Non-completion of works

- 26 Piped Water Supply Schemes (PWSSs) taken up in four Divisions prior to 2002-03 at an estimated cost of Rs. 1.62 crore, were not included in the AAPs of 2002-07, and were still lying incomplete till March 2007, despite expenditure of Rs. 0.76 crore.
- In one water supply scheme implemented at a cost of Rs 0.18 crore, the boring of Deep Tube Well (DTW) failed, but the scheme was shown as completed by tapping water from the treatment plant of a nearby village. However, the habitants complained of water supply at an interval of four to five days and lack of water supply in the dry season.

3.2.2 Cost and Time Overrun

- In 9 divisions, there was a cost overrun of Rs. 10.48 crore on 161 WSSs, with an estimated cost of Rs. 19.76 crore, which was caused by time overrun of 5 to 17 years.

[1] Nephelometric Turbidity Units, measurement unit of turbidity (cloudiness or haziness of water)

3.2.3 Cases of unauthorized, irregular or excess expenditure

- In 2002 -2005, the entire work charged establishment expenditure of Rs 0.97 crore of the Silchar PHE Division II was irregularly booked under ARWSP.

3.2.4 Ineffective Execution of Water Quality Schemes

- Seven PWSSs, implemented between 1987 and 1997, at a total cost of Rs. 0.59 crore, were shown as completed, without any treatment plant, reservoir, and pump house; these were constructed only later under the sub-mission on quality between 2002-03 and 2006-07.

  The Government of **Assam** stated that the approved amount of schemes sanctioned during the 1990s was very low within which full-fledged treatment plants could not be constructed; these were now being provided in a phased manner.

- 61 water supply schemes were implemented by two divisions from 1987 to 2004 without water treatment plants. Water was directly supplied to the habitations without treatment.

- In 16 WSSs in two Divisions, expenditure of Rs. 1.27 crore was incurred between 2002-03 and 2006-07 for execution of DTW, treatment plant, reservoir, pump house etc., although the schemes were shown as completed under ARWSP prior to 2002-03.

3.2.5 Execution of Swajaldhara Projects

- Out of Rs. 25.79 crore released by GoI during 2002-07, Rs. 4.90 crore had not been received by the District Water and Sanitation Missions (DWSMs)/District Water and Sanitation Committees (DWSCs). Out of the balance release of Rs. 20.90 crore, Rs. 11.17 crore was lying unutilized with the State Water and Sanitation Mission (SWSM) and DWSCs as of March 2007.

  The Government of **Assam** accepted the facts and stated that the entire fund was released to the DWSCs in September 2007.

- In four test-checked districts, out of 89 schemes, only 9 schemes were completed as of March 2007. Out of the available funds of Rs. 8.47 crore, Rs. 3.21 crore was lying unutilized.

  The Government of **Assam** stated that all schemes were to be completed by March 2008.

3.3 Bihar

3.3.1 Non-functional schemes

- As of 1 April 2006, out of 643 Rural PWSs, 319 were reported to be non-functional. Similarly, out of 7.48 lakh tubewells, 1.67 lakh tubewells were reported to be non-functional.

The Government of **Bihar** accepted the facts and stated that most of the non-functional schemes had outlived their functional life. Steps were being taken to reorganize the old and still viable PWSSs.

3.4 Chhattisgarh

3.4.1 Non-functional works

- As of 1 April 2006, out of 952 Piped Water Supply Schemes (PWSSs), 473 spot sources, and 16.92 lakh hand pumps, 40 PWSSs, 51 spot sources and 2906 hand pumps were reported to be non-functional.

3.4.2 Cases of unauthorized, irregular or excess expenditure

- Pipes and handpumps purchased for Rs. 2.36 crore in 5 divisions were not actually utilized, but directly charged to works, thereby inflating the cost of schemes.
- 44 out of 288 Rural PWSSs in 4 test-checked districts were designed for 55 lpcd, without the mandatory 10 *per cent* capital contribution by beneficiaries.
- Rs. 1.59 crore was incurred on construction of 317 tube wells during 2002-07 in FC habitations in Jagdalpur District, when the State had a substantial number of PC/ NC habitations.

3.4.3 Execution of Water Quality Schemes

- No funds were utilized for tackling water quality problems; in Jagdalpur District alone, the number of quality affected habitations with excess iron increased from 3090 in 2002-03 to 4478 in 2005-06.

  The Government of **Chhattisgarh** accepted the fact of non-utilization of funds and stated that the works of water quality affected habitations were now being taken up.

3.4.4 Execution of Swajaldhara Projects

- During the period 2002-07, 312 schemes were sanctioned in the State, of which 210 schemes were completed as of March 2007. 33 *per cent* of total available funds were unutilized as of March 2007.

  The Government of Chhattisgarh accepted the facts and stated that as on date (April 2008), 308 schemes had been completed.
- Test check of 83 schemes in four districts revealed that in 19 out of 28 schemes in Korba, community contribution was less than the stipulated 10 *per cent*. Electrification work in 22 out of 24 PWSSs remained incomplete since 2003-04 to March 2007.
- Accounts of Swajaldhara projects were not audited in 3 out of 4 test-checked districts.

3.5 Gujarat

3.5.1 Cost and Time Overrun

- 11 out of 12 test-checked Regional RWSSs had delays ranging from 9 to 35 months as of March 2007. The stated reasons for delay included delayed execution, delayed procurement, non-availability of land and other procedural aspects.

  The Government of Gujarat stated that the delays occurred because of non-availability of land, procedural delays in tenders, and delays in getting mandatory clearances.

3.5.2 Execution of Water Quality Schemes

- 238 de-fluoridation plants installed during the period 1994-2000 at a total cost of Rs. 18.14 crore, which were handed over after three years of commissioning to the village panchayats, were non-functional.

  The Government of **Gujarat** stated that plants were handed over to VPs, which could not afford O&M and did not take much interest in operating these. Most of these villages were now covered with surface based WSS.

3.5.3 Execution of Swajaldhara Projects

- In Junagadh, in a scheme involving expenditure of Rs. 0.18 crore, water was found to be unfit on testing. DWSC had irregularly reimbursed expenditure to 3 NGOs based on UCs, without vouchers.

  The Government of **Gujarat** stated that water during the first test in March 2005 at 40 m depth was found fit for consumption. But the second test conducted at depth of 42.5 m revealed that water was not fit for consumption. However, now the water had been found to be potable.

3.6 Haryana

3.6.1 Non-completion of Schemes

- In the test-checked divisions, out of 128 schemes sanctioned between June 1998 and September 2005 at an estimated cost of Rs. 49.40 crore, 87 schemes with an estimated cost of Rs. 33.17 crore, were incomplete. Expenditure of Rs. 22.35 crore was incurred on these 87 schemes.

- Out of 20 Water Supply Schemes (WSSs) selected for detailed examination, 4 schemes involving estimated cost of Rs. 3.39 crore and population to be benefited of 60,063, remained incomplete as of June 2007, after five to seven years of approval, despite expenditure of Rs. 2.84 crore. It was noticed that instead of executing the works as per the approved estimates, skeleton water supply was given to the villages through tube well. Further, physical inspection by audit revealed that the partially constructed structures for canal based water supply schemes were lying unused, and the work of laying of distribution system was also

not completed. Thus, the present water supply status in these villages remained between 20 and 35 lpcd.

The Government of **Haryana** generally accepted the facts and stated that suitable action would be taken. It also stated that the schemes at Morkhi, Kathura and Rindhana were likely to be completed by April 2008, June 2008 and August 2008 respectively.

View of WSS, Morkhi lying incomplete

View of WSS, Kathura lying incomplete

View of WSS, Rindhana lying incomplete

3.6.2 Cases of unauthorized, irregular or excess expenditure

- Although there were 868 remaining PC/NC villages, only 87 schemes for providing 55 lpcd of water at an estimated cost of Rs. 32.10 crore were sanctioned between June 1998 and July 2006, against which an expenditure of Rs. 16.97 crore was incurred. There was neither sharing of capital cost by the beneficiaries, nor was O&M of the schemes handed over to them.

- In seven divisions, expenditure of Rs. 46.14 crore was incurred on 176 works, without the detailed cost estimates being sanctioned. Further, an expenditure of Rs. 2.43 crore was incurred in excess of sanctioned estimates, without approval.

  The Government of **Haryana** stated that works were taken up only after receipt of administrative approval and technical clearance of the estimates which were prepared by the field offices. Hence, these could be considered as detailed estimates. The reply is not tenable, since the administrative approval was accorded on basis of rough cost estimate only.

3.6.3 Execution of Swajaldhara Projects

- Out of 148 schemes approved during 2002-06 in 10 districts at an estimated cost of Rs. 14.53 crore, only the first installment of Rs. 6.97 crore was released by GoI, of which Rs 7.38 crore (including beneficiary contribution) was spent. Only 25 schemes were completed by August 2007 at a cost of Rs. 2.34 crore.

  According to the Government of Haryana, handing over of O&M was not a satisfactory arrangement, as many schemes were non-functional because of non-deposit of electricity charges. Further, it stated that it did not have a direct role in implementation of Swajaldhara and also stated that the UCs were to be furnished

by the Village level committees. Since this was not done in the prescribed manner, the second installment was not released.

3.7 Himachal Pradesh

3.7.1 Non-completion of Projects

- In the six test-checked divisions, out of 166 schemes for 1,485 habitations estimated to cost Rs 52.13 crore and taken up during 2002-2007, only 59 schemes for 432 habitations had been completed up to March 2007 at a cost of Rs 16.48 crore. The remaining 107 schemes for 1,053 habitations were incomplete, despite expenditure of Rs 29.56 crore.
- Detailed audit scrutiny revealed expenditure of Rs. 1.53 crore as of April 2007 without technical sanction on four WSSs, whose execution had been stopped due to disputes over sources of water and private land required for construction.

3.7.2 Cost and Time Overrun

- In the test-checked divisions, 28 water supply schemes for 227 habitations, estimated to cost Rs 9.28 crore and scheduled to be completed within two to four years, were taken up between May 2000 and March 2007. Of these, 13 schemes for 114 habitations, estimated to cost Rs 3.90 crore, were completed at a cost of Rs 7.86 crore (involving a cost over run of Rs. 3.96 crore) between March 2003 and April 2007, after a delay of 6 to 52 months. The remaining 15 schemes for 113 habitations, which were estimated to cost Rs 5.38 crore and stipulated to be completed within three to four years, were in progress after incurring an expenditure of Rs 8.34 crore, with a cost overrun of Rs 2.96 crore and time overrun of 5 to 17 months.

  The Department attributed the time overruns to land disputes, and hindrances by the local people etc. and cost overruns to increase in the rates of material and labour. Further, they stated that instructions had been issued and norms were being devised to ensure cost-consciousness while framing DPRs, and MIS modules were also devised. The reply is not tenable, since norms were yet to be finalized, estimates continued to be framed on the basis of outdated norms, and MIS modules were yet to be supplied to field functionaries.

3.7.3 Cases of unauthorized, irregular or excess expenditure

- In five divisions, Rs 44.19 crore had been spent during 2002-2007 on the execution of 157 drinking water supply schemes, without detailed estimates and technical sanction.
- In 54 water supply schemes in six divisions, estimated to cost Rs 15.62 crore, expenditure of Rs 24.32 crore had been incurred during 2002-2007, without sanction of revised estimates.
- Excess expenditure of Rs. 4.93 crore was incurred in 32 schemes completed between March 2003 and June 2007 over the estimated costs of Rs. 8.03 crore indicated in the proforma approvals accorded by the State Water and Sanitation

Mission (SWSM); this excess expenditure was irregularly met out of ARWSP funds.

- An amount of Rs 0.95 crore, already incurred on various works other than ARWSP during 2002-07, was subsequently charged to ARWSP from March 2004 to March 2007 in Ghumarwin, Paonta Saheb and Rampur Divisions. In Paonta Saheb and Rampur Divisions, Rs. 1.41 crore was diverted to 24 other water supply works during 2002-07 which were not approved under ARWSP.

3.8 Jammu & Kashmir

3.8.1 Non-completion of Schemes

- 14 WSSs taken up for execution during 1999-05 by seven Divisions at an estimated cost of Rs. 9.56 crore, were not completed, despite expenditure of Rs. 8.89 crore; reasons for non-completion included non-development of source, depletion of source, land dispute and price escalation.
- In 6 implementing divisions, 73 *per cent* of schemes taken up more than 3 years ago were incomplete as of March 2006.

3.8.2 Cost and Time Overrun

- In 6 implementing divisions, out of 345 schemes executed between 2002-06, time overrun in 312 schemes (59 completed and 253 in progress) ranged between 1 to 4 years as of December 2006; this resulted in cost overrun of Rs. 5.20 crore in 44 schemes (6 completed and 38 ongoing). The delay was attributed to escalation in cost of material/ labour, change in proposals, and delay in release of funds by the State/ GoI.

3.8.3 Cases of unauthorized, irregular or excess expenditure

- Out of 569 schemes with an estimated cost of Rs. 402.57 crore taken up by 2003-04, 484 schemes, with an estimated cost of Rs. 398.42 crore were incomplete as of March 2007; this necessitated cost overrun of Rs. 91.57 crore. Instead of ensuring completion of these schemes, Rs. 19.56 crore was released for taking up 50 new unapproved schemes on the recommendation of local MLAs, and Rs. 11.78 crore was released for taking up 28 water supply schemes, for which detailed survey reports and project reports were yet to be prepared and approved.
- Works costing Rs. 4.95 crore were executed during 2002-06 by Executive Engineers departmentally, without observing financial rules; labour was engaged on hand receipts instead of Muster Rolls, and payments made through mates, without indicating details of labour actually engaged.
- In one division, 93 works valued at Rs.1.18 crore were allotted during 2004-05 on approval basis, without invitation of tenders.

- Under an action plan for Kandi areas[2], out of Rs. 40 crore released by GoI during 2004-06, Rs. 37.27 crore of GoI funds was irregularly utilized on suspended schemes, due to non-release of matching State share.
- During 2006-07, Rs. 14.11 crore was released for 29 schemes, which were not approved in the annual programme.
- Out of 341 schemes taken up by 8 divisions, 251 schemes had been executed and expenditure of Rs. 117.10 crore incurred during 2002-06 without administrative approval and technical sanction.
- Two divisions incurred expenditure of Rs. 0.33 crore on dismantling and relaying of system network of seven schemes, due to unplanned laying of pipes in stretches not covered by the project reports. Further, the dismantled pipes worth Rs. 0.60 crore were not accounted for in three Divisions.
- Project reports in areas covered under DDP did not contain provision of water to animals and installation of hand pumps/public stand posts, as envisaged.

3.8.4 Execution of Water Quality Projects

- Rs. 75 crore released by GoI between February 2004 and March 2007 for sub-mission projects was utilized on other ARWSP schemes in hand.

3.9 Jharkhand

3.9.1 Non-functional works

- As of April 2007, out of a total of 2.78 lakh DTWs in the State, 0.46 lakh DTWs were still non-functional, despite special repairs and structural modifications to 0.42 lakh DTWs during 2002-07.

3.9.2 Cases of unauthorized, irregular or excess expenditure

- Expenditure of Rs. 3.04 crore was incurred on Repairs and Maintenance of different schemes in three divisions, without approval of estimates.
- A scheme for converting existing Deep Tube wells (DTWs) into Force and Lift (F&L) pumps was undertaken in 2005-06 for providing sanitation facilities in rural schools; this was to be undertaken in schools with a sanitary complex, and the F&L pump was to be connected with the water tank of the sanitary complex. In five test-checked divisions, Rs. 2.37 crore was spent during 2005-07 on converting 1407 DTWs into F&L pumps in selected schools. However, the scheme was executed in schools where either a sanitary complex was not available, or available without water tank, and therefore the F&L pumps could not be connected with the water tank of the sanitary complex.

  The Government of **Jharkhand** accepted the facts and stated that after completion of sanitary complex by December 2007, F&L pumps would be utilized. Audit

[2] Rain fed area falling between the hill and plain

examination revealed that sanitation facilities were yet to be completed as of May 2008.

- In five test checked divisions, 10,341 sites (ARWSP: 6,045 sites, MNP: 4,296 sites) were drilled for construction of Deep Tube Wells during 2002-07. Of these, 1,696 bores (ARWSP: 1,004 bores, MNP: 692 bores) were declared as unsuccessful due to wrong selection of sites which was not based on geo-hydrological data. It was seen that the selection of sites for 1696 DTWs was done at the instance of the MLA/MP, of the area, and not based on any geo-hydrological data. The concerned EEs stated that there was no provision of pre-test to assess the availability of ground water. This resulted in wasteful expenditure of Rs 2.75 crore (ARWSP: Rs 1.67 crore, MNP: Rs 1.08 crore) on 1696 unsuccessful bores.

  The Government of **Jharkhand** accepted the facts regarding failure of DTWs and stated that steps had been initiated to reduce such failure.

View of Non-functional DTW (due to objection by Road Division) at Village Bargaccha Hariyari, Block Poraiyahat, Godda District

- According to norms, the life of a DTW is ten years. In three test checked divisions, premature failure of DTWs and special repairs (new construction) in place of old defunct DTWs were taken up in 625 cases at a cost of Rs. 2.01 crore during 2002-07. Out of these, 10 required repairs within one year of their installation, 66 required repairs between 1 to 3 years, 114 required repairs within 3-5 years and the remaining 435 had to be repaired within 5-9 years.
- In four test checked divisions, excess materials amounting to Rs 0.78 crore, which were purchased during 2002-07, remained unutilized as of April 2007.
- Materials worth Rs. 53.48 lakhs were diverted to MNP works.
- During 2006-07, a purchase order for Rs. 3.44 crore was placed in May 2006 for pipes required for structural modification of 24,650 DTWs, while the scheme was

sanctioned only in December 2006. However, no structural modifications of DTWs were reported during the year 2006-07.

The Government of **Jharkhand** stated that since 5 *per cent* funds were meant for sustainability, so pipes were purchased and utilized fully for change of rotten pipes. The reply is not tenable as the change of rotten riser pipes had been categorized as R&M and not as O&M.

3.9.3 Execution of Water Quality Schemes

- Rs 4.20 crore was allotted in 2006-07 for mitigating water quality problems through fluoride/arsenic removal attachment unit. However, only Rs. 0.84 crore was spent in one division in one district and the required schemes were not executed in the remaining 21 districts. The balance fund of Rs 3.36 crore was surrendered.

3.9.4 Execution of Swajaldhara Projects

- In three districts, 168 schemes at an estimated cost of Rs. 5.44 crore were taken up during 2003-07; none of the schemes was completed, despite expenditure of Rs. 1.56 crore.
- In one division, expenditure of Rs. 0.32 crore was incurred on a WSS, sanctioned in 2006-07 at an estimated cost of Rs. 0.37 crore, but the scheme failed due to unsuccessful boring; joint physical verification revealed that the failure was due to lack of monitoring and technical support by departmental engineers, and wrong selection of site.
- In two schemes in two divisions, balance amount of Rs. 0.03 crore was not refunded after execution of the schemes.

3.10 Karnataka

3.10.1 Cases of unauthorized, irregular or excess expenditure

- In PRE Division Chikkaballpur, ARWSP funds of Rs. 3.62 crore were diverted for works under Calamity Relief Fund, NCCF and MNP.

3.10.2 Execution of Water Quality Schemes

- Out of 21,008 quality affected habitations identified in 2001, only 1058 habitations had been tackled under the sub-mission so far.
- Out of 50 sub-mission projects taken up till March 2007 at an estimated cost of Rs. 135.95 crore, 36 were completed at a cost of Rs. 60.18 crore, while 14 were ongoing, despite expenditure of Rs. 50.71 crore.

The Government of **Karnataka** stated that since GoI did not release grants for 14 ongoing schemes under submission projects, there was escalation which was now being met from the state funds. The reply is not tenable as GoI released additional funds of Rs 125.36 crore during 2006-07 for sub-mission projects, besides normal funds of Rs.52.95 crore.

- All the 18 reverse osmosis-based defluoridation plants in the three test checked districts had not been working from periods ranging from 2 to 32 months, while no information was furnished in respect of the five adsorption technology based plants. The Government of **Karnataka** accepted the facts and stated that after lapse of guarantee period, GPs could not take up maintenance of the plants. However, AMC was being outsourced to ensure proper O&M.

3.11 Kerala

3.11.1 Cost and Time Overrun

- In six divisions in three test-checked districts, time overrun, ranging between 4 and 13 years, was noticed in nine RWSSs and cost over-run of Rs. 3.00 crore was noticed in 65 RWSSs completed between December 2003 and September 2007. The reasons for delay in completion of projects were delay in acquisition and handing over of land, and delayed completion of distribution system and obtaining power connection.

  The Government of **Kerala** accepted the facts and stated that action had been taken to mitigate the delay in land acquisition and to avoid delay in obtaining and distribution of power connections.

3.11.2 Execution of Water Quality Schemes

- Only one out of 9 sanctioned water quality projects was completed in the test-checked districts.

  The Government of **Kerala** stated the remaining 8 schemes were targeted for commissioning during 2008-09.

3.12 Madhya Pradesh

3.12.1 Non-completion of Schemes

- Out of a total of 9173 PWSS in the State, 7750 schemes were completed, 813 schemes were in progress and 610 schemes had not been taken up for execution as of March 2007.

- In 10 districts, out of the total 667 PWSSs estimated to cost Rs. 68.64 crores (of which 289 schemes were approved prior to 2002), only 260 schemes could be completed, 353 schemes were in progress, and 54 schemes had not been taken up as of March 2007. The reasons for non-completion of schemes were non-release of funds in time and revision of schemes.

  The Governments of **Madhya Pradesh** generally accepted the facts and stated that suitable action would be taken.

3.12.2 Cases of unauthorized, irregular or excess expenditure

- Expenditure of Rs.3.85 crore was incurred on construction of 705 tube wells in FC habitations in six divisions at the instance of influential persons, at the cost of uncovered NC/ PC habitations.

The Government of **Madhya Pradesh** stated that due to frequent droughts, many districts had been seriously affected. GoI had also permitted the State to carry out essential works in FC habitations. The reply is not tenable, since the priority was to cover NC/PC habitations, which had not been fully covered.

- In three divisions, augmentation of 26 RPWSSs at an estimated cost of Rs. 2.69 crore were sanctioned at the instance of influential persons during 2002-07 for supplying drinking water at 55 lpcd in violation of GoI norms, and an expenditure of Rs. 1.66 crore was incurred up to March 2007.
- Unspent ARWSP funds of Rs 8.53 crore (February 2002), Rs 6.60 crore (May 2003), Rs 15 crore (2006) and Rs 30 crore (January 2007) were withdrawn and deposited in Civil Deposits, inflating reported expenditure. Subsequently, the deposits were remitted to Divisions through Cheque/Demand Draft. Test check also revealed that Rs. 3.93 crore out of Rs 6.50 crore allotted to seven divisions were lying unspent as of March 2007.

3.12.3 Execution of Water Quality Schemes

- Although a project for providing safe drinking water to 101 problem villages in Dindori District suffering from excess fluoride was approved by GoI in 1997-98 and completed in 2005-06 at a cost of Rs. 1.25 crore, 207 new habitations were found affected with excess fluoride. In the same district, a project for 147 villages costing Rs. 7.35 crore approved by GoI was unwarranted, as 139 out of these villages had safe drinking water as per the norms of dual water policy.
- Excess fluoride in 132 habitations had been identified in Raisen District in April 2005, and Departmental instructions of 2006 provided for digging of shallow dug wells or other alternative arrangements, and not deep tube wells. However, 185 new deep tube wells were dug in the water quality affected areas at a cost of Rs. 1.25 crore. Despite the Department's claim that the tube wells were drilled in the safe zone, all the new tube wells were found to be quality affected. The Government of **Madhya Pradesh** accepted the facts.
- Four salinity projects, with estimated cost of Rs. 10.78 crore approved during 1997-2004, were not completed, despite expenditure of Rs. 10.27 crore.
- The problem of excess iron in 14 districts and nitrates in nine districts had not been tackled.
- Despite increase in fluoride-affected sources, only 13 out of 30 defluoridation plants were functional as of March 2007. The Government of **Madhya Pradesh** stated in June 2008 that at present 18 plants were functional.

3.12.4 Execution of Swajaldhara Projects

- Out of Rs. 50.32 crore released during 2002-06 by GoI for executing 2890 schemes in 39 districts, only Rs. 40.81 crore was released to the implementing agencies. Only 1363 schemes were taken up, of which 728 schemes were completed at a cost of Rs. 22.27 crore. Only 103 schemes were handed over to GPs/ VWSCs.

- In Seoni District, 4 PRIs deposited community contribution out of Government Grants for 4 schemes in 2004.
- In Chhindwara District, 21 schemes for FC habitations, estimated to cost Rs. 0.74 crore, were taken up during 2003-06, while 40 NC and 175 PC habitations remained in the district as of May 2007.

3.13 Maharashtra

3.13.1 Cost and Time Overrun

- Six schemes were completed with time over run of 12 to 30 months, while three schemes started during 2003-05 remained incomplete after expenditure of Rs. 0.24 crore.

  The Government of **Maharashtra** accepted the facts and stated that the schemes would be completed on priority.

3.13.2 Cases of unauthorized, irregular or excess expenditure

- In Amravati District, where the Sector Reforms Pilot Project was implemented up to March 2003, Rs. 13 crore of ARWSP (Normal) funds was released during 2005-07, which contravened the ARWSP Guidelines[3].
- A scheme, estimated to cost Rs. 0.25 crore, was started in anticipation of administrative approval.
- In one scheme, the first installment of Rs. 0.09 crore was paid before technical sanction.
- Irregular expenditure of Rs. 0.10 crore was incurred for a new RWSS at a village, which was already included under the Regional WSS.
- In one scheme, cash memo of Rs. 0.10 crore issued in the name of a supplier was used as proof of expenditure by a VWSC, while in another scheme, self cheque amounting to Rs. 0.06 crore was drawn for payment to supplier.
- In four schemes, pipes worth Rs. 0.26 crore were purchased without following prescribed procedures and supporting vouchers, and were lying unutilized.
- In two districts, records relating to expenditure against funds of Rs. 1.58 crore released during 2003-2007 for 16 works under ARWSP were not produced by the Village Water and Sanitation Committees (VWSCs) to audit. The genuineness and authenticity of this expenditure could thus not be verified.

  The Government of **Maharashtra accepted** the facts of non-production of records.

[3] Para 4.1 of the Guidelines stipulate that once Sector Reforms Pilot Project are approved for pilot districts by GoI, ARWSP(Normal) funds should not be used for such districts.

- In 34 works out of 46 works in five divisions, overhead charges were levied on gross amount of estimate, instead of net amount of estimates, resulting in inflation of estimates by Rs. 1.14 crore.

  The Government of **Maharashtra** stated that while framing the estimates, cumulative costs of sub-works were worked out and 17.5 *per cent* ETP charges were added, to work out the gross cost. The reply is not tenable as ETP charges were to be levied on net cost of work.

- In Ahmednagar, Amravati and Raigad Districts, available funds were not utilized, resulting in poor implementation of schemes.

Table 4: Utilization of ARWSP funds in 3 districts of Maharashtra

(Rs. in Crore)

District	Period	Funds received	Funds utilized
Ahmednagar	2005-06	5.15	3.15
Amravati	2005-07	13.00	0.26
Raigad	2005-07	13.50	0.22

3.13.3 Execution of Swajaldhara Projects

- There was short recovery of community contribution in 29 schemes of Rs. 0.40 crore.

  The Government of **Maharashtra** admitted the facts and stated that necessary guidelines were issued on 6.12.2006 for removing deficiencies in execution of works.

- In two districts, records relating to expenditure against funds of Rs. 0.59 crore released during 2003-2007 for 8 works under Swajaldhara were not produced by the Village Water and Sanitation Committees (VWSCs) to audit. The genuineness and authenticity of this expenditure could, thus, not be verified.

  The Government of **Maharashtra** accepted the facts.

3.14 Manipur

3.14.1 Non-completion of Schemes

- In three districts, 38 schemes approved during 2002-04 were not completed as of March 2007, despite certification to the GoI that no work which started three years before remained incomplete.

3.14.2 Cost and Time Overrun

- In three districts, during 2002-07, 48 schemes, with an estimated cost of Rs. 4.19 crore, were executed with a cost escalation of Rs. 4.62 crore, which was met out of ARWSP funds, despite the State's certification (along with year-wise accounts for 2002-06) that cost escalation was not met out of ARWSP funds.

3.14.3 Cases of Unauthorised, Irregular or Excess Expenditure

- During 2002-07, expenditure of Rs. 1.03 crore towards departmental outstanding bills, purchase of POL, and maintenance of departmental works on 6 new schemes and 9 ongoing schemes under IP Division was irregularly charged to ARWSP funds.

3.15 Meghalaya

3.15.1 Non-completion of Schemes

- In six out of nine test checked divisions, 17 schemes targeted for completion by March 2006 remained incomplete as of March 2007 (with a time overrun of one to two years), even after incurring an expenditure of Rs. 4.34 crore against the estimated cost of Rs 4.90 crore.
- A scheme costing Rs. 2.98 lakh, reported as completed during 1995-96, was found incomplete as of March 2005.

  The Government of **Meghalaya** admitted the delay and stated that efforts were being made to complete the schemes at the earliest.
- A WSS, sanctioned in March 2004 at an estimated cost of Rs. 2.55 crore, was abandoned in July 2007 after incurring expenditure of Rs. 1.45 crore, since the water source was not in a position to serve the targeted habitations.

  The Government of **Meghalaya** stated that works of the scheme were taken up as per the sanctioned provision. But when the discharge of the source decreased suddenly, alternative sources had to be located. Now, an alternative source had been identified and steps had been initiated to implement the scheme.

3.15.2 Cost and Time Overrun

- In seven divisions, 25 schemes, estimated to cost Rs. 4.38 crore, were completed with cost overrun of Rs. 0.40 crore, and time overrun ranging between three months to five years.
- Expenditure of Rs. 0.52 crore on supplies of pipes was incurred between December 2004 and March 2005 on the basis of fictitious certificates of receipt.

3.15.3 Cases of Unauthorised, Irregular or Excess Expenditure

- In Resubelpara Division, expenditure of Rs. 0.62 crore incurred on various schemes under MNP was charged to Bajengdoba Water Supply Scheme under ARWSP.
- In Mawphlang Division, expenditure of Rs. 0.52 crore on energy consumption during 2003-04 and 2005-06 was booked under ARWSP.
- Expenditure of Rs. 0.23 crore on Pynthurmukhrah water supply scheme phase I under State sector was irregularly charged to ARWSP.

3.16 Nagaland

3.16.1 Non-Completion of Works

- In a test-checked division, out of 27 carried over schemes and 23 schemes targeted during 2002-07, 15 schemes were abandoned, after expenditure of Rs. 4.61 crore, due to land and source disputes.

  The Government of **Nagaland** accepted the facts.

3.16.2 Cases of Unauthorised, Irregular or Excess Expenditure

- 21 FC habitations were targeted at an estimated cost of Rs. 7.80 crore, against which Rs. 2.60 crore had been incurred till March 2007.
- In 48 cases in three test-checked districts, beneficiary contribution of Rs. 1.67 crore was not deducted from the total approved capital cost of Rs. 15.41 crore.
- In four divisions, excess expenditure of Rs. 1.07 crore over the approved cost was incurred during 2002-07.
- The Department irregularly spent Rs.28.72 crore of ARWSP funds on payment of salaries of work charged staff, and Rs 0.70 crores for clearance of old outstanding bills of 2002- 2007.

3.17 Orissa

3.17.1 Non-completion of works

- 294 PWSS taken up during 1991-2006 at an estimated cost of Rs.10.84 crore for completion within one/two years of commencement remained incomplete as of April 2007 (prior to 2001-02 : 53, 2002-03 : 19, 2003-04 : 33, 2004-05 : 62 and 2005-06 : 127).
- In three (**Puri, Dhenkanal** and **Balasore**) out of eight test checked RWSS Divisions, 22 PWS Schemes taken up between 1993-2006 at an estimated cost of Rs.8.74 crore for completion within one year of commencement remained incomplete as of April 2007, after incurring expenditure of Rs. 3.18 crore.

  The Governments of **Orissa** stated that suitable action would be taken.
- In three RWSS Divisions (Rayagada, Kalahandi and Dhenkanal), 15 PWS schemes completed between 1999-2006 with an expenditure of Rs.2.29 crore remained uncommissioned as of April 2007 due to non-energisation of the pump houses, depriving 0.39 lakh people of safe drinking water, as detailed below:

Scheme	**Details**	**Status during field verification by audit**
PWS to Kalyani and adjoining villages	Targeted to benefit 0.05 lakh people; reported as completed and commissioned in	• Scheme remained non-functional, and no stand post/ platform had been constructed. • According to villagers, due to leakage of water during trial run, scheme could not be made

	July 2006, after expenditure of Rs. 0.34 crore	functional. • According to EE, scheme had been transferred to GP after successful commissioning and trial run. The Government of **Orissa** stated that the pipe line had now been re-laid and as per the provision in the scheme, 36 stand posts with platforms were functioning. Further, the EE RWSS division **Balasore** had been warned for negligence.
PWS to Mula Alasa	Targeted to benefit 0.03 lakh people; reported as completed and commissioned in December 2005, after expenditure of Rs. 0.20 crore	• Scheme had been abandoned since March 2006, due to failure of two production wells. The Government of **Orissa** stated that a geological survey was being conducted to find a suitable source
PWS to Nihalprasad	Targeted to benefit 0.07 lakh people; commissioned in May 2002 at a cost of Rs. 0.26 crore	• Scheme was non-functional after September 2005, due to theft of electrical conductors. The Government of **Orissa** stated that the EE had been warned for negligence and Rs 1.30 lakh had been deposited with CESCO to restore power supply.
PWS to Panigengutia	Targeted to cover 0.02 lakh people; reported as completed and commissioned in March 2005, after expenditure of Rs. 0.13 crore	• Scheme had not been commissioned due to failure of source as the yield was only 1.8 litres per second (lps). The Government of **Orissa** stated that one more production well was taken up to supplement the low yield of existing source.
PWS to Gosani	i) Targeted to benefit 0.01 lakh people; reported as commissioned in May 2003, after expenditure of Rs. 0.15 crore	• Project stopped functioning within six months of commissioning, due to burning of motor and subsequent shifting of transformer. • Distribution pipeline had also been damaged.
	ii) Targeted to benefit 0.07 lakh	• Project was non-functional.

	people; commissioned in September 1995, after expenditure of Rs. 0.26 crore	• According to villagers, project had stopped for the last two years due to pipeline damage, and want of operator. • According to EE, responsibility for O&M had been transferred to the GP in October 2006. The Government of **Orissa** stated that the project was now in operation after rewinding of burning motor, transformer and damaged pipe was also repaired. Further, the GP had engaged an operator, the scheme was running and the damaged pipe line had also been repaired.

View of Stand Post of Kalyani PWS reported as commissioned as of July 2006

Underground Sump of Bishnupur RPWS constructed prior to 2003, which remained uncommissioned

Underground sump for Bishwanathpur PWS in Puri District constructed prior to 2003, reported as commissioned in 2005, remained uncommissioned.

Scheme	Details	Status during field visit by audit
PWS to Bishnupur and adjoining villages	Estimated cost of Rs. 2.87 crore to benefit 0.34 lakh people in 17 habitations; subsequently extended to cover 0.47 lakh people in 28 habitations. Reported as commissioned in March 2005, after expenditure of Rs. 2.97 crore	• Two underground sumps remained uncommissioned, pipeline had been damaged during road widening, huge quantities of pipes laid had been stolen, and two out of four production wells were non-functional due to burning of motor and theft of conductor. • Part supply was being made to only 0.19 lakh people in 12 villages, which was further curtailed due to leakages to 0.17 lakh people in nine villages. • 11 out of 17 villages did not have access to piped water. The Government of **Orissa** stated that repair works had been done, the scheme was operational now, and all 17 habitations were being supplied with piped water. Further, funds for providing piped water to the left over 11 villages would be proposed in the coming budget.
PWS to Bishwanathpur and adjoining villages	Estimated cost of Rs. 4.56 crore to benefit 0.35 lakh people in 14 villages; subsequently revised to a cost of Rs. 3.10 crore to benefit 0.20 lakh people in 12 villages. Reported as commissioned in October 2005, after expenditure of Rs. 4.15 crore	• Project, commissioned in January 2006, was providing water to only 0.10 lakh people. • Two underground sumps had not been commissioned, laying of pipeline was incomplete, some pipes had been damaged. The Government of **Orissa** stated that out of 17 villages, 15 villages had already been covered and balance two would be covered during 2008-09 by PWSS.
PWS to Bahanaga	Estimated cost of Rs. 0.31 crore to benefit 0.03 lakh people in five villages; commissioned in January 2004	• Due to damage of pipeline during widening of National Highway, water supply was restricted to 0.01 lakh people in three villages. The Government of **Orissa** stated that the damaged pipe line was being repaired.

Scheme	Details	Status during field visit by audit
PWS to Pastikudi	Estimated to benefit 0.03 lakh people; reported as completed and commissioned in March 2004 at a cost of Rs. 0.12 crore	• One out of two pump houses had not been energized (due to non-provision of three-phase electrical line), and 7 out of 17 stand posts were operational. One out of two production wells was unutilized. The Government of **Orissa** stated that now the two pump houses were energized, 17 stand posts were in operation, and two production wells were utilized.
PWS to Ambaguda	Estimated to benefit 0.06 lakh people to 10 villages; commissioned in December 2002 at a cost of Rs. 0.28 crore, and further expenditure of Rs. 0.16 crore was incurred during 2005-06 on renovation	• Out of 10 villages, one village never had access to PWS, and PWS to 3 villages was stopped since May 2004. • According to the JE, unauthorized connections, and pipeline theft and damage were the main reasons for poor functioning. The Government of **Orissa** stated that the village Kachiakonadi, which could not get water supply due to road cutting, had now been tagged with the village PWSS to BJ-II for 2007-08 for which the work was nearing completion. The water supply to the three villages, which was disrupted since 2005, had now been taken up under Kumuliput PWSS, during 2007-08 and would be commissioned soon
PWS to Garabandha	Estimated cost of Rs. 0.23 crore to benefit 0.03 lakh people; subsequently, source changed and Sariapalli village added; commissioned in May 2003	• Water supply to two villages (Sariapalli and Adagam) was stopped within two months of commissioning. According to JE, another well had been installed to cover these villages. • Distribution pipeline of 1.5 km to Sariapalli became infructuous. The Government of **Orissa** stated that the one more production well had been sunk and the water supply to both the villages was restored.
PWS to Bansingh and adjoining	Commissioned in November 2001 at a cost of Rs. 0.37 crore	• Only one out of two open wells had been installed • Due to insufficient yield of source, piped

Scheme	Details	Status during field visit by audit
villages	to benefit 0.05 lakh people in 3 villages	water reached only one village, and was further affected by unauthorized connections. • Planned renovation costing Rs. 5.70 lakh could not be executed, due to objections regarding site. The Government of Orissa stated that due to disputes, open well could not be installed. Further, unauthorized connections had been disconnected/ regularized, and all the three villages were now getting piped water.
PWS to Ranja	Commissioned at a cost of Rs. 0.29 crore in November 2003 to benefit 0.05 lakh people in four villages	• Field visit revealed that the open well source had negligible yield. Due to low yield, the pump was operated for 1-2 hours/ day, as against the envisaged 8 hours/ day • Piped water could not be supplied to one village, while supply to another village was below the minimum requirement. The Government of **Orissa** stated that one more production well had been sunk.
PWS to Titipa and adjoining villages	Estimated cost of Rs. 4.64 crore to cover 0.39 lakh people in nine habitations; work completed in September 2004 at a cost of Rs. 4.13 crore. Commissioned only in November 2006, due to delay in energisation of pump house.	• According to District VMS, water supply had not been made to three habitations, due to pipeline damage caused during road construction. The Government of **Orissa** stated that the damaged pipe line was being repaired.
PWS to Ladugaon	Commissioned in May 2001 to benefit 0.03 lakh population at a cost of Rs. 0.18 crore.	• Piped water did not reach Bhirkipada area of the village due to design deficiency. • According to EE, five tube wells had been sunk to overcome the problem. The Government of **Orissa** stated that one more production well had been sunk to solve the problem.

- Field visits in Dhenkanal and Gajapati Districts revealed water problems in habitations which were not reported as NC/PC to GoI.
  - Out of 12 tube wells in Village Kendupada, Block Gondia, Dhenkanal District, six were defunct for more than three years, and five others were yielding scanty muddy water during summer. The Government of **Orissa** stated that all defunct tube wells had been replaced timely. The reply is not tenable since the EE accepted the factual position, ascertained during physical verification and interaction with local people in the presence of the departmental Engineers.
  - Non-functional PWSS and tube wells in Villages Gosani and Mahadeipur in Gajapati district resulted in non-availability of 10 lpcd of safe water during summer. The Government of **Orissa** stated that hand pumps and tube wells at Gosani and Mahadeipur were in running condition, and hence these two villages could not be categorized as NC/PC. The reply is not acceptable since the villagers, in the presence of Departmental Engineers, reported that the scheme had stopped functioning within six months of its commissioning.
  - The only sanitary well in Marigudi and Kuinara villages under Garabandha GP of Gajapati District had dried up, resulting in non-availability of drinking water in summer. The Government of **Orissa** accepted the fact.
  - Non-availability of water from Garabandha PWSS and non-functioning of tube wells for more than a year led to acute drinking water crisis in Sariapalli Village in Gosani Block of Gajapati District. The Government of **Orissa** stated that PWSS to Garabandha was in running condition and water supply to Sariapalli village was made from this source. The reply is not acceptable, since the local people and concerned JE stated that piped water had not been provided to the village, and the tube wells were not functional for more than a year.

3.17.2 Execution of Swajaldhara Projects

- During 2002-06, GoI sanctioned 1471 projects, at an estimated cost of Rs. 51.74 crore. Of these, 525 projects were incomplete as of April 2007. Of the total funds of Rs. 43.28 crore made available to DWSMs, Rs. 24.43 crore was shown as utilized.

  The Government of **Orissa** stated that the delay was attributable to the de-motivation felt by the village committees when the sanction and release of funds took a lot of time.

- In the test-checked districts, 49 projects taken up during 2002-06 at an estimated cost of Rs. 3.23 crore remained incomplete as of April 2007, and the advance payment of Rs. 1.21 crore to VWSCs for these projects remained unadjusted.

  The Government of **Orissa** accepted the facts.

- 17 PWSSs in 3 test-checked districts, completed during 2002-05 at a cost of Rs. 0.57 crore remained uncommissioned, due to non-energisation of pump houses and theft of electrical conductor.

The Government of **Orissa** stated that out of 17 PWSs, 12 schemes were commissioned while he remaining five schemes were not commissioned due to requirement of additional funds.

- Physical verification revealed four projects reported as commissioned to be non-energised.

3.18 Punjab

3.18.1 Non-completion of Schemes

- 46 schemes, scheduled for completion between March 2003 and March 2007, were incomplete as of March 2007, despite expenditure of Rs. 10.43 crore. Reasons for non-completion included site dispute, and non-completion of head works, civil works and distribution system.

3.18.2 Cases of Unauthorised, Irregular or Excess Expenditure

- Out of 4026 NC habitations as on 1 April 2003, only 1178 NC habitations were covered during 2003-07, against which 2265 PC habitations were incorrectly prioritized and covered during the same period.

  The Government of **Punjab** stated that first priority to NC habitations would now be ensured.

- Excess expenditure of Rs. 0.35 crore over the estimated cost of Rs. 1.62 crore was incurred on seven WSSs in four divisions.

  The Government of **Punjab** stated that efforts were being made to regularize this expenditure of Rs 0.35 crore incurred on seven water supply schemes.

- Expenditure of Rs. 1.00 crore was shown incurred on account of 15 *per cent* material arranged on 66 schemes covering 81 habitations approved in February 2007, but no work had been executed.

  The Government of **Punjab** stated that Rs 1.00 crore had been spent on purchase of material for use in duly approved schemes to prevent delay in execution of works.

  The reply is not tenable since the expenditure was booked without transferring the material at the site of works and even before calling for tenders.

3.18.3 Execution of Swajaldhara Projects

- Out of 50 schemes taken up during 2004-06, 19 schemes were completed and 31 schemes were not completed till March 2007, after expenditure of Rs. 3.42 crore.

  The Government of **Punjab** accepted the facts and stated that the works were likely to be completed within the next six months.

- In two districts, despite release of GoI funds of Rs. 0.37 crore during 2005-06 and beneficiary contribution of Rs. 0.06 crore, no work on the schemes had been executed.

3.19 Rajasthan

3.19.1 Cases of Unauthorised, Irregular or Excess Expenditure

- Avoidable cost increase of Rs. 0.58 crore was incurred by one division due to delayed approval of technical sanction by three to five years.

  The Government of **Rajasthan** stated that accord of technical sanction was a long process. The reply is not tenable since the scheme was sanctioned in July 1999, while its technical sanction was issued only in June 2004.

- Non-finalization of a contract by a division within the validity period led to increase in the cost of a work by Rs. 8.03 crore.

  The Government of **Rajasthan** stated that the contract could not be finalized within scheduled time due to delay in acquisition of desired land.

- Delay in technical approval by three years for a RWSS led to extra expenditure of Rs 0.09 crore.

  The Government of **Rajasthan** accepted the facts and stated that accord of technical sanction was a long process.

3.19.2 Execution of Water Quality Projects

- Unsafe water containing fluoride in excess of 1.5 ppm was being supplied to a population of 27049 in 19 habitations from five WSSs, after incurring expenditure of Rs. 1.52 crore.

  The Government of **Rajasthan** stated that a phased programme "Rajasthan Integrated Fluoride Mitigation Programme" had been undertaken for tackling the problem of 23297 villages.

- Out of four schemes, sanctioned during 1995-2005 at an estimated cost of Rs. 191.86 crore covering 240 fluoride affected villages and two towns in Ajmer District, two schemes covering 87 fluoride affected villages remained incomplete as of March 2007.

3.19.3 Execution of Swajaldhara Projects

- Against available funds of Rs. 126.58 crore, only Rs. 53.06 crore was spent during 2002-07.

- Out of 2466 schemes sanctioned during 2002-07, 1829 schemes were taken up, 791 schemes were completed and 260 schemes handed over to user groups.

  The Government of **Rajasthan stated** that out of 1970 schemes taken up, 824 schemes were completed and 283 schemes had been handed over to user groups.

- Test check of two schemes in Bikaner District and seven schemes in Barmer District revealed extra cost of works of Rs. 3.31 crore due to use of higher specifications.

  The Government of **Rajasthan stated** that cost increased due to provision of DI pipes as per the decision of the DWSC. The reply is not tenable since the 'Manual

for Swajaldhara Projects' issued jointly by PHED and UNICEF does not permit use of DI pipes for distribution lines in sandy areas.

- In three schemes in Dausa, against an estimated cost of Rs. 0.35 crore, and transferred amount of Rs. 0.18 crore, expenditure of Rs. 0.16 crore was incurred. However, scrutiny revealed the construction of tube wells at the land of Chairmen, VWSCs for use for irrigation on their own fields.

  The Government of **Rajasthan** accepted the facts and stated that the private land had been registered in the ownership of the government and the water was presently not being used for irrigation purposes.

- In Banswara District, Rs. 0.08 crore was misused through installation of 41 hand pumps between October 2003 and April 2006 in private houses and farms.

  The Government of **Rajasthan** stated that construction of hand pumps in private land was as per the decision of VWSC. The reply is not tenable since the construction of hand pumps on private land was not permitted.

- 26 schemes in six test checked districts were incomplete as of March 2007, after expenditure of Rs. 2.84 crore.

  The Government of **Rajasthan** accepted the facts and stated that the schemes remained incomplete due to non-release of second installment by GoI and price escalation.

3.20 Tamil Nadu

3.20.1 Cases of Unauthorised, Irregular or Excess Expenditure

- Community contribution of Rs. 16.05 crore was not collected from 2005 schemes (1851 schemes for the state as a whole and 154 schemes relating to Tiruvannamalai district) designed and executed during 2002-05 for providing 55 lpcd of drinking water.

3.21 Uttar Pradesh

3.21.1 Non-completion of Schemes

- The following table indicates the position of different types of water supply schemes of Uttar Pradesh Jal Nigam (UPJN) sanctioned and completed up to 2006-07:

Table 5 (Rs. in crore)

Type of scheme	Sanctioned		Completed		Incomplete	
	No.	Estimated Cost	No.	Expenditure	No.	Expenditure
Schemes for Quality Problem Villages (QPV)	632	297.71	195	113.59	437	86.28
Community Participation (CP) Schemes	180	92.40	41	8.70	139	24.89
Installation of deep bore hand pumps	31	8.89	7	1.64	24	0.00

Of the above, 99 QPV schemes (expenditure – Rs. 51.46 crore) and 26 CP schemes (expenditure – Rs. 4.01 crore) were lying incomplete for periods ranging from 2 to 13 years, for want of funds. As regards the 31 schemes for deep bore hand pumps sanctioned between January 2006 and January 2007, GoI released funds for two schemes, five schemes were funded by UPJN on its own, and the remaining 24 were incomplete.

- Field survey of three QPV schemes in Deoria District for providing safe drinking water to 10 villages, which were commissioned in March 2005 at a total cost of Rs. 1.79 crore, revealed that the schemes were non-functional due to damage of water pipeline at several places, as stated by the habitants.
- Expenditure of Rs. 0.22 crore was incurred on a scheme, sanctioned in February 2001 at an estimated cost of Rs. 0.58 crore, which was stopped in February 2003, since the construction was taking place on land reserved for public use. UP Jal Nigam stated in March 2008 that the land dispute was being resolved with the intervention of District Magistrate, Deoria, and the work on the scheme would resume shortly.

3.21.2 Cases of Unauthorised, Irregular or Excess Expenditure

- Rs 219.62 crore on account of centage charges was irregularly charged to ARWSP during 1977-78 to 2003-04.

3.21.3 Execution of Water Quality Projects

- Out of 54 schemes started during 1994-01 to benefit 616 villages (covering 6.66 lakhs population - 459 fluoride affected villages and 157 nearby villages) in Unnao District, 21 schemes were incomplete, despite expenditure of Rs. 31.58 crore up to March 2007. Resultantly, 1.86 lakh beneficiaries were not getting safe water. Of the remaining 33 completed schemes, completed at a cost of Rs. 41.06 crore, 8 schemes were closed, and 23 schemes were functioning only partially due to low voltage, damage of power line/ transfer, and theft of power line. Further, cost escalation amounting to Rs. 24.65 crore up to March 2007 on these schemes was irregularly charged to ARWSP funds.
- 14 PWSSs for providing safe drinking water to 14 fluoride affected habitations in Baghpat District, sanctioned during 2002-06 at a cost of Rs. 3.86 crore were not completed in time. Instead, UPJN installed 119 more hand pumps, at a cost of Rs. 0.33 crore in these villages, and thus continued to supply unsafe drinking water.
- Instead of preparing a scheme based on 40 lpcd (which required no community contribution) for five villages of Bareilly district affected by excess iron and nitrates, a scheme for supply of 70 lpcd of water at a total cost of Rs. 1.17 crore was prepared in March 2003. However, the scheme was abandoned, as community contribution was not forthcoming, and the villages continued to consume unsafe water.

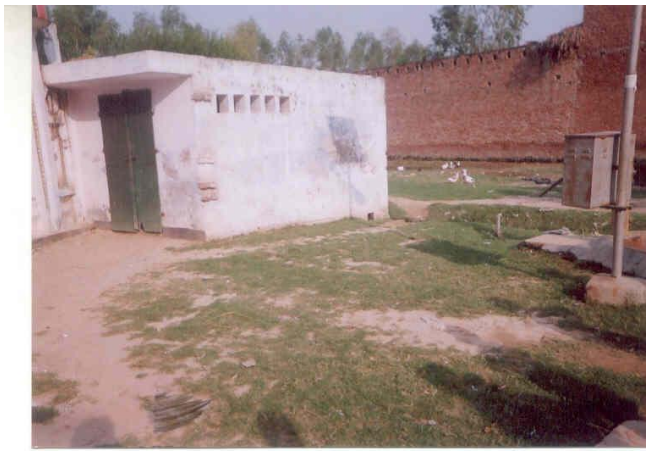
3.21.4 Execution of Swajaldhara Projects

- SWSM incurred inadmissible expenditure of Rs. 0.29 crore for renovation of its office premises.
- Out of 70 ponds, 2037 Mini-PWS, 98 PWS and 2984 Hand pumps approved during 2002-06, the progress was poor with 1984 Mini-PWS, 85 PWS and 257 Hand Pumps lying incomplete.
- Funds of Rs. 26.83 crore for providing safe drinking water in 29 districts released by GoI to the SWSM, were not released to the DWSCs, reportedly in anticipation of winding up of the scheme.
- 3 DWSCs in Chandauli, Sonebhadra and Lucknow received Rs. 5.99 crore in 2005-06 for 329 schemes, which were suspended/ dropped due to non-submission of DPRs in time, and non-issuance of cost sheet by the SWSM.
- DWSC Mirzapur received Rs. 1.60 crore in 2004-06 for 47 Mini PWSs in 18 VWSCs, none of which was started as of November 2007, due to non-release of funds by DWSC, and non-appointment of NGO for implementation.
- DPRs for seven VWSCs in Sonebhadra, Varanasi and Bijnor Disticts were deficient in terms of non-provision of adequate submersible pumps, and non-provision of chlorinator and generator.
- 49 VWSCs procured material, which did not have the ISI mark, and 15 VWSCs procured material of higher capacity than provided in the DPRs, without prior approval. Also, purchase of submersible pumps and generators were made at rates ranging between Rs. 15,568 per KVA and Rs. 37,500 per HP/KVA, against the DPR rates of Rs. 9350 and Rs. 32342 respectively.
- In DWSC Bareilly, 5 VWSCs paid Rs. 0.14 crore between April 2004 to September 2007 to an NGO, which supplied materials through two firms, which had no trade tax registration number and did not exist at the addresses mentioned in the bills/ invoices. Similar irregularities were noticed with the same NGO, which was entrusted with project implementation in Moradabad District. No action had been taken on DWSC Moradabad's request for blacklisting the NGO.
- Physical verification by audit in October 2007 revealed slow progress of works in several cases:
  - In VWSC Sarkara Khas in Moradabad District, even after an expenditure of Rs. 0.12 crore for construction of Over Head Tank (OHT) and pump house, the generator and steel pipes were not available and no pump house was constructed; the contractor/ NGO was not traceable. The same site had been visited earlier by a team from the SWSM, which suspected that the supplier had supplied pipes rejected by UPJN, or managed by unfair means. The sample collected by the SWSM team had not been tested, as the pipe was undersize.
  - In VWSC Godi in Moradabad District, in one MPWSs, boring of submersible was completed, but pipelines were not laid due to an RCC road, and the water supply system was incomplete. In VWSC Dalpatpur in Moradabad District, out

of two approved OHTs of total 65 KL capacity, only one OHT of 50 KL capacity was constructed without approval.

Incomplete OHT at VWSC Sarkara Khas, Moradabad District

Incomplete Pumphouse at VWSC Sarkara Khas, Moradabad District



Incomplete construction of OHT and Pumphouse at VWSC Godhi, Moradabad District

View of Single OHT of 50 KL at VWSC Dalpatpur, Moradabad District

3.22 Uttarakhand

3.22.1 Non-completion of works

- 34 WSSs, sanctioned at a cost of Rs. 14.39 crore, were suspended during 2002-07, despite expenditure of Rs. 6.16 crore; reasons included source dispute, drying up of sources; disputes; non-approval, and damage due to natural calamities.
- Seven schemes, sanctioned at a cost of Rs. 4.69 crore during 2005-07, were suspended, after expenditure of Rs. 0.54 crore, due to non-receipt of GoI approval for diversion of forest land.
- A 29 km pipeline, with an estimated cost of Rs. 2.85 crore, was stopped in December 2006, after expenditure of Rs. 1.69 crore, as prior approval of the Cantonment Board had not been obtained.

3.22.2 Non-functioning of Schemes

- No action was taken for coverage of 2260 uncovered rural schools till March 2007; Rs. 7.03 crore released by GoI in October 2006 on the basis of the 2006-07 AAP, was lying unutilized.
- Physical verification by audit of eight schemes in Pauri and Champawat Districts revealed that two schemes were completely defunct and two were defective, resulting in 19 FC habitations not receiving potable water supply. Also, in four schemes, pipes were laid on the surface or left hanging, contrary to guidelines, leading to breakage during minor landslips, and consequent disruption in water supply, as summarized below:

Scheme	**Details**	**Status**
Gadpar WSS	Commissioned in Feb 1998 at a cost of Rs. 0.13 crore to cover four habitations	According to Gram Pradhan, no water was supplied since commissioning. Audit found source intake pipe, clear water reservoir (CWR), water supply tank and supply lines broken, and CWR and supply tank filled with stones and plant growth
Dhaur Barsudi WSS	Commissioned in Feb 1997 at a cost of Rs. 0.20 crore to cover five habitations	According to Gram Pradhan, within a week of commissioning, the Pushta (supporting wall) gave way, and cracks in the tank developed. Audit found source intake pipe, CWR, water supply tank and supply lines broken and cracked supply tank filled with stones and mud and plant growth.
Bunga Jawari WSS	Commissioned in December 2006	According to the Gram Pradhan, supply main pipelines were vulnerable to slipping stones, and

	at a cost of Rs. 0.65 crore for four habitations and two primary schools	muddy water, sometime with worms, was being supplied. Audit found water supply disrupted due to breaking of supply main in a land slip.
Shaktipur Group of Hamlets WSS	Commissioned in September 2004 at a cost of Rs. 0.23 crore for 14 habitations	Audit found no water supply in some habitations, and due to leakage of water at several points, six habitations were affected. In these six habitations, stand posts were broken or rooted out, and the pipeline was not laid as per norms.

View of Water intake tank and supply tank at Gadpar WSS

View of Cracked Pushta and Broken Intake Pipeline at Dhaur Barsudi WSS

View of School Children taking water

Broken intake pipeline for Bunga Jawari WSS, covering four habitations and two primary schools

3.22.3 Cost and Time Overrun

- Out of 511 schemes taken up by the Nigam in the sampled divisions, there was delay in completion of 200 schemes, and cost overrun of Rs. 3.99 crore in 65 schemes as of March 2007.

3.22.4 Cases of Unauthorised, Irregular or Excess Expenditure

- Rs. 43.10 lakh of ARWSP funds was irregularly diverted towards establishment expenditure during 2002-03 to 2005-06, and Rs. 2.20 crore towards charges for project preparation and supervision in the detailed estimates.
- Total provision of Rs.2.36 crore was made for cartage of materials under the Sub-head Protection work of schemes, even as cartage expenses of all materials and machinery required for the schemes were already charged in the detailed estimates under the Sub- head "Cartage of materials"
- The Uttarakhand Peyjal Sansadhan Vikas Avam Nirman Nigam (Nigam) charged centage of Rs. 22.93 crore at the rate of 12.5 *per cent* on work outlay.

3.22.5 Execution of Water Quality Schemes

- While the Nigam reported no water quality problem, except discharge of red water in some areas, reports of PSI in six districts identified much higher bacteriological presence in terms of higher faecal coli in three districts, and higher coliform in one District.
- Funds of Rs. 22.88 crore meant for sub-mission schemes were diverted during 2002-07 for execution and maintenance of on-going schemes.

3.22.6 Execution of Swajaldhara Projects

- Out of 96 schemes sanctioned with a total allocation of Rs. 11.98 crore during 2003-06, after expenditure of Rs. 4.51 crore, 40 schemes were completed, and 56 schemes remained incomplete.
- Rs. 4.84 crore was lying unutilized with GPs/ VWSCs, and Rs. 2.44 crore was lying with the State Government

3.23 West Bengal

3.23.1 Non-completion of works

- In four test-checked districts, against the target of sinking 1306 tube wells in source less rural schools, only 814 tube wells were dug during 2002-07.
- One scheme in Bankura District, sanctioned in 2001-02 with a cost of Rs. 1.72 crore to cover seven mouzas could not be taken up as of August 2007 due to non-finalization of source.
- One scheme in Bankura District, approved in February 2003 at a cost of Rs. 0.86 crore to cover 10 mouzas, could not be completed as of March 2007, despite expenditure of Rs. 0.75 crore.

3.23.2 Non-functioning of works

- Two tube wells sunk in North 24 Parganas District at a cost of Rs. 0.09 crore were declared defunct, due to yield of oily and gas substances along with water.
- Three deep tube wells were sunk in 2002 at a cost of Rs. 0.12 crore, and were supplying arsenic contaminated water to a population of 0.14 lakh. An expenditure of Rs. 1.89 crore was also incurred on the distribution network and other ancillary work for supply of such water.
- A scheme in South 24 Parganas District, completed in 2003-04 at a cost of Rs. 0.98 crore, did not fully achieve its intended objectives, as one of the two tube wells was yielding muddy water and was declared defunct.
- As of April 2007, 46,133 tube wells (22,842 ordinary tube wells, 19591 DWP tube wells, and 4060 rig-bored tube wells) – 13 *per cent* of the total tube wells – were lying defunct due to shortage of spare parts, while 21,034 tube wells (11941 ordinary tube wells, 8336 DWP tube wells and 757 tube wells) – 6 *per cent* of the total tube wells – were defunct due to lowering of water table due to excess drawal of ground water.
- In the test-checked units, out of 1.07 lakh tube wells, 0.13 lakh tube wells were defunct due to shortage of spare parts, while 0.06 lakh tube wells were defunct due to lowering of water table.

3.23.3 Cases of Unauthorised, Irregular or Excess Expenditure

- In Bankura and Alipore Divisions, Rs.1.29 crore meant for providing safe drinking water in rural areas and creation of water sources in source-less schools was diverted for providing drinking water in urban areas.

3.23.4 Execution of Swajaldhara Projects

- Against 553 sanctioned schemes taken up during 2002-07, only 22 schemes were reported as completed. One of the reasons for non-commissioning was delay in energisation. In two test-checked districts, the benefit of the water supply reached a population of only 2073 (one scheme) out of the targeted population of 13487 (10 schemes) due to non-energisation of schemes, and delayed completion.
- Out of Rs. 9.50 crore received from GoI during 2003-07 in five Districts for 157 schemes, the ZPs released only Rs. 5.83 crore for 95 schemes to VWSCs, retaining the balance of Rs. 3.78 crore. Out of the amount of Rs. 5.83 crore released, UCs for Rs. 2.58 crore were still outstanding from the VWSCs.
- Accounts of 15 out of 25 test-checked VWSCs were not audited. Also, none of the VWSCs were registered.
- Four out of six test-checked schemes in Paschim Medinipur District could not be commissioned till August 2007, due to non-energisation.

New Delhi **(K.R. SRIRAM)**

Dated: **Principal Director of Audit**
Economic & Service Ministries

COUNTERSIGNED

New Delhi **(VINOD RAI)**

Dated: **Comptroller and Auditor General of India**

Annexure: A(i)

(Paragraph 1.5.3)

STATEMENT OF THE STATE-WISE SAMPLE SELECTION (ARWSP)

	Name of the State	Name of selected districts	Names of selected divisions/ blocks/units	Number of schemes selected	Year of approval	Location of scheme (block, village and habitation)	Cost of Selected Schemes (in Rs crores)	Expenditure incurred
1	**Andhra Pradesh**	East Godavari	Kakinada	10			0.77	
			Rajahmundry	10			0.60	
		Krishna	Vijayawada	10			1.17	
			Gudivada	11			1.46	
		Nalgonda	Nalgonda Division I	10			0.66	
			Nalgonda Division II	10			0.70	
		Karimnagar	Karimnagar	10			1.15	
			Manthani	10			0.50	
		Warangal	Warangal	11			0.45	
			Hanamkonda	12			0.66	
		Srikakulum	Srikakulum	10			1.55	
			Palasa	11			1.49	
2	**Arunachal**	Papumpare	Yupia	11			2.20	1.94

	Pradesh							
		Lower Subansiri	Ziro	11			1.91	1.90
		West Siang	Along	14			0.96	0.97
		East Siang	Pasighat	11			1.59	1.60
		Changlang	Changlang	14			3.55	3.59
		West Kameng	Bomdila	11			5.38	5.39
3	**Assam**	Barpeta	Barpeta PHE Division	3			0.79	0.79
		Bongaigaon	Bongaigaon PHE Divn	2			0.36	0.41
		Cachar	Silchar PHE Divn I	2			0.20	0.43
			Silchar PHE Division-II	3			0.44	0.96
		N.C.Hills	Haflong PHE Division	2			0.19	0.06
			Maibong PHE Division	2			0.06	0.04
		Sonitpur	Tezpur PHE Division-I	2			0.14	0.14
			Tezpur PHE Division-II	2			0.17	0.24
		Goalpara	Goalpara PHE Division	1			0.27	0.27

4	**Bihar**	Patna (East)	-	7			4.21	2.49
		Samastipur		11			10.84	6.26
		Motihari		7			6.70	4.96
		Sasaram		8			7.78	7.66
		Ara		5			4.03	3.80
		Bhagalpur		4			2.84	2.06
		Muzaffarpur		5			3.34	1.54
		Sheikhpura		3			0.78	0.60
		Biharsharif		6			4.27	2.11
5	**Chhattisgarh**	Raipur		10			2.77	2.32
		Jagadalpur		20			3.08	3.07
		Korba		14			2.87	3.41
		Ambikapur		-			4.78	2.34
6	**Gujarat**	Banaskantha	Danta	1			13.79	
			Palanpur	1			1.52	
		Junagadh	Junagadh	1			35.72	
			Manavadar	1			18.94	
		Kachchh	Mandvi	1			12.49	
			Mandvi	1			1.81	
		Panchmahal	Lunawada	1			10.24	
			Santrampur Kadana	1			7.39	
		Sabarkantha	Idar	1			2.88	
			Prantij	1			2.24	

		Valsad	Pardi	1			2.29	
			Valsad	1			2.02	
7	**Haryana**	Sirsa	Sirsa-II	10			3.17	3.08
			Sirsa-I	10			5.10	3.49
		Jind	Jind	10			3.42	3.13
		Fatehabad	Fatehabad	11			4.94	4.76
		Sonipat	Gohana	11			9.15	5.54
			Sonepat	10			3.32	1.85
		Kaithal	Kaithal	10			2.78	2.41
8	**Himachal Pradesh**	Bilaspur	Bilaspur	10			3.91	
			Ghumarwin	10			6.16	
		Sirmour	Nahan	10			2.21	
			Paonta Sahib	1			0.39	
		Simla	Rampur	7			0.83	
			Shimla-I	10			5.52	
9	**Jammu and Kashmir**	Jammu	Akhnoor	10			7.67	Most of the schemes were not approved.
			Samba	10			8.89	
		Rajouri	Rajouri	10			6.08	
			Nowshera	10			7.08	
		Baramulla	Baramulla	10			7.85	
			Sopore	10			7.33	

		Pulwama	Shopian	10			18.55	
			Awantipura	10			8.57	
10	**Jharkhand**	Godda	Godda	10			7.62	6.50
		Bokaro	Tenughat	10			2.33	1.80
		Dhanbad	Dhanbad	10			3.92	3.34
		Ranchi	Ranchi West	10			3.44	3.20
			Khunti	10			3.19	2.98
		Garhwa	Garhwa	9			3.90	2.28
		East Singhbhum	Jamshedpur	10			4.96	3.51
11	**Karnataka**	Belgaum	Belgaum	4			0.21	
			Bailhongal	2			0.01	
		Gulbarga	Gulbarga	5			0.33	
			Alland	5			0.25	
			Surpura	2			0.10	
			Yadgir	1			1.98	
		Bangalore-Rural	Kanakpura	5			0.28	
			Doddaballapur	6			0.41	
		Kolar	Chickballapur	3			0.07	
			Chintamani	3			0.07	
			Kolar	5			0.26	
		Koppal	Koppal	15			73.24	
			Gangavathi	5			0.28	
		Bellary	Bellary	5			0.21	
			Siruguppa	5			0.13	

		Shimoga	Shimoga	5			0.29	
			Sagar	5			0.30	
12	**Kerala**	Ernakulum	Muvattupuzha	5			12.95	11.92
			Piravam	6			22.39	5.87
		Kottayam	Kottayam	9			8.73	12.76
		Thiruvananthapuram	Nayyattinkara	10			25.06	8.31
			Attingal	10			29.24	19.73
		Thrissur	Irinjalakkuda	9			23.09	9.03
			Thrissur	7			26.31	19.89
13	**Madhya Pradesh**	Rajgarh	Rajgarh	10			1.41	
			Khilchipur					
			Sarangpur					
		Jabalpur	Jabalpur	10			1.06	
			Patan					
			Panagar					
			Shahpura					
			Sihora					
		Raisen	Obedullaganj	10			0.95	
			Begumganj					
			Udaipura					
		Khargone	Khargone	10			1.38	
			Kasrawad					
			Bhikangaon					

			Barwaha					
			Maheshwar					
		Shahdol	Sohagpur	10			1.78	
			Gohparu					
			Budhar					
			Beohari					
		Seoni	Keolari	2			0.32	
			Barghat					
		Chhindwada	Parasiya	10			0.58	
			Pandhurna					
			Chhindwara					
			Jamai					
		Sagar	Sagar	10			3.10	
			Khurai					
			Rahatgarh					
		Katni	Mudwara	10			1.05	
			Rithi					
			Vijairaghogarh					
		Bhopal	Phanda	8			NA	
			Berasiya					
14	**Maharashtra**	Ahmednagar	ZP Ahmednagar	10			3.54	
			MJP Ahmednagar	10			149.12	
		Amravati	ZP Amravati	10			2.32	
			MJP Amravati	10			10.01	
		Gondia	ZP Gondia	10			0.08	

			MJP Gondia	10			86.11	
		Jalna	ZP Jalna	10			1.88	
			MJP Jalna	10			11.75	
		Nandurbar	ZP Nandurbar	10			1.08	
			MJP Dhule	6			9.98	
		Raigad	ZP Raigad	10			2.52	
			MJP Panvel	10			20.51	
		Satara	ZP Satara	10			1.89	
			MJP Satara	10			21.76	
		Thane	ZP Thane	10			3.22	
			MJP Thane	9			32.39	
15	**Manipur**	Ukhrul	Ukhrul PHE division	10			0.57	48.42
		Imphal East	Imphal East PHE division	10			1.90	355.49
		Bishnupur	Bishnupur PHE division	10			1.46	128.63
16	**Meghalaya**	East Khasi Hills (capital)	PHE Investigation Division	10			4.38	3.71
			PHE Hills Division	7			1.78	1.78
		East Khasi Hills	PHE Electrical Mawphlang Division	10			14.36	14.36
		West Khasi Hills	PHE Nongstoin Division	10			5.35	5.35

			Mawkyrwat Division	10			3.76	3.82
		West Garo Hills	PHE, Tura Division	9			3.77	3.77
			PHE, Tura North Division	9			2.40	2.40
		East Garo Hills	PHE, Resubelpara Division, Williamnagar	5			3.32	4.24
			PHE, Simsangiri Division, Williamnagar	5			1.94	1.44
17	**Nagaland**	Dimapur	Store Division	2			0.69	
			Sanitation Division	3			1.33	
		Peren	Peren	1			0.58	
		Kohima	Kohima	4			1.30	
18	**Orissa**	Balasore	RWSS Division, Balasore	10			5.76	
		Rayagada	Rayagada	10			1.19	
		Gajapati	Gajapati	6			1.24	
		Kalahandi	Kalahandi	9			1.55	
		Koraput	Koraput	10			1.19	
		Puri	Puri	8			10.90	
		Dhenkanal	Dhenkanal	10			2.74	
		Sambalpur	Sambalpur	10			1.83	

19	**Punjab**	Ropar	Ropar	9			3.01	1.61
			Mohali	10			2.11	1.42
		Patiala	Patiala	10			2.74	1.80
			Rajpura	10			1.86	1.81
		Ludhiana	Ludhiana	5			0.49	0.41
		Nawanshahar	Nawanshahar	10			1.78	1.12
20	**Rajasthan**	Ajmer	Beawar	10			0.16	
			Bisalpur Project Division-II, Ajmer	8			108.05	
			Bisalpur Project Division-III, Bhinay	10			6.76	
		Banswara	Banswara	10			0.23	
		Barmer	North Division, Barmer	10			5.85	
			RIGEP Division, Barmer	10			2.00	
		Bikaner	District Division-I, Bikaner	10			21.66	
			District Division-II, Bikaner	10			6.58	
		Dausa	Dausa Division	10			4.03	
		Rajsamand	Bagheri ka Naka Project Division, Nathdwara	7			92.73	

			Rajsamand	10			7.48	
		Sikar	Neem Ka Thana Division	10			0.37	
			Sikar Division	10			0.80	
		Sriganganagar	Anoopgarh	10			3.28	
			District Division, Sriganganagar	10			2.49	
			Suratgarh	10			5.78	
21	**Sikkim**	East District	Gangtok	10			0.38	
			Rongli	10			0.63	
		South District	Jorethang	10			0.63	
			Namchi	10			0.66	
22	**Tamil Nadu**	Nilgiris	Udhagamondalam	9			0.55	10.20
		Coimbatore	Coimbatore	4			0.19	9.83
		Erode	Erode	10			0.38	22.69
		Karur	Karur	10			0.48	13.79
		Thanjavur	Thanjavur	10			0.58	14.71
		Villupuram	Villupuram	10			0.75	29.41
		Tiruvannamalai	Tiruvannamalai	10			0.45	16.45
		Vellur	Vellur	10			0.32	18.01
23	**Tripura**	South Tripura	PHE-VII	10			1.40	
			PHE-III	10			1.70	
		West Tripura	PHE-VI	10			1.34	

			PHE-IV	10			1.16	
24	**Uttar Pradesh**	Lucknow	Construction Division II	5			0.02	
		Raebareilly	Construction division I	5			0.02	
			Construction Division II	5			0.02	
		Agra	Nil	Nil				
		Hardoi	Construction Division I	5			0.03	
		Sonebhadra	UNICEF Division	3			0.03	
		Sant Ravidas Nagar	Construction Division I	5			0.02	
		Meerut	Construction Division I	5			1.08	
		Moradabad	Construction Division I	5			0.03	
		Deoria	Construction Division I	1			0.01	
		Allahabad	Construction Division	2			0.37	
			Construction Division VI	2			0.71	
		Unnao	Construction Division II	5			3.74	
			Construction Unit	Nil				

		Barabanki	Construction Division	5			0.02	
		Gonda	Construction Division	5			0.42	
		Etawah	Construction Division	2			0.70	
		Bareily	Construction Division VI	5			0.04	
		Kushinagar	Construction Division	5			0.57	
		Baghpat	Construction Division	5			0.87	
25	**Uttarakhand**	Pauri Garhwal	Srinagar Branch	27			801.78	
			Pauri Branch	16			411.52	
		Chamoli	Gopeshwar Branch	22			729.68	
		Tehri	Ghansali Branch	44			1501.63	
			Chamba	10			258.52	
		Champawat	Champawat	10			187.96	
		Dehradun	Purori	10			534.22	
			Dehradun	24			1511.15	
26	**West Bengal**	South 24-Parganas	Gosaba	1			1.94	1.94
			Mathurapur –I	2			1.14	1.13
			Mathurapur –II	1			0.87	1.00
			Patharpratima	2			2.47	1.94

			Falta	1			0.98	0.98
			Kakdwip	2			2.38	2.23
			Kulpi	1			1.13	1.10
		Bankura	Khatra-II	1			1.72	0.49
			Sarenga	1			1.06	0.53
			Taldangra	1			0.72	1.13
			Sonamukhi	1			0.35	0.56
			Saltora	1			1.35	2.27
			Onda	1			1.44	3.01
			Simlipal	1			0.90	1.21
			Gangajalghati	1			2.52	2.51
			Raipur-I	1			0.86	0.75
			Bankura-II				0.77	0.77
		North 24 Parganas	Sandeshkhali-I	1			1.86	1.84
			Basirhat-II	2			1.70	1.73
			Bongaon	1			0.88	1.32
			Bagda	1			0.53	0.81
			Basirhat-I	1			0.76	1.29
			Deganga	1			3.34	3.34
			Gaighata	3			4.99	5.42
		Paschim Medinipur	Gobipallavpur-II	1			0.56	0.56
			Binpur-I	2			1.39	1.37
			Ghatal	1			0.64	0.64
			Kharagpur-II	1			0.77	0.77
			Pingla	1			0.89	0.89
			Sankrail	1			0.60	0.69

			Nayagram	2			1.19	0.94
			Garbeta-III	1			1.13	1.13
		Malda	English Bazar	1			6.91	3.89
			Chanchal-II	1			1.28	1.28
			Harishchandrapur-II	2			1.54	1.54
			Gajole	1			0.99	0.99
			Ratua-I	2			23.39	1.47
			Harishchandrapur-I	1			0.98	1.00
			Manikchak	1			3.79	1.01

ANNEXURE: A (ii)
(Paragraph 1.5.3)

STATEMENT SHOWING THE STATEWISE SAMPLE SELECTION (SWAJALDHARA)

S.No.	Name of the State	Name of the District	Name of the Scheme selected	Cost of selected scheme (Rs. in crore)	Expenditure incurred
1	**Andhra Pradesh**	East Godavari	11 PWS Scheme to VWSC	1.29	
		Krishna	10 PWS Scheme to VWSC	1.41	
		Nalgonda	10 PWS Scheme to VWSC	1.77	
		Karimnagar	14 PWS Scheme to VWSC	1.31	
		Warangal	11 Swajaldhara Schemes for VWSC	0.54	
		Srikakulam	11 Swajaldhara Schemes for VWSC	1.32	
2	**Arunachal Pradesh**	East Siang	2	0.09	
		Papumpare	3	0.15	
		West Siang	4	0.32	
		Changlang	2	0.21	
		West Kameng	1	0.13	
		Lower Subansiri	1	0.13	
3	**Assam**	Barpeta	2 schemes	0.47	0.030
		Bongaigaon	2 schemes	0.50	0.014
		Cachar	4 schemes	0.80	0.038

		Goalpara	2 schemes	0.11	0.004
4	**Bihar**	Hajipur	2 PWS	0.56	
			349 Handpumps	3.44	
		Biharsharif	4 PWS	0.90	
			2 Handpumps	0.74	
		Sheikhpura	3 PWS	0.81	
			3 Handpumps	0.59	
		Muzaffapur	1 PWS	1.74	
		Bhagalpur	Nil	Nil	
		Ara	10 PWS	4.41	
		Sasaram	9 PWS	0.90	
			1 Handpump	0.08	
		Motihari	5 PWS	2.00	
		Samastipur	Nil	Nil	
		Patna	3 PWS	0.94	
			3 Handpumps	0.44	
5	**Chhattisgarh**	Raipur	19	0.48	
		Jagadalpur	20	0.24	
		Korba	28	1.22	
		Ambikapur	18	0.05	

6	**Gujarat**	Banaskantha	2 Water Supply Schemes	0.45	
		Junagadh	2 Water Supply Schemes	0.25	
		Sabarkantha	3 Water Supply Schemes	0.11	
		Valsad	3 Water Supply Schemes	0.34	
7	**Haryana**	Kaithal	10	0.82	
		Sonipat	10	0.78	
8	**Himachal Pradesh**	Bilaspur	10	0.35	
		Solan	8	0.42	
		Nahan	8	0.95	
9	**Jammu and Kashmir**	Jammu	5 Water Supply Schemes	2.65	
		Rajouri	12 Water Supply Schemes	0.95	
		Baramulla	8 Water Supply Schemes	1.46	
		Pulwama	12 Water Supply Schemes	1.78	
10	**Jharkhand**	East Singhbhum	10 PWSS	1.42	1.02
		Dhanbad	2 PWSS	0.07	0.02
		Godda	5 PWS S	0.47	0.29
		Garhwa	2 PWSS	0.13	0.11
		Ranchi	7 PWS S	0.40	0.18
		Bokaro	2 PWSS	0.14	0.10
11	**Karnataka**	Bangalore-Rural	10	0.52	

		Belgaum	10	0.79	
		Bellary	11	8.10	
		Gulbarga	13	0.53	
		Kolar	11	0.99	
		Koppal	5	0.28	
		Shimoga	10	0.20	
12	**Kerala**	Thiruvananthapuram	10 Water Supply Schemes	1.83	
		Kottayam	10 Water Supply Schemes	1.45	
		Ernakulum	8 Water Supply Schemes	0.98	
		Thrissur	13 Water Supply Schemes	0.84	
13	**Madhya Pradesh**	Rajgarh	10 schemes	0.07	
		Jabalpur	10 schemes	0.53	
		Raisen	10 schemes	0.79	
		Khargone	10 schemes	0.20	
		Shahdol	5 schemes	0.09	
		Seoni	10 schemes	0.18	
		Chhindwada	10 schemes	0.37	
		Sagar	10 schemes	0.31	
		Katni	5 schemes	0.42	
		Bhopal	5 schemes	0.03	
14	**Maharashtra**	Ahmednagar	10	0.97	
		Amravati	10	2.75	
		Gondia	10	0.94	

		Jalna	10	1.50	
		Nandurbar	10	0.90	
		Raigad	10	2.38	
		Satara	10	1.35	
		Thane	10	1.28	
15	**Manipur**	Swajaldhara not implemented in the state			
16	**Meghalaya**	Ri-bhoi	Sector Reform Pilot Project	9.75	
17	**Nagaland**	Dimapur	5 schemes	0.43	
		Kohima	1 scheme	0.11	
		Peren	1 scheme	0.11	
18	**Orissa**	Puri	5 Piped Water Supply Schemes	0.004	
		Sambalpur	8 Piped Water Supply Schemes	0.006	
		Koraput	5 PWSS	0.003	
		Gajapati	5 PWSS	0.003	
		Dhenkanal	8 PWSS	0.008	
		Kalahandi	7 PWSS	0.005	
		Balasore	4 PWSS	0.003	
		Rayagada	6 PWSS	0.002	
19	**Punjab**	Fatehgarh Sahib	3 Water Supply Schemes	0.63	0.38 crore
		Patiala	2 Water Supply Schemes	0.50	0.30
		Ropar	4 Water Supply Schemes	0.85	0.58

20	**Rajasthan**	Banswara	10	0.24	
		Barmer	10	7.97	
		Bikaner	2	1.68	
		Dausa	6	0.69	
		Rajsamand	10	1.29	
		Sikar	10	1.58	
		Sriganganagar	6	1.01	
21	**Sikkim**	Swajaldhara not implemented in the state			
22	**Tamil Nadu**	Coimbatore	6	0.27	3.36 crore
		Erode	8	0.35	3.63
		Namakkal	8	0.17	0.80
		Salem	8	0.21	1.49
		Thanjavur	6	0.29	0.71
		Sivagangai	8	0.80	2.86
		Madurai	8	0.65	3.37
		Villupuram	8	0.37	2.47
23	**Tripura**	South Tripura	7	0.16	
		West Tripura	7	0.10	
24	**Uttar Pradesh**	Allahabad	Mini/Single Pipe Water Supply	2.46	
		Barabanki	Mini/Single Pipe Water Supply	1.64	
		Bareilly	Mini/Single Pipe Water Supply	2.43	

		Bijnor	Mini/Single Pipe Water Supply	1.51	
		Chandauli	Handpump/Mini Pipe Water Supply	0.50	
		Lucknow	Handpump/Mini Pipe Water Supply	0.38	
		Mirzapur	*	1.60	
		Moradabad	Mini/Single Pipe Water Supply	1.00	
		Pratapgarh	Mini/Single Pipe Water Supply	0.62	
		Sonebhadra	Handpump/Mini Pipe Water Supply	0.61	
		Varanasi	Handpump/Mini Pipe Water Supply	1.33	
25	**Uttarakhand**	Almora	2	0.23	
		Champawat	5	0.33	
		Dehradun	2	0.21	
		Pithoragarh	4	0.28	
		Tehri Garhwal	3	0.27	
26	**West Bengal**	Malda	9	0.62	
		Paschim Mednipur	10	0.86	
		North 24 Parganas	10	1.65	
		Bankura	10	0.84	
		South 24 Parganas	10	0.51	

* : At Mirzapur, Rs 75.12 lakh and Rs 85.15 lakh was received during 2004-05 and 2005-06 respectively, but till date no scheme was started.

ANNEXURE: B
(Paragraph 2.4.2)

Statement showing amount of delayed release of Central funds:

(Rs in lakhs)

State	**Central fund**
Chhattisgarh	9214.74
Gujarat	275.7
Himachal Pradesh	42.79
Karnataka	12424.09
Kerala	154.8
Nagaland	7109.24
Rajasthan	5289.95
Uttarakhand	2064.12
West Bengal	42473.33
Total	**79048.76**

Annexure C
(Paragraph 2.5)

State-wise Analysis of slip back

Andhra Pradesh	The number of PC habitations increased by 7329 between April 2003 and April 2004. However, during the updation of habitation status in February-March 2007, 12951 habitations were reported as slipped back from FC. This was reportedly due to increase in population, migration of labour from one place to another, and variation in ground water levels.
Assam	In nine test-checked divisions, there were 4066 slip back habitations during the period 2002-07, which occurred due to poor maintenance, quality problems etc. However, the figures reported for the State as a whole indicated no slip back between April 2002 and April 2007, thus casting doubts on the reliability of these figures.
Bihar	On the basis of the habitation survey of 1993-94, as of April 2002, all habitations were reported to have been covered. However, as of 1 April 2004 (based on 2003 Survey Data), out of the total of 105303 habitations, there were only 32911 FC habitations (31 *per cent*), 44930 PC habitations and 27462 NC habitations.
Chhattisgarh	The status of FC Habitations as per the new survey in 2003, and as per Departmental figures of April 2003, revealed a slip back of 7674 FC habitations, reportedly due to sources becoming dry/ quality affected out of service due to choking and filling and some tribes moving periodically from place to place. However, no detailed analysis of slip back was provided to audit.
Gujarat	The status of FC Habitations as on 1 April 2003 and 1 April 2004 revealed an increase in PC and NC Habitations of 8386 and a slip back in 3810 FC habitations, which was reportedly due to quality problems, and depletion of water resources.

Himachal Pradesh	The status of habitations identified during 1993-94, and the data revealed by the 2003 survey reveals slip back of 18204 FC habitations. This was reportedly due to change in norms for conduct of the survey, emergence of new habitations owing to increase in population, and decrease in discharge of water sources.
Jammu & Kashmir	Out of the total 11184 habitations as per CAP 99, there was a slip back of 1629 FC habitations into 224 PC and 1405 NC habitations between CAP 99 and the 2003 Survey.
Karnataka	A comparison of the status of habitations as of April 2001 and April 2003 revealed slip back of 11585 FC habitations.
Kerala	A comparison of the status of habitations of Departmental figures as of 1 April 2005, and figures based on Survey 2003 data indicated a slip-back of 423 FC habitation.
Madhya Pradesh	The status of FC Habitations as on 1 April 2003 and 1 April 2004 revealed slip back of 36,470 FC habitations.
Maharashtra	In Maharashtra, in the report to GoI of NC/ PC habitations as of 1 April 2005, there was under-reporting of 1851 NC and 21250 PC habitations; this was attributed to the fact that the Survey 2003 figures and figures collected from Zilla Parishad representatives did not match
Nagaland	The status of habitations as on 1 April 2002, and new status as per Survey 2003 data revealed slip back of 429 FC habitations.
Orissa	The status of habitations as on 1 April 2002, and as on 1 April 2005 (as per Survey 2003 data) revealed slip back of 4614 FC habitations.
Rajasthan	The status of FC Habitations as on 1 April 2004 and 1 April 2005 revealed slip back of 37,759 FC habitations Further, 65329 habitations out of the total 122250 habitations were without adequate drinking water as of March 2007, of which 30088 were quality affected habitations.

Sikkim	The status of FC Habitations as on 1 April 2004 and 1 April 2005 revealed slip back of 138 FC habitations.
Uttar Pradesh	The status of FC Habitations as on 1 April 2004 and 1 April 2005 revealed slip back of 10167 FC habitations.
Uttarakhand	The status of FC Habitations as on 1 April 2003 and 1 April 2004 (based on Survey 2003 data) revealed slip back of 10062 FC habitations. Survey 2003 also showed that out of 4719 sources of water supply schemes, discharge of water flow of 805 sources had declined by more than 50 *per cent*. By 2005, out of 5818 water supply schemes handed over to Jal Sansthan for O&M, there was a reduction of water discharge in 1981 schemes, of which the decline was 50 to 75 *per cent* in 1290 schemes. Further, a household survey by Peoples' Science Institute (PSI) in 6 Districts revealed that 81 *per cent* of 791 households reported access to Government pipelines, but this source provided 67 *per cent* of the summer requirement and 75 *per cent* of the winter demand. Further, according to the survey, SC/ST households were placed at a disadvantage, as fewer received more than 40 lpcd, a higher fraction received only 11 to 20 lpcd, and the difference was large in four out of six Districts.
West Bengal	The status of FC Habitations as on 1 April 2003 and 1 April 2004 (based on Survey 2003 data) revealed slip back of 10650 FC habitations. The main reasons for slip back were sinking of tube wells in arsenic affected areas without taking appropriate mitigation measures, and non-maintenance/ inadequate maintenance of existing tube wells, which were becoming defunct or yielding less water.

Annexure: D

(Paragraph 2.5)

Statement showing the difference of habitation figures between DDWS and State level figures

Variation of 10,000 habitations or more (Total) in data – (State level figures – DDWS)

Name of the State	As of Ist April			
	2004	**2005**	**2006**	**2007**
Chhattisgarh	22396	22396	22396	--
Jharkhand	20054	20054	20054	20054
Madhya Pradesh	16683	16683	16683	16683
Orissa	--	27269	27269	27269
Rajasthan	--	28304	28304	28304
Tamil Nadu	15156	15156	15156	15156
Uttar Pradesh	--	16602	16602	16602
West Bengal	17229	17229	17229	17229

(Source: Data collected from DDWS and Implementing agencies in the State)

Variation of 5,000 or more habitations in PC data- (State level figures – DDWS)

Name of the State	As of 1st April			
	2004	**2005**	**2006**	**2007**
Andhra Pradesh	36663	34198	25290	32739
Bihar	44930	44325	44519	36850
Chhattisgarh	12412	11389	9378	--
Gujarat	9404	8552	7561	6005
Jharkhand	5555	--	--	--
Madhya Pradesh	31376	28249	22113	14840
Orissa	--	13085	11535	9908
Rajasthan	13335	17159	7228	--
Tamil Nadu	35877	32314	25670	29241
Uttar Pradesh	--	18776	17160	8060
Uttarakhand	13797	13650	13345	12044
West Bengal	25103	22197	19749	17063

Source: Data collected from DDWS and Implementing agencies in the State

Variation of more than 500 habitations in NC data (State level figures – DDWS)

Name of the State	As of Ist April			
	2004	**2005**	**2006**	**2007**
Andhra Pradesh	1651	1535	7673	6255
Bihar	27462	27452	26247	18486
Chhattisgarh	14471	11793	6791	--
Jharkhand	15357	13369	11771	--
Madhya Pradesh	19486	14035	7694	1777
Maharashtra	1624	--	--	--
Orissa	--	18798	9284	3344
Punjab	2849	2701	3087	2848
Rajasthan	--	62913	61894	60029
Tamil Nadu	9283	3224	968	--
Tripura	6949	6914	6731	6411
Uttar Pradesh	--	7993	7034	2790
Uttarakhand	5488	5207	5121	4766
West Bengal	9528	6835	6540	6187

(Source: Data collected from DDWS and Implementing agencies in the State)

Annexure E
(Paragraph 2.8.2)

Details of non-submission of returns

Annual Returns

Return	Due Date for Submission	States not submitting returns
Annual progress report for clearance of schemes	By 31 October and 30 April	**Andhra Pradesh, Arunachal Pradesh, Assam, Gujarat, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Meghalaya, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal** (16 States).
Annual report of achievements under the programme during the year	By 30th April of the succeeding financial year	**Assam, Himachal Pradesh, Kerala, Maharashtra, Meghalaya, Punjab, Sikkim, Tripura, Uttar Pradesh** and **West Bengal** (10 States)
District-wise break up of MNP provision and ARWSP allocation	Before end of May every year	**Andhra Pradesh, Arunachal Pradesh, Assam, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Nagaland, Punjab, Sikkim, Uttar Pradesh** and **West Bengal (**12 States).

Quarterly Returns

Return	Due Date for Submission	States not submitting returns
Quarterly progress monitoring reports (with full details)	By 20th of the first month of the following quarter	**Andhra Pradesh, Gujarat, Jharkhand, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Orissa, Sikkim, Uttar Pradesh** and **West Bengal** (12 states)
Status of functional/non-functional hand pumps and other drinking water supply schemes	By 30th April, 31st July, 31st October & 31st January for the preceding quarter	**Arunachal Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Manipur, Maharashtra, Meghalaya, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand** and **West Bengal** (20 States).

Monthly Returns

Return	**Due Date for Submission**	**States not submitting returns**
Monthly progress report	By 20th of the following month	**Jharkhand, Maharashtra, Manipur, Orissa** and **West Bengal** (5 States)
Progress reports in respect of installation of drinking water schemes in rural schools	Monthly	**Jharkhand, Maharashtra, Manipur, Orissa, Rajasthan** and **West Bengal** (6 States)
Progress of performance of drilling rigs of different types	By 20th of the following month	**Andhra Pradesh, Assam, Bihar, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Orissa, Rajasthan, Uttar Pradesh, Uttarakhand** and **West Bengal (**15 States)

ABBREVIATIONS

AAP	Annual Action Plan
ARWSP	Accelerated Rural Water Supply Programme
CAP99	Comprehensive Action Plan 1999
CCDU	Communication and Capacity Development Unit
CGWB.	Center Ground Water Board
FTK	Field Tests Kits
DDP	Drought Development Programme
DDWS	Department of Drinking Water Supply, Ministry of Rural Development, Government of India
DTW	Deep tube wells
DWSC	District Water and Sanitation Committee
DWSM	District Water and Sanitation Mission
FC	Fully Covered
GoI	Government of India
GP	Gram Panchayat
HRD	Human Resources Development
LPCD	Litres per Capita per day
MIU	Monitoring and Investigation Unit
NC	Not Covered
NSMC	National Swajaldhara Monitoring Committee
NSS	No Safe Source
NTU	Nephelometric Turbidity Units
O&M	Operation and Maintenance
PC	Partially Covered
PHED	Public Health Engineering Department
PRIs	Panchayati Raj Institutions
PWSS	Piped Water Supply Scheme
RGNDWM	Rajiv Gandhi National Drinking Water Mission
RWSS	Rural Water Supply Scheme
MIU	Monitoring and Investigation Unit
SMIU	Special Monitoring and Investigation Unit
SWSM	State Water and Sanitation Mission
VMC	Vigilance and Monitoring Committee
VWSC	Village Water and Sanitation Committee
WSS	Water Supply Scheme
WSSS	Water Supply Sanitation Scheme