Chapter 2
Performance Audit

This Chapter presents performance audits of 'Drinking water supply in Jaipur City', 'Implementation of Gararda Medium Irrigation Project', 'Implementation of Fluoride Control Project', 'Implementation of Maharana Pratap Awas Yojana for Gadia Lohars', 'Working of Rajasthan Shiksha Karmi Board', 'Integrated Forest Protection Scheme' and 'Information Technology (IT) Audit of Common Integrated Police Application'.

Public Health Engineering Department

2.1 Drinking water supply in Jaipur City

Executive Summary

The water problem in Jaipur City is chronic and acute. After the Ramgarh Lake, only source of surface water for the Jaipur City started drying up, Government of Rajasthan conceived (October 1999), the Bisalpur Jaipur Water Supply Project (BJWSP) for transporting water from Bisalpur Dam with a view to reduce dependency on ground water. Due to financial constraint, the BJWSP was launched in October 2004 with completion scheduled for December 2007. Implementation of the BJWSP and various water supply schemes providing drinking water to Jaipur City was marred by deficiencies in planning, execution, monitoring and vigilance by the Departments of Public Health Engineering (PHED) and Urban Development and Housing.

Unregulated over-extraction of ground water by both private and State agencies caused rapid depletion of ground water source and serious problem of pollution in Jaipur City. There are 1908 tube wells (TWs) in Jaipur City producing 345 MLD of water. New TWs were constructed even in areas found not feasible by Ground Water Department (GWD), due to lack of co-ordination between PHED and GWD. There is no regulatory mechanism to control tapping of ground water.

Bisalpur Dam, the alternative source, located 120 km from the Jaipur City, was recommended by the consultant as an immediate measure. The Dam, heavily dependent on vagaries of rain water and suffering from massive pilferages from the catchment area, proved to be a deficient source. It has never filled up to its full capacity during 2007-10 and the water supply to Jaipur City started in March 2009 at a low average of 67.50 MLD reduced to 34.57 MLD in March 2010.

Two packages proposed for replacement of worn-out pipelines to strengthen the water distribution network of the Jaipur City, development of three new distribution centres to cater to the un-served areas and reduction of unaccounted for water have not yet been taken up due to paucity of funds. Of six summer schemes approved (2007-10) to sustain adequate water supply,

none of the schemes (except Summer 2009) could be completed as of March 2010.

Quality of drinking water has not been ensured as 90 *per cent* water samples were not within the prescribed parameters. Shortage of manpower and equipment resulted in shortfall in collection of samples for test of water quality. Replacement of polluted pipelines and shifting of service lines/connections up to 82 *per cent* left scope for spreading pollution. Reservoirs were not cleaned periodically on the plea of affecting distribution system.

Water tariff has not been revised after 1998 despite manifold increase in the production cost. A large number of connections remained unmetered. Safety and security of water supply system suffered as the Vigilance Wing was understaffed.

2.1.1 Introduction

Jaipur City having a population of more than 31 lakh (March 2010) is divided into eight zones on the basis of hydrogeological parameters. The only source of surface water to meet the requirement of drinking water to Jaipur City was 'Ramgarh Lake' which started drying from the year 1999 and completely dried up in the year 2006. Since then water supply in Jaipur City was dependent only on ground water. Due to over-extraction, level of ground water has gone down by more than ten metres during the period 2004-2009. To cope up with the demand of Jaipur City, State Government conceived (October 1999) Bisalpur Jaipur Water Supply Project (BJWSP) for transporting water from Bisalpur Dam at an estimated cost of ₹ 1100 crore with the aim to supply 869 million litre per day (MLD) of water upto the year 2021. The total production (March 2010) of water was 379.41 MLD (Tube Wells: 344.77 MLD, Bisalpur Dam: 34.64 MLD). The net distribution was 239.03 MLD after allowing 37 *per cent* for Unaccounted for Water (UFW) which served a population of 27.98 lakh. Presently, per capita supply of water in Jaipur is 85 litres per capita per day (lpcd) which is much less than the norms of 150 lpcd as recommended by Central Public Health and Environmental Engineering Organisation (CPHEEO) of Ministry of Urban Development, Government of India (GoI).

2.1.2 Organisational set up

The Principal Secretary, Public Health Engineering Department (PHED) is the Administrative Head. The Chief Engineer (CE) (Headquarters), PHED is charged with overall planning, implementation, monitoring and evaluation of programmes. Responsibility for implementation of the schemes vests with the Superintending Engineer (SE), City Circle Jaipur, who is assisted by four Executive Engineers (EEs)[1]. The CE (Special Project) is responsible for implementation and monitoring of Bisalpur Jaipur Water Supply Project (BJWSP) and is assisted by Additional Chief Engineer (ACE), SE and four EEs.[2] Transmission work of BJWSP has been executed through 'Rajasthan

1. City Division, North Divisions-I, II and South Divisions-I, II.
2. Bisalpur Divisions, I, II, III and IV.

Urban Infrastructure Development Project (RUIDP)', the implementing agency under the Department of Urban Development and Housing (UDH). The Department is headed by a Principal Secretary and assisted by CE, Project Implementation Unit (PIU).

2.1.3 Status of ground water

Based on the rate of 150 lpcd, the projected water demand of Jaipur City was 465 MLD where as the Department has been able to supply 379.41 MLD (March 2010). Private colonisers tap the ground water resource to provide for the rest. Central Ground Water Board's (CGWB's) pre and post-monsoon data in respect of the eight hydrogeological zones of Jaipur City ***(Appendix 2.1)*** showed that during the years 2004 to 2009, the ground water level in seven zones had gone down from 1.77 metres to 21 metres during pre-monsoon period and 5.60 metres to 21.86 metres during post-monsoon period due to over extraction. Jaipur City has increasingly depended on ground water with 1,908 Tube Wells (TWs) (June 2010) of PHED pumping approximately 345 MLD.

2.1.4 Audit objectives

Audit objectives were to assess whether the efforts of the PHED were adequate and effective by examining whether:

- planning and execution of the projects/schemes was cost-effective and efficient;
- supply of safe and sufficient drinking water to Jaipur City was as per the prescribed norms;
- funds were utilised prudently and properly accounted for;
- maintenance of the distribution network was adequate; and
- internal controls and oversight through vigilance were effective.

2.1.5 Audit criteria

The audit criteria adopted were as under:

- Manual on water supply and treatment issued by Central Public Health and Environmental Engineering Organisation (CPHEEO) / State water supply rules;
- Norms, standards and performance indicators mentioned in reports on ground water resource, feasibility report on BJWSP, water quality test reports, proposals for schemes and financial statements;
- Instructions issued by PHED, UDH and RUIDP.

2.1.6 Scope and methodology

Implementation of BJWSP (2005-2010) and the augmentation/summer schemes for 2007-10 were reviewed (January to July 2010) through test-check of records in the concerned offices of PHED[3] and RUIDP[4]. Entry conferences

3. CE (Special Project); EE-Bisalpur Division-I, II, III and IV; SE, Jaipur City Circle; EEs, Jaipur City Divisions, North-I and II; EEs, City Division, South-I and II and Chief Chemist, PHED, Jaipur.
4. Project Director, RUIDP and CE (PIU), RUIDP.

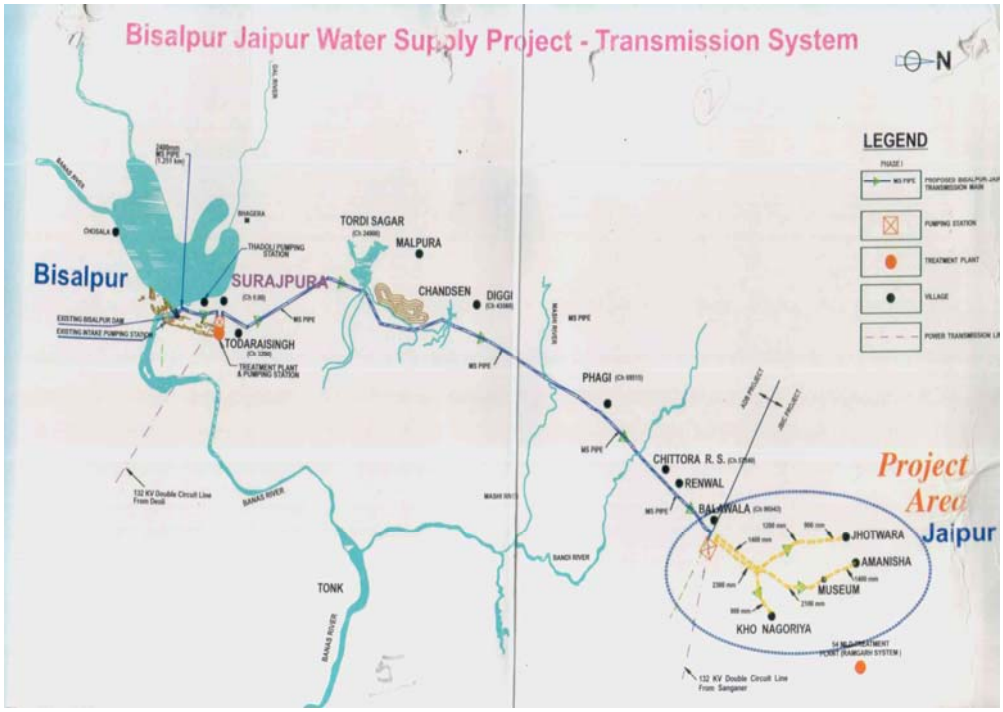
with the Principal Secretary, PHED and the Principal Secretary, UDH were held in January 2010, wherein the objectives of the performance review were discussed. Audit findings were discussed in the exit conferences held on 2 December 2010 with the Principal Secretary, UDH and on 13 January 2011 with the Principal Secretary, PHED, Government of Rajasthan (GoR).

Audit findings

2.1.7 Planning

To cater to the growing demand and reduce dependence on ground water, the Government of Rajasthan (GoR) accorded (October 1999) administrative sanction of ₹ 1100 crore for BJWSP[5] for transportation of surface water from Bisalpur Dam, located 120 km far from Jaipur City (Figure-1). However, due to financial constraints, BJWSP was launched in October 2004 and scheduled for completion in December 2007. Water flow from Bisalpur Dam to Jaipur City was targeted from January 2008. Owing to non-completion of transmission and transfer system of BJWSP and low level of water in the Dam during 2009-10, the objective of reduction in dependence on ground water and planned availability of surface water to different regions of Jaipur City could not be achieved (August 2010). A ray diagram of Bisalpur Jaipur Water Supply Project showing areas to be covered in Jaipur City is given in figure-2.

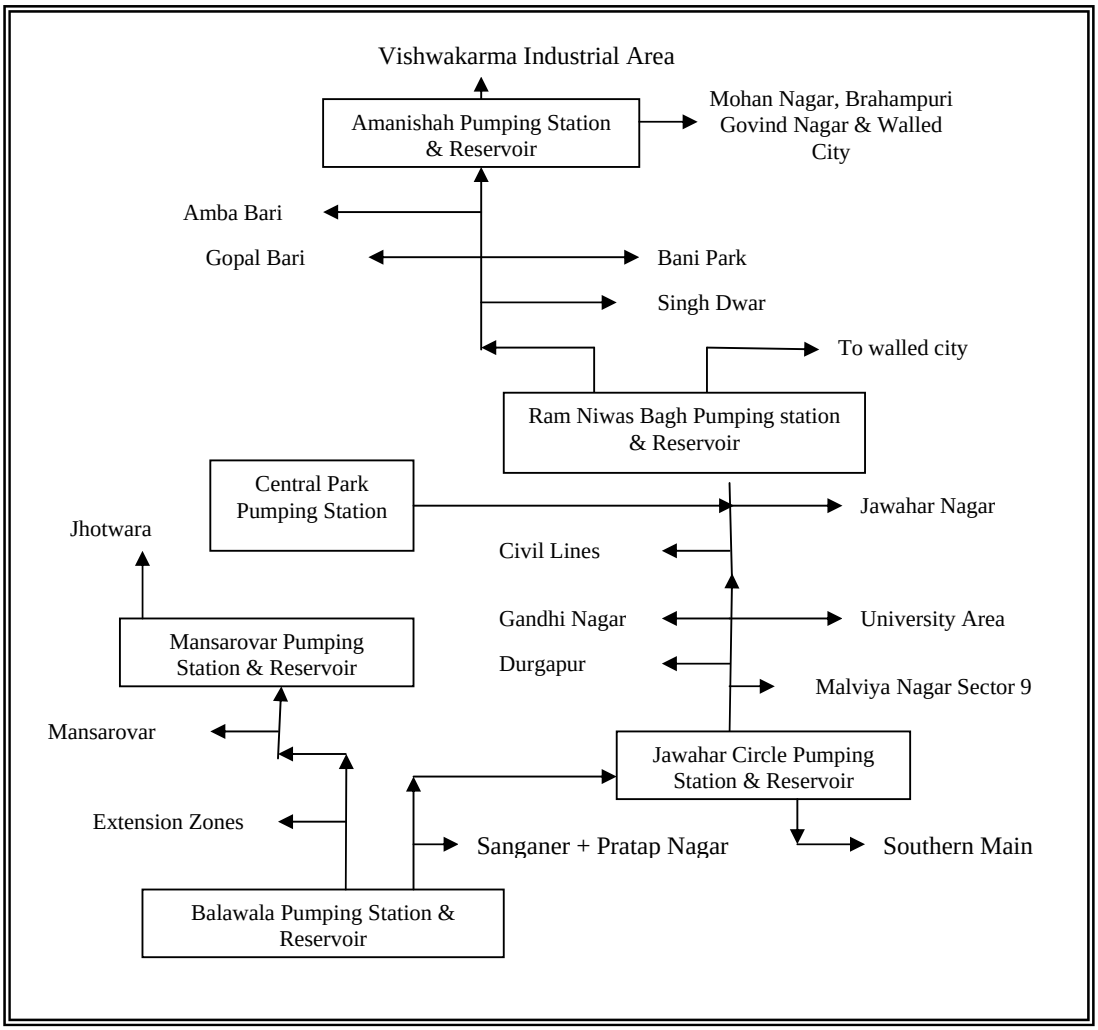
Figure – 1: Transmission system of BJWSP



Source: CE, Special project, PHED, Jaipur

5. To meet the increasing and anticipated demand of 1,020 MLD (Jaipur City: 960 MLD; Rural: 60 MLD) of horizon year 2021, when population is projected at 5.3 million. Break-up of funding of Bisalpur project is: Transmission– ₹ 719 crore and Transfer– ₹ 381 crore. The Asian Development Bank (ADB) has provided a loan assistance of ₹ 276 crore (with 30 *per cent* GoI subsidy) and the Japan Bank for International Cooperation (JBIC) provided ₹ 343 crore.

Figure – 2 Ray diagram of Bisalpur Jaipur Water Supply Project



To meet the growing demand of water, apart from BJWSP, four augmentation schemes[6] and six summer schemes[7] were also approved and executed during 2007-10.

The details of the summer schemes and the activities carried out under the schemes are given in ***Appendix 2.2.***

Ground Water Management Bill not yet approved by State Legislature.

GoI had circulated (January 2005) a Model Bill to all States which suggested establishment of "Ground Water Authority" to regulate and control the development of ground water and rain water harvesting for ground water recharge. GoR presented the Ground Water Management Bill 2006 in the Vidhan Sabha which is pending with the Select Committee of the State Legislature (January 2011). The State Water Policy (18 February 2010)

6. (i) Baiji ki Kothi, Jhalana (October 2007); (ii) Gurjar Ghati (February 2007); (iii) Kanwar Nagar (December 2007) and (iv) Sindhi Colony, Adarsh Nagar (February 2006).
7. Summer 2007 Phase-I (February 2007), Phase-II (December 2007), Summer 2008 (October 2008), Summer 2009 (March 2009), Summer 2009 Phase-I (August 2009), Phase-II (February 2010).

incorporates a provision for development of a legal framework for the regulation and management of ground water extraction in general, and in the critical and over-exploited zones in particular.

2.1.7.1 Over-extraction of ground water

Construction of TWs in non-feasible hydro geological zones due to lack of coordination between PHED/GWD and lack of regularity mechanism.

Audit observed that 1,350 TWs of PHED were in operation in Jaipur City as of May 2006. The number rose to 1,908 in June 2010, an increase of 40 *per cent*. The State Ground Water Department (GWD) in their Study Report (2008) divided Jaipur City into eight zones ***(Appendix 2.3)*** based on hydro geological parameters, that is, water level, alluvial thickness, saturated thickness, discharge and chemical quality. Of these, four zones (D, D1, E and F) were not found feasible for construction of TWs due to limited alluvial thickness and high density of the existing TWs. It was noticed that during 2007-10, 79 new TWs were constructed by PHED in three zones (D1-32, E-3, F-44), which resulted in over-extraction. During discussion (November 2010), the CE, PHED stated that the GWD did not issue any advisory to PHED based on its findings to control over-exploitation in these zones. For extracting ground water, PHED themselves conducted survey through their Hydrologist and sanction drilling of TWs. As per GWD, in the absence of Legislation, there was no mechanism to obtain prior clearance of GWD before boring of TWs. This was indicative of lack of any regularity mechanism and poor coordination between PHED and GWD. In addition, Local Bodies were also extracting water from TWs (474) for gardens[8] (June 2009). No data is available with PHED/GWD regarding extraction of ground water by private agencies/persons, as no such survey was conducted by the Department.

2.1.7.2 Assessment of water production

Bulk flow meter on TWs not installed, which affected assessment of water production.

For a realistic assessment of water production and control over the distribution, bulk flow meters (BMs) are to be installed at each TW. State Government provided ₹ 2.58 crore in Summer 2007 (Phase-II) for instalation of BMs on TWs. It was observed that against the provision of ₹ 2.58 crore for instalation of BMs, ACE, Jaipur Region, Jaipur approved (July 2008) work order worth ₹ 1.05 crore (41 *per cent*) for installing 700 BM for completion by April 2009. However, only ₹ 0.81 crore was spent (March 2010) on instalation of 543 BMs. Thus, due to slow progress of works the Department could not utilise the sanctioned provision. Audit observed that out of the total 1,908 TWs, BMs were not installed (June 2010) on 517 TWs and their actual discharge capacity could not be assessed. Further, production of 669 TWs was connected to the consumers' direct supply lines. During 2009-10, PHED assessed the water production at 344.77 MLD. The assessment was not realistic as production of 517 TW (27 *per cent*) was not measured with BM.

The State Government stated (November 2010) that BMs at all TWs would be installed in near future. Further, the Supervisory Control And Data Acquisition (SCADA) system provided in the Bisalpur Project has facilitated proper measurement of water. This contention is not acceptable as the SCADA system measures the quantity being received at local control centres

8. Data collected from Jaipur Nagar Nigam.

(Pumping Station) where water production of various TWs is collected and not the production from individual TWs.

2.1.7.3 Uneconomic production of water

Uneconomic production of water due to high energy consumption.

Jaipur City's water supply is heavily dependent on the ground water source. The details of total, daily average and hourly average production (per TW) of South and North wings are given in **Table 1**.

Table 1: Details of total, daily average and hourly average production of water from TWs

Year	No. of TWs	Production of water in Million litres per day (MLD)			Per hour per TW production (litres)
		South wing	North wing	Total	
2007-08	1,646	200.48	182.48	382.96	9,694
2008-09	1,682	196.98	198.25	395.23	9,791
2009-10	1,857	166.73	178.04	344.77	7,736

Source: City Division (North and South), PHED, Jaipur

GoR norms stipulate that production below 9,000 litre per hour (LPH) should be considered unsuccessful. In 2009-10, the average production of 1,857 TWs was 7,736 LPH. Out of 1,857 TWs, production of water in 111 TWs ranged between 1,800 LPH to 3,600 LPH. Production of water less than the prescribed norms was uneconomical due to consumption of high cost energy.

The State Government stated (November 2010) that steady drop in ground water table has changed duty conditions of the pumping machinery. Therefore, corrective steps to install proper duty conditions pumping sets have been started.

- ***Non-replacement of inefficient pumping machinery.***

Inefficient pumping machinery not replaced

Summer 2007 Phase-II, had a provision of ₹ 4.05 crore for replacement of inefficient pumping machinery in the existing 450 TWs of South and North wings. The ACE approved (July 2008) the work, which was to be completed within a period of nine months (April 2009).

Audit observed (July 2010) that pumping machineries were not replaced on 209 TWs as of March 2010, resulting in low discharge of water and excess energy load indicating inefficient and uneconomic functioning.

The State Government's contention (November 2010) that the process of replacement was being done as per sanction and budget provision, was not tenable as the inefficient pumping machineries were not replaced even by March 2010 despite sanction and budget provision.

2.1.7.4 Bisalpur Dam- an unreliable source of water for Jaipur City

Imprudent selection of source of water.

The quantum of water proposed to be transmitted to Jaipur City from Bisalpur Dam was based on the allocation of 317.2 million cubic metre, (equivalent to 869 MLD) up to the year 2021. However, as per the data maintained in Water Resources Department, the Bisalpur Dam was not filled up to its full capacity during 1996-2010 except during 2004-05 and 2006-07. The maximum water level ranged between 302.2 metres and 315.50 metres. The project provided the supply of 400 MLD (360 for Jaipur and 40 for en-route villages) water from January 2008 onwards. However, due to delayed execution of the project and less availability of water in Bisalpur Dam, the actual water supply[9] to Jaipur City started from March 2009 at a low average of 67.50 MLD, which further reduced to 34.57 MLD in March 2010.

Audit observed that as per the Isarda Report[10] (August 2001), the capacity of irrigation reservoirs in the catchment of Bisalpur Dam was 1,545 Mcum. The capacity increased to 2,676.42 Mcum (73 *per cent*) as per the survey report of State Water Resources (Planning) Department on the Bisalpur catchment area (May 2010), due to existence of 27,513 dams/anicuts/local ponds/quarries,[11] which reduced the inflow of water into the Dam. As a consequence, the dependability yield of the dam has reduced to 40 *per cent* against stipulated 75 *per cent*. This indicated that no realistic technical survey of the surrounding catchment area was conducted by PHED and the Bisalpur Dam could not be a reliable and regular source of water to cater to the increasing needs of Jaipur City.

Water level of Bisalpur Dam stands at 302.820 metre (24.4.2010).

Source: Photograph taken by Audit during joint inspection of the site.

M/s SAFEGE Consulting Engineers in its report (October 2000) stated that the Bisalpur Dam could only be a source of water supply for meeting the

9. Water supply (in MLD): March 2009: 87.50, April 2009: 55.09, May 2009: 67.87, June 2009: 74.97, July 2009: 79.59, August 2009: 85.62, September 2009: 85.73, October 2009: 75.44, November 2009: 52.01, December 2009: 33.15, January 2010: 33.05, February 2010: 32.89 and March 2010: 34.57.
10. Project Report of Isarda Drinking Water cum Irrigation Project, August 2001 of Water Resources Department.
11. Constructed by DRDA: 6,491, WRD:2,310 and *Panchayat Samiti* and other local bodies:18,712.

immediate needs of Jaipur City. The long-term water needs would have to be made by inter-basin transfer from the Chambal River.

The State Government stated (November 2010) that Bisalpur Dam having 75 *per cent* dependability was selected after technical study conducted by M/s SAFEGE, the Consultant. The fact is that due to existence of 27,513 dams/anicuts/local ponds constructed by other departments in the catchment area of dam, the dam never filled to its full capacity during 2005-10 (except 2006-07). For long term needs of Jaipur, the consultant suggested inter-basin transfer from Chambal river. But the State Government did not explore the feasibility of the proposed project. However, the State Government stated that it has imposed ban on any fresh construction in the catchment area.

2.1.7.5 Delay in completion of Transmission and Transfer system of BJWSP due to improper planning

Delay in completion of Transmission system was due to delay in obtaining forest clearance.

The transmission system of BJWSP was to be executed by RUIDP with the loan assistance of Asian Development Bank for which RUIDP accorded (June 2005) Administrative and Financial (A&F) sanction for ₹ 556 crore for construction of intake pumping station, raw water pipeline, water treatment plant, treated water pipeline, treated water pumping station, power supply, buildings, land, clear water reservoir at Balawala and Ram Niwas Bagh. The system was scheduled for completion in October 2007. The contract, awarded (June 2006) for implementation by 31 December 2008 was completed on 20 April 2010 with a delay of 16 months. The cost was revised (July 2010) to ₹ 603 crore.

Audit observed the following:

- The cost of the system has increased by ₹ 47 crore due to subsequent inclusion of some items[12] (₹ 29 crore) and price escalation (₹ 18 crore).

- It was observed that cases for permission for diversion of forest land (3.2 km x 30 metre) from Forest Department for fixing sluice gate at intake and from Indian Oil Corporation Limited (IOCL) for laying transmission lines were moved by RUIDP in October 2004 and December 2004 respectively, but the approvals were received after four years in August 2008 and September 2008, which resulted in delay in completion of transmission system.

The State Government (RUIDP) accepted (November 2010) that the cost of transmission system increased due to changes in original plan and delay in obtaining permission from IOCL and Forest Department. The fact is that the A & F sanction was issued and contract awarded without proper planning, which led to the delay and cost overrun.

12. Cost of diversion of forest land: ₹ 1.55 crore, implementation assistance: ₹ 7 crore, cost of consultancy: ₹ 6.50 crore, excess cost of work done by RVPNL: ₹ 13.87 crore.

Delay in completion of Transfer system led to cost overrun of ₹ 198 crore.

Further, as per the loan agreement (March 2004) between PHED and Japan International Cooperation Agency (JICA), the Transfer system[13] of BJWSP was to commence in January 2006 and completed by December 2007, but the execution of the project actually started in March 2007 and was still in progress as of August 2010. The implementation schedule as agreed with JICA vis-a-vis the actual implementation is detailed in ***Appendix 2.4***. Physical and financial progress of each package of system as of March 2010 is detailed in ***Appendix 2.5.***

Audit observed the following:

- Against the agreed cost of ₹ 462.40 crore on Transfer system, an expenditure of ₹ 442.22 crore had been incurred up to March 2010; yet packages I to VI were not completed and packages VII and VIII were not taken up as of August 2010. The value of the balance work was estimated as ₹ 218.25 crore with reference to the revised cost estimates of ₹ 660.47 crore sent to GoI on 1 April 2009. Thus, there was a cost overrun of ₹ 198 crore.

- JICA, the funding agency, in its report (October 2009) also observed that the project cannot be termed as complete due to non-execution of defined scope of works, including packages VII and VIII. PHED was required to take urgent measures for implementation of both these packages.

- Delay in receipt of detailed engineering reports due to delayed engagement (March 2005) of consultant, non-ensuring of availability of land for three booster pumping stations, changes made in configuration of Central, Western and Eastern Booster stations (at Jawahar Circle, Central Park and Mansarovar) and changes in the alignment of pipeline through railway crossings led to increase in the cost by ₹ 198.02 crore. The proposal for revised cost of ₹ 660.47 crore for increasing the loan amount from JICA, has not yet been agreed to by the GoI and JICA.

The State Government accepted (November 2010) the facts.

2.1.7.6 Under utilisation of clear water mains

Based on the feasibility study report of M/s SAFEGE, GoR issued (1999) A&F sanction for an estimated cost of ₹ 1100 crore for BJWSP, with an installed capacity of 540 MLD. Accordingly, PHED issued (October 1999) the A&F sanction for construction of Water Treatment Plant (WTP) of 600 MLD capacity. However, due to financial constraints, PHED decided (July 2003) to construct WTP of 400 MLD and proposed accordingly to RUIDP. Subsequently, in May 2006, it was decided to take up construction of WTP of 600 MLD capacity. However, PHED requested the RUIDP to increase the capacity of proposed WTP only in November 2006. Meanwhile, RUIDP had awarded the work in June 2006 and constructed WTP of 400 MLD capacity in

13. Consisting of eight packages *viz.* (i) Central Transfer Main (ii) Western and Southern Transfer main (iii) Pumping station at Balawala, Ram Niwas Bagh and Amanishah (iv) Central, Western and Eastern on line booster Pumping stations (v) Supervisory Control and Data Acquisition (vi) Electric supply (vii) Improvement of existing distribution system and New Distribution Centres (viii) Reduction of UFW.

March 2009. This resulted in underutilisation of clear water mains constructed with a carrying capacity of 540 MLD.

The State Government (RUIDP) stated (November 2010) that as per decision (May 2007) of the Empowered Committee, the PHED would take up work of enhancing the capacity as per their need. The fact remains that PHED had compromised on the initial planned capacity of the WTP and subsequently did not effectively coordinate with RUIDP due to which WTP with enhanced capacity was not constructed and led to under-utilisation of clear water mains.

2.1.8 Implementation of Programmes/Projects

To provide adequate water supply to Jaipur city, apart from execution of BJWSP (Transmission and Transfer systems), summer schemes and UWSS were executed. The transmission system of BJWSP was almost completed (March 2010) and out of eight packages of the transfer system, the progress of Packages I to VI (pipelines-2, pumping station-2, SCADA and electricity) ranged between 84 to 95 *per cent* as shown in ***Appendix 2.5.***

2.1.8.1 Strengthening of existing distribution system under BJWSP

Package for improvement of existing distribution system and development of new Distribution Centres was not implemented due to paucity of funds.

M/s SAFEGE Consulting Engineers pointed out (1999-2000) that the existing distribution pipes in Jaipur City were in a very poor condition, resulting in leakages and very low pressure of water. Leakages were noticed in service connection (50 *per cent*), distribution system (30 *per cent*) and transfer network (20 *per cent)*. To rectify the problems, package VII was included (March 2004) for replacement of worn-out pipeline and strengthening of the distribution system. The package included development of three new distribution centres to cater to un-served areas[14]. The package was scheduled for completion in December 2007. Technical sanction for this package costing ₹ 63.21 crore, was, however, accorded in June 2009. The work was not started as the funds provided for the activity were utilised for execution of other packages.

The State Government admitted (November 2010) the facts and stated that the changed proposals for three distribution centres were still to be approved by Policy Planning Committee of the Department. The fact remains that due to paucity of funds, an important aspect of water supply remains unattended.

2.1.8.2 Reduction of unaccounted for water under BJWSP

Non-reduction of Unaccounted for water (UFW).

One of the conditions of the agreement with JICA (March 2004) was reduction in unaccounted for water (UFW) supply, i.e. leakages from 37 *per cent* to 20 *per cent* by the year 2011. Its scope included the activities such as instalation of Bulk Flow Meter, detection of leakages, carrying out steps for valves tests, replacement of service connection, replacement of consumer meters in the designated area, and monitoring of UFW on a regular basis. The cost for this work was estimated at ₹ 38.13 crore which was to be undertaken

14. Kho-Nagorian, Sewerage Farm (Devi Nagar), Dev Nagar.

through package VIII. Audit observed that the technical sanction for this package has not been accorded (August 2010).

As package VIII has not been implemented, the reduction in UFW level from 37 to 20 *per cent* could not be achieved which still continues at 37 *per cent*.

The State Government stated (November 2010) that work of the package VII and VIII could not be undertaken due to non-availability of funds. The fact is that the implementation of these packages should be coordinated. The original sanction contained specific provision of funds for these packages which were utilised for meeting excess expenditure on other activities of the transfer system (viz. Package I to VI).

2.1.8.3 Delayed implementation of Summer Schemes

Six summer schemes were sanctioned by PHED during the period from February 2007 to February 2010 to provide adequate water supply in Jaipur City. Various components under the schemes included construction of TWs, hand pumps (HPs) and single phasae TWs, instalation of Poly Vinyl Chloride (PVC) tanks, redevelopment of the existing TWs and HPs, replacement of old pumping machinery of TWs, improving existing rising pipeline[15] and distribution pipeline[16], laying of transfer pipeline, constructing CWRs and SRs, transporting water and provision of road cuts as detailed in ***Appendix-2.2***. Against the sanctioned amount of ₹ 125.18 crore, ₹ 94.64 crore were allotted and ₹ 94.77 crore were spent upto March 2010. The schemes were executed by EEs of North and South Wings. The scheme wise fund allotment, expenditure and the present status of work (March 2010) is as shown in **Table 2**.

Table 2: Scheme wise fund allotment, expenditure and the present status of work

(₹ in crore)

Sl. No.	Scheme	Date of sanction	Sanctioned amount	Amount allotted	Expenditure up to March 2010	Present status of works
1	Summer 2007 Phase-I	1.2.2007	23.53	23.53	23.69	Pipeline work was not yet completed.
2	Summer 2007 Phase-II	3.12.2007	57.15	49.29	49.09	Pipe line work was not completed.
3	Summer 2008	13.10.2008	24.20	8.81	9.14	Approval for works except TWs and transportation of water withdrawn.
4	Summer 2009	14.3.2009	3.87	13.01	12.85	Complete
5	Summer 2009 Phase-I	13.8.2009	7.62			Construction and deepening of TW/HP were pending.
6	Summer 2009 Phase-II	20.2.2010	8.81			
	Total		**125.18**	**94.64**	**94.77**	

Source: Budget and expenditure document of the Department.

15. Pipeline laid from source to reservoir is called rising pipeline.
16. Pipeline between reservoir to distribution points is called distribution pipeline.

Year wise allotment and expenditure incurred by EEs, North Wing and South Wing on these schemes up to March 2010 are detailed in ***Appendix 2.6***.

Audit observed that no date of completion was stipulated in A&F sanctions issued for Summer 2007 Phases-I and II, Summer 2008 and Summer 2009. Five schemes (except Summer 2009) could not be completed till March 2010. In Summer-2007 Phases I and II, the work of pipeline was pending. In Summer 2008, only construction of TWs and transportation of water was executed and the remaining works viz. Redevelopment of existing TWs and HPs, improvement of existing rising and distribution pipe line and laying of transfer pipe line, etc. were withdrawn due to paucity of funds[17].

Likewise in Summer-2009, Summer-2009 (Phases I and II), work valued ₹ 12.85 crore could be completed against the sanctioned amount of ₹ 20.30 crore. The work of deepening of HPs (200) and TWs (150) and construction of HPs (15), TWs (62) single phase TWs (28) was not executed thus depriving Jaipur City of safe drinking water year after year.

The State Government stated (November 2010) that the works of Summer 2008, 2009 and 2009 (Phase-II) have been completed in allotted sanctioned time and works of some packages were kept in abeyance by Government. These were completed as per year wise allotment of budget. The reply was not acceptable as unexecuted works (work of rising and distribution pipelines) of Summer 2008 were withdrawn and work of Summer 2009 Phase-I and II were lying incomplete.

2.1.8.4 Incomplete and delayed execution of Summer-2007 Phase-I

Schemes of Summer-2007 Phase-I lying incomplete.

The Summer-2007 Phase-I was sanctioned (February 2007) for ₹ 23.53 crore[18] to tap all possible sources available in Jaipur City to maintain the existing water supply level up to 2009. The augmentation scheme had four parts, viz. Ramgarh Lake, Vidhyadhar Nagar, North Zone and South Zone. It was noticed that the scheduled date of completion was not stipulated in the A&F sanctions.

- ***Augmentation of water supply from Ramgarh Lake–non construction of tube wells and laying of pipeline***

A proposal for construction of six TWs, pumping machinery, rising pipeline and replacement of 4,000 metre of 425 mm dia pipeline between Intermediate Pumping Station (IPS) and Bundhgate was made to augment water supply to seven areas[19]. However, the water supply in the targeted area could not be improved due to construction of only two TWs with new pumping machinery against the proposed six and non-laying of rising pipeline for connectivity. Further, 837.50 metres of pipeline was still to be laid (August 2010).

17. As confirmed by the Policy Planning Committee (PPC) in their agenda point (20 February 2010).
18. North wing: ₹ 15.70 crore; South wing: ₹ 7.83 crore.
19. Brahampuri, Govind Nagar (East and West), Hida ki Mori, Laxman Doongri, Laxminarainpuri, Ramganj and Surajpol.

The State Government stated (November 2010) that the remaining four TWs not constructed due to resistance of local habitants, have been constructed at a diverted site in Vidhyadhar Nagar and the production was utilised for supplementing the water supply in walled city. The reply was not acceptable as the targeted localities were still deprived of additional quantity of water, as envisaged in the scheme.

- ***Vidhyadhar Nagar water supply augmentation scheme***

Under this scheme, for transmission of water from Shastri Nagar to Brahampuri via Fateh Ram ka Tibba in the affected area,[20] the work of laying of pipeline from Fateh Ram ka Tibba to Brahampuri was executed by RUIDP. The work of laying 3,300 meter pipeline from Shastri Nagar to Fateh Ram ka Tibba was awarded (September 2007) to a contractor for ₹ 21.45 lakh with the completion period of four months. The contractor laid only 1,965 metre of pipeline during December 2009 and, thereafter, no progress was made due to non-supply of DI pipes (August 2010) by the Department.

Thus, in the absence of connectivity of transfer pipeline from Shastri Nagar to Fateh Ram Ka Tibba, the objective of water transmission to that area could not be achieved.

Further, transmission of water from Brahampuri to Truck Stand, the work of laying of 4000 metre pipeline was awarded (October 2007) to a contractor for ₹ 18.40 lakh with the stipulated completion period of four months. However, only 3051 metre pipeline was laid (August 2010), which has not yet been tested and put to use. The objective to supply water to Brahampuri and onward area of walled city has not been achieved (August 2010).

The State Government stated (January 2011) that the pipeline has been completed and shall be commissioned by December 2010 after getting permission of road cut from JDA. The Government has not furnished any document in support of completion of pipeline (January 2011).

2.1.8.5 Implementation of Urban Water Supply Scheme-Summer-2007 Phase-II

Non-completion of laying of transfer lines led to non-supply of adequate water even after incurring expenditure of ₹ 34.47 crore.

To sustain the service level, the Summer 2007 Phase-II augmentation scheme was approved for ₹ 57.15 crore by the Policy Planning Committee (PPC) in December 2007. Provision of ₹ 36.05 crore for North Wing and ₹ 21.10 crore for South Wing was made for construction and re-development of TWs (307) and HPs (420), replacement of old pumping machineries and laying of transfer pipeline etc. as detailed in ***Appendix 2.2.*** An expenditure of ₹ 49.09 crore has been incurred during 2007-10.

The information regarding laying of pipeline in respect of South Wing was not provided to Audit. Test check of the records of EE, North Wing revealed that

20. Ghatchokri, Goverdhanpuri, Kali ki Kothi, M.I. Road, Modikhana, New Colony, Surajpol, Topkhana Huzuri and Vyas Park.

against the targeted laying of 20,000 metres pipeline (six works), pipeline of only 2,595 metres was laid (cost: ₹ 34.47 crore) as of 31 March 2010 ***(Appendix 2.7)***, defeating the very objective of transferring water from the newly developed sources to scarcity area.

The State Government stated (November 2010) that there were contractual disputes in three cases. The fact remains that the 87 *per cent* pipe line work was incomplete and the object of the scheme was not achieved (June 2010).

2.1.8.6 Non-completion of Regional Urban Water Supply Scheme

UWSSs targeted to be completed between August 2007 and February 2009 were lying incomplete despite spending ₹ 8.22 crore.

PHED issued (February 2007 to December 2007) administrative and financial sanctions of ₹ 11.88 crore for augmentation of five regional UWSS to improve supply of water as per the prescribed norms of 150 lpcd. The schemes were to be completed between August 2007 and February 2009 as per work orders issued to the executing agencies. The details of sanctions, expenditure incurred, works to be done and work done as of 31 March 2010 in respects of five UWSSs are given in **Table 3**.

Table 3: Details of sanctions, expenditure incurred, works to be done and work done

Name of scheme	Date of sanction	Amount of sanction (₹ in crore)	Date of completion as per work orders	Expenditure incurred (upto March 2010) (₹ in crore)	Details of activities required to be done		Status of work completed (March 2010)	Shortfall in percentage
Bai Ji Ki Kothi	October 2007	1.71	2.1.2009	1.34	TW	5	5	-
					Rising pipelines	4500 mtr	NIL	100
					Distribution pipelines	4608 mtr	1672 mtr	64
					Pumping pipelines	800 mtr	277 mtr	65
					SR	1 (900 KL)	Work done	-
Gurjar Ghati	February 2007	1.35	22.6.2008	1.36	Distribution pipelines	18,409 mtr	19718.90 mtr	-
Kanwar Nagar	December 2007	4.96	11.2.2009	3.24	Tube Well	17 No.	14 No.	18
					CWR	1 (2300 KL)	Constructed	-
					OHSR	1 (800 KL)	Constructed	-
					Transfer pipelines	3000 mtr	2530 mtr	16
Malviya Nagar	December 2007 (Summer 2007 Phase-II)	2.24	31.12.2008	0.92	Tube well	8No.	NIL	100
					Distribution pipelines	15732 mtr	1438 mtr	91
					Rising pipelines	5200 mtr	NIL	100
					SR	1 No.	Work done	-
					Pumping pipe lines	200 mtr	NIL	100
Sindhi Colony, Adarsh Nagar	February 2007	1.62	23.8.2007	1.36	Tube well 7 No.		7 No.	86
					Rising pipelines	10,375 mtr	1451.6 mtr	
					Distribution pipelines			
					OHSR	1400 Kl (1 No.)	1 No.	-
	Total	**11.88**		**8.22**				

Audit observed that the schemes were lying incomplete as of 31 March 2010 despite spending ₹ 8.22 crore in addition to the following:

- Against 10,375 metre rising pipeline and distribution pipeline sanctioned under UWSS-Sindhi Colony, Adarsh Nagar, only 1,451.6 metre pipeline (14 *per cent*) was laid up to March 2010. However, the SE, City Circle, Jaipur stated (June 2010) that the scheme was complete, which was incorrect. State Government stated (November 2010) that the pipeline in remaining length could not be laid for want of permission of road cut from JDA and Jaipur Nagar Nigam.

- Though 10,438 metre AC pipeline and 9,280.90 metre DI pipeline were laid[21] in UWSS Gurjar Ghati at a cost of ₹ 1.36 crore (2007-10) the work of transfer pipeline[22] from Shastri Nagar to Fateh Ram Ka Tibba was not completed. Thus, the objective of water transmission from CWR Brahampuri could not be achieved.

The State Government stated (November 2010) that 85 *per cent* population of Gurjar Ghati is being benefited by supply of 1.5 ML water. The reply did not mention as to how the water is being supplied without completion of work of transfer pipeline from Shastri Nagar to Fateh Ram Ka Tibba. Besides, supply of 1.5 ML water as against a requirement of 4.5 ML was grossly inadequate.

- In UWSS Kanwar Nagar, transfer of water to Brahampuri Head works was not possible as the contractor did not connect the pipeline up to the destination within the stipulated period (August 2008), resulting in an unfruitful expenditure of ₹ 1.11 crore on laying of 2,530 metre pipeline (August 2010).

The clear water and service reservoirs, constructed at Amer Road, Kanwar Nagar at a cost of ₹ 1.52 crore were also not utilised because they were not linked with Brahampuri Headworks as the rising pipeline from Brahampuri to Kanwar Nagar was incomplete (August 2010).

Thus, even after the development of source and storage reservoirs, water could not be transmitted to the targeted areas despite incurring an expenditure of ₹ 3.24 crore.

The State Government stated (November 2010) that since road cut permission has now been given by JNN the pipeline would be completed and the reservoirs would be put to use soon. No reason has been given for delay in commissioning of the scheme.

21. The components of the scheme were-pumping machinery for Pump House, providing, laying and jointing of distribution pipeline – 9,105 metre (Asbestos Cement) and 9,304 metre (Ductile Iron) pipeline.
22. Linkage of pipeline in the scheme: The work of laying transfer pipeline from Vidhyadhar Nagar to Shastri Nagar (sanctioned under Summer- 2007 Phase-II scheme-para 2.1.8.5-***Appendix 2.7***) and Shastri Nagar to Fateh Ram Ka Tibba (sanctioned under Summer-2007 Phase I scheme (para 2.1. 8.4)) were not completed. As such, water transmission was not possible for Water Supply Scheme, Gurjar Ghati and Kanwar Nagar.

- In Baiji ki Kothi, Jhalana, no work of rising pipeline was undertaken and only 1,672 metre (36 *per cent*) of distribution pipeline and 277 metre (35 *per cent*) of pumping pipeline was completed. The work, targeted for completion in January 2009, was still incomplete (August 2010). As a consequence, the distribution of available water could not be ensured.

The State Government stated (November 2010) that water supply has been started from 8 October 2010 by using 1,000 metres old idle pipeline. The fact is that the State Government has not laid rising pipeline at all and laid only 35 to 36 *per cent* of distribution pipeline and pumping pipeline as of 31 March 2010. Government has also not intimated the reasons for proposing laying of 9,908 metre pipeline when the objective was served by using 1,000 metre idle pipe line.

- As per technical report of the AUWSS, Malviya Nagar Sector-2, the area is not covered under complete distribution system of PHED and service level could be improved only after the development of source and distribution system. As such, the Technical sanction issued to improve the existing supply system stipulated that other works should be taken up only after the development of the water source. However, work order for distribution pipeline (15,732 metre), pumping machinery, OHSR etc., amounting to ₹ 1.58 crore, was awarded in April 2008 to a contractor for completion by December 2008. The contractor was paid ₹ 0.92 crore as of February 2010. Owing to non-development of source (eight TWs and rising pipeline in 5,200 metre and pumping pipeline in 200 metre), the problem of low pressure and scarcity continues (August 2010). The work awarded to the contractor too remained incomplete (August 2010).

The State Government stated (November 2010) that eight TWs were not constructed due to negligible ground water recharge in the area; since water from Bisalpur Project had been received in March 2009 supply to Malviya Nagar Sector-2 has been increased to 6,000 KLD. This indicated that the scheme was conceived on improper hydrological survey. Further, the reply did not mention as to how the water of Bisalpur Dam was being supplied with incomplete distribution pipeline/rising pipeline.

2.1.8.7 Non-implementation of Public Relation Activities

Programme for promotion of public awareness not implemented; ₹ 61.44 lakh spent on consultancy was unfruitful.

Item (iv) X of Minutes of Discussion (November 2003) with JICA spelt out public relations (PR) activities for promotion of awareness and recognition in the public about the operations of PHED, in particular BJWSP viz. conservation of water, acceptance to pay actual cost of water, immediate reporting of leakages and theft of water, awareness of safe water and harms of unsafe water and avoidance of causes of pollution in water.

The consultants submitted their reports/programmes[23] to PHED between December 2006 and August 2008. The EE, Bisalpur Division I stated (April

23. Formative research, media plan, communication strategy papers, agenda for technical sanction and baseline survey.

2010) that the Technical Committee accorded (February 2008) sanction for media plan etc. for ₹ 3.21 crore, funds for which were not released.

Thus, no fruitful results have been achieved despite incurring an expenditure of ₹ 61.44 lakh (August 2010) as payment to the consultant for want of follow up on the reports submitted by the consultant.

The State Government stated (November 2010) that PR activities would be commenced after full commissioning of Bisalpur system.

2.1.9 Contract management and defective execution

2.1.9.1 Pump machinery not operated and flow meters not working properly

Infructuous expenditure of ₹ 0.84 crore was incurred on pump and machinery and flow meters.

Procurement of four pump-machinery for discharge of water and two flow meters for measuring the water flow for Bisalpur-Dudu Project was included in the contract for which the contractor was paid (January 2010) ₹ 70.04 lakh and ₹ 13.81 lakh respectively.

Scrutiny (April 2010) revealed that these pumps were not being operated. The two flow meters to be installed in sub-merged condition for accurate results were not showing correct quantity of water flow as these were workable at a designed velocity of 0.5 metre per second which was not being achieved due to flow of water by gravity with velocity less than 0.5 metre per second. As a consequence, the expenditure of ₹ 83.85 lakh incurred on pump machinery and flow meters proved infructuous. RUIDP stated (November 2010) that due to lesser demand of water, pump machinery was not operated.

The State Government (RUIDP) stated (November 2010) that flow meters and pumps were designed and installed to measure and discharge the water flow and discharge upto the year 2021 and the present demand of water being less is met out by flow through gravity. The fact is that due to wrong assessment of demand, pumps remained unutilised and flow meters were not recording correct quantity of water.

2.1.9.2 Back filling with unsuitable soil in trench of Transmission System of BJWSP

Escalated rates allowed for excavation of soil resulted in undue favour to contractor.

Clause 4.3.9.8 of Section 4 of contract agreement provided that back filling should be done by sand or gravel, free from rock or stones and 90 to 95 *per cent* modified proctor density was to be achieved. The contractor, while excavating trench for laying water transmission pipeline, reported that the strata below the depth of one metre of ground level was not 'soil' but 'ordinary rock', and backed up the claim with a report of Malviya National Institute of Technology, Jaipur. RUIDP made no effort to verify the claim of the contractor from other sources and allowed a higher excavation rate of ₹ 127 instead of ₹ 28 per cubic metre (cum) for a total quantity of 5,94,506.311 cum.

Audit observed that the contractor was paid for excavation in ordinary rock at higher rate but allowed to use the excavated material as suitable for back

filling up of the trench. The different criteria of Government for classifying excavated material and refilled material was unjustified and led to undue benefit[24] to the contractor as he was allowed to use the unsuitable soil for back filling.

The State Government (RUIDP) in their reply (November 2010) justified use of excavated ordinary rock in back filling of trenches on the ground that the excavated material was having the properties of sand and gravel suitable for back filling. The reply was not acceptable as the contractor was paid higher rates by classifying the excavated material as ordinary rock, which could not have been used for back filling as per clause 4.3.9.8 of the agreement.

2.1.9.3 Uninterrupted electric supply at Grid Sub-Station Balawala not ensured

Uninterrupted electric supply for reliable water supply not ensured.

For arranging electric supply at Balawala pumping station, the work of construction of 132 KV Sub-Station at Balawala was awarded to Rajasthan Vidyut Prasaran Nigam Limited (RVPNL) as deposit work at an estimated cost of ₹ 12.23 crore, which was remitted (March 2006) to RVPNL for the work to be completed by March 2007.

The project consultant of Transfer system pointed out (October 2006) that dual electric supply system be provided at Grid Sub Station (GSS) Balawala to ensure reliable water supply. This arrangement had been adopted in six other pumping stations[25]. Due to non-providing of dual electric system, there were failure of power supply at GSS Balawala on five occasions (April to July 2009) as reported by Superintending Engineer, Bisalpur in July 2009. However, no action in the matter was initiated by PHED with RVPNL (August 2010). The Department failed to ensure uninterrupted water supply by not adopting the dual electric supply system (August 2010).

The State Government stated (November 2010) that in the meeting held on 28 December 2005, it was decided to provide 132 KV sub station at Balawala and hence no steps were taken for dual electric supply. The action of the Government was contrary to the recommendation of the consultant to provide dual supply system at GSS Balawala for uninterrupted electric supply.

2.1.9.4 Heavy leakage of water in Central Transfer pipeline of BJWSP

During testing of central transfer pipeline of BJWSP (Gaurav Tower to Ram Niwas Bagh), a heavy leakage of water occurred on 3 October 2009 from the pipeline near the Harish Chandra Mathur Rajasthan Institute of Public Administration (HCM-RIPA).

The State Government appointed (October 2009) a Technical Enquiry Committee to probe into the incident/leakage. The Committee reported (November 2009) that the main reasons for the leakage were poor welding of cut plate on lining man-hole, non-provision of reinforcement plate (cover pad)

24. Not quantifiable as there is no separate rate for back filling.
25. Amanishah, Balawala, Central Park, Jawahar Circle, Mansarovar and Ramniwas Bagh.

on the top of the cut plate and air valves at critical points. The Committee stated that all the three agencies viz. consultant, department and contractor were responsible for the incident.

The State Government stated (November 2010) that the cost of damages have been borne by the contractor. The fact is that while the consultant did not supervise the execution properly, the Department also failed to ensure that the consultant supervised the work as envisaged.

2.1.10 Maintaining quality of water

CPHEEO manual prescribed the norms for physico-chemical examination and permissible limits of Total Hardness, Magnesium, Chlorides, Nitrates, Total Dissolved Solids, Calcium etc. The Department is responsible for testing of water quality and ensuring supply of quality water. The deficiencies noticed in audit are discussed below:

2.1.10.1 Quality of water

Unsafe water was provided to consumers.

The water quality findings, based on the quality guidelines and norms prescribed by CPHEEO and the results derived from 293 (15.78 *per cent)* samples taken by the Chief Chemist, PHED out of 1,857 TWs (2009-10) are given in **Table 4**.

Table 4: Water quality findings, based on the quality guidelines and norms

Contents	Permissible limit	Audit findings	As *per cent* of total samples
Total Hardness (TH)	300-600 mg/L	54 samples above permissible limit	18.13
Magnesium Hardness (MgH)	30-150 mg/L	237 samples above permissible limit	80.88
Chloride (CL)	200-1000 mg/L	247 samples below permissible limit	84.30
Nitrates (No3)	45mg/L	263 samples above permissible limit	89.76
Total Dissolved Solids (TDS)	500-2000mg/L	13 samples above permissible limit	4.44
Calcium Hardness	75-200mg/L	136 samples above permissible limit	46.42

Source: Chief Chemist, PHED, Rajasthan, Jaipur

There was nothing on record to show that any remedial action was taken by the Department for supply of quality water as per the prescribed parameters. Water produced from the above TWs, samples of which were not within the permissible limit of safe drinking water, was pumped into the City's distribution system.

Disinfection has been prescribed by CPHEEO for ground water. Since production from 669 TWs had been directly connected to the distribution system by PHED, the treatment prescribed for providing safe water was not ensured. The stipulated bacteriological tests were also not being conducted regularly.

The State Government stated (November 2010) that most of TWs in Jaipur City are connected with CWRs/SRs and the quality of blended water of different CWRs/SRs is within the permissible limit. The reply was not acceptable as the CPHEEO manual stipulates that samples of ground water source are to be tested for ensuring quality of water. The test results of samples of CWR/SRs do not depict the properties of unsafe water of ground water sources as required under the manual. Besides, 669 TWs are directly connected to distribution system.

- ***Shortfall in sampling for laboratory examination***

Shortfall in collection of samples from TWs for laboratory test of ground water.

As per norms prescribed vide notification issued (June 2005) by GoI, Ministry of Environment and Forest, frequency of samples for laboratory examination of ground water were: (i) yearly for physico-chemical and (ii) half-yearly for biological parameters from each TW.

The number of TWs in operation during 2007-10 and the number of samples required and collected for physico-chemical and biological examination as per above norms are given in **Table 5**.

Table 5: Details of TWs in operation, samples required and collected for physico-chemical and biological examination

Year	No. of TWs in operation	Samples for Physico-chemical parameters			Sample for Biological parameters			
		One sample from each TW to be collected	Samples collected	Short fall *(per cent)*	Two samples from each TW to be collected	Samples collected		Short fall *(per cent)*
						No. of TWs	Samples	
2007-08	1,646	1,646	129	92.16	3,292	28	5,010	98.30
2008-09	1,682	1,682	11	99.35	3,364	18	4,581	98.93
2009-10	1,857	1,857	293	84.22	3,714	710	5,124	61.77

Source: SE, City Circle, Jaipur

It would be seen from the above that there was a shortfall ranging between 84 and 99 *per cent* in the collection of samples for conducting chemical examination. In respect of biological examination, the shortage ranged between 62 to 99 *per cent*.

Against the provision of two samples a year from each TW for biological examination, samples were repeatedly taken from the same TWs (2007-10) due to which the results of laboratory tests did not reflect the quality of water on all TWs.

Insufficient staff for laboratory test of water.

It was also noticed that to conduct the required number of tests, samples at various points viz. source, reservoirs, distribution system and consumer level, are required to be collected and analysed in the laboratories.

As per information furnished by the Chief Chemist, PHED, Jaipur, all the three sanctioned posts of Technical Assistant (Chemical) and one post of Sample Taker (against two sanctioned) were vacant as of July 2010. The vacancies in the key posts also affected adequacy of sampling. Besides, the

Chief Chemist sent (May 2010) proposals for 24 additional posts for the State Laboratory and 13 additional posts for Mobile Laboratory at Jaipur for upgradation of the Laboratories. The proposal was pending with the State Government (November 2010).

The Chief Chemist, PHED stated (July 2010) that it was not possible for laboratory staff to collect samples from each TW.

The State Government stated (November 2010) that as per CPHEEO (GoI), for a city having population more than one lakh, one sample per month on 10,000 population is required to be analysed, which was achieved. Further, the proposals for laboratory staff were under examination. Reply was not tenable as the above criteria of sampling pertained to the distribution system and did not apply to sources of water. Audit has objected to shortfall in sampling of water from ground water source as per norms prescribed by GoI.

2.1.10.2 Replacement of polluted distribution pipeline and service connections

As per CPHEEO Manual, normally Galvanised Iron (GI) pipes are used for services connections due to low cost and high strength. These pipes, however, suffer from the disadvantage of short life and their carrying capacity is reduced due to incrustations. On the directions (2008) of Hon'ble High Court, the Principal Secretary, PHED and the Chief Engineer, PHED surveyed the water supply system of Jaipur City and observed that "the distribution system of walled city and most of the outside walled city area is more than forty years old and the GI pipes of such connections are in poor condition. In the system, sewer and water distribution network run parallel at some places. Dilapidated old consumer connections are another major source of pollution and accordingly identified areas needing replacements of pipelines." Consequently, a scheme for replacement of polluted pipelines, including shifting of service lines/connections, was approved (April 2008) for ₹ 23.13 crore by the PPC. This provided for replacement of 71,175 metre pipeline and 16,675 service connections by September 2009. The technical sanction of ₹ 19.84 crore was accorded (April 2009) with the condition that (i) 176 pipelines, identified in the proposal, should be replaced alongwith service connections, (ii) old pipelines permanently disengaged when new lines are commissioned, and (iii) use of best quality of material be ensured in the service connections.

The work was scheduled for completion by September 2009. Work undertaken by the contractor as of March 2010 is given in **Table 6**.

Table 6: Details of work undertaken by the contractor

	Replacement of pipeline (in metres)	Replacement of number of service connection	Expenditure upto March 2010 (₹ in crore)
North wing	31,599	5,940	7.10
South wing	27,094	7,435	7.51
Total	**58,693**	**13,375**	**14.61**

Source: EE, City Division (North and South wings), PHED, Jaipur

Against the provision in the scheme, 82.46 *per cent* pipeline and 80.20 *per cent* service connections were replaced. The deficiency in replacement of polluted pipelines defeated the purpose of providing safe drinking water to the consumers.

Scrutiny of the records revealed the following:

- ***Quality of pipes supplied not verified***

As per directions (October 2008) of ACE, the quality and specifications of the material brought by the contractor was required to be inspected and approved by EEs. In four work orders of South Division, 22,413 metre pipeline was laid and in eight work orders of North Division, 31,599 metre pipeline was laid. Audit observed that the samples of these pipes were not approved by EEs. However, in Measurement Books (MBs), the concerned Assistant Engineers (AE)/Junior Engineers (JE) have certified that the work was carried out as per specifications. In the absence of the approval of the EE to the samples, it could not have ensured that the material was of the requisite make and specifications. The possibility of use of sub- standard material and consequent extension of undue benefit to the contractor can, therefore, not be ruled out.

The State Government stated (November 2010) that the firm furnished 'factory inspection certificates' issued by BIS licensee firms, which were accepted by concerned AE/JE. The fact is that Departmental directions for quality control were not adhered to.

2.1.10.3 Scheme for mitigation of pollution in walled city-2007

To solve the problem of water pollution, ₹ 35.96 crore were sanctioned (December 2007) under capital works by the Policy Planning Committee of PHED. This included ₹ 21.36 crore for replacement of polluted pipeline of walled city. Against this ₹ 13.33 crore were released. The execution of the works was carried out by North Wing and ₹ 13.24 crore were spent (2007-10). As per the action plan, 45.1 km line (14 locations) was to be replaced till July 2008. For this, EE issued (January 2008) 14 work orders for replacing 40,710 metre pipeline against which 33,446 metre line was replaced (August 2010). However, 11,654 metre pipeline was not replaced by new pipe line.

The State Government stated (November 2010) that Audit has not considered replacement of 9,945 metre pipeline done by Contractor M/s Ram Gopal Panwar. The reply was not factually correct as the work done by this Contractor in August 2006 pertained to the mitigation scheme, 2006 and no work was awarded to M/s Ram Gopal Panwar under the scheme 2007 for ₹ 21.36 crore.

2.1.10.4 Non-cleaning of reservoirs

Reservoirs were not cleaned on the plea of their affecting distribution system and law and order.

The manual (1999) of the Central Public Health and Environmental Engineering Organisation (CPHEEO) of GoI provides for periodical cleaning of reservoirs, at least once a year. The ACE directed (January 2009) the SE/EEs to ensure the cleaning of reservoirs on a six-monthly basis. Sanction

was accorded (April 2008) for ₹ 1.18 crore for rejuvenation and cleaning of reservoirs (Clear Water Reservoir - CWR, Service Reservoir - SR) in the City. However, the sanction did not mention the number of reservoirs to be cleaned. The period of agreement was one year i.e. up to 30 April 2009, which was subsequently extended up to 31 March 2010.

The details of work orders issued by EEs and work executed by the contractor are given in **Table 7**.

Table 7: Details of cleaning of reservoirs ordered, cleaned and uncleaned

Wing	Ordered		Cleaned		Remained uncleaned	
	CWR	SR	CWR	SR	CWR	SR
North	28	29	13	25	15	4
South	30	46	21	33	9	13
Total	**58**	**75**	**34**	**58**	**24**	**17**

Source: City Division (North and South wings), PHED, Jaipur

An amount of ₹ 87.67 lakh was paid to the contractor up to March 2010 for cleaning of 34 CWRs and 58 SRs. The Department did not take any action to get the remaining 24 CWRs and 17 SRs cleaned by the contractor. Most of the CWRs and SRs again became due[26] for cleaning as per norms of CPHEEO. The above cleaning works, if done departmentally through regular periodical operation and maintenance, could not be verified in Audit as no proper records had been maintained by the PHED divisions (North and South wing) (August 2010).

The State Government stated (November 2010) that CWRs in walled city run for 24 hours and require two days for cleaning. Cleaning of such reservoirs was not done as it could adversely effect the distribution causing Law and Order problem. The reply was not acceptable as reservoirs in walled city could not be cleaned as per norms. Consequently, supply of safe drinking water to the consumers was not ensured.

2.1.11 Financial Management

Details of expenditure debited by GoI were not on record.

2.1.11.1 For maintenance of water supply and implementation of various schemes, funds were provided under Major Heads "2215-Non plan and 4215-Plan-Water Supply Schemes" and "4217-Plan - Urban Development (UD)" under the State Plan. BJWSP was implemented by allocating funds from the State Plan, which was partially assisted under a loan agreement with ADB (Transmission system) and JICA (Transfer system). The rest of the cost was required to be met by the State Government. Details of Budget allocation under various heads and expenditure therein are given in **Table 8**.

26. South wing-CWRs -12 (from April 2009): SRs-15 (from February 2009) North wing-CWRs-08 (from September 2009), SRs-22 (from January 2010).

Table 8: Details of Budget allocation under Non-plan and plan heads and expenditure

(₹ in crore)

Year	Expenditure under UWSS						Plan expenditure under BJWSP					
							By PHED*		By RUIDP		Total	
	Non-plan		Plan		Total							
	A*	E*	A	E	A	E	A	E	A	E	A	E
2005-06	-	-	-	-	-	-	32.01	34.08	0.70	0.67	32.71	34.75
2006-07	-	-	-	-	-	-	20.95	20.96	137.93	137.93	158.88	158.89
2007-08	91.38	91.04	57.01	57.18	148.39	148.22	128.89	131.71	225.75	224.44	354.64	356.15
2008-09	109.96	111.68	57.15	57.42	167.11	169.10	156.17	158.38	185.44	169.45	341.61	327.83
2009-10	124.47	126.40	43.84	42.97	168.31	169.37	97.20	97.09	5.94	20.60	103.14	117.69
Total	**325.81**	**329.12**	**158.00**	**157.57**	**483.81**	**486.69**	**435.22**	**442.22**	**555.76**	**553.09**	**990.98**	**995.31**

** **A: Allotment; E: Expenditure***

Source: Expenditure statement of department and appropriation account

The cost of transfer system of BJWSP was estimated to ₹ 463 crore of which ₹ 343 crore was to be met out of the loan assistance from JICA. It was observed that as of 31 March 2010, PHED spent ₹ 442.22 crore on transfer system and obtained reimbursement of ₹ 329.25 crore from JICA. For transmission system as per loan agreement with ADB, ₹ 276 crore[27] was to be reimbursed. As of March 2010, ₹ 553.09 crore was spent and reimbursement of ₹ 241.12 crore was obtained from ADB.

Audit observed the following:

- GoI, MoF have debited ₹ 9.15 crore under the Head "4215-UWSS (BJWSP)-Plan" during 2003-07 but reasons thereof were neither on record nor called for by the Department from GoI. In reply to an audit query, the Department stated (November 2010) that the GoI debited the amount towards service charges and consultancy services etc.

The State Government also endorsed (November 2010) the same reply. The fact is that no document/instruction of GoI specifying the details of debit note was available with the Department.

- The expenditure of ₹ 8.46 crore incurred during 2004-10 by RUIDP for BJWSP (Transmission system)[28] had wrongly been booked on schemes other than BJWSP (Transmission system). Thus, the expenditure of BJWSP was understated.

- Test check of four[29] divisions showed excess expenditure of ₹ 2.18 crore in three divisions in the Sub-Head 'Water Supply Schemes, Jaipur' under the Major Head-2215 'Water Supply and Sanitation' for 2008-09 over the budget allotment on account of salary and other miscellaneous charges.

The State Government stated (November 2010) that the payment was made in anticipation of allotment of funds.

27. Equivalent to 60 million dollars.
28. Details of expenditure of ₹ 8.46 crore not charged to BJWSP- consulting charges (PMC) (₹ 2.06 crore), designing of bid documents (₹ 0.39 crore), survey of alignment (₹ 0.04 crore) and construction of CWRs (₹ 5.97 crore).
29. City Division North I and II; City division South I and II.

2.1.11.2 Undue benefit to contractor

Undue benefit of ₹ 17.48 crore to contractors.

As per the conditions of contracts based on international bidding pattern (Federation International Des Ingenieurs Councils (FIDIC) condition), five *per cent* retention money of gross amount of bill was to be deducted by the Department, of which 50 *per cent* was to be released to the contractor after taking over of the executed works and the balance was to be released on the expiry of the defect liability period.

Scrutiny of records revealed that during January 2009 to February 2010, the EEs of Transfer system of BJWSP did not deduct the retention money of ₹ 3.96 crore from contractor's claims for executed works[30] and released the retention money of ₹ 13.52 crore already deducted before taking over the works[31].

The State Government stated (November 2010) that as the contractor had furnished bank guarantee in terms of Finance Department order of June 2004, the action of the Department not to deduct/refund retention money was in order. The contention was not tenable in view of specific provision with reference to bid documents as per FIDIC conditions.

2.1.11.3 Operation and Maintenance (O&M) liability created on using partially completed structures

A condition of the agreement[32] with contractors stipulate that if the employer does use any part of the works before issuing a 'taking over certificate', the contractor shall cease to be liable for care of such part. It was noticed that even though various packages of transfer part of BJWSP viz. Transfer pipeline and Pumping Stations had not been fully completed, the Department utilised them w.e.f. 1 March 2009 without issuing taking over certificate. This action of the Department was against the provisions of contract and led to creation of liability towards payment of operation and maintenance charges.

The State Government stated (November 2010) that use of part infrastructure does not affect the defect liability of project and is as per the respective contract agreement of the packages. Government reply is not factually correct because as per the agreement when the employer uses any part of the work before issuing a taking over certificate, the contractor shall cease to be liable for care of such part.

30. Packages I: ₹ 0.92 crore; II: ₹ 0.57 crore; III: ₹ 0.86 crore; IV: ₹ 1.35 crore and V: ₹ 0.26 crore.
31. Packages I: ₹ 7.54 crore; II: ₹ 3.70 crore; III: ₹ 1.28 crore; IV: ₹ 0.54 crore and V: ₹ 0.48 crore.
32. If the employer does use any part of the works before the taking over certificate is issued (i) the part which is used shall be deemed to have been taken at the date on which it is used, (ii) the Employer Representative shall when requested by the contractor issue a taking over certificate accordingly, and (iii) the contractor shall cease to be liable for the care of such part from such date when responsibility shall pass to the Employer.

2.1.11.4 Procurement of final impellers without immediate requirement

Blocking of funds of ₹ 1.70 crore on procurement of final impellers.

The final impellers[33] for pump house were required to be procured for Phase I-stage II from 2012 and Phase II from 2017. However, Audit noticed that impellers worth ₹ 1.70 crore (Transmission System ₹ 0.49 crore and Transfer system ₹ 1.21 crore) were procured (March 2008 to August 2009) in Phase I in advance. This resulted in blocking of funds of ₹ 1.70 crore.

The Department justified (April 2010) the procurement on the ground that the impellers may not be available in later years and cost higher compared to the current market rates.

The State Government also justified (November 2010) the procurement of impellers on same grounds. The reply was not in consonance with the conditions of contract which stipulate that the pump machinery and equipment necessary for only Phase-I were to be procured. Moreover, the impellers have been procured without immediate requirement and were proposed to be used after nine years for phase-II (2017).

2.1.11.5 Avoidable extra expenditure due to non-reduction of energy load

Avoidable extra expenditure of ₹ 1.36 crore on excess power load.

JVVNL charges PHED for 75 *per cent* of connected load for each pumping station. The details of sanctioned, utilised and fixed charges[34] for minimum 75 *per cent* load for each pumping station is given in ***Appendix 2.8***.

Audit observed that the power load taken by PHED from JVVNL for five pumping stations was much higher (between 1,150 to 10,000 KVA) compared to their actual utilisation (between 422 to 2,262 KVA during February 2009 to October 2010). Secretary, PHED requested JVVNL only in January 2010 for reduction in energy load for the pumping station at Mansarovar and Central Park. Thus, failure on the part of the Department in assessing the proper requirement of energy load led to extra avoidable payment of ₹ 1.36 crore (as shown in ***Appendix 2.8***) to JVVNL for the period February 2009 to October 2010.

The State Government stated (November 2010) that as per the agreement with JVVNL, the sanctioned energy load cannot be changed for at least one year. The fact remains that the State Government has not been able to revise the energy load even after one year of sanction of load. Moreover, it was also seen that at Surajpura, the energy load was enhanced (November 2009) from 5,000 to 10,000 KVA despite actual utilisation of load upto 1,512 KVA (October 2010).

2.1.11.6 Non-revision of water tariff

As per minutes of discussions held in November 2003 with JICA, it was agreed by GoR that the existing tariff structure would be rationalised as soon

33. Impeller: Machinery to increase the suction capacity of pumps. Initial impellers are necessary at the time of instalation of pumps and final impellers were required to increase the capacity of pumps during 2012/2017.
34. ₹ 90 per KVA per month.

as Bisalpur water was made available to Jaipur City. The Department stated that a "Water Sector Reform Committee (WSRC)" had been constituted (November 2005), which was to form sub-committees in various areas viz. institutional reform, tariff and accounting. Audit observed that the last tariff revision (between ₹ 1.25 to ₹ 3.20 per kilo litre) was made in 1998. The prevailing tariff (2010), which does not match with the present cost of ₹ 10.55 per kilo litre of production of water, is causing a huge revenue loss to the State Government and needs immediate revision.

The State Government stated (November 2010) that the infrastructure development (water) surcharge for consumption above 15,000 litre per month at all regional headquarters has been imposed (September 2007). The fact remains that there is a need for rationalisation of tariff to make it commensurate with the present cost of production and maintenance.

2.1.11.7 Blocking of funds due to non-disposal of civil structures and land

Non-disposal of unused acquired civil structures/ land.

For laying of transmission system, 104 km of abandoned railway track (Sanganer to Todaraisingh section) was acquired from the railways for a provisional payment (March 2003) of ₹ 14.10 crore. Of this, about 22 km. of track and few railway buildings were not utilised for laying the pipeline. The cost of this land strip and structures was estimated at ₹ 2.95 crore. In April 2004, the Finance Department gave the go-ahead for its disposal. As transfer of this land and structures in favour of the State Government was still pending due to dispute regarding urban lease money charges and non-reconciliation of area between Railway and Revenue Department, the same could not be disposed off, resulting in blockage of funds of ₹ 2.95 crore (August 2010).

The State Government stated (November 2010) that action for transferring of land in the name of PHED was in process.

2.1.11.8 Non-recovery of expenditure of shifting of service connection

Avoidable burden of ₹ 5.19 crore due to non-recovery of cost of shifting of service connection. from the consumers.

Rule 13(1) of "The Rajasthan Water Supply Rules" (July 1967) stipulates that the consumers would be responsible for maintenance of service lines from water works pipeline or sub pipeline. However, its maintenance was to be carried out through the Department and charges borne by the consumer.

It was noticed that 13,375 service connections (South Division: 7,435; North Division: 5,940) were replaced by the Divisions at a cost of ₹ 3.06 crore. However, no efforts were made by the Department to recover the amount from the consumers. This inaction resulted in avoidable extra financial burden of ₹ 3.06 crore on the State exchequer.

Further, in the scheme for mitigation of pollution in walled city, the provision of ₹ 6.07 crore made for shifting consumer connections, was contrary to the provision of above Rule. As such, cost of replacement of 12,285 consumer connections, amounting to ₹ 2.13 crore, which was to be borne by consumers, was irregularly charged to the scheme.

The State Government stated (November 2010) that the decision of shifting of water connections along with replacement of pipeline at Government cost was taken in public interest. The decision of the Government was contrary to existing Water Supply Rules specially when the water supply schemes are suffering from paucity of funds.

2.1.12 Maintenance and security of water supply system

2.1.12.1 Tampering of transmission pipeline

Safety and security checks were inadequate.

Tampering of transmission pipeline from Bisalpur to Balawala through loosening of valves was noticed (February 2009 to December 2009) at seven places by the Department.

Joint inspection, conducted by Audit with the Department on 24 April 2010, showed tampering at ISV No. 91/1/30. The CE, PIU, RUIDP stated that as no connection from clear water pipeline had been provided to the en-route villages, the villagers were stealing water by loosening the valves, especially for cattle and that the matter has been taken up (January 2010) with the District Administration/Police for necessary action.

1. Location of tampered valve chamber
2. Damaged valve chamber

3&4. Tampered water drained into pond and stagnating near the valve chamber

Source: Photographs taken by Audit during Joint Inspection of the site

The State Government (RUIDP) stated (November 2010) that daily patrolling was being conducted. The facts remain that patrolling in sabotage prone areas was not effective.

2.1.13 Monitoring of the implementation of programmes and internal control

2.1.13.1 Quarterly review by Project Review Committee

Only seven meetings of Project Review Committee were held against the required 20.

As per the agreement between JICA and PHED, a Project Review Committee (PRC) was constituted (October 2004) under the chairmanship of the Principal Secretary of the Department for quarterly review of implementation of the programmes. The PHED is the Administrative Department for implementation of BJWSP.

- It was noticed that from October 2004 to October 2009, only seven meetings were held against the required 20. In view of the tardy progress, Principal Secretary (Finance) directed (September 2007) that PRC meetings be held on a monthly basis. The directive was ignored and the subsequent meeting of PRC was held only on 5 October 2009, after a gap of more than two years. Thus, the project was deprived of the benefit of monitoring, guidance and resolving hindrances/constraints during execution of the project activities (viz. allotment of land for pumping stations, permission for railway crossing etc.).

The State Government stated (November 2010) that PRC had regularly facilitated coordination among various stake-holder agencies and expedited resolving the various deadlocks in the implementation. The reply has not mentioned the reasons for not conducting required number of meetings by the PRC.

- Government prescribed submission of "T-Forms" (various formats showing the physical and financial progress of activities implemented under water supply schemes by Divisional Officers every month on performance/ execution of schemes/programmes/ activities). In February 2009, the State Government revised instructions for proper monitoring of all schemes. Audit observed that the information in "T-Forms" was not being maintained properly as the base records were incomplete/not maintained. It was also noticed that the instructions issued in February 2009 did not provide periodicity and number of inspections to be conducted by the EEs. Lack of effective monitoring resulted in the schemes remaining incomplete as commented in paragraphs 2.1.8.3 to 2.1.8.6.

Non-maintenance of control register/ record of physical and financial progress of the schemes.

- Further, to review the status of the schemes, detailed activity-wise progress of each scheme was sought. The SE also could not provide the component wise status of each scheme. Verification of progress claims was not possible due to non-maintenance of basic records by Divisions including works abstracts, contractor ledger, incomplete recording in Agreement Register, payment schedule of agreements and non-availability of detailed technical estimates of various packages. The Divisional Office was not maintaining control record/registers through which the physical as well as financial progress of each component/activity of the sanctioned scheme could be evaluated. The copies of detailed technical estimates of various packages, approved by the Technical Committee/ACE, were also not made available to Audit by the divisional offices. The EE/SE stated that the copies of detailed

estimates, approved by higher authorities, were not available in the Division/Circle office. These critical lapses have been regularly brought to the notice of the Divisional Officer through Local Audit Reports. Scrutiny revealed that due to non-maintenance of proper record/registers, controlling the physical and financial progress (component/activity wise) of the sanctioned schemes, the Department did not monitor the scheme execution which resulted in non-completion of various activities in time.

The State Government stated (November 2010) that the concerned officers have been directed to maintain proper records.

2.1.13.2 Poor vigilance

For detection of cases of pipeline leakages, damages and unauthorised drawal of water, an AEN (Vigilance) was posted in divisional office.

Audit scrutiny revealed that as no technical/ministerial staff or vehicle had been provided to the AEN (Vigilance), there was no proper system of vigilance. The AEN (Vigilance) was only disposing off complaints of consumers through different sub divisional AENs/JENs. Thus, the very objective of detection of cases of leakages/damages in pipeline and unauthorised drawal of water remained unachieved.

The State Government stated (November 2010) that all efforts were being made to utilise the services of vigilance cell. The reply did not mention the action being taken to strengthen the cell.

2.1.13.3 Water meter management

Water meter management was inadequate.

Scrutiny of the Management Information System (MIS) Report for March 2010 revealed that out of a total of 3.55 lakh connections, 3.16 lakh connections were metered. Of these, the functional meter connections were only 1.78 lakh. The position of consumer connections from 2007 to 2010 is given in **Table 9**.

Table 9: Position of consumer connections

Year ending	Total connections	Operative connections	Non-operative connections	Flat rate connections	Metered connections	Functional metered connections	Non-functional metered connections w.r.t. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
March 2007	3,02,939	2,71,745	31,194 (10.30 *per cent*)	5,044	2,66,701	1,65,404	1,01,297 (37.98 *per cent*)
March 2008	3,22,840	2,91,249	31,591 (9.78 *per cent*)	4,997	2,86,252	1,77,423	1,08,829 (38.02 *per cent*)
March 2009	3,37,699	3,04,054	33,645 (9.96 *per cent*)	4,836	2,99,218	1,79,862	1,19,356 (39.89 *per cent*)
March 2010	3,54,806	3,20,904	33,902 (9.56 *per cent*)	4,746	3,16,158	1,77,620	1,38,538 (43.82 *per cent*)

Source: MIS Report of the City Circle, PHED, Jaipur.

Audit scrutiny revealed the following:

- The number of non-operative connections has increased from 31,194 in 2007 to 33,902 in 2010, resulting in recurring loss of revenue.

Non-operative flat rate connections.

- From May 1998, a fixed charge of ₹ 16 per connection, having two taps, was being realised from the consumers, irrespective of quantum of consumption. Water rates have not been revised for the past 12 years.

Non- functional metered connections.

- Number of non-functional metered connections has increased from 1.01 lakh in 2007 to 1.39 lakh in 2010. SE stated (June 2010) that due to shortage of staff and non- availability of new meters, functional meters could not be installed. There were also 33,204 defective water meters dumped in the workshop since 2007 for want of repair.

Defective water meters dumped in the workshop for want of repair

Source: Photograph taken by Audit during joint inspection of the site.

Inadequate staff for meter management.

- It was noticed that as per the norms prescribed, there was a huge shortage of staff required for meter management i.e. repairing and testing, meter reading, and checking ***(Appendix 2.9)*****.**

In view of the large number of vacancies in the meter management system, actual assessment and realization from water consumption cannot be ensured, which has caused persistent loss of revenue to the Department.

The State Government stated (November 2010) that for flat rate a policy decision is yet to be taken and action for non-operative connections and replacement of non-functional meters could not be taken due to shortage of staff. Besides, proposals for declaring the meters dumped in store as unserviceable were being prepared.

2.1.13.4 Overstocking and doubtful charging of store to works

- Rule 142 of Public Works Financial and Accounts Rules (PWF&ARs) provides an upper reserve stock limit of ₹ 25 lakh a month. On scrutiny, it was revealed that stock balances ranging between ₹ 1.71 crore and ₹ 5.37 crore in City Division North I, and between ₹ 44.56 lakh and ₹ 2.92 crore in City Division South I was kept (2007-08 to 2009-10), violating the provisions of PWF&ARs.

The State Government stated (November 2010) that to execute the schemes and to maintain the water supply, sufficient material in stock was needed, which was not possible with the existing reserve stock limit of ₹ 25 lakh. The fact is that without getting the reserve stock limit increased, the Government kept excess stock in the stores valuing more than ₹ 1 crore for 36 months from April 2007 in North Wing and for 33 months from July 2007 in South Wing, violating the Rules. Besides, non-utilisation of stocks has the potential of denying funds availability to other schemes.

Overstocking of pipes

Source: Photograph taken by Audit during joint inspection of the site.

- The Audit team visited (29 July 2010) the central store of City Division North I and noticed that the stock balances of various pipes shown in the stock ledgers were not in conformity with the quantities physically available in store. In City Divisions North I and South I, stock worth ₹ 1.99 crore and ₹ 69.07 lakh respectively, shown as charged to work was actually lying in the stock. This indicated that the internal control system in the Divisions was not adequate and correctness of the store accounts was doubtful. Possibility of issuing false issue-notes and misappropriation of stores also could not be ruled out.

The State Government stated (November 2010) that every effort was being made to utilise the charged material. However, incorrect account keeping has not been investigated.

2.1.13.5 Damages/leakages of pipelines

Non-coordination with other agencies resulted in wastage of water and interruption in water supply system.

The distribution network of PHED water supply in Jaipur City is about 22,000 km (April 2010). Pipelines at various places were damaged by other departments/agencies[35] while executing their developmental activities. This resulted in leakages, wastages and frequent interruptions in water supply.

Principal Secretary, PHED decided (May 2009) that before undertaking such works, the concerned agencies would have to obtain 'No Objection Certificate' (NOC) from the concerned EE within three days from the date of request.

35. Jaipur Development Authority (JDA), Municipal Corporation, Bharat Sanchar Nigam Limited (BSNL)/Cable agencies etc.

However, the decision was silent about charging the defaulter departments for leakages/wastage of water.

Audit observed[36] that the JDA and Jaipur Vidyut Vitran Nigam Limited etc. did not obtain the required NOCs from EEs and damaged the pipeline while executing construction works (August 2010) ***(Appendix 2.10).***

While the State Government admitted (November 2010) the facts, it did not intimate steps taken for enforcing the above instructions issued in May 2009.

2.1.14 Conclusion

The State Government's attempt to provide adequate safe drinking water to the population of Jaipur City has been hampered due to inefficiencies in planning, execution, monitoring and vigilance. Time and cost overruns plagued every project and scheme. The plan of the State Government to supply adequate drinking water to the population of Jaipur City upto the year 2021 through Bisalpur Dam was unsuccessful as it was unable to meet out even the present demand. Over-extraction of ground water caused depletion of water level by three metres per year. Non-completion of various activities of BJWSP and various Urban Water Supply Schemes in time resulted in non-achievement of objective of providing water supply at 150 lpcd. Due to non-taking up of work of packages VII and VIII of BJWSP, the objective of replacement of worn out pipelines, development of three new distribution centres for areas not covered by PHED and reduction in unaccounted for water remained unachieved. The objective of supplying safe drinking water could not be ensured owing to shortfalls in sampling and testing, non-replacement of polluted, old and damaged pipelines and non-cleaning of reservoirs as required. Leakage, wastage and tampering of water could not be checked. Instalation of bulk flow meters on TWs was not done, hence assessment of production of ground water remained unrealistic. Water tariff has not been revised since 1998. Meter management was not effective as old and non-functional meters were not replaced and flat rate system persisted.

2.1.15 Recommendations

- A regulatory mechanism should be established to regulate tapping of ground water and plugging of unauthorised leakages in the catchment area of Bisalpur Dam and other source of surface water.
- Monitoring of all critical projects/schemes should be enforced with due diligence to ensure that their execution is time bound and cost effective.
- For providing quality drinking water, Government of Rajasthan should ensure that adequate manpower and equipment are in place for proper testing of drinking water, cleaning of reservoirs as per the prescribed periodicity and timely replacement of identified polluted pipelines.
- Government of Rajasthan should initiate action to ensure that operational costs are met through revenues by plugging loopholes in metering and collection of water charges.

36 From the agenda note for meeting with the Chief Secretary on 26 April 2010.

Home Department

2.2 IT Audit of Common Integrated Police Application

Executive Summary

Government of India introduced in 2004 a Common Integrated Police Application (CIPA) project at police stations to automate the processes at primary sources of data i.e. police stations and to build a crime and criminal information system based on Criminal Procedure Code. Under this project, apart from maintaining the basic records electronically at police station level, facilitating availability of records to investigating officer, supervision by the senior officers and faster response to public were envisaged. It sought to increase the efficiency and effectiveness of police functioning. It was to be an important tool for e-governance. Audit of CIPA was undertaken not only to get assurance that adequate measures have been designed and are operated to minimise the exposure to various risks, but also to examine the overall outcomes of the entire project.

There were delays ranging from 62 to 85 days in instalation of hardware and from 91 to 200 days in commissioning of work, keeping the hardware idle, and affecting timely completion of the project. The vendors failed to upkeep the hardware under the warranty period and to attend the complaint within prescribed time which indicated poor quality of services provided by them. Annual maintenance contract of the hardware was not executed after expiry of warranty period to ensure smooth working and prompt repairing of down systems.

Progress of work to clear backlog of data entry and current arrear was very slow. Data entry was below 25 *per cent* in nine districts in investigation module and below 25 *per cent* in 17 districts in prosecution module. The integrity of data could not be ensured as constables were allowed to perform all duties relating to various stages of the CIPA. No password change policy was found resulting in an impact on the confidentiality, integrity and reliability of data.

Framed back-up policy was not implemented and there was absence of fire safety equipments. The information and hardware were exposed to the risk of damage and loss. There were deficiencies in the software resulting in incomplete or improper data entry and report generation. CIPA Software connectivity between Police stations, District Crime Records Bureau, State Crime Records Bureau and National Crime Records Bureau was not established which defeated the basic purpose of sharing of the information.

There was no significant reduction in manual records/ registers maintained at police stations after introduction of CIPA. Data entry was being made both in registers and in the software resulting in duplicating of efforts and non achievement of objective of CIPA. CIPA trained officials in the Police Stations were few and even though they were assigned other police duties. Prescribed role/duties were not performed by officials at higher levels.

2.2.1 Introduction

The Police Department has been bringing in initiatives over the years to use information technology to create a crime and criminal database and computerise different activities for early detection of crimes as well as improvement in its services. Common Integrated Police Application (CIPA) was introduced in 2004 by Government of India to automate the processes at primary sources of data i.e. police stations and to build a crime and criminal information system. The application was introduced not merely as a means to process data but to store, utilise and communicate a wide variety of information that influences decision making at various levels of the organisation. This project aimed at creating a national database for crime prevention and detection, while shifting to an electronic system to increase ease of storage and access to records and reflect credibility of the Department.

2.2.2 Objectives of the Project

The main objectives of CIPA were to:

- automate the processes at Police Station in order to maintain the details pertaining to all the activities relating to crime and criminals;
- provide information as and when required;
- Generate various statutory output for smooth functioning of the Police Station.

2.2.3 Organisational set up

Director General of Police (DGP) who functions under the administrative control of Principal Secretary, Home Department, heads the Police Department of the State. The computerisation work implemented through Police Station (PSs) and District Crime Record Bureau (DCRB) is monitored by the Director, State Crime Record Bureau (SCRB), Jaipur.

2.2.4 Audit objectives

The objectives were to evaluate whether:

- the scheme achieved its primary objectives of automating processes, providing required information and generation of timely reports;
- implementation of the project was as per schedule and personnel at different levels were adequately trained to operationalise the software;
- adequate controls exist to ensure data confidentiality, completeness and availability;
- well-defined disaster recovery and business continuity plan were laid out and implemented; and
- there was a smooth flow of information from Police Stations to DCRB, SCRB and finally to National Crime Report Bureau (NCRB).

2.2.5 Audit criteria

The audit criteria adopted were

- Instructions of NCRB/GoI
- CIPA manual and guidelines
- Criminal Procedure Code (Cr. PC), Indian Penal Code (IPC), local Acts, etc.
- Best practices relating to IT controls and security aspects

2.2.6 Scope and methodology of audit

The implementation of CIPA project was examined (during May to August 2010) in seven DCRBs[37] out of 40 and 21 PSs[38] under these DCRB, in addition to scrutiny of records at SCRB, Jaipur. The DCRBs and PSs were selected through random sampling. Audit evidence were collected through questionnaires, comparison of electronic data with manual records, analysis of various modules of CIPA software, checking of reports generated and general scrutiny of documentation in selected units. An Entry conference was held in April 2010 with the Director, SCRB, Jaipur, where the audit objectives and criteria were discussed. The audit findings have been discussed (February 2011) with the Director General of Police, Rajasthan.

2.2.7 Audit Findings

2.2.7.1 Project implementation

- CIPA Software was designed and developed by National Informatics Centre (NIC), New Delhi. CIPA was to be implemented in four phases as per orders (May 2004 and July 2006) by Ministry of Home Affairs, GoI with certain number of districts covered in each phase. It was noticed that though three phases of instalation of computer hardware in 566 Police Stations of 28 police districts were over by 2008-09 by incurring ₹ 11.96 crore for hardware and ₹ 1.15 crore for infrastructure, the fourth phase of implementation covering remaining 176 police stations of 12 districts was yet to be started (August 2010).

The funds for procurement of hardware have been provided to NIC, New Delhi by Ministry of Home Affairs, Government of India (GoI) under the scheme of Modernisation of Police Forces (MPF) and for site preparation by the Government of Rajasthan.

It was also noticed that procurement for phase I started only in February 2006 as against the scheduled completion in 2004-05. The purchase orders for supply, testing, acceptance and instalation of hardware items for CIPA project

37. Alwar, Dausa, Jaipur (North), Jaipur (Rural), Jodhpur, Sikar and Udaipur.
38. Aravali Vihar, Kotwali, Sadar (Alwar); Bandikui, Kotwali, (Dausa); Amber, Kotwali, Shastri Nagar (Jaipur North); Kalwar, Kanota, Kotputli (Jaipur Rural); Kotwali, Mandore, Pratap Nagar (Jodhpur City); Fatehpur Kotwali, Kotwali, Sadar Sikar, (Sikar) and Ambamata, Goverdhanvilas, Rishabdev, Surajpole (Udaipur).

were placed by the NIC in favour of M/S HCL Info Systems Ltd, Pondicherry for Phase-I (₹ 2.31 crore) and Phase-II (₹ 4.68 crore) and to M/s Acer India Pvt. Ltd, New Delhi (September 2008) for Phase-III (₹ 4.98 crore).

The seven modules covered under CIPA software are registration, investigation, prosecution, information, State specific requirements, general/ daily station diary and reports/registers/queries. As per Action Plan for implementation of CIPA Project, Technical Assistants (TAs) were required to be provided by the vendor for assistance of the staff of PSs to start data entry work and clearance of backlog.

It was observed that there was delay in finalisation of supply orders by NIC for procurement of hardware. Out of 21 test checked PSs, completion of project was delayed in nine PSs[39] due to delay in instalation of hardware by the supplier ranging from 62 to 85 days and commissioning of work in CIPA software was also delayed at 10 PSs[40] ranging from 91 to 200 days after instalation of software which besides keeping the hardware idle for such period, adversely affected timely completion of backlog entries as indicated in *Para 2.2.7.2.*

While accepting the facts SCRB attributed (November 2010) the delay to (i) late instalation by suppliers, (ii) non-preparation of site as per norms, (iii) delayed posting of TAs, (iv) inadequate trained staff as there was no provision of training under CIPA project and (v) non-release of funds by GoI for phase IV.

- Hardware supplied were under warranty of three years for the first two phases and five years for the third phase from the date of supply, and the vendor was responsible for the upkeep of the hardware and to attend the complaint within prescribed time. In case of failure, penalty could be levied from vendor. The SCRB vide letter dated 27.11.2009 intimated the State Informatics Officer, NIC to levy penalty amounting to ₹. 4.54 crore from two vendors for the down time of UPS System and computer hardware upto June 2009, which was later increased to ₹. 8.70 crore (upto June, 2010). This indicated poor quality of services provided by the vendors during warranty period which adversely affected the utilisation of the system. SCRB replied (15 December 2010) that State Informatics Officer, NIC, Jaipur has been further requested (10 October, 2010) to levy total penalty ₹. 8.70 crore (upto June 2010) but no information in this regard has been furnished by NIC so far.

- It was observed that out of seven test checked districts, Annual Maintenance Contract (AMC) to ensure smooth working and prompt repairing of down systems was not executed after expiry of warranty period in six districts (except Jaipur Rural). The computers and other peripherals were either running without UPSs or without power back-up. It was also found that

39. Kotwali, Sadar in Police District, Alwar; Bandikui, Kotwali in Police District, Dausa; Kalwar, Kanota, Kotputli in Police District, Jaipur Rural; Kotwali, Sadar Sikar in Police District, Sikar.
40. Arawali Vihar, Kotwali, Sadar in Police District, Alwar; Kotwali, Mandore in Police District, Jodhpur City; Fatehpur, Kotwali in Police District, Sikar; Ambamata, Goverdhanvilas, Rishabdev, Surajpole in Police District, Udaipur.

computer and peripherals which required repair were remained idle at 14 police stations.

Accepting the facts Director SCRB, Jaipur replied (December 2010) that for renewal of AMC of Phases I and II expired by the end of June 2009 and June 2010, Ministry of Home Affairs, GoI and NIC had been requested, but no budget was provided for renewal of AMC. Further SCRB requested (February and November 2010) Home Department, GoR for providing budget for AMC but no budget has been provided. The CIPA guidelines are silent in this regard.

- Inbuilt Modem/Fax cards (two for each police station) to all 566 Police Stations (Phase I to III) which were provided by the suppliers at the cost of ₹ 4.98 lakh could not be put to use due to lack of connectivity from Police stations to DCRB , SCRB and NCRB. Accepting the facts Director, SCRB stated (November 2010) that during Stage II of CIPA, software was proposed to be web enabled. Fact remains that till the software is web enabled the inbuilt Modems/Fax cards will remain unutilised.

2.2.7.2 Backlog of data entry

The State Level Committee on CIPA and SCRB directed the District Level Officers to clear the backlog of data entry. To facilitate the clearance of backlog and bring the data entry at current level, the data entry work during phases I and II was outsourced. As per Action Plan for implementation of CIPA in State, a Technical Assistant (TA) was required to be provided by vendor firm at police stations for six months to help the staff for starting data entry work in CIPA and for clearance of backlog. A Senior Technical Assistant (STA) was posted at 10 PSs for trouble shooting on demand. A review of the progress reports (January 2008 to March 2010) of various districts revealed that in three districts data entry in investigation module was between 25 to 50 *per cent* and in nine districts[41] it was below 25 *per cent*. Similarly, in Prosecution module the data entry was 25 to 50 *per cent* in 5 districts and below 25 *per cent* in 17 districts which includes five districts[42] where no data entry was done in prosecution module.

On being pointed out the SCRB attributed (November 2010) that the delay in prosecution module was due to delay in prosecution and disposal of cases in courts. Similarly, back log in investigation module was due to inadequate trained man power, heavy work load and delay in investigation. Further, lacunae in CIPA software and short service period of TAs was also one of the reason for non-clearance of backlog and arrear of data entry.

2.2.7.3 Access control

- To maintain the integrity and confidentiality of the data, designated officers with appropriate rights should only be allowed to access the data. As per guidelines given in CIPA Brochure, the Duty Officer is authorised to

41. Baran, Bundi, Churu, Dholpur, Jalore, Jhalawar, Karauli, Sikar, Sawaimadhopur.
42. Baran, Jhalawar, Karauli, Sikar, Sawaimadhopur.

register a case at PS and the Investigation officer is authorised only to input the information in Investigation and Prosecution modules of the CIPA. It was observed in the 21 test checked PSs that constables were performing all duties relating to various stages of the CIPA application. Accepting the facts Director, SCRB informed (November 2010) that data entry was being done by CIPA trained constables under supervision of Investigating Officers as all Investigating Officers were not trained in computer operations. Thus, the secrecy of the data could not be ensured.

- According to the IT security practices there should be a password policy insisting change of passwords at regular intervals. It was observed that no such policy prescribing minimum length, period of expiry, regular change of passwords and prohibiting re-use of earlier passwords existed in the Department. Director, SCRB replied (November 2010) that facility to use the password of self choice and to change the passwords, was available in CIPA software. However, the fact remained that the required password policy was not framed by the Department to have a control over access to data. Further, it was not made compulsory in the software to change the password at regular interval.

2.2.7.4 Disaster recovery and Business continuity plan

- ***Data back-up***

With the objective to ensure data security at police Stations, SCRB circulated (November 2007) a back-up policy for police stations prescribing back-up time table, back-up process, life time of media and responsibility to take regular back-up and restore data. However, it was found that back-up of the data was not taken at regular intervals. Register for record and for monitoring the back-up was also not maintained. The back-ups were stored in the same room where the data were stored in the server. This defeated the purpose of taking back-ups since the threat to information remain continued. Director SCRB informed (November 2010) that directions have been issued to keep the CD of data in a separate room for use in case of fault in server.

- ***Environmental control***

No fire extinguishers were available in all the test-checked PSs to provide reasonable magnitude of security to the sophisticated servers, PCs and other peripherals. Director SCRB accepted the facts and stated (November 2010) that budget was not provided in CIPA for fire extinguishers.

2.2.7.5 Software design

The following system design deficiencies were noticed during the audit of the test checked PSs:

- Month and year of the case diary was not indicated in the FIR (First Information Report) Register report though such data were entered in the system.

- FIRs of the same head were not grouped together and shown under the local head-wise register.

- In the absence of provision to indicate the "amount of bail" in the Bail register, the amount of bail received could not be ascertained through the system.

- As the data entry screen was designed to capture only upto eight digits of the value of property, the value of ₹ 10 crore or more could not be entered in the system.

- Description/summary of the section of the act applied was not shown in the FIR.

- Since the text relating to subject matter of the FIR was not in 'Justified alignment', this caused problems when FIR printouts were presented in Courts.

- Complete number of stolen vehicle was not captured in the "Motor Vehicle stolen register" though data entry was correct.

- Details of the Motor Vehicle Act were not maintained in the master file.

- Descriptions against various sections of IPC were not mentioned in the software.

Director, SCRB intimated (November 2010) that NIC has been informed to remove the deficiencies in CIPA software and NIC has also improved the software from time to time.

2.2.7.6 Data sharing/connectivity

One of the major objectives of the application was to spruce up information gathering, organizing and dissemination among police organizations to give an edge over criminals. On these lines, it was envisaged that information would flow between PSs, DCRBs, SCRB and NCRB with certain degree of access being provided to citizens through a web-based interface. However, data connectivity from Police station to DCRB and to organisations above was yet to be established and data was lying on stand alone server at each PS, defeating the purpose of sharing of information between PSs and DCRB, SCRB and NCRB and thereby not achieving the objective of e-governance. Director, SCRB admitted (November 2010) the facts.

2.2.7.7 Reduction in manual records/ registers

One of the main objectives of CIPA was significant reduction in manual records/register maintained at police stations and also generating various reports required from time to time. However, it was observed in test checked PSs that data entry both in registers (i.e. crime register, arrest register, bail register, establishment register, registers of missing persons, un-natural death register etc.) and CIPA software was being made due to deficiencies and

lacunae in software, in-adequate training and non-receipt of directions/ orders from higher authorities.

Director, SCRB replied (November 2010) that maintenance of various registers at PSs was legally binding. These registers could not be closed without sanction of designated officers. Further, formats of registers in CIPA software was faulty and different from those being used by Rajasthan Police. In this regard, NIC was also being requested from time to time.

With respect to utilisation of the information stored in the software, though a variety of reports could be generated in the system, the PSs were not generating these reports on account of lack of adequate training and awareness which indicated a gap between the uses envisaged for the application and the extent of actual utilisation at ground level.

2.2.7.8 Training

- It was noticed that only 257 out of 927 officials in the test checked Police stations were trained in CIPA. Only constables were able to operate CIPA, whereas the officers at higher levels were not contributing in terms of their prescribed roles. In all test checked PSs, the CIPA trained constables were assigned other police duties. Accepting the facts, Director, SCRB replied (November 2010) that data entry was being done by CIPA trained constables under the supervision of Investigating Officers as all Investigating Officers were not trained in computer operation.

- It was also noticed that eight computers in five test checked PSs[43] of ₹ 1.86 lakh were lying idle from the date of their instalation due to non-availability of trained staff.

Director, SCRB stated (November 2010) that number of computers to be installed in PSs had been decided by Ministry of Home Affairs, GOI/ NIC on the basis of number of Investigating Officers, However, these computers were being used for CIPA training purposes from these PSs where there was no sufficient computer work.

2.2.7.9 Non-utilisation of available features

- In the investigation module data relating to eight categories of cases like FIR, missing persons, medico-legal cases, unnatural deaths, absconding persons, un-identified properties, non-cognizable offences and other cases were to be entered . However, it was observed that information relating to FIR only was entered in investigation module. Director SCRB stated (November 2010) that investigation module of these categories of cases was not according to procedure prevalent in Rajasthan Police. Reply was not acceptable because data entry regarding missing person and unnatural death in investigation module in test checked four PSs[44] was being done.

43. Dausa-Kotwali: 1, Bandikui: 1, Sikar-Fatehpur Kotwali: 2, Jodhpur City- Pratap Nagar: 2 and Udaipur-Ambamata: 2.
44. Aravali vihar (Alwar); Kotwali; Pratap Nagar (Jodhpur) and Ambamata (Udaipur).

- There was a provision to enter the value of stolen property in the FIR in registration module but it was observed that no such entries were made in test checked PSs. SCRB explained (November 2010) that value of stolen property were not being entered only in cases where such information was not available in the complaints. Contention of the Department was not acceptable because in four test checked PSs[45] the value of stolen property was shown in the complaint but not entered in the module.

- Though there was a provision in the software to store photographs/fingerprints, but the same was not scanned and stored by any of the test checked PSs. Director, SCRB informed (November 2010) that there were some problems in photograph scanning in phases II and III of CIPA. However, finger prints were being separately maintained in "AFIS Software"

- The details of criminals were not entered in information module thwarting the objective of maintaining a criminal data base. Director, SCRB replied (November 2010) that information module being output module, the details of criminals are auto generated from the "Arrest Forms and Investigation Module". Entry is made only when some special information is to be included. However, the test checked PSs had informed that no such report was being generated from CIPA software for want of training.

2.2.8 Constraints and achievements

Despite weaknesses, there have been some commendable steps taken by the state police institutions. Although no funds were provided separately under CIPA for training to SCRB, it organised training programmes for different levels of personnel with its available resources. It also prepared the Hindi version of the CIPA manual for circulation to other Hindi-speaking States. There was constant monitoring by the SCRB of data entry progress at PSs through regular reports and inspections.

Director, SCRB stated (November 2010) that for monitoring of CIPA software, CIPA progress report was being called from concerned districts every month and necessary instructions issued after evaluation of reports.

2.2.9 Conclusion

CIPA project is yet to deliver its envisioned outcomes for better e-governance due to weaknesses in certain aspects of scheme implementation, software development, connectivity and supervision. Delay in instalation and under-utilisation of hardware has adversely affected the shift towards electronic data-keeping. Due to non-renewal of AMC, hardware items remained idle for want of repair. The password policy was not clearly defined and followed which raises concerns about data security and reliability. The lacunae in software were creating hurdles in proper data entry and generation of reports in certain cases. Since the connectivity envisaged from police station to NCRB level was yet to materialise, the objective of information sharing for better decision-making was not achieved. While comprehensive training had not been

45 Kotwali (Dausa); Amber (Jaipur North) and Kotwali; Fatehpur Kotwali (Sikar).

imparted, there were instances of trained personnel not working on the software. As a result of the above deficiencies, there was no significant reduction in manual records which caused duplication of work. There was no business continuity planning or disaster recovery policy in place to guard against losses of data in unforeseen circumstances. Due to non-establishment of connectivity between institutions, incomplete database and training deficits, the critical objectives of the project are a long way from being achieved.

2.2.10 Recommendations

- Efforts should be made to ensure that instalation and commissioning of hardware and software are not delayed and services should be provided by vendors within the prescribed time. Execution of Annual Maintenance Contract of the hardware should be ensured before expiry of warranty period.

- Clearance of backlog of data entry work should be ensured. The System needs to be properly utilised by the authorised personnel and password policy needs to be framed and implemented stringently. Disaster recovery and business continuity plan must be clearly laid down and implemented. Back-up policy should be followed in police stations.

- The lacunae in software must be filled up through regular feedback from the users and timely rectification through application developer (National Informatics Center). Connectivity must be established so that electronic data can be shared for facilitating crime prevention and detection through a national database.

- The training aspect has to be focused upon in order to have adequate trained manpower for entering data, generating MIS reports and effective monitoring at various levels.

Water Resources Department

2.3 Implementation of Gararda Medium Irrigation Project

2.3.1 Introduction

State Government accorded (September 2002) administrative and financial (A&F) sanction of ₹ 81.40 crore for Gararda Medium Irrigation Project (GMIP) near village Holaspura, District Bundi, to provide irrigation facilities in the Culturable Command Area (CCA) of 9,161 hectare of 44 villages. The cost was revised[46] to ₹ 147.04 crore in August 2009. The project scheduled for completion by September 2007 was extended up to March 2010 and was under progress as of August 2010. The earthen dam, filled only to 74 *per cent*[47] of Full Tank Level (FTL) was breached (August 2010) in the first monsoon. The Committee headed by Divisional Commissioner, Kota appointed (August 2010) by the Government to investigate the reasons of breaching of the dam observed 19 reasons for breach of dam, which, *inter alia*, included inadequate/ineffective curtain grouting, defective compaction of earth, absence of horizontal sand filters etc. The physical progress of various components of the Project is given in ***Appendix 2.11*.**

The results of the performance audit of the GMIP (April-May 2010) through test-check of the records of the Executive Engineer (EE), Water Resources Project Division are discussed in the subsequent paragraphs.

2.3.2 Project formulation

The GMIP was originally sanctioned (July 1981) by the Planning Commission and Central Water Commission (CWC) for ₹ 10.22 crore, but it could get final clearance in April 1996, as the Department took several years in complying with the observations of Technical Advisory Committee[48] of the Planning Commission (November 1983) and CWC[49] (December 1993). The Water and Power Consultancy Services (WAPCOS) was entrusted (July 1999) the survey, design and geometric investigation work of the GMIP to be completed by 30 January 2000. It submitted its first two reports on geotechnical investigation etc. and hydrological studies in January 2001 and September 2001 respectively and third report in August 2002. On receipt of survey

46. Reasons for revision of cost are: revision of BSRs, change in design and specification of dam, main canal and branches, increase in land rates tender premium and payment towards compensatory afforestation and net present value (NPV) of land to Forest Department.
47. Actual filling level - dead storage level/ Full Tank Level - dead storage level (291 m-277 m) /295.90 m - 277 m x 100 = 74 *per cent*.
48. Review of Rehabilitation and Resettlement (R&R) plan, and provision for water courses, field channels, concurrence of Finance Department, Waste weir for diversion of dam and earthen flank be provided as directed.
49. Hydrology, irrigation planning, forest clearance, R&R plan, cost estimates, BC ratio and plan provision to be ensured.

reports from WAPCOS between January 2001 and August 2002, the Department accorded (September 2002) A&F sanction for ₹ 81.40 crore.

The State Government stated (October 2010) that the work could not be completed for want of clearance from Forest Department and Railways, due to paucity of funds and delay in resolving objections of CWC. The fact remains that the targeted beneficiaries were deprived of the intended benefits as the revised schedule of completion of project by March 2010 also could not be maintained.

2.3.3 Land acquisition

Rule 298 and 351 of Public Works Financial and Accounts Rules (PWF&AR) stipulate that acquisition of dispute-free land is a pre-requisite for planning a work.

Ownership of the land to be acquired for the Project not ensured.

For construction of dam and canals 430.918 ha[50] and 166.96 ha[51] of land was required. Private land of 374.308 ha was acquired. In-principle approval for diversion of forest land (205 ha), coming under dam submergence, was given (September 1998) by GoI, subject to transfer of non-forest land and payment of cost for compensatory afforestation. In May 2000, 209.46 ha of land was transferred to the Forest Department. However, payment of ₹ 14.51 crore[52] was staggered from November 2003 to February 2009. Thus, the final approval for diversion of forest land under submergence of dam was received only in September 2010.

Scrutiny revealed that a provision of ₹ 18.70 lakh was made to acquire 18.70 ha of private land for canal system. However, while taking up the works of the canal distribution system in 2005, the Department came to know that 18.573 ha of land[53] belonged to Forest Department and prior approval from GoI through Forest Department was necessary. However, a proposal to GoI for clearance of forest land of 18.573 ha through Forest Department was initiated only in November 2007. The Forest Department refused (November 2007) to forward the same to GoI in view of pendency in final approval of diversion of forest land (205 ha) under submergence of dam. This indicated that a proper survey was not conducted and the Department had not planned adequately for acquiring dispute free land.

The State Government replied (October 2010) that the final approval for diversion of forest land under submergence of dam has since been issued (September 2010) by MoEF, GoI and the work of the remaining canals and minors would be completed after receipt of clearance of 18.573 ha forest land from MoEF, GoI. The action regarding fixing the responsibility for undertaking GMIP before obtaining approval of GoI was under consideration.

50. Private land: 225.918 ha; forest land: 205 ha.
51. Private land: 148.39 ha; forest land: 18.573 ha.
52. Cost of compensatory afforestation: ₹ 1.39 crore; catchment area treatment: ₹ 0.29 crore (Paid in November 2003, September 2004 and February 2009); NPV: ₹ 12.83 crore as per Supreme Court's order of October 2002 and August 2003 (Paid in February 2009).
53. As mentioned in revised estimates, 2009.

Thus, failure of the Department in correctly ascertaining the ownership of the land required for the irrigation project, led to delay in obtaining requisite approvals.

2.3.4 Survey and investigation

No urgency in adhering to the time schedules.

Audit observed that the survey, design and geometric investigation work was entrusted (July 1999) to a private consultant, M/s WAPCOS on the plea that the Investigation, Design, Research (IDR) Unit of the Department lacked the equipment and trained manpower to undertake the assignment in the stipulated period of six months i.e. by 30 January 2000. However, WAPCOS delivered only five out of six survey reports by July 2003. Besides, the survey reports prepared by WAPCOS on the basis of which the dam was constructed mentioned the strata as rocky. However, the enquiry committee set up (15 August 2010) by the Government for investigating reasons for breach of dam opined that 40 *per cent* reason for breach of dam was settlement of foundation and embankment due to presence of fissured rocks and clay seams, absence of proper slope protection and inadequate compaction of earth.

The State Government stated (October 2010) that due to non-availability of required machinery and trained staff with IDR units, the work was entrusted to WAPCOS. For failure to complete the work in time, a maximum 10 *per cent* penalty has been imposed on WAPCOS. The fact remains that even after incurring expenditure of ₹ 0.35 crore, WAPCOS did not give its reports upto three and a half years defeating the purpose of urgency.

2.3.5 Rehabilitation of project affected persons (PAPs)

Apathy towards rehabilitation and resettlement of affected population

As per the instructions of the Planning Commission (Water Resources Division) (November 2000), clearance from GoI of the Rehabilitation and Resettlement (R&R) Plan was to be obtained before investment approval. The project estimate 2002 had a provision of ₹ 98.75 lakh for R&R activities including ₹ 82.41 lakh for land compensation. The Department initiated (November 2003) the proposal and obtained (April 2008) clearance from Ministry of Tribal Affairs, GoI, with the stipulation that R&R plan would be implemented before submergence, but the same was not implemented (October 2010). The plan, *inter alia,* provided for allotment of irrigable land, plots for houses, roads, drinking water, education, medical and social facilities for the displaced tribal families of Holaspura (52) and Parana (44). Despite this, only compensation for land was paid. Infrastructural facilities and civic amenities for rehabilitation were not provided as the project estimate 2009 did not have any provision for R&R activities, on the plea that the villagers would not be affected from dam submergence. As a consequence, the tribal families of Holaspura and Parana severely affected due to breach in the dam (August 2010), as reflected in public hearing by the Divisional Commissioner, would not be eligible to get any relief, reflecting insensitive planning.

The State Government stated (October 2010) that compensation of land for two villages, whose land was coming in submergence area, was paid. As these villages were not in the portion of rehabilitation, no provision for this has been

made in the revised estimates. Government's reply was not factually correct in view of the facts of public hearing mentioned above.

2.3.6 Lack of co-ordination between PHED and WRD

Irregular sanction of non-viable project.

The State Water Policy envisaged giving top priority for reservation of water for drinking purpose. Accordingly, CE, WRD, Jaipur, instructed (October 2001) that reservation of water for drinking purposes invariably be made in the irrigation reservoirs/tanks with the condition that PHED would contribute its share.

Audit scrutiny revealed that on the request (May 2001) of EE, PHED, Bundi for reservation of 350 Mcft water in GMIP, a provision of ₹ 9.90 crore being the share cost to be borne by PHED, was included in the project estimate (May 2002) without obtaining confirmation from the competent authority of PHED. On taking up the matter by the ACE, WRD (June 2002) with ACE, PHED, Kota, the latter stated (July 2002) that there was no proposal for drawal of water from GMIP. Even after refusal of PHED, ₹ 17.12 crore was included as share cost of PHED in the revised project cost (August 2009). However, the BC ratio of the GMIP on both occasions i.e. in 2002 (₹ 81.40 crore)[54] and in 2009 (₹ 147.04 crore) was worked out incorrectly by excluding the share cost of PHED. Thus, due to lack of coordination between the two departments, the project not economically viable was considered viable for sanction.

The State Government stated (October 2010) that the BC ratio has been worked out correctly as per policy of Government. Fact remains that the Department reduced the project cost by excluding the share cost of PHED, though PHED refused to share the cost.

2.3.7 Financial Management

The GMIP, at revised estimated cost of ₹ 147.04 crore, was implemented with a loan assistance from the National Bank for Agriculture and Rural Development (NABARD: ₹ 69.36 crore) and State's share (₹ 77.68 crore). A sum of ₹ 124.49 crore was spent as of March 2010. Audit observed that ₹ 1.56 crore was debited to the project on account of payment made (March 2007) to the Divisional Forest Officer, Bundi, though there was no demand. The payment was not accepted by the Forest Department, therefore, the same was credited to the project in May 2007. Consequently, this was utilised next year (2007-08). The irregular action of the Department was indicative of an attempt to escape from lapse of budget provision in violation of Rule 8(3)[55] of General Financial and Accounts Rules.

The State Government has accepted (October 2010) the facts.

54 Total sanctioned cost: ₹ 81.40 crore less ₹ 11.02 crore (price escalation) and ₹ 9.90 crore being share cost of PHED.

55. Rule 8(3) forbids withdrawal of funds with a view to avoiding lapse of budget grant.

2.3.8 Physical and financial progress

As per the project estimates (2002) of ₹ 81.40 crore, the works of earthen dam, diversion dam and canals including lining were scheduled for completion in four years (2006) and five years (2007) respectively. The dates of completion of earthen dam and canals were revised to June 2009 and March 2010, and the project cost shot up to ₹ 147.04 crore (August 2009). An expenditure of ₹ 124.49 crore was incurred as of March 2010 ***(Appendix 2.12)***. The earthen dam, completed in March 2010 was breached in the first monsoon (August 2010). The State Government stated (October 2010) that the damage would be rectified with cost to the contractor as the dam was in the defect liability period. Audit observed that the physical progress of various components of GMIP has not been commensurate with the expenditure incurred ***(Appendix 2.11)***, which raises the risk of a further escalation in cost as explained below:

- A provision of ₹ 63.27 lakh was made in the project estimates, 2002 for construction of diversion dam. However, audit observed that there was no provision for diversion channel through which 70 *per cent* of the water of the catchment area was to be collected. Subsequently, a provision of ₹ 5.81 crore was made in revised estimates, 2009 for diversion dam and channel indicating lack of planning, which led to increase in estimated cost from ₹ 0.63 crore (in 2002) to ₹ 5.81 crore (2009).

- Similarly, the Department did not provide for compensation payable to Railway/Forest Department for passing canal distributaries and minors in various reaches. It was only in 2009 that a provision of ₹ 1.69 crore was included in the project estimates, for payment to Railway/Forest Department. This indicated that while framing the estimates, the Department was not aware that the canal distributaries/minors were passing through Railway/Forest land. The proposals for approval of GoI for execution of work in forest land were moved in November 2007, but these were not forwarded to GoI by State Forest Department for want of approval of diversion of forest land under submergence of dam. Consequently the work could not be taken up (October 2010) for want of clearance from Forest and Railway Departments. Delayed execution of these works would further increase the cost.

The State Government stated (October 2010) that the action to fix the responsibility for lapse was under consideration.

Slow response.

The EE, Project Planning and Preparation Division, Kota sought (December 2000) permission from Senior Divisional Engineer, Western Railways, Kota for crossing of canals across railway tracks. The Railways requested for relevant information for grant of permission, which was furnished by EE, PHED Division, Bundi only in March 2007, after a gap of seven years, and a sum of ₹ 0.53 crore was deposited into the Railways account as charges for preparation of drawings for crossing, establishment, contingency, land and supervision for construction of five crossings of canals across the track. However, the works could not be taken up as of October 2010 as the estimates

of railway crossing sought by Railways at current market rates were not made available by the Department despite repeated requests of the Railways. Not only the sum of ₹ 0.53 crore remains blocked but, it also reflected the apathy of the Department.

The State Government stated (October 2010) that the action to fix the responsibility for lapse was under consideration.

Loss due to short receipt of usable material.

The revised (August 2009) estimate of ₹ 147.04 crore, finalized on the basis of actual work, reduced the cost of the project by ₹ 1.42 crore on account of recovery of 1,21,359 cum (80.03 *per cent*) usable material from blasting of hard rock. The contractor, to whom work of construction of earthen dam, spillway, wing wall and head outlet sluices of GMIP was awarded (September 2003) for ₹ 37.07 crore executed blasting in 1,13,699 cum of hard rock (November 2008). However, the cost of only 47,834 cum usable material was recovered from him as against 90,993 cum (80.03 *per cent*) as per the revised estimates of August 2009, thereby incurring a material loss of ₹ 0.55 crore[56]. This loss will only increase as the work was still under progress. The State Government stated (October 2010) that only 47,834 cum (42 *per cent*) usable stone was obtained and cost recovered from the contractor. The reply was not tenable as the revised project estimates of August 2009 had a provision of recovery of 80.03 *per cent* for usable material based on work actually carried out till November 2008.

Loss of produce.

Audit scrutiny of project estimates showed that 70 *per cent* of the irrigation benefits were to be obtained in 2009 and 100 *per cent* in 2010. However, in the absence of the canal system, these benefits could not be accrued. As a consequence, the State has lost envisaged net crop produce for two years, as per revised estimate[57]. The State Government stated (October 2010) that the project was delayed due to unavoidable reasons like permission from Forest Department, railways etc. The reply was not tenable as cost and time is the essence of any project and not adhering to the time schedule has led to delay in obtaining irrigation benefits.

2.3.9 Conclusion

The Project remained in limbo for 20 years, resulting in cost overrun of ₹ 71.18 crore without any change in irrigation coverage. Improper survey and deficient planning for acquiring dispute free land led to further delay in

56.

Total HR blasting	1,13,699 cum
As per estimate 80.03 *per cent* usable material to be obtained	90.993 cum
Usable material obtained	40.834 cum
Balance material not obtained	43.159 cum
Cost of balance material @ ₹ 117 per cum + 8 *per cent* tender premium	₹ 0.55 crore

57. Net receipt after canal introduction (₹ 27.73 crore) less ₹ 6.60 crore being annual receipt before canal introduction (₹ 5.31 crore), O&M charges (₹ 0.55 crore) and O&M charges of head works (₹ 0.74 crore) = ₹ 21.13 crore of which 170 *per cent* (70 *per cent* for 2009 and 100 *per cent* for 2010 works out to ₹ 35.92 crore.

completion and avoidable escalation of ₹ 65.64 crore in estimated cost. Hiring of consultant on the grounds of urgency was not justified as the firm submitted five out of six reports in three and a half years as against stipulated period of six months. The earthen dam completed in March 2010 collapsed on 15 August 2010 within six months due to inadequate/ineffective curtain grouting, defective compaction of earth and absence of horizontal sand filters as brought out in an enquiry report. The intended objective of providing irrigation facilities in 9,161 ha of culturable command area of 44 villages was not achieved despite incurring ₹ 124.49 crore as of March 2010 and taking 29 years in finalisation and execution of the project which remained incomplete as of August 2010.

2.3.10 Recommendations

- Proper survey and planning should be conducted before taking up a project to ensure timely completion. Follow up of the enquiry report on breach of Dam should be expedited and repairing of the damaged Dam should be completed early so that the irrigation benefits are achieved.

- Monitoring checks should be properly exercised during execution to ensure quality of work.

Public Health Engineering Department

2.4 Implementation of Fluoride Control Project in Ajmer District

2.4.1 Introduction

In five[58] Tehsils of Ajmer District, the water has high content of fluoride, chloride and nitrate more than the prescribed limit[59]. In order to improve the quality of drinking water to 692 villages, it was proposed to provide surface water from the Bisalpur Dam.

Accordingly, the Government of Rajasthan (GoR) set up (July 1994) a Fluoride Control Project (FCP) under the Accelerated Rural Water Supply Programme (Sub Mission) for providing drinking water to these villages. The Policy Planning Committee (PPC) of Rajasthan Water Supply and Sewerage Management Board (RWSSMB) of Public Health Engineering Department (PHED) sanctioned (July 1994 to January 2005) eight drinking water supply schemes under the FCP. Of these, five schemes[60] were taken up between July 2005 and January 2007 in these Tehsils covering 505 villages and 593 *dhanis* at a sanctioned cost of ₹ 315.39 crore. The schemes scheduled to be completed between June 2006 and November 2007 are still in progress.

The FCP envisaged laying of raw water trunk main from Bisalpur Dam to Baghera, where a treatment plant was to be constructed for pumping of water to 14 main pumping stations in the District for all schemes under the Project. Water from these stations was to be supplied to a centrally located Over Head Service Reservoir (OHSR). From the OHSR, water was to be supplied to the beneficiary villages through the Public Stand Post (PSP) and Cattle Water Tank (CWT) located in suitable locations.

Performance audit of implementation of five schemes[60] under FCP was conducted (April-May 2010) through test-check of records in three divisions[61]. The shortcomings noticed in audit are discussed in the subsequent paragraphs.

2.4.2 Short release of funds by GoI and State Government

The funds for the project were to be provided by the Government of India (GOI), under the Accelerated Rural Programme- Quality (ARP- Q) and by the State Government under the Minimum Need Programme (MNP) in the ratio of 75:25. During 2004-10, ₹ 209.78 crore under ARP-Q and ₹ 58.67 crore under

58. Tehisls: Ajmer (partly), Kekri, Kishangarh, Masuda and Sarwar.
59. Permissible limit of fluoride, chloride and nitrate in water is 1.5 ppm, 1000 ppm and 45 ppm respectively.
60. Extension of Kekri-Sarwar: ₹ 32.62 crore, Nasirabad Phase II: ₹ 11.53 crore, Kishangarh-Arain: ₹ 152.49 crore, Bhinay Masuda Phase-II: ₹ 47.95 crore and Bhinay Masuda Phase-III: ₹ 70.80 crore.
61. Executive Engineer (EE), PHED District Rural Division, Ajmer; EE, PHED Division, Kishangarh and EE, PHED, Bisalpur Project Division III, Bhinay (Ajmer).

MNP were available, against which the expenditure incurred was ₹ 208.45 crore and ₹ 59.29 crore respectively. The year-wise details of the funds released by GOI and State Government *vis-a-vis* actual expenditure incurred are given in the ***Appendix 2.13.***

Short release of funds amounting to ₹ 48.30 crore by GoI and State Government.

It was noticed that against the due share of ₹ 236.54 crore and ₹ 78.85 crore from GoI and GoR, actual releases were ₹ 208.42 crore ₹ 58.67 crore respectively during 2004-10. Thus, there was a short release of ₹ 28.12 crore by GoI and ₹ 20.18 crore by GoR. The reasons for short releases were not furnished though called for (June 2010). State Government stated (October 2010) that the shortfall was being made up in the current financial year.

2.4.3 Physical progress of the schemes

Against the expenditure of ₹ 267.74 crore incurred up to March 2010 on five schemes, physical progress was as under:

S. No.	Name of scheme	Month and year of sanction	Stipulated month and year of taking up/ completion	Original sanctioned cost (₹ in crore)	Expenditure upto March 2010 (₹ in crore) and percentage	No. of villages/ *dhanis* targeted to be covered	No. of villages/ *dhanis* covered (March 2010)	Percen-tage coverage
1.	Extension Kekri-Sarwar	July 2004	July 2005 June 2006	32.62	31.85 (98%)	118	79	67
2.	Nasirabad Phase II	January 2005	June 2006 January 2007	11.53	10.85 (94%)	103	65	63
3.	Kishangarh-Arain	September 2004	December 2005 August 2007	114.96 (Revised to ₹ 152.49)	126.53 (83%)	519	344	66
4.	Bhinay-Masuda Phase II	July 2004	November 2005 June 2007	47.95	98.51 (83%)	144	142	99
5.	Bhinay-Masuda Phase III	December 2004	January 2007 November 2007	70.80		214	149	70
	Total			**315.39**	**267.74**	**1098**	**779**	**71**

Source: Public Health Engineering Department

Reasons for delay in completion of above works were attributed mainly to change of AC pipes to DI pipes due to site conditions (S.No. 1, 2 and 3), delay in getting permission from railways and NHAI, non-availability of funds (S.No. 4) and delay in getting permission from railways and Forest Department (S.No. 5).

Physical progress was not in consonance with expenditure incurred.

The Project envisaged providing drinking water to 1,098 villages and *dhanis* under the five schemes by November 2007. As of June 2010, 779 (71 *per cent*) villages and *dhanis* were benefited after spending ₹ 267.74 crore (85 *per cent* of sanctioned amount); construction of distribution lines to benefit 319 villages remained incomplete.

The Department stated (April and July 2010) that the delay in completion was due to delays in obtaining permission for railway land/forest land, supply of pipes and execution of works by the contractor.

The fact remains that the provision for laying of AC pipeline proposed in the original project report was not found feasible as per the site conditions and were proposed to be replaced by DI pipes, estimates for which were not yet sanctioned. Thus, improper planning and deficiency in survey, delay in supplying material to contractor and in obtaining clearance from Railways/Forest Department led to non-completion of work as per schedule. State Government (October 2010) accepted the audit observation.

2.4.4 Blocking of funds

₹ 1.86 crore meant for a power feeder remained blocked with the executing agency.

Bhinay Pumping Station (BPS) of FCP is the key point for feeding water to 15 OHSRs for 27 villages, eight *dhanis* and Bijaynagar town under Bhinay-Masuda Scheme Phase-II. As the site of BPS was in rural area, where the average power supply was for less than 16 hours, as against designed requirement of 22 hours, a dedicated power feeder to provide uninterrupted power supply for the scheme was necessary. Accordingly, the PPC of RWSSMB accorded (February 2007) administrative and financial sanction of ₹ 2.37 crore for the power feeder and ₹ 1.86 crore was deposited (June 2008) by EE, PHED, Bisalpur Project Division-III, Bhinay with Ajmer Vidyut Vitran Nigam Limited (AVVNL), Bijaynagar for completion of the work by May 2009. It was, however, noticed that the work of power feeder and electric connection was not started by the AVVNL as of June 2010 and ₹ 1.86 crore remained blocked for the past two years defeating the very objective of the project.

The State Government stated (October 2010) that the work of feeder was still incomplete. Reasons for delay in completion were, however, not intimated.

2.4.5 Construction of additional reservoirs to cover the villages already covered

Sixteen additional OHSRs/ GLRs were constructed to cover the villages already covered.

The PPC of RWSSMB accorded (July 2004) administrative and financial sanction of ₹ 47.95 crore for coverage of 115 villages[62] under Bhinay-Masuda Scheme Phase II. The scheme envisaged construction of OHSRs involving four Regional Water Supply Schemes (RWSS) originating from various head works. For this purpose, 26 OHSRs were sanctioned (July 2004) and constructed for an estimated population of 2027 and distribution of water to tail end villages. Scrutiny of the records revealed that 12 additional OHSRs and four Ground Level Reservoirs (GLRs) were sanctioned (between March 2006 and December 2007) by the PPC in order to provide separate reservoirs for 23 villages already connected with other reservoirs. Additional reservoirs were constructed between April 2007 and December 2008 at a cost of ₹ 1.13 crore, as detailed in ***Appendix 2.14.*** However, the villages have not been connected with the new reservoirs as of May 2010. Thus, construction of the

62. Revised to 144 villages/*dhanis* due to inclusion of 29 *dhanis*.

additional reservoirs was not justified and the investment of ₹ 1.13 crore remained idle for two to three years.

The State Government stated (October 2010) that the schemes were designed for the year 2012 considering routine growth rate, but due to four laning of NH and conversion to broad-gauge of the railway line, commercial activities in the villages, the demand of public increased for construction of storage for better water supply. The reply was not acceptable as the villages have not been connected with the new reservoirs for better water supply.

2.4.6 Non-availing of the benefit of exemption of Excise Duties

Department did not avail of the benefit of Excise Duty exemption (₹ 5.62 crore).

The general terms and conditions of the Director General of Supplies and Disposals (DGS&D) rate contract provide that in case of refund of Excise Duty (ED) obtained by the contractor, if not refunded to the paying authority, the same would be recovered from the contractor.

Mention was made in paragraph 4.1.2 of Report of the Comptroller and Auditor General of India for the year ended 31 March 2007 regarding loss of ₹ 1.29 crore due to failure of Chief Engineer, PHED in inserting a specific clause regarding refund of ED in the rate contract as exhibited in the contracts of Director General, Supply and Disposals (DGS&D).

In another such case, the Chief Engineer (CE) (Headquarter), PHED executed (August 2006 and July 2007) rate contracts for supply of Centrifugally Cast Ductile Iron (spun) pipes of various sizes with Firm 'A', New Delhi at rates inclusive of ED. However, CE did not insert a clause in the rate contract regarding passing on the benefit of refund of ED obtained by the contractor to the Department. This led to an undue benefit of ₹ 5.62 crore to the contractor and an extra expenditure to that extent on supply of 6,72,802 metre pipes during April 2007 to November 2008 to EE, PHED Division, Kishangarh (2,83,870 metre) and EE, PHED Division, Bhinay (3,88,932 metre) ***(Appendix 2.15 and 2.16)***.

The State Government stated (October 2010) that the firm had obtained refund of ED under an incentive scheme of promoting industries in poorly developed areas and State Government has paid firm as per the rate contract. The reply was not acceptable as the rates of DI pipes approved by the Department in the contract were inclusive of ED. Since the contractor obtained refund of ED he was liable to pass it on to the Department.

2.4.7 Improper maintenance of the records of inspection

Records of inspection not maintained.

Instructions were issued by the PHED time to time to all the departmental officers to conduct periodical inspection for effective monitoring of water supply schemes and for solving public problems relating to drinking water. In March 2009, the Principal Secretary, PHED had fixed a minimum number of inspections of sites in a year to be conducted by various officers (Junior Engineer to Chief Engineer) of PHED, which ranged between 30 to 150

days[63]. The information pertaining to inspections was to be furnished in the prescribed formats. Scrutiny revealed that proper records of inspection and reports thereon were not maintained. However, copies of tour programmes cum inspection reports conducted by JE, AE and EE during January to September 2010, subsequently furnished (October 2010) to Audit, disclosed that most of the officers did not furnish the desired information of inspection in the prescribed formats and had also not complied with the norms fixed for inspection.

2.4.8 Conclusion

Five water supply schemes under the Fluoride Control Project (FCP) in Ajmer District envisaged provision of surface water from Bisalpur Dam to 1,098 villages and *dhanis* as the ground water supplied contained high content of fluoride, chloride and nitrates. The schemes scheduled for completion by November 2007 remained incomplete as of July 2010 for various reasons viz. changing of specification of pipes as per site condition which was indicative of deficient survey, short release of funds by GoI and State Government, delays in supply of pipes by the Department to the contractors and execution of works delayed due to obtaining permission for railway land and forest land. Additional reservoirs constructed for better supply in 23 villages remained unconnected. Thus, defective planning and failure of governance not only delayed supply of surface water to beneficiaries but also deprived the population of 319 villages and *dhanis* of quality drinking water for more than three years from the scheduled date of completion of the project.

2.4.9 Recommendations

- Government should provide adequate funds and make necessary efforts to acquire the requisite land for early completion of the project so that the targeted population is provided with safe drinking water.

- Effective monitoring needs to be conducted by all the departmental officers so as to ensure timely completion of schemes for safe drinking water.

63. Inspection of site: 30 to 150 days; night stays: 22 to 100 days.

Social Justice and Empowerment Department

2.5 Implementation of Maharana Pratap Awas Yojana (MPAY) for Gadia Lohars

2.5.1 Introduction

Government of Rajasthan (GoR) introduced (November 1997) a scheme titled, 'Financial assistance to Gadia Lohars[64] for construction of houses' to benefit the nomadic blacksmiths, who do not own houses and do not live at a permanent place. The scheme was renamed in October 2006, as "Maharana Pratap Awas Yojana" (MPAY). The Maharana Pratap Financial Assistance for Construction of House Rules, 1997 (Amendment 2009) (MPFAH Rules) were issued in November 2009. The assistance per unit was payable at ₹ 5000 from November 1997, at ₹ 17,500 from July 1999, at ₹ 25,000 from July 2007 and at ₹ 35000 from August 2009, in two to three instalments. The scheme is being implemented by the Social Justice and Empowerment Department (Department).

To obtain assistance for construction of houses, Gadia Lohars were required to submit the applications to the District Officers[65] along with caste certificate and title deed of land (Rule 5.2). They were also required to give a declaration that they did not own any other house in the State and they would not sell the house constructed with the Government assistance for 20 years (Rule 5.3). The District Officers were authorised to sanction the assistance under the MPAY and release the assistance in two to three instalments (Rule 4.4), after ensuring utilisation of funds already paid on the basis of the utilisation certificates given by the beneficiaries, duly verified by Patwari, Executive Officer/Junior Engineer of Municipalities, Development Officers of Panchayat Samiti, Assistant Director (AD) or District Probation and Social Welfare Officer (DPSWO) of the Department. The utilisation of funds was to be further ensured by the Designated Authorities[66] (Rule 4.5).

A review of implementation of the scheme during 2005-10 was conducted (March-April 2010) in eight selected districts[67] covering 2,901 beneficiaries[68]. Scrutiny of the records of eight offices[69] covering the period 2005-10 and joint physical verification of 582 cases by Audit and departmental officers revealed deficiencies in implementation, as discussed in the subsequent paragraphs.

64. A Gadia Lohar is a nomadic blacksmith living in bullock cart with his family and does not own a house.
65. Deputy Director (DD), AD and DPSWO.
66. The District Collector, Sarpanch, Members of Zila Parishads/Panchayat Samiti and District Officers of the Department.
67. Ajmer, Bhilwara, Chittorgarh, Jodhpur, Nagaur, Pali, Rajsamand and Udaipur.
68. 100 *per cent* cases test checked in selected districts: Ajmer: 288, Bhilwara: 434, Chittorgarh: 144, Jodhpur: 686, Nagaur: 517, Pali: 340, Rajsamand: 245 and Udaipur: 247.
69. The Deputy Director (DD): Ajmer, Bhilwara, Jodhpur and Udaipur, Assistant Director (AD): Chittorgarh, Nagaur and Pali and District Probation and Social Welfare Officer (DPSWO), Rajsamand.

2.5.2 Financial outlay

The year-wise details of financial assistance sanctioned and paid to the beneficiaries during 2005-10 under the Scheme were as under:

(₹ in crore)

Year	Funds sanctioned for assistance	Assistance paid
2005-06	2.54	2.24
2006-07	1.21	1.21
2007-08	2.00	1.98
2008-09	2.15	2.01
2009-10	2.50	2.11
Total	**10.40**	**9.55**

Source: Department of Social Justice and Empowerment.

In the eight selected districts, funds provided and expenditure incurred as financial assistance was ₹ 5.42 crore during 2005-10.

2.5.3 Identification and selection of beneficiaries

The Department was not aware of the total number of Gadia Lohar families who were benefitted since inception of the scheme. During 2004-05, the Department identified 35,719 Gadia Lohar families in the State. However, the records of survey conducted, if any, were not furnished to Audit. There was no record to show that identification of Gadia Lohar families was ever done prior to 2004-05. The number of the Gadia Lohars who actually benefitted during 2005-10 could also not be ascertained as separate beneficiary-wise details of assistance paid were not maintained in the District offices.

Assistance of ₹ 20.25 lakh paid to already settled beneficiaries.

Scrutiny of applications revealed that 93 applicants who were already settled on land purchased/allotted between 1967 and 1996 and six applicants who declared their profession as service, business or farming were also sanctioned (2005-10) assistance under the MPAY. Thus, inadmissible expenditure of ₹ 20.25 lakh was incurred in 99 cases[70], in violation of the MPFAH Rules.

The State Government stated (October 2010) that assistance was given on the basis of declaration of the applicants that they were Gadia Lohars and did not own any house. The reply was not tenable as the correctness of the facts in the application was not verified before release of the assistance.

2.5.4 Low achievement in completion of the houses

Expenditure of ₹ 1.05 crore on incomplete houses proved unfruitful.

The MPFAH Rules (July 1999) envisage that financial assistance should be paid to the beneficiaries in three instalments i.e. after plinth level, after door level and after roof level. Since August 2009, number of instalments was revised to two i.e. after door level and after roof level. The payments were to be made after verifying the progress of work through Utilisation Certificates (UCs) indicating the completion/progress of work/utilisation of previous instalment, issued by the designated authorities.

70. Chittorgarh: 2; Jodhpur: 25; Nagaur: 17; Pali: 31; Rajsamand: 3 and Udaipur: 21.

Scrutiny revealed that no time frame was fixed for utilisation of assistance paid and subsequent instalments were released on the basis of UCs verified by designated authorities, mentioning completion stages of work. Only in the revised Rules of November 2009, it has been specified that the construction should be completed in the financial year in which assistance was sanctioned and in case of the defaulters, the action to recover the amount would be made through District Collector/District Officer. In special cases permission was granted for extension of time.

Out of 582 houses sanctioned in eight selected districts, which were physically verified by Audit, 129 were completed during 2005-10. Scrutiny revealed that 419 houses for which ₹. 73.28 lakh[71] was paid (all instalments in 286 cases and two out of three instalments in 133 cases), were lying incomplete as of April 2010. Of the 286 houses, construction was completed up to plinth level in 118 houses and up to door level in 32 houses. Of the 133 cases where construction should have been completed up to door level, 80 houses were constructed only up to plinth level. Further, construction of 34 houses in four districts[72] had not been started though all instalments were released in 26 cases and two (out of three) instalments were released in eight cases.

This indicated that the verification of the utilisation of assistance was not carried out properly by the designated authorities.

Deputy Director, Bhilwara stated (March 2010) that payments have been made after obtaining factual position from the designated officers about utilisation of earlier assistance and the final instalments have not been paid. Other District Officers stated that detailed reply would be sent after verifying the position. The State Government replied (October 2010) that notices had been issued to the beneficiaries to complete the houses.

Thus, expenditure of ₹ 73.28 lakh on incomplete houses was largely unfruitful due to release of assistance on the basis of UCs issued in a routine manner.

Scrutiny of records also revealed that 272 houses in the Districts of Nagaur (264) and Jodhpur (8) were lying incomplete as of May 2010, though the Department had sanctioned ₹ 32.18 lakh in 2005-06 (two instalments in 264 cases and one instalment in 8 cases). District Officer, Nagaur stated (March 2010) that in 264 cases first and second instalments have been paid and further instalments would be paid as per prescribed norms after physical verification of construction works. District Officer, Jodhpur stated (April 2010) that as a complaint was received regarding eight houses, the remaining instalments were not paid and the houses were lying incomplete.

The State Government informed (October 2010) that notices have been issued to the beneficiaries to complete the houses.

71. Ajmer- 53 houses: ₹ 10 lakh; Bhilwara- 170 houses: ₹ 25.13 lakh; Chittorgarh-31 houses: ₹ 5.10 lakh; Nagaur- 61 houses: 9.65 lakh; Pali- 29 houses: ₹ 6.72 lakh; Rajsamand- 45 houses: ₹ 8.03 lakh and Udaipur- 31 houses: ₹ 8.65 lakh.
72. Chittorgarh: 1, Nagaur: 12, Rajsamand: 11 and Udaipur: 10.

Thus, the District Officers neither ensured timely completion of the houses nor made efforts to release further instalments for gainful utilisation of funds released, resulting in unfruitful expenditure of ₹ 32.18 lakh.

2.5.5 Payment made without obtaining requisite documents

Payment of ₹ 4.35 lakh as assistance without obtaining caste certificate/ title deed was irregular.

Rule 5 (2) of MPFAH Rules provides furnishing of a copy of caste certificate and title deed of land by the applicant with the application.

Audit observed that District Officers did not scrutinise the applications properly and released assistance of ₹ 2.98 lakh in 17 cases (Bhilwara: 9 and Rajsamand: 8) without obtaining the caste certificate from the applicants and ₹ 1.37 lakh in 10 cases (Nagaur: 9 and Jodhpur: 1), without obtaining title deeds of the land.

The State Government stated (October 2010) that now the caste certificates and land title deeds have been obtained from the applicants. The fact remains that the assistance was sanctioned without ensuring submission of prescribed documents by the applicants.

2.5.6 Misutilisation of assistance

As per the Rule 5 (3) of the MPFAH Rules, selling of the house constructed with this financial assistance is prohibited for a period of 20 years.

However, it was noticed (March-May 2010) that no specific instructions were issued by the Department to ensure that the constructed houses were not sold. Physical verification revealed that 17 Gadia Lohars, to whom assistance of ₹ 3.13 lakh was provided during 2005-06 for construction of houses, sold the land/partially-constructed houses, as reports obtained by Audit from other beneficiaries.

The State Government stated (October 2010) that notices have been issued to recover the amount of assistance from the defaulters.

2.5.7 Irregular payment of assistance to minors/on tampered document

Rule 3 (1) of MPFAH Rules defines the family as husband/wife and dependent minor children. Thus, assistance was payable only to major members of the family.

Scrutiny revealed that assistance was paid to seven minor children, in addition to their parents. In two cases the names of the applicants were included in the family by tampering the ration card without attestation of competent authority and age of a three-year old applicant was fraudulently shown as 23 years.

The State Government stated (October 2010) that five applicants were major at the time of sanctioning the assistance and details of remaining two have been called for. The reply was factually incorrect as the documents submitted with the application showed that the applicants were minor on the date of sanctioning assistance.

2.5.8 Conclusion and Recommendation

The State Government did not have any details of the number of Gadia Lohar families who owned houses under the Maharana Pratap Awas Yojana. Weak control and ineffective implementation of the Yojana led to sanction of assistance to ineligible persons. Utilisation Certificates of the funds already released were not verified with the progress of work. This resulted in release of funds in excess of the amount due to the beneficiaries. Besides, large amount remained blocked on incomplete houses. Government should enforce better monitoring and implementation to ensure that the objective of providing shelter to nomadic tribes is accomplished.

Elementary and Sanskrit Education Department

2.6 Working of Rajasthan Shiksha Karmi Board

2.6.1 Introductory

Rajasthan Shiksha Karmi Board (Board) was registered (September 1987) under the Society Registration Act, 1958 to implement the Shiksha Karmi Project (Project) in Rajasthan. The main objective of the Project was to provide quality education upto 5th standard to boys and girls in the age of 6 to 14 years living in remote rural areas[73], where primary education was not available, by establishing new schools. Schools which were not giving appropriate result or were not functioning due to non-availability or absenteeism of teachers were also selected. Shiksha Karmis (SK) from among the local persons of villages were to be trained for teaching. The project was started in 1988.

Since July 2005, the project is fully funded from the State budget. Prior to July 2005 the expenditure was shared by Sweden International Development Authority (50 to 90 *per cent*) up to June 1998 and by the Department for International Development (UK) and Government of Rajasthan (50 to 75 *per cent)* up to June 2005.

As per the constitution of the Board, a Governing Council (GC), under the Chairmanship of Education Minister and Vice Chairmanship of Principal Secretary/Secretary, School and Sanskrit Education Department, was to be formed for framing policies, programmes and fixing targets. The Executive Council (EC) was to be set up under the Chairmanship of Principal Secretary/Secretary, for implementation of policies and budget finalisation. Secretary, School and Sanskrit Education is the Chief Executive Officer of the Board. Block Elementary Education Officers (BEEOs) were responsible for implementation of the project. The Board was running 3,646 schools in 148 Blocks during the period 2005-10.

The main activities under the project besides regular teaching were free supply of books and education material, educational tours of students and SKs, organising tournaments for various games, training of SKs and inspection of schools.

Scrutiny of records of sixteen[74] test-checked offices of BEEO for the period 2005-09 was conducted during July to November 2010 to evaluate the functioning of the Board and implementation of the Project. The results are discussed in the subsequent paragraphs.

73. Desert and hilly areas, inaccessible areas and thinly populated areas etc.
74. Balotra: 89, Bandikui: 29, Bikaner: 131, Dausa: 7, , Gangapur city: 2, Karauli: 38, Kotputli: 28, Mandor: 32, Nagaur:47, Nainwa: 7, Neem ka Thana: 33, Niwai: 16, Phagi: 6, Sambhar lake: 7, Tonk : 16 and Umrain: 4 schools- Total 492 schools.

2.6.2 Budget and expenditure

Position of year-wise receipt of grants and expenditure incurred during 2005-09 was as under:

(₹ in crore)

	Position of the Board			Position of test checked units (BEEOs)		
Year	**Budget Estimate of the Board**	**Grant received from the State Government**	**Expenditure incurred**	**Amount available with BEEOs**	**Expenditure incurred**	**Saving**
2005-06	46.00	46.00	43.51	6.11	4.74	1.37
2006-07	63.00	57.40	57.76	7.47	6.57	0.90
2007-08	98.84	62.28	59.42	9.18	7.74	1.44
2008-09	66.77	56.94	56.43	8.35	6.93	1.42
2009-10 (Unaudited figures)	49.28	46.01	42.30	5.60	5.02	0.58
Total	**323.89**	**268.63**	**259.42**	**36.71**	**31.00**	**5.71**

Source: Rajasthan Shiksha Karmi Board

In sixteen[74] test checked offices of BEEOs, funds provided for the project were not fully utilised.

Audit observed the following:

- Department did not have a database for implementation of various components of the scheme. It also did not assess requirement of schools and the targeted children to be covered under the project.

No Budget for critical school activities.

- Up to June 2005, the Board carried out the activities such as free supply of books and teaching/ learning material, organising tours of students and SKs, games/tournament etc. During 2005-09, GoR provided funds only for meeting the expenditure on salary/honorarium and other office expenses of the Board. Funds for other activities of the Board were not demanded by the Board except during 2006-07, when a sum ₹ 4.07 crore was demanded by the Board for monitoring and training of SKs. However, funds released were less than the funds demanded ***(Appendix 2.17)***. Only books were supplied under the GoI scheme 'Sarva Shiksha Abhiyan' (SSA). The State Government admitted (October 2010) that budget has not been provided for other activities continuously in the past few years.

GC did not meet even once.

- The GC and the EC were to meet once and thrice a year respectively. It was observed that during 2005-10, only three meetings of EC were held and none of the GC. In the absence of regular meetings, no decision regarding implementation of policies and programmes could be taken and no check kept on administration and finances. State Government admitted (October 2010) that regular meetings of GC and EC were not held, but reasons thereof were not intimated.

2.6.3 Nugatory expenditure on uneconomic schools

Nugatory expenditure on pay and allowances of SKs in 26 uneconomic schools.

Director, Elementary Education, Rajasthan, Bikaner decided (September 1999) that uneconomic schools, having less than 20 students should be merged with nearby schools. Audit observed that periodical review of SK schools was not conducted by the Board to implement the decision. During 2005-09, 26 uneconomic schools[75] in 16 test-checked blocks, having average students ranging between three and nineteen were not merged with nearby schools thereby resulting in avoidable expenditure of ₹ 22.20 lakh on pay and allowances of SKs[76]. Four schools had less than 10 students. State Government stated (October 2010) that merger of the schools would be done. However, no action plan for the same has been intimated.

2.6.4 Training of Shiksha Karmis

The Project envisaged selection by the Village Sabha of local villagers as SKs having passed Class VIII or more in case of male and Class V or more in case of female candidates. They were to be imparted the prescribed initial/advanced training in first four years of appointment and thereafter regular monthly/yearly training[77] as they did not have teaching experience. Considering their low qualification, regular training was necessary to develop their skills and upgrade their knowledge. Audit noticed that no regular monthly/annual training was imparted to all SKs, working in 3,646 schools during 2005-09 for want of funds. The State Government confirmed (October 2010) that monthly/yearly trainings were not organised as SKs had gained experience of three to 15 years (up to 2005-10). The reply was not tenable as yearly evaluation training and monthly plan and review meeting required under guidelines were not organised.

2.6.5 Learning material

Learning material not provided.

The project guidelines stipulated providing for teaching and learning material (TLM)[78] to schools and students every year. Audit noticed that out of 12 items of learning material for students, only books were provided to students of the schools in all test checked 16 BEEOs (during 2005-09) under SSA. In 16 test checked BEEOs, no learning material was provided to students under the project. The State Government stated (October 2010) that since TLM were available in the local market, these were not provided. The contention of the State Government was violative of the guidelines of the project.

75. BEEO, Bikaner: 17, Kotputli: 1, Mandore: 1, Neem ka thana :2, Niwai: 1, Sambhar 3 and Umrain: 1.
76. Calculated at ₹ 3,700 per month per SK per school based on minimum average honorarium.
77. 130 days teaching training for I to V class (upto first three years), 20 days training for weak Shiksha Karmis, (after completion of fourth years) 12 days regular evaluation and review training (yearly and monthly)
78. Teaching material: black board, maps, science kit, globe, etc.
    Learning material: books, slate, slate pencil, black pencil, note books, bag, wax colour, drawing copies, rubber and sharpener, geometry box, atlas, map, copies etc.

2.6.6 Inspection by Sahayogis and BEEOs

Inadequate inspections.

Clause 8.1.2 of Project guidelines stipulates provision of one Shiksha Karmi Sahayogi (Sahayogi) for 15 to 17 schools situated in each block to improve the SK's skill through training, solving daily problems and by distributing teaching material. Further, according to clause 8.6.03, the Sahayogi was to conduct monthly detailed and short duration support visits of every school. The Sahayogi was required to make three to four days detailed visit of four to five schools and surprise visits of six to seven schools every month. As such 120 visits (4x12+6x12) were to be conducted by each Sahayogi in a year.

An analysis of information furnished by 16 BEEOs revealed that the number of schools allotted to each Sahayogi for these activities varied between two and 131 as against the stipulated 15 to 17 schools. Audit observed that no visit during 2005-06 was conducted in test checked blocks. During 2006-07, no visit was undertaken by any Sahayogi except Dausa (50 visits against 120 due). During 2007-08, Sahayogis at Dausa, Karauli and Neem ka Thana made 94 visits against 360 due and during 2008-09 Sahayogis at Dausa, Neem ka Thana and Mandore made 82 visits against 360 due ***(Appendix 2.18)***. In 382 schools of 12 blocks, no visit was conducted by the Sahayogis. While admitting the facts, Board attributed (July 2010) fewer visits to non-availability of the budget provision for inspection. Further, review of some inspection reports provided to Audit mentioned about non-checking of answer books by SKs, non-use of TLM, absence of basic facilities and poor quality of teaching. No action was, however, found taken on these reports by the Department.

Further, the Board appointed (February 2007) the BEEOs as Coordinators and directed them to inspect the schools regularly and send report every month to the Board. However, no norms for inspection by the BEEOs were fixed by the Board. Audit noticed that during 2005-09, 106 inspections were carried by only two BEEOs (Neem ka Thana: 84 and Tonk: 22) but the reports of these inspections were not made available to Audit. No inspection was conducted by 14 test checked BEEO's. The State Government stated (October 2010) that reports could not be prepared and sent to Board due to work load. As a consequence, Audit could not ascertain the impact of the Project.

2.6.7 Late deposit of EPF contributions

Late deposit of EPF contribution created liability of interest and penalty.

The Employees Provident Fund (EPF) and Miscellaneous Provisions Act, 1952 binds an employer to deposit contribution of Provident Fund (PF), deducted on due date, failing which a simple interest of 12 *per cent* per annum and penalty at the prescribed rates[79] are payable to EPF Commissioner.

79.

S. No.	Period of default	Rate of penalty per annum (*per cent*)
1.	Less than two months	17
2.	More than two months but less than 4 months	22
3.	More than four months but less than 6 months	27
4.	Six months & above	37

During 2005-09, PF contribution of SKs, Sahayogis and Board employees amounting to ₹ 16.11 crore was deposited with a delay of one to 14 months. Thereby, a liability of ₹ 0.41 crore and ₹ 0.90 crore towards interest and penalty, respectively was created ***(Appendix 2.19)*.**

Further, Audit could not work out interest and penalty in eight cases, involving PF contributions of ₹ 3.56 crore, collected from the SKs but deposited late, for want of complete details in the challans. This made it difficult for employees to get correct balances at the time of withdrawal/advances. This was indicative of inefficient working of the Board. The State Government accepted the facts and stated (October 2010) that from March 2007 EPF deduction has been started at Panchayat Samiti level to save time.

2.6.8 Irregular expenditure

Irregular expenditure on pay and allowances.

Of the 44 employees of the Board, 21 (Senior Personal Assistant:1, Steno:1, Computer Operator:1, LDC: 4, Driver: 3, Mahila Task Force: 1 and Group-D: 10) were working in other offices[80] but their pay and allowances were being charged to the Board. The expenditure on their pay and allowances, amounting ₹ 0.84 crore, during April 2005 to March 2010 was irregular and compromised the effectiveness of the Board. The State Government stated (October 2010) that the project staff was working for cooperation, guidance and effective working of the project. However, no record in support of project work being performed by such staff was produced to Audit.

2.6.9 Errors in accounts

Non-reconciliation of books of accounts.

BEEO office was responsible for reconciliation of the books of accounts. Audit observed that balances of BEEO books in test checked units did not tally with the balances in the balance sheet of the Board (2005-09) ***(Appendix 2.20)***. Accounts for 2009-10 were not audited. However, Board did not fix norms for periodicity of reconciliation. Reasons were also not given for not doing periodical reconciliation. The State Government stated (October 2010) that audit of accounts for the period 2005-09 by Chartered Accountant was under progress and corrections would be made.

2.6.10 Internal control, monitoring and evaluation

Lack of internal controls.

Internal controls to ensure proper implementation of the scheme was deficient. Scrutiny revealed that (i) a perspective plan was not prepared nor were targets set in the absence of GC meeting, (ii) internal audit of unit offices had not been conducted after 2003-04; and (iii) monthly information reports from units were not collected by the Board office for

80. Education Minister: 4; Chief Secretary: 1; Principal Secretary, Education: 1; Secretary, School and Sanskrit Education: 4; Deputy Secretary (Group-I), Education: 4; Officer on Special Duty (OSD), Education (Group-I): 1; State Institute of Education, Research and Training (SIERT), Udaipur: 4; District Education Officer, Banswara: 1 and District Institute of Education and Training, Jodhpur: 1.

monitoring. Besides, no evaluation study was conducted by Department to assess the impact on education since launching of the scheme. The State Government admitted (October 2010) that internal audit was not conducted after 2003-04 and monthly information reports of achievement were not being sent to the Board office.

2.6.11 Conclusion

The Shiksha Karmi (SK) Project envisaged establishing new primary schools in remote rural areas, providing free supply of books, teaching-learning material, organising educational tours of students and SKs and tournaments for various games, training of SKs and inspection of schools. However, from 2005 onwards, no budget was provided for these critical activities except honorarium for SKs and contingencies. This affected overall implementation of the scheme. Uneconomic schools were not merged with nearby schools to avoid expenditure thereon. Yearly evaluation training and monthly plan and review meetings for Shiksha Karmis were not organised. In the test-checked 12 BEEOs, no visits by Shiksha Karmi Sahayogis were conducted in 382 schools. No norms for inspection by BEEOs were fixed and inspection by only two BEEOs out of 16 test checked was conducted. As no meeting of GC was held, perspective plan was not finalised. Working of the Board was not efficient as internal control mechanism was also weak. No evaluation study of the project was conducted by Department for impact assessment.

2.6.12 Recommendation

- Government should conduct survey to prepare a database on the different components of the scheme for optimum utilisation of funds, make adequate provisions for TLM and training, improve monitoring and conduct impact assessment for making the scheme successful.

Forest Department

2.7 Integrated Forest Protection Scheme

2.7.1 Introduction

Ministry of Environment and Forests (MoEF), Government of India (GoI) launched (2002-03) the Integrated Forest Protection Scheme (the Scheme) to develop and strengthen: (i) forestry infrastructure and capacity for effective protection of the flora, fauna, biodiversity and environment, (ii) forest fire control and management and (iii) survey, demarcation and notifying forest areas. The Department was required to prepare and submit the Annual Work Programme (AWP) to GoI for approval prior to their execution. Expenditure on the Scheme was to be shared between GoI and State Government in the ratio of 75:25. The Scheme is in progress (June 2010) and was reviewed in audit to draw assurance regarding proper and timely implementation of the scheme and utilisation of funds as per guidelines.

The review was conducted through test check (April-May 2010) of the records of the offices of the Principal Chief Conservator of Forests (PCCF), Additional Principal Chief Conservator of Forests (APCCF) and 15 units[81] (in 11 Districts), selected randomly out of 45 executive units and Forestry Training Institute, Jaipur for the year 2005-10. Audit findings are discussed in the subsequent paragraphs.

2.7.2 Financial management

Non-release of ₹ 1.99 crore by GoI and non-utilisation of ₹ 0.47 crore.

As per the Scheme guidelines, funds were to be released in two instalments in a financial year. For release of second instalment by GoI, furnishing of utilisation certificates (UCs) and progress report for incurring more than 50 *per cent* expenditure of the first instalment of current financial year along with a certificate that expenditure of at least 70 *per cent* of the instalment released has since been committed, were required.

During 2005-10, GoI sanctioned ₹ 10.65 crore (Central share: ₹ 7.99 crore; State share: ₹ 2.66 crore) and released ₹ 5.70 crore as first instalment and ₹ 0.30 crore as second instalment. The State Government released ₹ 2.07 crore. Out of ₹ 8.07 crore available, ₹ 7.60 crore[82] were spent and ₹ 0.47 crore remained unutilised as on 31 March 2010.

81. (i) Divisional Forest Officer (DFO), Ajmer, (ii) DFO, Banswara, (iii) Deputy Conservator of Forests (DCF) (Keoladeo National Park wild life) WL, Bharatpur, (iv) DCF, Dungarpur, (v) DCF (Central),Jaipur, (vi) DCF (South),Jaipur, (vii) DFO, Jodhpur (viii) DCFWL, Jodhpur, (ix) DFO, Kota, (x) DCF, Pratapgarh, (xi) DCF, Rajsamand, (xii) DCF, Sriganganagar, (xiii) DCF (Central), Udaipur, (xiv) DCF (South), Udaipur, (xv) DCFWL, Udaipur.
82. During 2005-10, ₹ 3.02 crore have been spent in test checked units.

Scrutiny of records revealed the following:

- During 2009-10, GoI released only ₹ 0.30 crore as second instalment and the State Government was deprived of the balance amount of ₹ 1.99 crore due to non-furnishing of the required UCs of the first instalment to GoI. The details of amount sanctioned, released, State share, actual utilisation and unutilised amount are given in ***Appendix 2.21.***

The State Government stated (November 2010) that the first instalment could not be utilised due to late release of funds by GoI and claim for second instalment could not be submitted. The contention of the State Government was not correct as funds were released by GoI between August and October during 2006-10. The State Government, however, took two to three months in releasing the same to the units leaving less time for its utilisation. This deprived the State Government of the Central share of ₹ 1.99 crore.

Audit observed shortfalls in the execution of important activities of all the three components of the scheme, i.e, forest fire control and management (3.33 to 46 *per cent*), strengthening of infrastructure for forest protection (12.5 to 66.66 *per cent*) and survey and demarcation (5.55 to 50 *per cent*) during 2005-10 ***(details in Appendix 2.22)***. The position is summarised below:

S.No.	Items	Total targets for 2005-10	Total achievement	Total shortfall	Percentage of Shortfall
A.	**Forest Fire Control Management (FFCM)**				
1.	Fire Line Creations (km)	1240	670	570	45.97
2.	Fire Line Maintenance (km)	1500	1197	303	20.20
3.	Fire Fighting Cell	8	7	1	12.50
4.	Watch Tower	21	19	2	9.52
5.	Construction of water storage	30	29	1	3.33
6.	JFMCs	270	260	10	3.70
B.	**Strengthening of Infrastructure for Forest Protection**				
1.	Buildings for forest guard hut/barrack (No.)	37	32	5	13.51
2.	Vehicle for Flying Squad (No.)	4	2	2	50
3.	Maintenance of existing road (km)	40	35	5	12.50
4.	Bolero (Vehicle)	10	4	6	60
5.	Range office cum residence	12	12	-	-
6.	Development of MIS	3	1	2	66.66
C.	**Survey and demarcation**				
1.	Pillars (No.)	19026	13721	5305	27.88
2.	Survey (km)	180	99	81	45
3.	Vehicle	4	2	2	50
4.	GPS	13	13	-	-
5.	Computer and accessories	18	17	1	5.55
6.	Digitization of block maps	410	410	-	-

Source: Forest Department

Out of 15 test checked units, Audit observed shortfalls of 35 *per cent* to 78 *per cent* in maintenance of fire lines in five units[83], 25 *per cent* in

83. Ajmer, Dungarpur, Jaipur (Central), Pratapgarh and Rajsamand.

construction of pillars (Udaipur Central) and 16.6 *per cent* in creation of fire lines in Jaipur (Central) Division. As a consequence, fire line creation and maintenance, training and awareness, purchase of vehicles for the flying squad, technological upgradation, development of Management Information System (MIS) and construction of pillars for demarcation of the forest land suffered and safety of forests was compromised. The targets and achievements are shown in ***Appendix 2.23***. The State Government accepted (November 2010) that physical targets could not be achieved due to non-release of second instalment by GoI.

2.7.3 Surveying

Lack of field survey for enumeration of forest.

A detailed field survey and demarcation of forest was required to be conducted under the Scheme[84] for improving productivity of the forest land and to maintain ecological balance through forest protection.

Audit observed that in AWPs for the years 2005-08, against the quantum of survey of 180 sq. kms, only 99 sq. kms was conducted. The activity of survey was not included in AWPs for the years 2008-10.

It was also noticed that a vital activity like survey was not included in the perspective plan. As against the total area of 32,701 sq.km, only 180 sq.km was considered for survey and out of that only 99 sq.km (0.30 *per cent*) could be achieved. Owing to survey in only 0.30 *per cent* forest area, the State Government could not make extensive realistic plans to cover the entire forest area. Consequently, improvement in the productivity of the forest land and maintenance of geological balance through forest protection could not be ensured in audit. The State Government stated (November 2010) that the Scheme does not provide for field survey every year and the work of demarcation of forest boundaries in notified forest area was conducted under the Scheme.

The reply was not tenable as 10 *per cent* of the project cost per year under the Scheme was earmarked for survey component. However, the Department has carried out only the work of demarcation of forest boundaries by construction of pillars.

2.7.4 Execution of the Project

The Scheme provided for deployment of fire watchers during fire season (April to June). Construction of watch towers, fire lines, purchase of fire fighting equipments and training to prevent the incidence of forest fires were covered under the forest fire control and management component of the Scheme.

Scrutiny of records revealed the following:

Wrong site selected for watch tower.

- APCCF (Development), Jaipur allotted (December 2007) ₹ 2.50 lakh to DCFWL, Jodhpur for construction of a watch tower at village Gudha

84. Regeneration survey, plantation survey, forest soil survey, socio economic survey, survey of forest produce, survey of wild animals and demarcation of forest boundaries.

Vishnoia near forest chowki. This village was out of the forest area. However, the watch tower was constructed on the bank of pond of Gudha Vishnoia village for tourist purpose. The watch tower was not constructed up to the prescribed height of 30 feet. As there was no forest area, there was no requirement of watch tower at that sight. The State Government stated (November 2010) that the area was rich in wild life, therefore, the site was selected for observance of the animals and for tourist purposes. The reply was not acceptable as under the Scheme the watch tower was to be constructed for fire protection in forest.

Unplanned deployment of fire watchers.

- Without prescribing norms for fire watchers required in specific forest area, deployment of 28 fire watchers was sanctioned (one to three fire watchers per division) by PCCF for one to three months (sanctions did not mention the specific month). Audit observed that 10 watchers were deployed (2007-09) in three divisions (Banswara, Jaipur (Central) and Jaipur (South) having 1.54 lakh ha forest area, where no case of forest fire was noticed. Audit also noticed that 98 forest fire incidents occurred in three divisions (Udaipur (South), Udaipur (Central) and Dungarpur) having 3.28 ha forest area, but no fire watcher was posted there **(*Appendix 2.24)*.** This indicated that deployment of fire watchers was done without considering the fire prone forest area and incidence of fire. Besides, fire watchers were deployed during January to March and the peak fire season (April to June) remained unprotected, indicating ad-hocism.

The State Government accepted (August 2010) that though the fire incidents occurred normally during January to June, but the fire watchers were deployed only upto March to avoid lapse of budget during the financial year. The fact remains that during the peak season of fire cases (April to June), no fire watchers were available with the Department to detect/prevent fire and the Department spent the funds only to avoid lapse of budget.

2.7.5 Diversion of funds

Irregular diversion of scheme funds.

Guidelines of the Scheme provide that maintenance costs/recurring expenditure would not be permissible. GoI sanctioned funds under the Scheme for activities approved in AWP for 2005-10. No deviation was permissible without prior concurrence of GoI.

Audit scrutiny revealed that in seven out of 15 divisions, ₹ 12.16 lakh were spent on items not included in AWP ***(Appendix 2.25)***. Funds meant for prevention and control of the forest fire were irregularly spent on repair of office buildings, publication of departmental magazine and office expenses, purchase of petrol/diesel for departmental vehicles, stationery, photo copying and payment of office electricity bills. The Department did not obtain prior concurrence of GoI and irregularly reported it as utilised for the Scheme while submitting the utilisation certificates to GoI. Further, since the Department did not quantify these items in AWP, the impact of diversion could not be analysed in audit. The State Government stated (August 2010) that these expenses were related to works of the Scheme. The reply was not tenable as the scheme guidelines did not permit recurring expenditure/maintenance cost out of scheme funds.

2.7.6 Monitoring

Delayed constitution of Monitoring Committee.

As per operational guidelines of the scheme (2002-03), a Review and Monitoring Committee (the Committee) under the chairmanship of PCCF was to be constituted for regular monitoring and evaluation of the Scheme. The Committee was required to meet at least twice a year. The Committee was constituted only in June 2009, and its first meeting could be held after one year in June 2010. As a consequence, only one meeting was held during the review period 2005-2010 against two meetings stipulated in a year. Thus, proper monitoring and implementation of the Scheme was ignored.

2.7.7 Conclusion

The Department did not implement the Integrated Forest Protection Scheme sincerely. Due to delayed release and slow spending ₹ 0.47 crore remained unutilised and the State was deprived of ₹ 1.99 crore due from GoI. Scheme funds were diverted to office contingencies. Instead of detailed field survey under the scheme for improving the productivity of the forest land and to maintain ecological balance through forest protection, survey was carried out only in 99 sq. km as against an area of 32,701 sq. km in the State. The deployment of fire watchers was without proper planning and peak season of fire incidences remained unprotected. Proper monitoring and implementation of the Scheme was ignored as the Review and Monitoring Committee was constituted in June 2009, after a lapse of six years.

2.7.8 Recommendations

- GoR should ensure timely release of funds to the units and submission of utilization certificates to the GoI so that the State is not deprived of the benefit of Central assistance.

- Effective monitoring of implementation of the plans should be enforced so that the objectives of the scheme could be achieved.