CHAPTER II

Performance review relating to Government Company

Performance Audit of the working of Punjab Water Resources Management & Development Corporation Limited

Executive Summary

The Punjab Water Resources Management & Development Corporation Limited is engaged in the installation of tubewells and lining of watercourses to supply water for irrigation in the State. The Company had been incurring losses and the accumulated loss as on 31 March 2009 was ₹ 76.09 crore. Though in February 2008, the Company had amended its Memorandum of Association inter alia to include the new objectives of promoting schemes for execution and management for recharge of ground water, anti water logging measures etc., no steps for their implementation, have been initiated by the Company:

Delay in completion of tubewells

As against the norm of five months for installation of a tubewell, there were delays ranging from one to 36 months in 217 tubewells out of 239 tubewells (91 per cent) installed during 2004-09.

Installation of tubewells in over-exploited zone

Punjab is one of the states drawing the ground water maximum and it needs to be regulated on sustainable basis, particularly in the over-exploited areas where drawl is more than recharging of the ground water. The Company installed 24 tubewells between September 2006 to February 2009 in four districts categorised as over-exploited without making arrangements for recharge of the ground water and defeating the objective of protection of the ground water.

Reduction in irrigation potential

Despite the observation of the Hydrogeological wing of the Company that in 23 tubewells installed in the nearby areas there was less discharge of water, the company neither limited the number of tubewells nor explored the alternate sites for installation of the tubewells. Due to such indiscriminate digging of tubewells and fast depleting water level in the state, 174 tubewells out of 295 tubewells drilled and developed during 2004-09 had less (25 per cent) discharge of water than the anticipated discharge and as a result against the targeted irrigation of 23,959 acres, actual irrigation was possible in 17,988 acres only.

Failure to revise the rates for sale of water

The Company had incurred operation and maintenance cost of ₹ 9.05 to ₹ 11.20 per unit of electricity consumed during 2004-09 as against water charges of ₹ one and ₹ 1.60 per unit in the Kandi and non Kandi area respectively fixed in May 2003. The Company had not brought to the notice of the State Government the high operational

cost of the tubewells vis-a-vis the low rates prescribed for sale of water so as to revise the rate of water charges.

Recovery of water charges

The present system of collection of water charges by lambardars authorised by the Revenue Department is prone to embezzlement as the Company had not laid down any system for periodical reconciliation of the amount collected and deposited in the banks by the lambardars. The outstanding dues of water charges had increased from ₹1.42 crore in 2005-06 to ₹5.35 crore in 2008-09.

Taking up of low priority project

In the case of lining of watercourses too, there were abnormal delays in completing the works. As against recommendations of a committee to give priority to water logged and saline ground water zone for taking up the work of lining of water courses and discourage such works in the areas where water balance was negative and falling (over-exploited area), the Company took up such works in the area of Upper Bari Doab Canal in Amritsar district which was declared as over-exploited by the Central Ground Water Board.

Internal Control

System of raising the bills and recovery of water charges was not effective. There was no monitoring of implementation of the projects.

Corporate Governance

There were instances of a number of the Board directors not attending the Board meetings. During the review period of five years, the Government had appointed eight Managing Directors whose tenure ranged from 29 to 665 days. Poor participation by the directors and frequent changes in the top official of Company has the risk of affecting effective functioning of the Company.

Recommendations

We have made seven recommendations which included augmentation of recharging of ground water; handing over the operation and maintenance of the tubewells to the Water Users Associations; disallowance of subsidy attributable to the Company's inefficiencies; control of establishment cost and streamlining the system of revenue collection; and revision of water charges.

Introduction

2.1 Water resources of India consist of both the surface water and the ground water. Agriculture utilises nearly 80 *per cent* of the available water resources in Punjab. A team of hydrologists observed (August 2009) that northern India's underground water supply was being pumped and consumed by human activities faster than the natural processes could replenish them. The experts further observed that ground water level was declining by as much as 33 centimeter per year over the past decade.

The Punjab State Tubewell Corporation Limited was incorporated in December 1970 as a wholly owned Government Company to provide irrigation facilities to the farmers by installation of deep tubewells. Subsequently, in 1974-75 the State Government entrusted the work of lining of watercourses to the Company. With a view to further enhance the scope of working, the Company was renamed (February 2008) as the Punjab Water Resources Management & Development Corporation Limited and the following new objectives were added to its Memorandum of Association:

- To promote schemes for execution and management for recharge of ground water, anti water logging measures, research and development of design techniques of irrigation structures, computerization and creation of data bank; and
- Improvement and management of major, medium and minor irrigation projects likely to promote the development of irrigation.

Though the Company had amended (February 2008) the Memorandum of Association by adding the above mentioned new objectives, no steps for their implementation for recharging of ground water which is fast depleting have been initiated by the Company (March 2010).

The Company is presently engaged in installation, operation and maintenance of tubewells, sale of water to the farmers at the rates fixed by the State Government and lining of watercourses by executing the projects approved by the Government of India under the Command Area Development and Water Management Programme[♣] (CADWM).

The Management of the Company is vested in the Board of Directors (Board) consisting of 15 directors appointed by the State Government. As on 31 March 2010, there were 13 directors. The Managing Director is the Chief Executive Officer of the Company and is assisted by one Superintending Engineer at the Head Office and four Superintending Engineers in the field offices.

♣ Programme of Government of India for lining of water courses.

Scope of audit

2.2 The present performance audit review was conducted during November 2009 to May 2010 to assess the performance of the Company during the period from 2004-05 to 2008-09*. The audit was conducted by test check of records in the head office of the Company and nine out of the 16 divisional offices selected on probability proportion to size with replacement sampling technique. The selected divisional offices covered 65.27 *per cent* of the expenditure on installation of tubewells and 78.69 *per cent* of the expenditure on lining of water courses incurred during 2004-09.

Audit objectives

2.3 The audit objectives were to ascertain whether:

- Installation, operation and maintenance of the tubewells were executed in efficient, effective and economical manner;
- Functions relating to lining of watercourses were carried out as per priorities and norms prescribed by the State Government and Government of India;
- Funds for executing the works were utilised efficiently and economically;
- The Company billed for sale of water at the prescribed rate and its prompt realisation; and
- Prevalent internal control system in the Company was adequate and effective.

Audit criteria

2.4 Norms and instructions contained in the following were used as criteria**:**

- Memorandum of Association and long term and short term plans of the Company;
- Directives as well as policies of the Government of India/State Government; and
- Targets set under various schemes for installation of tubewells and lining of watercourses.

Audit methodology

2.5 Audit used a mix of the following methodologies:

- Scrutiny of minutes/ agenda of meetings of the Board and sub committees;
- Scrutiny of contracts relating to execution of works by the contractors;

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* Figures (operational and financial) for the year 2009-10 have not been compiled by the Management (August 2010).

- Examination of records relating to sanction and execution of the projects for installation of tubewells and lining of watercourses;
- Scrutiny of records relating to utilization of the funds;
- Scrutiny of records relating to raising of bills for sale of water to the beneficiaries; and
- Interaction with the Management and issue of audit queries.

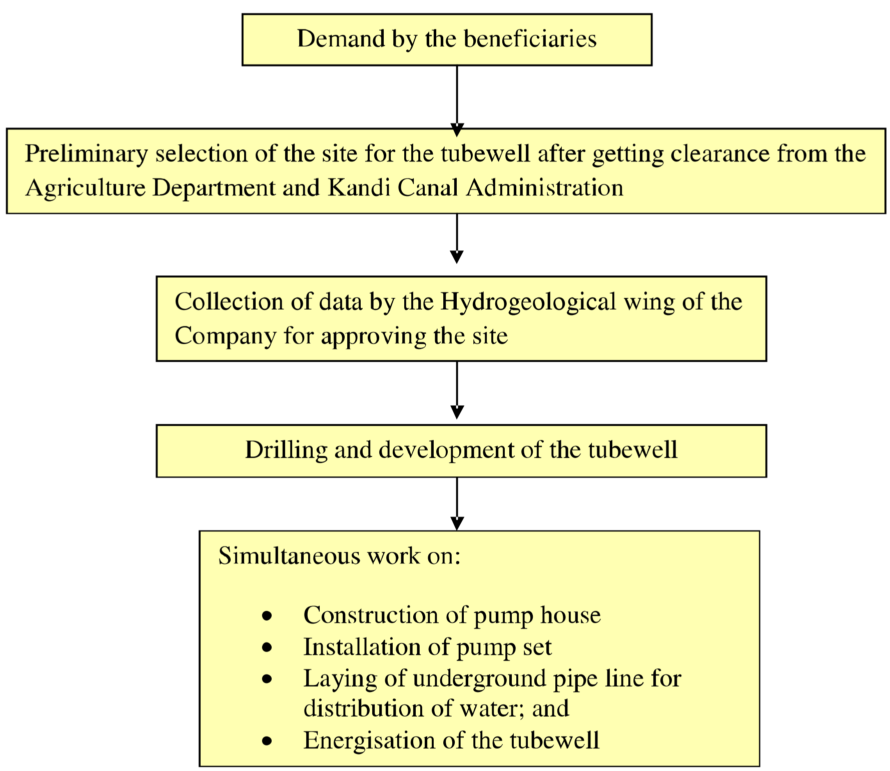
Audit findings

The audit finding were reported to the Management/Government in May/July 2010 and discussed in the Exit Conference on 28 July 2010 which was attended by Managing Director, Financial Adviser and Senior Hydrogeologist of the Company. Views of the Management have been duly considered while finalizing the review.

The audit findings are discussed in the succeeding paragraphs:

Implementation of the tubewell programmes

2.6 The installation of a deep tubewell involves the stages of drilling and development, construction of pump house, installation of pump set, construction of underground water carrier channels and energisation. After deciding the site for a tubewell, geological and hydrogeological data is collected by hydrogeological wing of the Company. The Company carried out the activity of installation of tubewells utilising the funds received from the State Government. The stages involved in installation of the tubewells are given in the following flow chart:



The installation of tubewells was carried out by eight[†] divisional offices of the Company. The Company planned to install 312 tubewells at an estimated cost of ₹ 98.48 crore (revised to ₹ 110.97 crore) under nine schemes (six State plan schemes and three Punjab Nirman Programme schemes) during the period from 2004-09 to create irrigation potential in 41,704 acres of area against which 239 tubewells were completed and irrigation potential in 27,474 acres of area was actually created. The details showing the tubewell schemes planned and executed during 2004-09 are indicated in ***Annexure 7***.

The reasons for non completion of balance 73 tubewells analysed in audit were as follows:

- Drilling and development work on 17 tubewells was not initiated.
- In 18 tubewells, the pipeline for supply of water was not laid, though the tubewells had been energised.
- Civil works for 22 tubewells were not started.
- In seven tubewells, pump sets were not installed.
- Nine tubewells had not been energised by the State Electricity Board.

It was further observed that against the prescribed period of five months for installation of a tubewell, 217 out of 239 tubewells were installed after the delay of one to thirty six months, as discussed in para 2.6.5 *infra*.

Some of the major schemes undertaken by the Company during the period of review were examined in audit and the deficiencies noticed are discussed in the succeeding paragraphs:

Installation of 100 deep tubewells

2.6.1 The project for installation of 100 tubewells in four[‡] districts was approved (June 2004) by the Company at an estimated cost of ₹ 21.39 crore. The installation of tubewells was to be completed in a phased manner in three years i.e. 35 tubewells each during the first and second year and 30 tubewells in the third year. The Company assessed that there was acute shortage of water in the region and water level was very deep. With the installation of these tubewells, the Company proposed to bring additional area of 14,820 acres under cultivation. The first instalment of funds (₹ 4.08 crore) was received from the State Government in August 2005. The Company took up the work of drilling and development of the tubewells in August 2005. Against the 35 tubewells targeted for the first year, no tubewell could be energised till March 2006. The Company revised (June 2006) the project cost to ₹ 32.70 crore due to escalation in the prices of material etc. The State Government further released ₹ 26.88 crore during March 2006 to September 2008 to the Company. The schedule period of completion of the scheme was revised (April 2009) to 31 March 2010. The Company, however, completed 95 tubewells at a cost of ₹ 30.45 crore upto 31 March 2009.

[†] Tubewell Construction Divisions at Hoshiarpur, Jalandhar, Ludhiana, Malerkotla, Pathankot, Ropar and Operation and Maintenance Divisions at Chandigarh and Hoshiarpur.

[‡] Gurdaspur, Hoshiarpur, Nawanshehar and Ropar.

We observed that instead of taking up the work of installation of tubewells in the phased manner, the Company decided (June 2006) to take up the work of drilling and development of all the 100 tubewells simultaneously and complete it by 31 December 2006. This resulted in delay in creation of irrigation potential as well as extra expenditure as below:

- With the available funds of ₹ 19.23 crore released by the State Government the Company could complete 62 tubewells upto 31 March 2007 against which only 26 tubewells were actually completed. Failure to do the work in a phased manner resulted in delay of one to 21 months in completing the balance 34 tubewells (after excluding two abandoned tubewells). This resulted in delay in creation of the irrigation potential in 3420 acres of area.

- The Company got the work of drilling and development of 65 tubewells through private contractors and 33 tubewells were drilled departmentally. Audit scrutiny revealed that had the drilling and development of tubewells been done in a phased manner with the available machinery (eight departmental rigs for drilling of tubewells), the Company could have drilled and developed 56 tubewells departmentally (as against 33 tubewells drilled departmentally) during three years. Thus, failure of the Company to undertake the drilling and development work in a phased manner resulted in extra expenditure of ₹ 2.48 crore.

Failure to undertake drilling and development work departmentally in phased manner resulted in extra expenditure of ₹ 2.48 crore.

The Management stated (July 2010) that it had taken up the matter with the State Government for release of funds required for the purchase of machinery as most of the drilling machinery available with the Company was outlived and the Company was unable to drill the tubewells within the scheduled period, and hence it was decided to get the tubewells drilled through private agencies. The reply is not acceptable in view of the fact that since the Company failed to take up the work in a phased manner, it had to get the tubewells drilled through private parties. Further, the contention that the machinery was outlived is not acceptable as this was an after thought and was never brought to notice of the Board at the stage of taking up of work.

Installation of eight deep tubewells in Garhshankar block

2.6.2 The Company prepared (September 2004) a project report for installation of eight deep tubewells in Garhshankar block of Hoshiarpur district at an estimated cost of ₹ 3.93 crore (revised to ₹ 5.11 crore in September 2007). The tubewells were to be installed by March 2007.

The Company completed the work of drilling and development and construction of pump house of the tubewells during June 2005 to May 2006. In the meantime, the Company had placed (10 April 2006) an order on Trade Linkers Amritsar[§], for supply of eight pump sets. The supplier was required to supply the pump sets by 15 June 2006. The supplier requested (September 2006) for grant of extension in the delivery period on the plea of incessant rains with floods in Maharashtra and labour strikes in their manufacturing unit. The Company merely on the request of the supplier and without verifying the facts extended the delivery period upto 15 October 2006. The

§ The agency is authorised supplier of the main supplier viz. Calama Pumps, Mumbai.

supplier again requested (February 2007) to grant extension upto 16 February 2007 on the same grounds furnished earlier which was also accepted by the Company. The supplier supplied six and two pump sets in December 2006 and February 2007 respectively. There was, thus, delay of six to eight months (from the scheduled delivery period) in the supply of eight pump sets. We noticed that:

- three pump sets were installed during February/March 2008 i.e. after a delay of 12 to 13 months from their receipt.
- one pump set was irregularly diverted to another tubewell. As a result, another pump set was to be procured and installed (October 2008) after a delay of 27 months.

The delays resulted in blocking up of capital of ₹ 3.50 crore (drilling and development cost) during the delayed period of six to 27 months.

The Management stated (July 2010) that the delay was on the part of Punjab State Electricity Board (PSEB) as the electric poles, transformers etc. were not available in their stores. The reply of Management is not specific to the audit observation of delay in supply and installation of pump sets.

Installation of 119 alternate tubewells

2.6.3 The Central Ground Water Board (CGWB) recommended (March 2005) that drawl of the ground water in the over-exploited zones[⊗] be regulated on sustainable basis by making arrangements for recharge of water.

The Company installed 24 tubewells in four districts which were over-exploited, against the recommendations of Central Ground Water Board.

The Company approved (June 2006) a project for installation of 119 alternative tubewells[♣] in 19 blocks and proposed to bring 14,875 acres under irrigation with the stipulation that these alternate tubewells would not affect the ground water status. The Company completed installation of 98 tubewells upto 31 March 2009. We observed that out of these, 24 tubewells at a cost of ₹ 5.22 crore were installed during September 2006 to February 2009 in four districts[ℵ] which were categorised as over-exploited areas. No arrangements for recharge of these tubewells were made by the Company.

The Management stated (July 2010) that installation of alternate tubewells even in the over-exploited area had not been prohibited by the CGWB and discharge of the abandoned and dried up tubewells had been accounted for in the figure of water exploited in these areas. The reply is not acceptable as the CGWB had recommended drawl of water in over-exploited zone on sustainable basis which was not done by the Company. Further, the inclusion of discharge of abandoned tubewells in the figures of water exploitation does not imply that Company should install the alternate tubewells in these areas without making arrangements for recharge of water.

⊗ Area in which drawl of ground water is more than its recharge.

♣ Tubewells installed at site near to the dried and abandoned tubewells.

ℵ Patiala, Sangrur, Nawanshehar and Hoshiarpur.

Reduction in irrigation potential

2.6.4 After the selection of site for digging the tubewell and obtaining clearance from the Agriculture Department and Kandi Canal Administration, the Hydrogeological wing of the Company assesses the availability of water discharge. The discharge of the tubewells as per the project report, actual discharge obtained and the area brought under irrigation are given in ***Annexure 8***.

Improper selection of sites for digging of tubewells resulted in creation of irrigation facility of 17,988 acres against the targeted irrigation of 23,959 acres.

Out of 295 tubewells on which the drilling and development work was completed during 2004-09, the Company obtained less discharge of water than the estimated quantity in 174 tubewells. According to the norms, the Company was to bring 23,959 acres of area under irrigation by the 174 tubewells installed at a cost of ₹ 61.98 crore during the period from 2004-05 to 2008-09. It was observed that the actual discharge of the tubewells was less by 24.92 *per cent* than the anticipated discharge and as a result actual irrigation was possible in only 17,988 acres against the targeted irrigation of 23,959 acres. Further, audit scrutiny revealed that immediately before the installation of tubewells, the Hydrogeological wing of the Company had noticed less discharge of water in 23 tubewells already in operation at the nearby sites. The Company, however, did not take cognizance of the same.

The Management stated (July 2010) that the schemes were framed 2-3 years before implementation and the project were started since 2006-07 when funds were received from the State Government. Thus, due to depletion of water level, the tubewells did not yield the projected discharge and thus the area under irrigation had decreased. However, the fact remains that the Company did not take cognizance of findings of its Hydrogeological wing.

Delay in completion of the tubewells

2.6.5 The Company had prescribed a time period of five** months for installation of a tubewell. After successful development of the tubewell, the work of laying of pipeline is taken up so as to make availability of water up to the channels in the fields of beneficiaries. The following table depicts the extent of delay in completion of the tubewells:

** 20 days for initial formalities i.e. obtaining land from the farmers etc, one and a half month for drilling and development and two and a half month for completion of civil works, including laying of underground pipelines.

Sl. No.	No. of tubewells	Delay in months
1	40	one to three
2	47	Above three and upto six
3	44	Above six and upto nine
4	21	Above nine and upto twelve
5	14	Above 12 and upto 15
6	19	Above 15 and upto 18
7	23	Above 18 and upto 24
8	9	Above 24 and upto 36
Total	**217**	

The Company took excess time of one to 36 months in installation of 217 out of 239 tubewells (90.79 *per cent*) completed during 2004-2009. Audit scrutiny revealed that 86 tubewells could not be completed and put to use for one to 19 months even after energisation due to delay in laying of the pipelines. It was further noticed that laying of the pipeline was delayed due to delay in inviting tenders (one to 28 months in 63 cases) and delay in allotment of works (one to 30 months in 69 cases). This deprived the farmers of potential irrigation in 10,306 acres. Besides, an amount of ₹ 17.93 crore spent on the construction works remained blocked during the period of delay. This also resulted in loss of interest of ₹ 33.96 lakh on the amount remained blocked during the delayed period.

The Management stated (July 2010) that before inviting tenders for laying the pipelines, the process for tendering was to be completed which took two to three months. The reply is not acceptable as due to lack of proper planning and close monitoring, the Company failed to install the tubewells within the period of five months.

Non involvement of the beneficiaries

2.6.6 According to the National Water Policy-2002, involvement of the beneficiaries should be encouraged from the project planning stage itself. In the case of lining of water courses, the Company involved (from April 2004) the beneficiaries by requiring them to contribute 10 *per cent* of the cost of lining works. However, the Company did not involve the beneficiaries in installation of the tubewells and the entire capital cost was incurred by the Company. We noticed that in similar cases of installation of tubewells by the Gujarat State Water Resources Development Corporation, the beneficiaries were contributing 15 *per cent* of the capital cost of the tubewells for getting the benefit of irrigation. Thus, the Company due to its failure to involve the beneficiaries in the installation of tubewells lost an opportunity to generate additional funds of ₹ 11.10 crore (at the rate of 10 *per cent* of the total capital cost of ₹ 110.97

Failure to involve beneficiaries in the installation of tubewells resulted in losing of an opportunity to generate funds of ₹ 11.10 crore.

crore) during 2004-09. Further the involvement of farmers would create a sense of belonging facilitating optimum utilisation of the scarce water resources.

The Management stated (July 2010) that the tubewells were installed in the area where the economic condition of the farmers was poor and they were unable to contribute the cost of installation of the tubewells. The reply of the Management is not based on records as it had neither ascertained the economic condition of the farmers nor determined any parameters for taking contribution from them towards the cost of tubewells.

Even 15 years after the decision of State Government, the Company could not hand over operation and maintenance of tubewells to Water Users Associations.

2.6.7 The State Government decided (November 1995) to hand over the operation and maintenance of tubewells to the Water Users Associations (beneficiaries) with a view to reduce the burden of subsidy. Accordingly in the project estimate for installation of 100 tubewells approved in February 2005, the Management stated that after successful operation of the tubewells, the operation and maintenance of the tubewells would be handed over to the beneficiaries for which necessary willingness/understanding had already been obtained from them. It was noticed by us that the Company had not transferred the operation and maintenance of the tubewells to the beneficiaries so far (31 March 2010). As of March 2009, 1700 tubewells were in operation but the operation and maintenance of the tubewells was continuously being done by the Company and an expenditure of ₹ 87.43 crore was incurred during the period 2004-09.

The Management stated (July 2010) that as per policy of the State Government, the Company made efforts during 1996-97 to hand over the operation and maintenance of the tubewells to the beneficiaries, but most of them were reluctant to take over the operation and maintenance of the tubewells. It was also stated (July 2010) that expenditure on operation of the tubewells was being met by the Company from the amount of sale of water. The reply is not based on facts as the income from the sale of water was ₹ 17.62[ϒ] crore during the period 2004-09 as against the corresponding operational and maintenance cost of ₹ 87.43 crore. The Management also failed to implement the participation of the beneficiaries in the schemes for which willingness/understanding were obtained in 2000-01.

In order to reduce the burden of subsidy on the State Government, there is an urgent need to increase the rates of sale of water so that the gap is reduced and the beneficiaries are pursued simultaneously by framing policy to hand over the operation and maintenance of the tubewells in a phased manner to them.

Sale of water

2.7 According to the Memorandum of Association, the Company was to sell water at the rates, terms and conditions determined by it from time to time. However, the sale of water from the tubewells of the Company were continued to be at the rates fixed by the State Government similar to the rates for canal water fixed for the Irrigation Department. The Water Policy of the State Government, 2008 also provided that the water rates should be fixed and revised from time to time with a view to recover at

ϒ Figure as per annual accounts.

least the annual maintenance and operational costs. The following points were noticed in audit.

Failure to revise the rates for sale of water

Against ₹ 9.05 to ₹ 11.20 per unit of electricity incurred, the Company recovered ₹ one to ₹ 1.60 per unit of electricity for sale of water during 2004-09.

2.7.1 We observed that the Company had incurred operation and maintenance cost of ₹ 9.05 per unit to ₹ 11.20 per unit of electricity consumed during 2004-09 as against the water charges of ₹ one and ₹ 1.60 per unit of electricity in the kandi[††] and non kandi area respectively fixed in May 2003. The Company had neither exercised its inherent power to revise the rates from time to time nor taken up the matter with the State Government for revision of the rates.

The Management stated (December 2009) that revision of the rates was done by the State Government after getting proposal from the Company. We noticed that the Company had neither moved any proposal nor impressed upon the State Government to revise the rates in view of the high operational cost of running and maintenance of the tubewells. The revision could also result in judicious use of the scarce irrigation resources and act as a deterrent against liberal use of water by the farmers.

Recovery of water charges

2.7.2 The following table indicates the amount recoverable and recovery made on account of sale of water by the divisional offices for the five years ending 31 March 2009:

(₹ in lakh)

	Opening Balance	Demand for the year	Total amount due	Actual recovery	Recovery (in percentage)	Closing balance
2004-05	98.63	370.50	469.13	327.39	69.79	141.74
2005-06	141.74	248.86	390.60	241.54	61.84	149.06
2006-07	149.06	395.14	544.20	217.90	40.04	326.30
2007-08	326.30	349.58	675.88	231.84	34.30	444.04
2008-09	444.04	358.77	802.81	267.36	33.30	535.45[‡‡]
Total		**1722.85**		**1286.03**		

It would be seen from the above that the outstanding dues have progressively increased from ₹ 1.42 crore in 2005-06 to ₹ 5.35 crore in 2008-09. The percentage of recovery of dues declined drastically from 69.79 in 2004-05 to 33.30 in 2008-09. Despite the decision of the Board (January 2005) to stop supply of water from the tubewells to the farmers who had not made the payment of water charges, no action was taken to implement the decision.

Our scrutiny revealed the following deficiencies:

- The Company had neither determined the terms and conditions for the sale of water to the beneficiaries nor fixed the time schedule for recovery of the dues on account of sale of water. The Company had not made any provision for levy of penalty, surcharge etc. for non /delay in payment of water charges. The demand

[††] Semi-mountainous area.

[‡‡] excluding ₹ 25 lakh recoverable as per books of accounts at Head office.

for water charges was raised on the beneficiaries in the form of 'khataunies' for two crops, Kharif and Rabi, separately. The tubewell operator was issuing the sale bill to the beneficiaries for the use of tubewell water. The water charges were collected by the 'lambardars' authorized by the State Revenue Department who charged commission at the rate of three *per cent* of the amount of sale of water collected from the beneficiaries. We found that the Company had not prescribed any system:

- to check the authentication of the sale bills issued to the beneficiaries;
- to issue receipt books to the lambardars so that they could issue receipts in token of having collected the amount from the beneficiary farmers;
- to reconcile the period and amount of collection made by the lambardars and deposited in the bank account of the Company;
- to transfer the amount of water charges lying in the current account of the divisions to the head office of the Company.

- The system of recovery of water charges was prone to embezzlement as the Company had not laid down any system for periodical reconciliation of the amount realised and deposited into the bank by the lambardars.

  The Management stated (July 2010) that the Divisional Engineers (DEs) had been instructed to countersign the bills of sale of water checked by the revenue staff of the divisions and to reconcile the period and amount collected by the lambardars and deposited in the bank. It was further stated that the Company was in the process of taking up the matter with the State Government for the issue of receipt books to the lambardars for collecting the water charges and that all the DEs had been advised to make vigorous efforts for effecting the recovery from the beneficiaries on account of sale of water and to stop supply of water to those farmers who had not made the payment of water charges. We, however, do not agree with the reply as instead of taking up the matter with the State Revenue Department, the Management should have issued the receipt books to the lambardars and instructed them for further issuance of receipts to the beneficiaries in token of acknowledgement of recovery of the water charges.

- The recovery of dues ranged between 31.66 *per cent* and 85.73 *per cent* in four[§§] test checked divisions of the Company. In two[***] divisions, the entire amount on account of sale of water was recovered from the farmers, which means that it was possible to realise the dues in full.

- The Management apprised (August 2007) the Board that it was almost impossible to recover ₹ 0.61 crore on account of sale of water pertaining to the old period of 10 to 25 years. The Board directed (August 2007) the Financial Adviser to analyse the cases of old dues to ascertain that if the employees responsible were still in service, necessary action could be taken to recover the amount from them. But no action could be taken in this regard as beneficiary wise details of ₹ 0.61 crore were not available with the Company.

[§§] Tubewell Construction Division at Pathankot and Ropar and Operation and Maintenance Division at Chandigarh and Hoshiarpur.

[***] Tubewell division Ludhiana and Jalandhar.

- Mention was made in the Report of the Comptroller and Auditor General of India for the period ending 31 March 1998 that for the recoverable water charges of ₹ 25.24 lakh, the details of beneficiaries and the period to which it pertained was not known to the Company. During examination of the paragraph by the Committee of Public Undertakings (COPU), the Company assured (June 2000) that the details of recoverable amount were being located and necessary action would be taken to set right the figure. The COPU settled (October 2003) the paragraph on the assurance given by the Company. We, however, noticed that the Company did not initiate action to identify the beneficiaries from whom the amount was recoverable. The matter has also not been placed to the Board either to write off the irrecoverable amount or further action to be taken in the matter.

Construction of field channels - Lining of Watercourses

2.8 Field channels convey water from the outlet of the Government controlled distributaries to the individual farmer's land. The field channels are lined to avoid seepage, leakage in conveyance system, evaporation losses and water loss through cuts and breaches which creates water logging in adjoining lands reducing their production capacity. Upto 2003-04, the Government of India (GOI) provided 50 *per cent* of the cost of the project as grant and the remaining 50 *per cent* was borne by the State Government. The financing pattern was changed (February 2004) by the GOI and the share of State Government was reduced to 40 *per cent* and the remaining 10 *per cent* was to be contributed by the beneficiary farmers. The Company executes the work of lining of field channels through eight field divisions. During the five years ending 31 March 2009, the Company incurred expenditure of ₹ 287.28 crore on lining of watercourses. The targets for the lining of watercourses and progress achieved there against in respect of the projects taken up during the last five years ending 31 March 2009 are given in ***Annexure 9.***

Analysis of the annexure revealed the following:

- There was delay of one year each in the two projects (Kotla Branch and Eastern Branch) commenced and completed during 2004-09 which resulted in delay in providing benefits of potential irrigation to the farmers in 23,651 and 3,482 hectares of Kotla Branch and Eastern Branch respectively during the delayed period.
- In the case of Upper Bari Doab Canal (UBDC) project, the Company had completed only 12 *per cent* of the work though the scheduled completion period lapsed in 2007-08 (discussed in the paragraph 2.8.1)

The Management stated (March 2010) that keeping in view the plan provision made by the State Government in the annual budgets for every year, the targets for lining of the watercourses were fixed. It was also stated that these schemes were welfare schemes and the benefit was realised in the long run in the shape of higher production of food grains and general uplift of the farmer's community. The reply is not specific as the State Government delayed the release of funds received from the GOI to the Company (as discussed in the paragraph 2.9.2). Due to time over run, the cost of the projects had gone upward, besides the farmer community was deprived of the benefits of higher production during the period of delay.

Some of the major schemes undertaken by the Company were reviewed in audit and the deficiencies noticed are discussed below:

Lining of watercourses of Upper Bari Doab Canal - Taking up of low priority project

2.8.1 The project estimate for lining of water courses of the Upper Bari Doab Canal system (UBDC) was prepared by the Company in May 2001. The Company proposed to cover 1,84,861 hectare of land and the cost of the project was assessed at ₹ 159.85 crore. The project was approved by the GOI in February 2004. The UBDC was passing through the district Amritsar and the CGWB had observed (March 2004) that all the blocks in the district were over-exploited.

The Company had not conducted any survey to identify the priority areas for lining of the watercourses. The Committee constituted (February 1987) by the State Government to evaluate the impact of lining of water courses recommended (March 1987) to give priority[†††] to the water logged and saline ground water zones for taking up the work of lining of water courses. The committee further observed that in the area, where water balance was negative and falling, lining of watercourses would further aggravate the falling trend.

The Company took up lining of water courses in Amritsar district a low priority area in disregard to recommendations of a committee set up by State Government.

Disregard to the recommendations of the Committee, the Company took up the work of lining of water courses in the UBDC project in Amritsar district in April 2005. Though the project was scheduled to be completed by 31 March 2008, the Company could complete only 3.70 *per cent* of the work upto March 2007 and intimated the State Government in May 2007 that the beneficiaries were reluctant to deposit their 10 *per cent* share which had affected the progress of work. Scrutiny in audit, however, revealed that in most of the area under the UBDC project, the farmers had been meeting their demand for water through private tubewells already installed and there was no demand for construction of watercourses.

We noticed that the Company could complete 12.42 *per cent* of work on the project upto March 2009. The State Government requested (March 2009) the GOI for extension of the completion date because of poor response of the farmers of the area. The GOI revised the date of completion of the project to 31 March 2012. Due to deferment of completion schedule, the construction cost would further increase to ₹ 358.57 crore.

Thus, by taking up the low priority project of UBDC, the Company has not only delayed the project but it also failed to create irrigation potential during the period March 2004 to February 2009 in the high priority area of Abohar branch (saline and brackish) for which the work has been proposed to be taken up in 2009-10.

The Management stated (July 2010) that the main purpose of lining of watercourses was to save water due to seepage and for equitable distribution of water to all the

[†††] Priority fixed by the Committee – i) water logged zones ii) saline ground water zone iii) border area iv) riverian areas v) sandy zones and vi) other areas not covered.

beneficiaries. The reply is not acceptable as undertaking of lining of watercourses in the over-exploited zone was against the recommendations of Committee. The seepage from unlined watercourses would help in improvement of water level in the over-exploited zones.

Lining of watercourses of Kotla Branch and Eastern Branch Canal - Diversion of funds

2.8.2 The Government of India approved (February 2004) two projects (Kotla Branch and Eastern Branch) for the lining of watercourses to create irrigation potential in 54,564 and 51,001 hectares at a cost of ₹ 49.84 crore and ₹ 46.51 crore (revised to ₹ 78.24 crore and ₹ 73.26 crore) respectively. The terms and conditions of the Central grant provided that the funds would not be diverted for the purposes which are not related to Command Area Development and Water Management (CADWM) programme. The GOI desired to complete the work in three years by 2006-07. We noticed that the Company did not fix targets for the work so as to complete the projects within the prescribed time. The construction works were taken up in 2004-05 and completed in 2007-08 i.e. after a delay of one year. Resultantly, the farmers were deprived of the potential irrigation during the delayed period and the establishment cost also exceeded the projected cost due to delay in completion of the work.

Scrutiny of records of the completed projects revealed that the work on four[‡‡‡] components of the projects involving an amount of ₹ 13.27 crore (Kotla ₹ 6.70 crore and Eastern canal ₹ 6.57 crore) were not taken up by the Company. The funds saved were diverted towards meeting the establishment expenditure of the Company in violation of the guidelines of CADWM Programme.

The Management stated (July 2010) that the funds of ₹ 13.27 crore were not claimed from the GOI for executing the four components. It was further stated that the expenditure on these components related to the Agriculture and Irrigation Department of the State and the savings had been charged to the establishment expenses.

Audit scrutiny, however, found that the Company had received ₹ 13.27 crore for execution of the four components included in the projects. The Company should have refunded the funds received for the four items instead of diverting them for the establishment expenses.

Financial management

2.9 Efficient financial management provides for establishing a sound system of control over funds and it serves as a tool for decision-making and optimum utilisation of the available resources. Audit analysis revealed the following deficiencies in the financial management:

‡‡‡ i) Soil surveys ii) field drain construction iii) adaptive research and trials iv) subsidy to small, marginal and SC/ST farmers for installation of shallow tubewells.

2.9.1 Financial position and working results

- The Company had finalised its accounts only upto 2007-08. The financial position and working results for the five years ending 31 March 2009 (figures for 2008-09 were provisional) are given in ***Annexure 10* and *11*** respectively. It would be observed that the Company had continuously incurred loss during the last five years and the accumulated losses increased from ₹ 63.46 crore as on 31March 2005 to ₹ 76.09 crore as on 31 March 2009. As analysed in audit, one of the main reasons for the accumulated losses was non inclusion of the depreciation in the subsidy given by the State Government.
- The Company had not framed any guidelines for capitalization of the expenditure on tubewells completed from time to time. The figure of capital work in progress continued to accumulate which increased from ₹ 30.44 crore in 2004-05 to ₹ 51.28 crore in 2008-09. Scrutiny in audit revealed that:
  - ➢ An amount of ₹ 10.35 crore related to 11 schemes of tubewells completed upto 2003-04, but the amount was not capitalised till 2008-09.
  - ➢ In the scheme of installation of 100 tubewells, 95 tubewells were completed upto 31 March 2009. Against ₹ 43.18 crore to be capitalised, only ₹ 20.02 crore were capitalised leaving ₹ 23.16 crore excess in work in progress.
- The State Government provided funds in the shape of share capital to the Company for the installation of tubewells under the State plan schemes. As on 31 March 2009, the authorised share capital of the Company was ₹ 125 crore which was fully paid up. During 2004-09, the State Government released ₹110.90 crore towards share application money for the installation of tubewells, but the Company had not issued the shares so far (June 2010) even though the authorised share capital was increased to ₹ 300 crore in January 2010.
- The Company is mainly dependent on operation and maintenance subsidy given by the State Government. As may be seen from the ***Annexure 11***, the State Government provided subsidy to the Company to meet the gap between the expenditure on operation and maintenance of the tubewells (excluding depreciation) and the income from sale of water. We further noticed that :
  - ➢ While working out the claim for subsidy, the basis of allocation of the establishment expenditure of the head office and tubewell construction divisions was neither defined nor adopted uniformly. This was arbitrarily increased from 38 *per cent* (head office) and 60 *per cent* (tubewell divisions) in 2002-03 to 53 *per cent* (head office) and 75 *per cent* (tubewell divisions) in 2005-06 and onwards.
  - ➢ Due to incorrect calculations, as on 31 March 2006, the Company worked out the recoverable amount of subsidy as ₹ 32.01 crore instead of ₹ 34.16 crore worked out by Audit. The Company admitted (April 2010) the error and stated that the difference of ₹ 2.15 crore had been rectified in the Company's accounts for the year 2009-10. However, the Company had not yet (August 2010)

taken up the matter with the State Government to get the differential amount.

2.9.2 *Delay in release of grants by the State Government*

The Centrally Sponsored Command Area Development and Water Management (CADWM) programme provided that in no circumstances, funds would be diverted for activities not related to the CADWM programme. The release of central assistance was to be regulated keeping in view the matching grant (40 *per cent*) released by the State Government from time to time as discussed in paragraph 2.8 infra. The Company executes the work of lining of water courses through its field divisions which prepare estimates for the lining of water courses on the basis of Common Schedule of Rates (CSR) and premium applicable thereon. The tenders are invited through press and work is allotted to the lowest tenderer.

We observed that the GOI released ₹ 133.33 crore to the State Government during 2004-09 for lining of the watercourses in five projects to be done by the Company. The State Government was required to contribute ₹. 106.66 crore and release ₹. 239.99 crore to the Company. Against this the State Government released only ₹ 184.23 crore (including the State fund of ₹ 85.15 crore), which was short by ₹ 55.76 crore.

In eight cases, funds amounting to ₹ 110.43 crore (ranging between ₹ 2.02 crore to ₹ 60.91 crore) were sanctioned by the State Government after a delay of two to six months of their receipt from the GOI. After the sanction of funds by the State Government, there was a delay of one to three months in drawl of funds from the treasury by the Company. As a result, the executions of the works were delayed and in the meanwhile there was increase in the CSR. This resulted in extra expenditure of ₹ 1.42 crore[§§§] during 2004-09.

2.9.3 *Utilisation of funds for post lining maintenance of water courses*

The National Water Policy 2002 emphasized the need for progressive involvement of farmers in the management of irrigation for increasing the agricultural productivity and water use efficiency. The farmers' participation in irrigation management was to be ensured so that the pressure of maintenance was reduced on the State Government. According to the instructions (March 1997) of the GOI, an amount of ₹ 500 per hectare (₹ 600 per hectare from April 2004) in the ratio of 45:45:10 was to be contributed by the GOI, the State Government and the beneficiaries as one time functional grant (OTFG) and was to be released in favour of the concerned Water Users Association (WUA) of the outlet after completion of the work. The fund so created was to be kept in fixed deposits (FDR) pledged in favour of the Divisional Engineer (DE) and the interest earned was to be utilized for the repair and maintenance of the lined watercourses. After the expiry of lock- in-period of three years, the principal amount of FDRs and interest thereon were to be made separately in favour of WUA. No expenditure on account of maintenance of watercourses has been incurred by the WUA so far (March 2010). The following

§§§ Extra expenditure has been worked out by taking into account the premium on CSR rates at the time of receipt of grant by the State Government from the GOI compared with the premium on CSR rates at the time of receipt of grant by the Company from the State Government or rate at which the work was actually got done whichever was lower.

table shows the amount of OTFG due from the Centre/State Government and the beneficiaries in respect of four schemes completed during 2004-09.

(₹ in crore)

Sr. No.	**Name of scheme**	**CCA (in hectares)**	**Amount of OTFG Centre/State Share**	**Beneficiaries share of OTFG**
1	Sirhind feeder Part I	1,10,884	4.99	0.55
2	Bathinda Branch Part I	1,06,004	4.77	0.53
3	Kotla Branch	56,684	3.06	0.34
4	Eastern Branch	51,001	2.75	0.31
Total			**15.57**	**1.73**

We noticed the following deficiencies:

- The Company did not have the consolidated details of total amount of OTFG due from the State Government/GOI and actually received thereagainst.
- The divisions had not realised ₹ 1.73 crore, being 10 *per cent* share to be recovered from the beneficiaries.

Delay of 23 to 2063 days in depositing ₹ 6.37 crore in FDRs resulted in loss of ₹ 23.74 lakh.

- Seven[****] divisions placed an amount of ₹ 11.62 crore (Central and State share) from 2001 to 2008 in the FDRs initially for a period of one to five years of which six[††††] divisions opened FDRs for ₹ 6.37 crore, after a delay of 23 to 2063 days from the receipt of funds. This delay resulted in loss of interest income of ₹ 23.74 lakh.
- Out of 742 FDRs (₹ 4.50 crore) maintained by two[‡‡‡‡] divisions, 405 FDRs (₹ 2.58 crore) were not delivered to the WUA.

The Management replied (July 2010) that the Company had issued guidelines to all the field divisions to follow the instructions of GOI in regard to utilisation of OTFG.

**** Lining Division at Abohar, Amritsar, Bathinda, Ferozepur, Ludhiana, Malout and Rampuraphul.

†††† Lining Division at Abohar, Bathinda, Ferozepur, Ludhiana, Malout and Rampuraphul.

‡‡‡‡ Lining Division at Abohar and Ludhiana.

Internal control system and Internal audit

Internal Control

2.10.1 The Internal Control is an essential pre-requisite for efficient and effective management of the organisation. The internal control in the Company was deficient in regard to the following:

- There was no prescribed system to monitor compliance of the decisions of the Board of Directors (BOD). Audit noticed that though the Board decided (January 2005) to discontinue supply of water to the farmers who had not made the payment of water charges, no action had been taken to implement the decision.
- There was no effective system for raising the bills and recovery of water charges. The Company had not maintained beneficiary wise detail in respect of the outstanding dues on account of sale of water. The Management stated (July 2010) that the system of raising the bills and recovery of water charges was being strengthened.
- The Management had not framed effective system to manage the funds received for the repair and maintenance of watercourses.

Internal audit

2.10.2 The Company has neither framed internal audit manual nor has its own internal audit wing. However, the Company has been appointing a firm of chartered accountants as internal auditor for conducting audit of its financial records every year. It was noticed that:

- The Internal Auditors submitted reports for the period 2004-05 and 2005-06 during July 2007 to April 2008. The internal audit reports for the period 2006-07 onwards were yet to be submitted by the auditors; and
- The internal audit reports were not brought to the notice of the Board/Audit committee for perusal and remedial action. Thus, the internal audit was not only ineffective but also failed in its objectives.

The Management stated (July 2010) that the audit reports for 2006-07 and 2008-09 had been received and would be submitted to the audit committee for review.

Monitoring and Evaluation

2.11 There should be a system to monitor and evaluate the performance and socio-economic impact of the projects. While preparing the projects for lining of the watercourses, the Company envisaged that the whole programme of CADWM needed to be monitored properly to achieve the desired objective. During 2004-09, the Company executed the works of installation of tubewells and lining of watercourses at a cost of ₹ 383.52 crore, but there was no monitoring of the implementation of the projects to ascertain the achievement of desired results. We further noticed that the GOI/State Government had provided funds of ₹ 90 lakh in two projects (Kotla and

Eastern Branch) for monitoring purposes. The Company had, however, not carried out the monitoring and evaluation of the projects so as to compare the projected figures with the actual results for apprising the BOD/State Government. It was noticed that the monitoring and evaluation wing of the Company was closed down in June 2003.

The Management stated (July 2010) that the Divisional Engineer had been asked to ensure monitoring and evaluation of the projects. It was, however, noticed by us that there was no system of monitoring and evaluation either at divisional level or at headquarter.

Corporate Governance

2.12 Corporate Governance is the system by which the Company is directed and controlled by the Management in the best interest of the stakeholders ensuring greater transparency and better and timely financial reporting. We noticed that:

- During the period from 20 January 2004 to 31 December 2009, the State Government had appointed eight Managing Directors, whose tenure ranged between 29 and 665 days. Such frequent changes of the top official had the risk of affecting smooth and efficient functioning of the Company.
- In compliance to Section 292 A of the Companies Act 1956, the Company constituted the audit committee in November 2006 to ensure compliance of internal control system, but the meeting of the audit committee was not held (September 2010).
- Some of the directors were not serious in attending the Board meetings of the Company.

Acknowledgement

In addition to examination of records and documents, a number of issues were deliberated for conducting this performance audit by the audit team. We acknowledge the co-operation and assistance extended by different levels of Management at various stages of conducting performance audit.

The matter was referred (July 2010) to the Government, the reply had not been received (September 2010).

Conclusion

- **There were delays ranging from one to 36 months in the installation of 217 tubewells out of 239 tubewells installed during 2004-09.**
- **The Company installed 24 tubewells in four districts categorised as over-exploited area without making arrangements for recharge of the ground water. Further, the Company had not taken any action for recharging of the ground water and anti water logging measures.**
- **The Company did not involve the beneficiaries in the installation, operation and maintenance of tubewells as envisaged in the National Water Policy 2002.**

- **The present system of collection of water charges by the lambardars is prone to embezzlement as the Company has not laid down any system for periodical reconciliation of the amount collected and deposited in the banks by the lambardars.**
- **The Company neither exercised its powers regarding fixation of tariff and levy of surcharge for delayed payments nor brought to the notice of the State Government the high operational cost of the tubewells vis a vis the low rates prescribed for sale of water so as to revise the rate of water charges.**
- **In disregard to the recommendations of the state level committee to give priority to saline ground water zone for construction of the watercourses, the Company took up works in the over-exploited area of Upper Bari Doab Canal in Amritsar district.**
- **The Company had no major source of its own income and was surviving on the subsidy/grants provided by the Government.**

Recommendations

- **The Company should make efforts to ensure completion of the works in time by avoiding delays in tendering, allotment of work, energisation etc. and by better coordination and simultaneous execution of all components of the works.**
- **In the background of fast depleting ground water and requirement for sustainable development of agriculture in the State, the Company needs to regulate installation of the tubewells and execution of lining of watercourses only in those area where the adverse impact of such works is minimal. It also needs to take steps for augmenting recharging of the ground water.**
- **With a view to create sense of ownership and controlled use of water by the farmers, the Company should actively involve the beneficiaries by charging a token contribution of 10 *per cent* of the cost of installation of the tubewells and hand over the operation and maintenance of the tubewells to the Water Users Associations.**
- **While releasing subsidy to the Company, the Government should disallow the subsidy attributable to the Company's inefficiencies in controlling the cost and maximisation of the revenue.**
- **Government needs to consider discontinuing the directorship of the non serious directors and make the Board to strictly work on commercial principles by limiting the subsidy.**
- **The Company needs to control its establishment cost and realise the full revenue of water charges by streamlining the system of revenue collection and revision of the water charges in tune with the cost of supply.**