CHAPTER II

2.1. PERFORMANCE AUDIT ON THE CONSTRUCTION ACTIVITIES OF BIHAR RAJYA PUL NIRMAN NIGAM LIMITED

Chapter II Performance Audits relating to Government companies

2.1 Performance Audit on the Construction Activities of Bihar Rajya Pul Nirman Nigam Limited

Executive Summary

Introduction

Bihar Rajya Pul Nirman Nigam Limited (Company) was incorporated in June 1975 as a wholly owned Government Company. The main objective of the Company is construction of new bridges and other structures including maintenance and improvement work in respect thereof. The Company, during the period 2010-15, executed deposit works only and did not participate in any competitive bidding process to obtain contract.

Audit findings pertaining to Construction activities of the Company are discussed below:-

Fund Management

• The Company suffered loss of centage charges of ₹ 12.66 crore in respect of 70 projects due to execution of work without agreement and the centage charges of ₹ 16.49 crore on revised estimate of a bridge was also not claimed.

(Paragraph 2.1.7)

Construction of bridges funded by NABARD

Out of 542 bridges executed by the Company, 281 bridges were completed during the period 2010-15 of which 149 bridges (53 *per cent*) were completed with delays. As on 31 March 2015, 261 bridges were under various stages of completion out of which 94 bridges are delayed by one to 64 months.

(*Paragraph 2.1.11*)

• In six test checked divisions, 81 bridges were completed, out of which 45 bridges were completed with delays ranging from one to 30 months and 17 bridges were completed with a cost overrun of ₹ 36.19 crore.

(*Paragraph 2.1.11*)

• Out of 224 bridges executed by six test checked divisions, there were delays in finalization of tender in 49 cases ranging from eight to 356 days after the expiry of the validity period of the bids.

(*Paragraph 2.1.12*)

• The Company in violation of the CVC Guidelines issued eight work orders aggregating to ₹ 126.92 crore for construction of bridges on a nomination basis without inviting tenders.

(*Paragraph 2.1.13*)

• After incurring an expenditure of \mathbb{Z} 42.13 crore, the construction of two bridges were abandoned due to non-availability of land. In case of five bridges, there were abnormal delays in completion of approach roads connecting thereto as a result of which expenditure of \mathbb{Z} 14.95 crore remained blocked for a period ranging from seven months to 15 months.

(*Paragraph 2.1.14*)

• In case of six ongoing bridges, though the bridge portions were completed at a cost of ₹ 69.23 crore, the construction of connecting approach roads were still incomplete even after a lapse of period ranging from seven to 34 months.

(*Paragraph 2.1.14*)

• The additional works in case of bridge at Dhanha-Ratwalghat was not awarded to the contractor on the rate of original work which resulted in excess expenditure of ₹ 9.24 crore.

(*Paragraph 2.1.16*)

• In case of bridge at Vijayghat at Bhagalpur an additional sum of ₹ 4.29 crore was paid to the contractor for the increase in the depth of the foundation well.

(*Paragraph 2.1.17*)

Construction of bridges under Mukhya Mantri Setu Nirman Yojana

• Out of 710 bridges executed by the Company, 540 bridges were completed during the period 2010-15 of which 312 bridges (58 *per cent*) were completed with delays. As on 31 March 2015, 170 bridges were under various stages of completion of which 61 bridges are delayed by one to 84 months.

(*Paragraph 2.1.20*)

• In six test checked divisions, 248 bridges were completed, out of which 141 bridges (56.85 *per cent*) were completed with delays ranging from 10 days to 51 months and 26 bridges were completed with a cost overrun of ₹ 7.48 crore.

(*Paragraph 2.1.20*)

• Out of 337 bridges executed by six test checked divisions, there were delays in finalization of tenders in 57 cases ranging from 10 to 369 days after the expiry of the bid validity period.

(*Paragraph 2.1.21*)

• After incurring an expenditure of $\stackrel{?}{\underset{?}{?}}$ 2.70 crore, the construction of two bridges were abandoned since June 2012 due to non-availability of land. In case of 10 bridges, there were abnormal delays in completion of approach roads connecting thereto as a result of which expenditure of $\stackrel{?}{\underset{?}{?}}$ 16.40 crore remained blocked for a period ranging from six to 30 months.

(*Paragraph 2.1.22*)

• In case of four bridges, bridge portion was completed at a cost of ₹ 10.57 crore, the approach roads were still incomplete even after lapse of period ranging from 13 months to 45 months.

(*Paragraph 2.1.22*)

Construction of Buildings

• In case of Construction of Vardhaman Institute of Medical Science, excess payment on account of price escalation of \mathbb{T} 18.51 crore was made to the contractor. Further, the company in violation of the directives of the Government incurred avoidable excess expenditure of \mathbb{T} 3.81 crore.

(*Paragraph 2.1.25*)

• Out of 38 Chhatrawaas to be constructed by the Company, only seven Chhatrawaas were completed till March 2015 even after a lapse of five years from the date of Administrative Approval.

(*Paragraph 2.1.26*)

Monitoring and Internal Control

• The Company did not have any policy regarding appointment of Supervision Consultants (SC). The expenditure of \mathbb{Z} 32.54 crore incurred on payment to SC was charged to the work expenses instead of meeting the same from Centage Charges.

(*Paragraph 2.1.28*)

• Due to non-reconciliation of accounts of the completed projects with concerned administrative department, an amount of ₹ 11158.91 crore were shown as Deposits from Government of Bihar in the annual accounts for the year 2014-15.

(*Paragraph 2.1.31*)

Introduction

2.1.1 Bihar Rajya Pul Nirman Nigam Limited (Company) was incorporated in June 1975 as a wholly owned Government Company. The main objectives of the Company are construction of new bridges/other structures and the Company also undertakes maintenance and improvement work in respect thereof. Though Company mainly executes the works relating to construction of bridges, in addition to this, other infrastructural works viz. construction of hostels, hospitals, flood shelters, convention center, parks, etc., are also undertaken.

The Company executes two types of works (i) deposit works and (ii) contract works through participating in tenders. The deposit works are being entrusted

by the Government of Bihar (GoB) to the Company on a cost plus basis, i.e. scheduled cost plus centage charges¹ to meet overhead expenses of the Company. The Company, during the period 2010-15, executed deposit works only and did not participate in any competitive bidding process to obtain contracts.

The Company executed the deposit works during the said period through funds received under National Bank of Agriculture and Rural Development (NABARD), Plan, Non-plan, etc., and Mukhya Mantri Setu Nirman Yojna (MMSNY). The details of bridges/projects allotted to the Company under different heads during April 2010 to March 2015 are given in the table below:

Table No: 2.1.1

Statement showing details of projects awarded to the Company

(₹ in crore)

Heads	2010-11	2011-12	2012-13	2013-14	2014-15	Total
Various	1010.29	1131.77	1975.83	4461.52	330.77	8910.18
heads	(149)	(173)	(129)	(267)	(17)	(735)
MMSNY	415.79 (196)	108.93 (49)	402.06 (138)	75.49 (27)	350.45 (114)	1352.72 (524)
Total	1426.08	1240.70	2377.89	4537.01	681.22	10262.90
	(345)	(222)	(267)	(294)	(131)	(1259)

Source: Information furnished by the Company

Figures in brackets indicate numbers of bridges/projects

During the period from April 2010 to March 2015, the Company completed 914 projects involving AAs of ₹ 4344.29 crore and as on 1 April 2015, 626 projects involving AAs of ₹ 10136.01 crore were under various stages of completion (as detailed in *Annexure-2.1.1*). Out of 329 projects completed in six test checked works divisions, 186 projects (56.53 *per cent*) were completed with delays.

The Company, during the period 2010-11 to 2014-15, registered steady profits which increased from ₹ 70.63 crore in 2010-11 to ₹ 139.09 crore in 2014-15. The Reserves and Surplus of the Company increased from ₹ 166.50 crore in 2010-11 to ₹ 464.86 crore in 2014-15. The accounts of the Company for the year 2013-14 and 2014-15 were in arrears.

The Management of the Company is vested with the Board of Directors comprising of seven directors. The Managing Director, subject to the overall control and supervision of the Board, is responsible for day to day conduct of the business of the Company. The Managing Director is assisted by three Deputy Chief Engineers, Financial Adviser cum Chief Accounts Officer and

¹ 13.5 *per cent* for the turnover up to ₹ 100 crore, 12.5 *per cent* for the turnover between ₹ 100 crore to ₹ 250 crore and nine *per cent* plus one *per cent* contingency charges for the turnover exceeding ₹ 250 crore.

Secretary of the Company. The organisational chart of the Company is given in *Annexure-2.1.2*.

Audit Scope and Methodology

2.1.2 A Performance Audit (PA) on the Company for the period 2005-10 featured in the Report of Comptroller and Auditor General of India (Commercial), Government of Bihar (GoB) for the year ended 31 March 2010. The said PA has since been taken up for discussion by the Committee of Public Sector Undertakings (CoPU) which has not yet been completed.

The Scope of Audit and Methodology covered examination of records during March 2015 to June 2015 pertaining to the period April 2010 to March 2015, maintained at the Company's Head office, Planning Circle, Quality Control Wing and six (Works division Muzaffarpur, Sitamarhi, Bettiah, Nalanda, Bhagalpur and Patna-2) out of the 14 Works Divisions of the Company covering 47.35 *per cent* of the total expenditure incurred during the period 2010-2014. The Works Divisions, for the purpose of detailed scrutiny, were selected on the basis of quantum of the work executed during the previous four years ending 31 March 2014 on the basis of the Random sampling method.

Audit Objectives was explained to the Top Management in the Entry Conference held on 13 March 2015 and discussion of audit findings with the Management and Government was done in the Exit Conference held on 08 October 2015. Further, the draft Performance Audit Report was issued to the Management and the State Government for their comments. The reply of the Management and the State Government received in September 2015 and October 2015 respectively, has been suitably incorporated in PA.

Audit Objectives

- **2.1.3** The Performance Audit of the Company was carried out to evaluate and assess whether:
- the funds were managed efficiently and economically;
- the various Projects/Schemes undertaken by the Company were executed economically, efficiently and effectively and that the Company was sensitive to the risk of time and cost overruns; and
- the Company had an adequate and effective Monitoring/Internal Control system in place.

Audit criteria

- **2.1.4** The Audit criteria considered for assessing the achievement of Audit objective was drawn from:
- Memorandum and Articles of Association of the Company; Company's Regulations and Business Bye-laws, Standard Contract Document;

- Bihar Financial Rules and Bihar Public Works Department Code;
- Central Government/State Government Guidelines /Project Guidelines; and
- Guidelines of Mukhya Mantri Setu Nirman Yojna (MMSNY).

Audit Findings

Fund Management

Financial Position and Working Results

2.1.5 The financial position and working results of the Company for the five years ending 31 March 2015 is given in *Annexure-2.1.3*.

It can be seen from the annexure that the centage, i.e., main source of income of the Company has shown increasing trend during the period covered under scrutiny. The percentage of centage income to total income ranged between 67.31 and 82.69 whereas the percentage of interest earned on Fixed Deposits to total income ranged between 11.24 and 19.23.

Fund availability and their utilisation

2.1.6 The details of fund received by the Company during the period 2010-15 *vis-a-vis* their utilisation are given in the table below:

Table No: 2.1.2

Table showing fund utilisation during the period 2010-15

(Amount: ₹ in crore)

Year	Opening Balance	Received during the year	Total funds available	Funds utilized	Closing Balance	Percentage of Utilisation
2010-11	729.65	1625.41	2355.06	1244.58	1110.48	52.85
2011-12	1110.48	1635.84	2746.32	1410.88	1335.44	51.37
2012-13	1335.44	1356.87	2692.31	1389.26	1303.05	51.60
2013-14	1303.05	1778.77	3081.82	1606.78	1475.04	52.14
2014-15	1475.04	2167.14	3642.18	1881.46	1760.72	51.66

Source: Information furnished by the Company

It can be seen from the table that the fund utilisation of the Company during the period 2010-15 decreased from 52.85 *per cent* in 2010-11 to 51.66 *per cent* in 2014-15. Thus, significant funds pertaining to Infrastructural Projects/schemes ranging between ₹ 1110.48 crore and ₹ 1760.72 crore were lying in the Company's Accounts.

Loss of centage charges

2.1.7 We observed that:

The Company suffered loss of centage charges of ₹ 12.66 crore in respect of 70 projects due to execution of work without agreement

• The Company undertook the work of construction of various bridges in Kosi area of Bihar allotted by Bihar Apda Punarwaas Evam Punarnirman Society (BAPEPS) without any agreement with BAPEPS, as a result the centage charges to be paid to the Company could not be finalised. After executing the projects, the Company claimed its centage charges which were denied by the BAPEPS. Thus, the Company suffered loss of centage charges aggregating to ₹ 12.66 crore in respect of 70 projects executed during 2011-15.

The Management stated (September 2015) that the Company has insisted for the payment of centage charges from BAPEPS as well as requested for its waiver from the State Government. The fact remains that the Company failed to ensure the provision of centage charges in the agreement and as a result suffered loss.

The Company failed to safeguard its financial interest by not claiming increased centage • The estimate of a Fly-over at Bailey Road in Patna, was increased from ₹ 161.98 crore to ₹ 321.40 crore. However, the required increase in centage charges of ₹ 16.49 crore was not claimed by the Company while preferring the revised cost for approval of the State Government. Thus, the Company failed to safeguard its financial interest by not claiming increased centage charges.

The Management stated (September 2015) that in the revised estimate, admissible centage charges were proposed, however, the State Government restricted the same to original approved amount. The reply is not based on facts as in revised technical sanction sent by the Company, the centage charges were not claimed on revised cost.

Loss due to non-retention of collection charges and non-deduction of labour cess

2.1.8 We observed that:

The Company failed to retain collection charges in respect of cess collected from the contractors • The Building and Other Construction Workers Welfare (Regulation of Employment and Conditions of Service) Act, 1996 which read with the Building and Other Construction Workers Welfare Cess Act, 1996 and Building and Other Construction Workers Welfare Cess Rules 1998, provides, *inter alia*, that a cess at the rate of one *per cent* of the cost of construction incurred by the employer shall be levied and collected from the bills of contractors and an amount at a rate of one *per cent* so collected shall be retained as collection charges. We noticed that the Company, in six test checked Works Divisions, during the period 2010-15, failed to retain a sum of ₹31.38 lakh on account of collection charges in respect of cess aggregating to ₹31.38 crore duly collected from the contractors.

The Management agreed to the audit observation and stated (September 2015) that the same has been noted for future compliance.

• The Company, in contravention of aforementioned provisions also failed to deduct labour Cess amounting to ₹ 28.10 lakh from the bills of the contractor in respect of International Convention Centre at Rajgir, Nalanda and instead deposited the same out of its own fund. As a result, the company not only incurred an avoidable excess expenditure of ₹ 28.10 lakh but also provided undue benefit to the contractor to that extent.

The Management stated (September 2015) that provision for Labour cess was not made in the approved estimates and the contractor claimed additional one *per cent* for labour cess in his bills prior to effecting deduction and the Company did accordingly. The reply was not acceptable as labour cess was Applicable from 2008 in the State of Bihar and since as per the bid documents (issued in December 2009), the rates quoted by the bidders shall be deemed to be inclusive of all the taxes and cess. Thus, the amount of Labour Cess should have been deducted from the bills of the contractor instead of depositing the same from Company's own fund.

Recommendation

The Company should be vigilant to ensure that in all agreement entered into by it, its due centage charges are claimed.

Execution of Projects

2.1.9 The Company executes two categories of work, i.e., construction of bridges and construction of other structures like Buildings, Hostels, Flood shelters, Parks, etc.

Construction of Bridges

2.1.10 For construction of bridges, funds are made available to the Company by the GoB through various heads such as National Bank for Agriculture and Rural Development (NABARD), Plan, Non-plan, etc., and Mukhya Mantri Setu Nirman Yojana (MMSNY). Under Heads NABARD, Plan, Non-plan, etc., the Company undertook the construction of 542 bridges involving AA of ₹ 11578.55 crore during 2010-15. Further, under MMSNY, the Company executed 710 bridges involving AA of ₹ 1916.50 crore.

The construction of bridges commences on allotment of works to the Company by the Government of Bihar (GoB). The Company, after conducting survey of site selected by the Government, gets the DPR/Design/Estimates prepared for determining the cost of the projects and getting Administrative Approval (AA) from the Government. After getting the AA, Technical Sanction (TS) is accorded by the Company for determining the actual quantity of work to be executed. The works are executed either through inviting tenders or on nomination basis. After finalisation of the tenders, the work orders are issued and an agreement in Standard Contract Document is entered into with the contractors for commencement of work.

Construction of bridges funded by NABARD

2.1.11 During the period 2010-15, under the head NABARD, Plan, Nonplan, etc., the Company, undertook the construction of 542 bridges involving AA of ₹ 11578.55 crore including 54 bridges involving AA of ₹ 2939.11 crore of previous years. Out of this, the Company completed 281 bridges at a cost of ₹ 2825.30 crore of which 149 bridges (53 *per cent*) were completed with delays. As on 31 March 2015, 261 bridges involving AA of ₹ 8753.25 crore were under various stages of completion out of which 94 bridges are delayed by one to 64 months.

The details of bridges constructed under Plan, Non-plan, NABARD and other heads in six test-checked Works Divisions are given in the table below:

Table No: 2.1.3

Table showing time and cost overruns in case of bridges completed under other Heads

Sl. No.	Name of Works Division	No. of bridges Completed	No. of bridges completed with Delays	Range of delays (in months)	No. of bridges completed with Cost over-run	Cost overrun (₹ in crore)
1	Muzaffarpur	12	3	6 to 18 months	3	3.68
2	Sitamarhi	19	16	1 to 30 months	8	2.92
3	Bettiah	3	2	7 to 12 months	1	24.03
4	Nalanda	18	8	1 to 8 months	1	2.26
5	Bhagalpur	16	9	1 to 20 months	4	3.30
6	Patna-2	13	7	3 to 16 months	0	0
	Total	81	45		17	36.19

Source: Information furnished by the Company

It can be seen from the table that out of 81 completed bridges:

- 45 bridges, i.e., 55.56 *per cent* were completed with delays ranging between one to 30 months, the delays being attributable to delays in finalization of tenders, delays in acquisition of land, delays in timely execution by the contractor and splitting of work of construction of bridge portion and approach road.
- Besides, 17 bridges were completed with a cost overrun of ₹ 36.19 crore which were attributable to the reasons viz., changes in design on account of

increase in length of bridge, additional work after finalization of tender and delays in issuing work orders.

Some of the significant discrepancies in construction of bridges under NABARD, Plan, Non-plan, etc, are discussed below briefly:

Delays in finalization of tenders

2.1.12 The Company floats the Notice Inviting Tenders (NITs) for execution of the various Infrastructural Projects. The bid remains valid for a period of 120 days from the date of opening of technical bid.

In case of 49 NITs, the tenders were finalised with delays ranging from eight to 356 days We observed that out of 224 bridges executed by six test checked divisions under NABARD, Plan, Non-plan heads, etc., in case of 49 NITs, the tenders were finalised with delays ranging from eight to 356 days after the expiry of the validity period of the bids. Of the aforementioned 49 NITs, 17 NITs were finalised after delays ranging from eight to 100 days, 12 NITs were finalised after delays ranging from 101 to 200 days. Further, 20 NITs were finalised after delays ranging from 201 to 356 days.

Further, in case of four bridges namely bridge at Maliya and Tetarhat in Lakhisarai District, Ranghaighat and Pilkhighat in Muzaffarpur District and Jatwaghat at East Champaran District, the Company issued four work orders after an abnormal delays of one year from the expiry of the validity period of the bids. As a result of this, the construction of bridges were delayed by one year and the Company had to incur excess expenditure of ₹ 1.84 crore on account of price escalation which was avoidable. This resulted in loss to the Government exchequer by ₹ 2.02 crore (including centage charges of the Company).

The Management stated (September 2015) that NITs were floated in anticipation of AA and due to non-receipt of AA in time and verification of documents of the Contractors, the NITs could not be finalized in Bid validity period. However, the fact remains that due to delay in according/obtaining AA, the project suffered time and cost overrun.

Irregularities in tendering process

- **2.1.13** In course of scrutiny of records pertaining to the tendering process of bridges constructed under NABARD Head, we observed the following discrepancies:
- We observed that due diligence in the finalization of technical bids was not being carried out at the Works Division (WD) and Deputy Chief Engineer (DCE) level. In case of construction of a bridge along with approach road across Tirumuhan River in Dhankutwa to Shivpur road in WD, Bettiah, we observed that four bidders were declared technically qualified by the Senior Project Engineer (SPE), WD, Bettiah and Deputy Chief Engineer (DCE), North Bihar Circle. However, on scrutiny at Headquarters, it was found that only one bidder was technically qualified. Similarly, in case of construction of bridge between Maliya and Tetarhat in WD, Nalanda, out of eight bidders, two

Bid evaluation at WD and DCE level was not proper bidders were declared technically qualified by SPE, yet, the same were declared disqualified at Headquarter and another bidder who was declared disqualified at Works Division was awarded the Work Order. The comparative statements for evaluation of Technical bids were not found on records. This indicated that the bid evaluation at WD and DCE level was not proper.

The Management stated (September 2015) that SPE did not recommend any technically qualified bidder therefore decision was taken at Headquarter's office. The reply is not based on facts as the SPE in his noting had made recommendation regarding technically qualified bidders.

The qualifying criteria was diluted at the request of bidder

• in case of construction of bridge across the River Harohar near Surjichack in WD Nalanda, the work order was awarded to a bidder who was earlier held technically not fit in the first bid and further at his requests, the criterion of bridge length experience was reduced from 100 meters to 90 meters and subsequently to 70 meters by the Company. This was not only irregular but also amounted to extension of undue benefit to the said bidder.

The Management stated (September 2015) that in the first tender both the bidders could not meet the qualifying length criterion of 100 meters. Thus, the required qualifying criteria of length was reduced to 90 meters in re-tender, and at the request of bidders in pre-bid meeting of re-tender, the same was further reduced to 70 meters.

The reply of the Management is not based on facts as in case of first tender one bidder fulfilled the qualifying length criterion and had experience of construction of 154 meter long bridge of the Company itself. Further, only one bidder requested for reduction in qualifying length and to benefit that bidder his request was accepted and he was finally awarded the work order.

• The Central Vigilance Commission's Order dated July 2007 based on the Judgement of Hon'ble Supreme Court of India arising out of (Special Leave Petition) SLP (Civil) No. 10174 of 2006, *inter alia*, provides for awarding of Government Contract only through public auction/public tender, the prime objective being to ensure transparency in the Government Contracts as well as to weed out corrupt/irregular practices. The said order also stipulated a departure from the aforementioned rule only in exceptional cases where a Government Contract may be awarded on a nomination basis.

The Company in violation of the CVC Guidelines issued work orders aggregating to ₹ 126.92 crore on nomination basis

The Company in violation of the aforementioned CVC Guidelines issued eight work orders under NABARD Head aggregating to ₹ 126.92 crore for construction of bridges and approach roads on a nomination basis which were not exceptional cases as per the CVC Guidelines and without assigning any justifications/reasons on record. This was not only irregular and against the Judgement of the Apex Court but also amounted to extension of undue benefit to the Contractors.

The Management stated (September 2015) that as per Company's business bye-laws, works were awarded on nomination basis, however, after being pointed out by audit, the process was stopped from June 2015.

Delays in land acquisition

- **2.1.14** To ensure timely availability of a bridge for public use, its construction should be planned in such a way that the bridge as well as the approach road connecting thereto is completed simultaneously in time. Further, timely acquisition of required land is a key issue for timely execution of bridge Project. Thus, assessment of availability of land should be done before commencement of work and constraints in land acquisition should be identified before incurring any expenditure on the bridges. However, we observed that:
- Construction of two bridges were abandoned after incurring an expenditure of ₹ 42.13 crore
- construction of two bridges i.e. bridge across river Barnar at Debhghat Nijuara in Jamui District (since March 2014) and a Railway Over bridge at Bariyarpur in Munger District (since March 2010) were abandoned after incurring expenditure of ₹ 42.13 crore due to non-acquisition of Land. A picture of abandoned ROB at Bariyarpur is given below:



Picture of an abandoned Railway Over bridge (ROB) Bariyarpur at Bhagalpur

There were abnormal delays in completion of approach roads

• in case of five bridges, though the bridge portion was completed at a cost of ₹ 14.95 crore, there were abnormal delays in completion of approach roads connecting thereto which ranged for a period of seven months to 15 months (as detailed in *Annexure-2.1.4*).

In case of six ongoing bridges, connecting approach road was incomplete even after a lapse of seven to 34 months • in case of six ongoing bridges, though the bridge portions were completed at a cost of ₹ 69.23 crore, the construction of connecting approach roads were still incomplete (June 2015) notwithstanding a lapse of period ranging from seven months to 34 months (as detailed in *Annexure-2.1.5*). A recent picture of one of the bridges lying unutilised is depicted below:



Incomplete bridge at Mandarghat in Sheohar District

As a result of above, the public fund on account of expenditure of ₹ 126.31 crore incurred on the aforesaid 13 bridges till date (June 2015) not only lay blocked up but also resulted in denial of intended benefit to the public.

The Management stated (September 2015) that due to various reasons such as delays in land acquisition, clearance from other departments, laxity on the part of the contractors, etc., the approach roads could not be completed. Reply is not acceptable as the Company should have assessed the availability of land *ab-initio* to identify the constraints in acquiring the land.

Delays by contractor

2.1.15 As per Clause -5 of the agreement, request for extension of time, was to be made by the Contractor within 14 days of the happening of the event causing delay. Besides, as per clause -2 of the agreement, compensation for delay at the rate of one *per cent* per month (maximum up to five *per cent*) of the tendered value of work was to be deducted.

We noticed that in respect of bridge between Maliya and Tetarhat in Lakhisarai district:

- the contractor applied for extension of time in March 2015, i.e., after 13 months from the schedule date of completion and the same was granted in violation of clause 5 to the contractor despite knowing the fact that there was lapse on the part of the contractor causing delay.
- for compensation of delay an amount of only $\stackrel{?}{\underset{?}{?}}$ 8.48 lakh at the rate of two per cent of the bill value was deducted from the bills of the contractor, as against required amount of $\stackrel{?}{\underset{?}{?}}$ 94.55 lakh which resulted in short deduction of compensation for delay by $\stackrel{?}{\underset{?}{?}}$ 86.07 lakh.

The Management stated (September 2015) that there were naxal attacks on the site in July 2012 and the contractor while seeking assistance from the Company, had mentioned need for time extension. The Management further stated that the liquidated damage was not deducted in anticipation of grant of extension of time to contractor. The reply is not acceptable as the disturbance on site occurred in July 2012 and extension of time was sought by the

contractor in March 2015, i.e., after 32 months from happening of the event and 13 months from schedule date of completion. Further, the conditions of agreement regarding liquidated damages should have been imposed.

Recommendation

The terms and conditions of contract regarding granting extension of time in case of delay in completion of work should be implemented and no undue favour should be granted to the contractors.

Excess Payment on execution of additional items

2.1.16 As per clause 182 A of the Bihar Public Works Department (BPWD) Code, for execution of extra item a supplementary agreement should be entered with the contractor and the rate of extra items should not be more than the rate quoted for the primary agreement. The Company awarded (September 2009) the work of construction of bridge with approach road and guide bund at Dhanha-Ratwalghat in West Champaran District on Gandak River on turnkey basis at a cost of ₹ 219 crore (26 per cent below the estimated cost).

We observed that Indian Institute of Technology (IIT), Roorkee, recommended (March 2011) for additional protection work on the bridge and the Company decided the construction of a new bridge of 100 meters and work of boulder pitching on the approach road of the above bridge. For above works estimate amounting to ₹ 35.55 crore was prepared based on Schedule of Rates (SoR) of January 2009 and the work was awarded (June 2012) to the same contractor on nomination basis on the basis of SoR. This resulted in excess expenditure of ₹ 9.24 crore (26 per cent of ₹ 35.55 crore).

The Management stated (September 2015) that the rates of the related items increased considerably from 2009 to 2012, so by awarding the additional work on SoR of 2009, the Company was able to save cost. The reply is not acceptable as the payment for price escalation was made to the Contractor as per primary agreement for increase in the prices of related items.

Recommendation

The provisions of BPWD code should be followed while entering into supplementary agreement with the contractors.

Injudicious payment to the Contractor

- **2.1.17** For construction of a bridge at Vijayghat, Bhagalpur, the work order was issued (July 2010) to the Contractor at a cost of ₹ 219.47 crore being 14.60 *per cent* below the estimated cost of ₹ 257 crore. The depth of foundation well of the bridge in the said estimate was considered to be 40 meters. We noticed that:
- the contractor submitted a new design wherein the depth of the foundation well was reduced to 31.2 meters (for 15 piers) and 32.2 meters (for 19 piers) and the same was approved on 13 December 2010 by the Company for

Additional work was awarded to the contractor on same rate i.e. below 26 per cent of the estimated cost. This resulted in excess expenditure of ₹ 9.24 crore

construction. Further, although a model test of the bridge was undergoing from May 2010 to December 2010, the design submitted by the contractor was approved by the Company without waiting for test report of Indian Institute of Technology (IIT), Roorkee.

- IIT, Roorkee recommended on 22 December 2010 that under no circumstance, the depth of the foundation well be reduced from 40 meters. Subsequently, the contractor was directed (April 2011) by the Company to increase the depth of the foundation well and the same was constructed by the contractor.
- apart from contract amount, an additional sum of \mathbb{Z} 4.29 crore was paid to the contractor for the increase in the depth of the foundation well from 31.2/32.2 meters to 40.0 meters as against the contractor's design. This shows that the Company, *ab initio*, failed to examine the cost implication of the reduction in the depth of the foundation well which resulted in avoidable excess expenditure of \mathbb{Z} 4.29 crore but also amounted to extension of undue benefit to the Contractors.

The Management stated (September 2015) that when the work is executed on turnkey basis, the cost comparison is not done between the provisional structure on which tender is done and the structure designed by the contractor. The reply is not acceptable as the Company failed to safeguard the financial interests of the Government as it approved the design of the contractor having less quantity notwithstanding the pendency of the recommendation of IIT.

Recommendation

The approval of design of contractor should be done only after completion of ongoing test by IITs, etc.

Excess Payment on account of Price Variation

2.1.18 For construction of two bridges at Piprahighat in Sheohar District and Mandarghat in Sitamarhi District, the Company issued two Work Orders. As per terms and conditions of the agreement, the prices of the cost components prevailing on 28th day prior to the date of opening of the bid (i.e. January 2009) was to be considered as base price for working out cost escalation.

We observed that the Company in contravention of the provisions of the agreement paid price escalation bills of the contractors amounting to ₹ 11.27 crore considering February 2009 as base month as against the admissible amount of ₹ 10.60 crore. This resulted in avoidable excess payment/expenditure of ₹ 67.23 lakh.

The Management accepted (September 2015) the audit observation and stated that necessary action has been taken to recover the amount from the Contractor.

The Company, failed to examine the cost implication of the reduction in depth of the foundation well which resulted in avoidable excess expenditure of ₹ 4.29 crore

The Company, paid price escalation bills of the contractors amounting to ₹ 11.27 crore as against the admissible amount of ₹ 10.60 crore

Collapse of Runnisaidpur-Katra-Kewatsa Road bridge

2.1.19 A DPR including design for construction of a bridge on 26.15 KM of Runnisaidpur-Katra-Kewatsa Road in Muzaffarpur district was submitted by the Consultant to the Company in November 2011. As per the DPR, the length of the bridge was to be 111.84 meters and depth of each foundation was proposed to be 30 meters with four piles in one foundation. The total cost of the bridge together with the approach road was ₹ 5.94 crore.

We observed that:

- the DPR of the aforementioned bridge was significantly revised (January 2014) whereby the length of the bridge was reduced from 111.84 meters to 99.6 meters and four spans of 24 meters and the depth of the foundation was reduced to 20 meters with six piles in one foundation.
- on 27 August 2014, one of the piers, on which, the work of superstructure was also almost complete, sunk further into the bed of the river and the pier cap also tilted towards earth end. As a result of this, the superstructure of the bridge collapsed and bent on the sunken pier thereby making the bridge unusable as can be seen from the photograph given below. The construction work was stopped (August 2014) midway and the matter is under enquiry at the Company level.



Damaged bridge on Runnisaidpur-Katra-Kewatsa Road in Muzaffarpur

Notwithstanding a lapse of almost one year, the Company failed to fix any responsibility for collapse of the said bridge and/or lay on records any justification for a paradigm change in the DPR. As a result of this, a sum of ₹ 5.42 crore incurred on the construction of bridge not only remained blocked up but also led to denial of intended benefit to the public. Further, the Company also failed to take any action till date (September 2015) to restore/repair the damaged bridge.

The Management stated (September 2015) that the previous DPR was not approved by the Company and AA was obtained on the revised DPR. Accordingly, the work was executed. The reply is not acceptable as the

The DPR of the bridge was significantly revised and the depth of the foundation was reduced. Further, one of the piers sunk into the bed. As a result, the superstructure of the bridge collapsed thereby making it unusable

Company failed to justify the changes made in the DPR and reduction in the depth of the pier which might be one of the reasons for collapse of the bridge.

Construction of bridges under Mukhya Mantri Setu Nirman Yojana

2.1.20 The GoB launched (2006-07) a Scheme named Mukhya Mantri Setu Nirman Yojana (MMSNY) for providing rural connectivity through construction of new bridges on all un-bridged gaps in roads and rivers of different villages in the State. The work of construction of bridges under MMSNY of more than ₹ 25 lakh individual value was awarded to the Company.

During April 2010 to March 2015, the Company executed 710 bridges involving AA of ₹ 1916.50 crore of which AA in respect of 524 bridges aggregating to ₹ 1352.72 crore was received during 2010-15 while AA in respect of 186 bridges aggregating to ₹ 563.78 crore were received prior to April 2010. Of the aforementioned 710 bridges, a total of 540 bridges were completed by the Company at a total cost of ₹ 1365.09 crore during the period 2010-15 out of which 312 bridges (58 *per cent*) were completed with delays. Further, as on 31 March 2015, 170 bridges involving an estimated cost of ₹ 551.41 crore were under various stages of completion of which 61 bridges are delayed by one to 84 months.

The details of bridges constructed under MMSNY in test-checked Works Divisions are given below in table:

Table No: 2.1.4

Table showing time and cost overruns in case of bridges completed under MMSNY

Sl. No.	Name of Works Division	No. of completed bridges	No. of bridges completed with delays	Range of delays (in days/months)	No of bridges completed with cost over-run	cost overrun (₹ in crore)
1	Muzaffarpur	65	18	26 days to 51 months	8	2.14
2	Sitamarhi	26	17	10 days to 18 months	0	0
3	Bettiah	15	11	3 to 44 months	4	0.64
4	Nalanda	31	18	1 to 12 months	5	1.32
5	Bhagalpur	52	32	1 to 38 months	7	2.04
6	Patna-2	59	45	20 days to 38 months	2	1.34
	Total	248	141		26	7.48

Source: Information furnished by the Company

Of the 248 completed bridges, 141 bridges (56.85 per cent) were completed with delays ranging from 10 days to 51 months

In case of 57 NITs floated under MMSNY, the tenders were finalised with delays ranging from 10 days to 369 days

Construction of two bridges after incurring expenditure of ₹ 2.70 crore was abandoned

It can be seen from the above table that in six test checked Divisions, of the 248 completed bridges, 141 bridges (56.85 per cent) were completed with delays ranging from 10 days to 51 months. The reasons for such delays were mainly attributable to delays in finalization of tender, delays in acquisition of land, delays on the part of the contractor, inadequate monitoring on the part of the Management, etc. Besides time overrun, 26 bridges were completed with a cost overrun of ₹ 7.48 crore.

The Management stated (September 2015) that due to some unavoidable reasons mainly delays in land acquisition and local hindrances, the approach roads could not be completed in time.

Some of the significant discrepancies in construction of bridges under MMSNY head are discussed below briefly:

Delays in finalization of tenders

2.1.21 Reference in invited to paragraph number 2.1.12 of this report.

We observed that out of 337 bridges executed by six test checked divisions under MMSNY heads, in case of 57 NITs, the tenders were finalised with delays ranging from 10 days to 369 days after the expiry of the validity period of the bids. Of the aforementioned 57 NITs, 21 NITs were finalised after delays of period ranging from 10 to 95 days, 33 NITs were finalised after a delay of period ranging from 101 to 200 days. Further, three NITs were finalised after a delay of period above 201 days.

The Management stated (September 2015) that NITs were floated in anticipation of AA and due to non-receipt of AA in time and verification of documents of the Contractors, the NITs could not be finalized in Bid validity period. However, the fact remains that due to delay in according/obtaining AA, the project suffered time and cost overrun.

Delays in land acquisition

2.1.22 Reference in invited to paragraph number 2.1.14 of this report.

In this regard we observed that:

- construction of two bridges, i.e., bridge across Nadha river connecting Sonepur Purani and Bhawanipur Block (since March 2010) and bridge at Marganjdhar on Pirpainti Nandi Govind path in Bhagalpur District (since June 2012) were abandoned after incurring an expenditure of ₹ 2.70 crore due to non-acquisition of land.
- in case of 10 bridges completed under MMSNY, though the bridge portions were completed at a cost of ₹ 16.40 crore, there were delays in completion of approach roads connecting thereto ranging from six months to 30 months (as detailed in *Annexure-2.1.6*).
- in case of four ongoing bridges, though the bridge portion was completed at a cost of $\stackrel{?}{\stackrel{?}{$\sim}}$ 10.57 crore, the construction of connecting approach road was still

incomplete (June 2015) notwithstanding a lapse of period ranging from 13 months to 45 months (as detailed in *Annexure-2.1.7*). A recent picture of one of the incomplete bridge is depicted below:



Incomplete bridge at Laluchak in Bhagalpur District

As a result of above, the public fund on account of expenditure of ₹ 29.67 crore incurred on the aforesaid 16 bridges till date (June 2015) not only remained blocked up but also resulted in denial of intended benefit to the public.

The Management stated (September 2015) that due to various reasons such as delays in land acquisition, clearance from other departments, laxity on the part of the contractors, etc., the approach roads could not be completed. Reply is not acceptable as the Company should have assessed the availability of land *ab-initio* to identify the constraints in acquiring the land.

Execution of work without tender

2.1.23 The Central Vigilance Commission's Order dated July 2007 mentioned in third bullet of paragraph number 2.1.13 of this report may be referred to.

In this regard we observed that the Company in violation of the aforementioned CVC Guidelines issued two work orders aggregating to $\stackrel{?}{\stackrel{?}{$\sim}} 5.36$ crore for construction of bridges and approach roads on a nomination basis which were not exceptional as per the CVC Guidelines and without assigning any justifications/reasons on record.

The Management stated (September 2015) that as per Company's business bye-laws, work was awarded on nomination basis, however, after being pointed out by audit, the process has been stopped from June 2015.

Construction of Buildings and other structures

2.1.24 Apart from construction of bridges, the Company also executes the work of construction of other structures such as buildings, hospitals, flood

The public fund on account of expenditure of ₹ 29.67 crore incurred on the 16 bridges was blocked up and resulted in denial of intended benefit to the public

Company in violation of CVC Guidelines issued two work orders aggregating to ₹ 5.36 crore for construction of bridges and approach roads on a nomination basis

shelters, parks etc. as and when allotted by the GoB. The details of construction of building and other structures are given in *Annexure-2.1.1*.

Construction of Vardhaman Institute of Medical Science (VIMS):

- 2.1.25 The work relating to Construction of Vardhaman Institute of Medical Science (VIMS), Pawapuri, Nalanda (Bihar) with AA of ₹613.09 crore was awarded (January 2011) by the Company to the contractor at an agreement value of ₹454.09 crore, scheduled for completion in July 2013. The scope of work included construction of various buildings such as building for medical college, hospital, auditorium, hostels, staff quarters, guest house, etc. Examination of the records in respect of the said project revealed the following discrepancies:
- clause 11 of the contract pertaining to Escalation/Price Variation, *inter alia*, provided that, no escalation in prices shall be provided to the contractor for the period of extension of time allowed by the Company. However, the Company in contravention of the aforementioned clause provided price escalation to the contractor for the extended time period which resulted in avoidable excess payment and undue benefit to the contractor by ₹ 18.51 crore (December 2014).

The Management accepted (September 2015) the audit observation and stated that action is being taken to recover the amount of excess payment.

• the agreement with contractor stipulated for use of TMT Fe-415 grade steel in the construction work. However, owing to non-availability of TMT Fe-415 grade steel in the market, the contractor was permitted to use TMT Fe-500 grade steel subject to an undertaking of non-charging additional amount in respect thereof by the contractor. Later on at the instance of the contractor to revise the price of TMT Fe-500 grade steel, it was decided in a meeting held (November 2013) under the Chairmanship of Secretary, RCD that payment to the contractor for the revised rate of TMT Fe-500 shall be made for the work executed since 01 August 2013 onwards. However, contrary to this, the payment to the contractor was made at the rate of revised price of TMT Fe-500 grade for pre August period as well. This resulted in avoidable excess expenditure of ₹ 3.81 crore as well as extension of undue benefit to the contractor.

The Management stated (September 2015) that in the beginning some parts of the buildings were designed both with Fe-415 and with Fe-500 grade of steel. So, the payment of reinforcement for Fe-500 in respect of the work already designed with Fe-500 has been done prior to 01 August 2013 also. The reply is not acceptable as Fe-500 was not available in the Schedule of Rates prevailing at that time. Further, the committee decided for payment of Fe-500 from August 2013 onwards. Hence, payment of Fe-500 for the work executed prior to August 2013 was in violation of orders of the committee.

Recommendation

The extant orders of the Government should be adhered to strictly while making payment to the Contractor.

Avoidable excess payment of ₹ 18.51 crore was made to the Contractor in contravention of the agreement clause relating to price escalation

Avoidable excess payment of ₹ 3.81 crore for use of Fe-500 steel was made to the contractor in violation of orders of Government

Construction of Chhatrawaas

2.1.26 For Construction of 38 Chhatrawaas (Hostels) under Jannayak Karpoori Thakur Chhatrawaas Nirman Yojna in all the Districts of Bihar, Backward Class and Extreme Backward Class Welfare Department (B&EBCWD), GoB, accorded Administrative Approval of ₹ 71.06 crore (March 2009) and the construction work for all 38 Chhatrawaas was entrusted to the Company.

We observed that:

Out of 38

five years

Chhatrawaas, only

seven Chhatrawaas were completed and

25 Chhatrawaas

were incomplete even after lapse of

- out of 38 Chhatrawaas, only seven² Chhatrawaas were completed till March 2015 at a cost aggregating to ₹ 15.45 crore and 25 Chhatrawaas were still to be completed even after lapse of five years from the date of AA. The works for six³ Chhatrawaas were not taken up due to non-availability of land.
- in six test checked divisions, construction of 17 Chatrawaas were entrusted to the concerned division. Out of 17 Chatrawaas only four were completed and remaining Chhatrawaas work was incomplete despite incurring expenditure of ₹ 14.60 crore (detailed in *Annexure-2.1.8*).
- the Company submitted the proposal for revised administrative approval for 29 Chhatrawaas involving ₹ 83.23 crore, of which administrative approval in respect of 14 Chhatrawaas only was received (June 2015).

The Management stated (September 2015) that non-completion of the work in time was mainly attributable to non-availability of land and work would be executed as and when the land would be made available. The reply of the Management itself shows that the neither the Company nor the concerned Department was active in identification and acquisition of land as a result of which the projects suffered time and cost overrun.

Recommendation

The availability of land and funds should be ensured before executing the work so as to avoid delays in completion of the projects.

Monitoring and Internal Control

2.1.27 Monitoring at every stage of implementation of Infrastructural Projects is vital for the Company to ensure the quality of work as per the agreement and the prescribed standards, codes, etc.

We observed the instances of deficient monitoring in the following cases:

² Banka, Jamui, Kaimur, Katihar, Madhubani, Nalanda and Shekhpura.

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³ Darbhanga, Lakhisarai, Nawada, Sheohar, Siwan and Vaishali.

Appointment of Supervision Consultants

- **2.1.28** As per CVC Guidelines, the appointment of consultants should be need based and the fee payable to the consultants should be linked with the progress of the works. In this regard we observed that:
- the Company did not have any policy regarding appointment of Supervision Consultants (SC). The appointment of SC is being made in ad-hoc manner without considering the actual requirement which is evident from the fact that the Company appointed SC for six works (agreement amount ₹ 32.54 crore) but in none of the cases the SC were appointed from the start of construction work and there were delays of eight to 30 months and after completion of 2.83 per cent to 68 per cent of the works.
- the consultant fee was linked neither with the project cost nor with the progress of the work and varied from 0.70 per cent to 5.20 per cent of the project cost.
- since SCs were appointed for performing the function which was to be performed by the Company and for which the centage charges were being paid by the State Government, hence payment to SC should have been met from the centage charges itself, however, the same were being charged to the work expenses.

Thus, appointment of SC belatedly after completion of most of the work, defeated the very purpose of appointment of SC. Besides, charging the payment to SCs to work expenses would result in loss to the State exchequer by ₹ 32.54 crore.

The Management stated (September 2015) that the Company is guided by the orders of Vigilance Department, Government of Bihar. However, the Company agreed to frame a policy in this regard.

Payment to contractors in violation of Government Order

2.1.29 GoB informed (May 2009) the Company that every contractor shall deposit affidavit for Form M and N with his bill and the consumption of minor minerals shall be verified from the District Mining Office prior to making payment to contractors by the Company.

We observed that the Company in contravention of the aforementioned Government orders, made payment to the contractor without obtaining/verifying Form M and N from the District Mining Officer before making payments.

The Management stated (September 2015) that in case where the contractor did not submit the M and N form, the Company deducted royalty at double rate and also stated that deduction of price of minor minerals from the bills of the contractor will cause hindrance in execution. The reply is not acceptable as deduction of royalty at double rate did not absolve the Company from the responsibility of getting the materials verified from the specified quarries.

The Company did not have any policy regarding appointment of Supervision Consultants

The Company, in violation of Government order made payment to the contractor without verifying minor minerals

Thus, the government orders in this regard should be adhered to by the Company.

Quality Control Mechanism

Works Divisions did not have independent quality control wing

- **2.1.30** The Company has an internal quality control laboratory to carry out various tests during the construction activities. Cube samples, aggregates and mortar samples are being tested to determine the concrete strength and grading respectively. In this regard we noticed that:
- though the responsibility to ensure the quality of work rests with the respective Works Divisions, the divisions did not have any independent quality control wing and as such no quality control tests were being done at Works Divisions level.
- the quality control laboratory, as against collecting the samples independently for quality control tests, was testing the samples provided by the field office only.
- no facilities as regards testing of steel, mortar and chemical analysis of cement, etc., existed in the quality control laboratory.
- the Company outsourced the work of quality control testing of bridges under MMSNY to third party consultancy agencies in three packages viz. Patna, Muzaffarpur and Bhagalpur Packages. We observed that in case of Bhagalpur packages the agreement had ended in December 2012 and new agreement was entered into only in October 2013, as a result of which quality control testing of 85 bridges was not done during the period of nine months.

The Management stated (September 2015) that considering large number of projects being constructed, it is difficult to collect independent samples. Further, it was also stated that the purchase of required equipment are under process. In case of Bhagalpur package, the Management stated that in absence of third party quality testing, the quality testing was done at Company's laboratory to the extent possible.

Recommendation

Adequate quality testing facilities at the Works Divisions should also be created and quality control wing of Headquarters should collect samples independently for testing the quality of the materials being used.

Closure of Works Accounts and reconciliation with concerned Department

2.1.31 As per Bihar PWD Code, accounts of all the completed works should be closed and the work-wise funds should be reconciled with the RCD and Rural works departments for proper accountal in the books of accounts. Any amount remaining in excess or short with respect to the administrative approval should be returned/claimed.

In six test checked divisions, we noticed that 329 projects were completed during 2010-15, out of which 284 projects were completed with a cost saving

Due to non-closure of accounts of the completed projects, an amount of ₹ 11158.91 crore was shown as Deposits from GoB in the annual accounts of the Company

of ₹ 153.63 crore while in case of 43 bridges, there were excess expenditure aggregating to ₹ 43.67 crore over Administrative Approval. However, closure of accounts and its reconciliation with the concerned Department was not done by the Company. As a result, an amount of ₹ 11158.91 crore was shown as Deposits from GoB in the annual accounts of the Company for the year 2014-15 (provisional) which also included funds pertaining to completed projects.

The Management stated (September 2015) that in case of bridges constructed under MMSNY, savings and excess are adjusted in next year. In case of bridges under other heads, the Management stated that action is being taken as suggested by audit. The reply of the Management failed to address the reconciliation of the accounts in respect of completed projects with funds received from the concerned Department.

Internal Audit

2.1.32 Existence of an independent internal audit wing is a necessary tool for effective internal control system to provide reasonable assurance that objectives of the Company are being achieved in an economical, effective and orderly manner.

We observed that the Company did not have its own Internal Audit Wing. Firm of Chartered Accountants (CAs) appointed for internal audit was merely certifying the compilation of accounts, carrying out reconciliation of bank accounts, etc., and as such did not cover technical/propriety audit to strengthen process of Internal Control System prevalent in the Company.

Management in their reply agreed to constitute an Internal Audit Wing.

Conclusion & Recommendations

• The Company suffered loss of centage charges of ₹ 12.66 crore in respect of 70 projects due to execution of work without agreement and the centage charges of ₹ 16.49 crore on revised estimate of a bridge was also not claimed.

The Company should be vigilant to ensure that in all agreement entered into by it, its due centage charges are claimed.

- Execution of the projects under various heads and MMSNY were deficient which resulted in delays in completion of bridges due to delays in tendering process, in land acquisition and execution of the projects by the contractors. Tenders were finalized with delays and 10 work orders amounting to ₹ 132.28 crore were issued without inviting tenders. Four incomplete bridges were abandoned after incurring expenditure of ₹ 44.83 crore.
- Construction of bridges and buildings was marred by excess payment of ≥ 9.91 crore to contractor, avoidable payment of ≥ 3.81 crore to

contractors, injudicious payments of \mathbb{Z} 4.29 crore on account of increase in depth of foundation and undue benefit to the contractors by \mathbb{Z} 18.51 crore.

The extant orders of the Government and agreement clauses should be adhered to while making payment to the contractors.

• The monitoring and internal control in the Company was deficient with respect to appointment of supervision consultant, quality control mechanism, closure of accounts of completed projects and internal audit functions.

Adequate quality testing facilities at the Works Divisions should also be created and quality control wing of Headquarters should collect samples independently for testing the quality of the materials being used.

CHAPTER II

2.2. PERFORMANCE AUDIT ON THE ACTIVITIES OF BIHAR URBAN INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED

2.2 Performance Audit on the Construction Activities of Bihar Urban Infrastructure Development Corporation Limited

Executive summary

Introduction

Bihar Urban Infrastructure Development Corporation Limited (Company) was incorporated on 16 June 2009 as a wholly owned Government Company with main objectives to execute and accelerate urban infrastructural projects pertaining to water supply, sewerage and sewage network, road and drainage, river front development, etc. under various Government of India (GoI) and State Funded Infrastructural Development Schemes. The Company was also appointed as a nodal agency for execution of projects assigned under GoI Scheme viz. Jawaharlal Nehru National Urban Renewal Mission (JnNURM).

Financial Management

• During the period 2009-10 to 2014-15, the Company received a total sum of ₹ 940.30 crore for execution of various projects. Utilisation of fund during the said period ranged between 1.03 *per cent* and 42.13 *per cent* only. The main reasons for under utilisation of funds were low activity of the Company in initial years, slow execution of projects and termination of contract.

(Paragraph 2.2.6)

• In Danapur Water Supply Project, the Company failed to renew the validity of the Bank Guarantee pledged against mobilisation advance and the contract was terminated. This resulted in non-recovery of mobilisation advance of ₹ 6.70 crore.

(Paragraph 2.2.9)

Execution of Water Supply Projects under JnNURM

• The contracts for Muzaffarpur Water Supply Project, Patna Water Supply Project and Danapur Water Supply Project were terminated due to non-performance of the contractors. Non-award of the remaining portion of the work to another contractor despite lapse of more than one year resulted in blocking of funds amounting to ₹77.70 crore. Besides, the State was deprived of the intended benefits envisaged under the scheme.

(Paragraphs 2.2.13, 2.2.14 and 2.2.15)

National Ganga River Basin Authority funded projects

• During the period 2010-11 to 2014-15, the Company had undertaken four projects of Sewerage System and Sewage Treatment Plant at Buxar, Hazipur, Begusarai and Munger with an Administrative Approval (AA) of ₹ 441.86 crore and scheduled date of completion between December 2013 and March 2014. As of July 2015 the financial progress of the projects was only 1.57 per cent to 18.14 per cent despite lapse of 16 to 19 months from their

scheduled date of completion due to delay in award of work to contractor, non-availability of land and slow/non-execution of work by contractors.

(*Paragraph 2.2.18*)

State Funded Schemes

During the period 2010-11 to 2014-15, 12 construction projects having AA of ₹270.36 crore were undertaken by the Company out of which, only five projects were completed (July 2015) with time overruns ranging from two to 18 months. The work of seven projects was in progress. As of July 2015 the financial progress of these projects was only 7.45 to 73.08 *per cent* despite lapse of 9 to 26 months from its scheduled date of completion. The delay was mainly due to preparation of faulty DPR by the Company and delay in award of work to contractors.

(*Paragraph* 2.2.20)

Monitoring and Internal control

• The Company failed to link the payment of Construction for Supervision and Quality Control consultants (CSQC) with progress of work which resulted in unfruitful expenditure to the tune of $\mathbf{\xi}$ 9.53 crore.

(*Paragraph 2.2.22*)

Introduction

2.2.1 Bihar Urban Infrastructure Development Corporation Limited (Company) was incorporated on 16 June 2009 as a wholly owned Government Company. The main objectives of the Company are to execute and accelerate urban infrastructural projects assigned by its Administrative Department, i.e., Urban Development and Housing Department (UD&HD), Government of Bihar (GoB). During the period 2010-11 to 2014-15, it had undertaken various infrastructural projects *viz*. Water Supply Projects, Sewerage and Sewage Network Projects, Road and Drainage Projects, Solid Waste Management Projects, Urban Transport Projects, Urban Park Projects, River Front Development Projects, etc. covered under various Government of India (GoI) sponsored Schemes *viz*. Jawaharlal Nehru Urban Renewal Mission (JnNURM), National Ganga River Basin Authority (NGRBA) and Asian Development Bank (ADB) funded projects as well as GoB Schemes.

The projects are entrusted by the UD&HD to the Company as deposit work on a cost plus basis, i.e., scheduled cost plus centage (Eight *per cent* for Project cost up to ₹ 250 crore and Seven *per cent* for project cost above ₹ 250 crore) and contingency charges at the rate of one *per cent* of project cost for execution of projects. The deposit works are executed through award of contracts either through item rate basis or Bill of Quantity (BoQ) rate or turnkey basis. Since incorporation, the Company has executed deposit works only and as such has not obtained any contract through participation in open tender.

The execution of project commences upon allotment of work by the UD&HD. Urban Local Bodies (ULBs) being a party to the tripartite agreement for execution of work alongwith the Company and the Contractor, assists and facilitates the Company in the execution of the work. The asset so created is handed over to ULBs for operation and maintenance. The Detailed Project Report (DPR) is prepared either by UD&HD or by the Company. After reviewing the DPR, the Company accords technical Sanction (TS) which forms the basis for Notice Inviting Tender (NIT).

The year-wise details of projects allotted to the Company under different schemes and corresponding Administrative Approval are given in the table below:

Table No. 2.2.1 (₹ in crore)

Schemes	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Total
JnNURM	427.92	427.00	-	-	-	-	854.92
	(10)	(1)					(11)
NGRBA	-	441.97	-	-	-	-	441.97
		(4)					(4)
State	229.08	-	0.80	13.79	-	26.69	270.36
Funded	(4)		(1)	(3)		(4)	(12)
Total	657.00	868.97	0.80	13.79	-	26.69	1567.25
	(14)	(5)	(1)	(3)		(4)	(27)

Source: Information furnished by the Company. Figures in brackets indicate numbers of projects.

The Company during the period April 2009 to March 2015, received a total of 27 major construction projects with an Administrative approval (AA) of ₹ 1567.25 crore out of which 10 projects (AA of ₹ 335.92 crore) were completed and the remaining 17 projects (AA of ₹ 1231.33 crore) were incomplete (July 2015). The details of these projects are depicted in *Annexure-2.2.1*. During the said period, the Company received ₹ 940.30 crore from UD&HD out of which only a sum of ₹ 564.79 crore (60.06 per cent) was utilised.

The Company had finalised its accounts for the year upto 2013-14 only and figures for the year 2014-15 were provisional. During the period 2010-11 to 2014-2015 it registered steady profits which increased from ₹ 31 lakh in 2010-11 to ₹ 8.78 crore in 2013-14. However, the profit decreased to ₹ 5.57 crore in the year 2014-15.

The Management of the Company is vested with the Board of Directors (Board) comprising of eleven Directors including Chairman. The Development Commissioner, Government of Bihar is the ex-officio Chairman of the Board. The Managing Director is the Chief Executive Officer of the Company and is responsible for the day-to-day functioning of the Company subject to the overall control and supervision of the Board. The organisational set-up of the Company is shown in *Annexure-2.2.2*.

Scope and Audit Methodology

2.2.2 The Performance Audit on the construction activities of the Company was carried out during the period March 2015 to June 2015 for the period 2010-15. The records maintained at the Company's head office and all its eight Scheme Implementation Units (SIUs) were selected and examined.

An Entry Conference was held on 13 March 2015 to apprise the Government and the Management about the objectives of the Performance Audit. The audit findings were reported (July 2015) to the Government and the Management and discussed in an exit conference held on 30 September 2015 which was attended by the Principal Secretary, UD&HD, GoB and the Managing Director of the Company. The view expressed by the Government and the Management have been considered while finalising the Performance Audit.

Audit Objectives

- **2.2.3** The Performance Audit of the Company was carried out to assess whether:
- the Company adequately safeguarded its financial interests and utilised its financial resources judiciously;
- proper planning was done before commencement of execution work of various infrastructural projects and the projects were executed economically, efficiently and effectively and that there was no unwarranted delay or cost overrun in the execution of the projects; and
- monitoring and internal control system prevalent in the Company was adequate and effective.

Audit Criteria

- **2.2.4** The audit criteria considered for assessing the achievement of audit objectives were drawn from:-
- Directives of the GoB/GoI, Central Vigilance Commission (CVC) and Management with respect to scheme implementation as well as execution of projects;
- Scheme Guidelines issued by the GoI/GoB;
- Board's resolutions and other relevant rules and regulations;
- Company's plan for execution, supervision and monitoring of the project works; and
- Provisions of the Bihar Financial Rules, Bihar Public Works Department Code and Bihar Public Works Accounts Code.

Audit Findings

Financial Management

Financial position and working results

2.2.5 The financial position and working results of the Company during the period 2010-11 to 2014-15 is depicted in *Annexure-2.2.3*.

The perusal of the financial position and working results of the Company revealed that:

- the net worth of the Company increased from ₹ 5.27 crore in 2010-11 to ₹ 27.62 crore in 2014-15 which was indicative of good financial health of the Company.
- the total turnover of the Company increased from ₹ 2.03 crore in 2010-11 to ₹ 209.05 crore in 2014-15 due to increase in activities of the Company.

Fund position

2.2.6 The Company receives fund from the UD&HD for execution of the assigned infrastructural projects. During the period 2009-10 to 2014-15, it received fund of ₹ 940.30 crore under various schemes from UD&HD (*Annexure-2.2.4*). The year-wise detail of the available fund vis-à-vis utilisation thereof is depicted in the Table 2.2.2.

Table no. 2.2.2 (₹ in crore)

Year	Opening Balance	Fund received	Available fund	Fund Utilised	Closing Balance	Utilisation in Per cent
1	2	3	4=2+3	5	6=4-5	7= 5/ 4*100
2009-10	0	101.00	101.00	0.05	100.95	0.05
2010-11	100.95	55.76	156.71	1.61	155.10	1.03
2011-12	155.10	166.12	321.22	6.29	314.93	1.96
2012-13	314.93	113.37	428.30	136.30	292.00	31.82
2013-14	292.00	255.60	547.60	230.71	316.89	42.13
2014-15	316.89	248.45	565.34	189.83	375.51	33.58

It can be seen from above that utilisation of available fund during the period 2010-11 to 2014-15 ranged between 1.03 *per cent* and 42.13 *per cent*. Further, the closing balance ranged between ₹ 155.10 crore to ₹ 375.51 crore during the aforementioned period. The main reasons for under utilisation of funds were low activity of the Company in initial years, slow execution and termination of contract.

Recommendation

The Company should improve utilization of fund by timely execution of projects and by removing the bottlenecks.

Other important observations relating to fund management are discussed below:

Execution of works beyond projects' funds

2.2.7 We observed that the Company received ₹ 143.97 crore for execution of 12 projects, against which it incurred expenditure of ₹ 157.45 crore. The excess expenditure of ₹ 13.48 crore was met from other projects fund (₹ 9.00 crore), interest earned on project funds (₹ 3.67 crore) and its own sources (₹ 81 lakh).

The Management while accepting the audit observation stated (October 2015) that funds were so utilized to complete those projects which were in advance stage of completion. Reply is not convincing since the diversion of fund meant for execution of other projects may hamper completion of those projects.

Recommendation

The Company needs to plan the timely availability of funds so as to avoid the instances of execution of infrastructure project through other sources of fund.

Irregularities in grant of mobilisation advance

2.2.8 The Company did not fix uniform rate for grant of interest bearing mobilisation advance. Rates of interest varied on different work awarded at same time. We observed that as per agreement with the contractor of Bodhgaya Sewerage and Sewerage treatment plant (STP) Project (December 2011), mobilisation advance was given to him at an interest rate of 14.25 *per cent* per annum as per SBI norms whereas, in other nine projects, the advance was given to contractor at the interest rate of 10 *per cent*. Thus, due to lack of fixing uniform rate of interest to be charged from the contractor, the Company extended undue benefit of ₹ 3.21 crore to the contractors.

The Management, while accepting the audit observation, stated (October 2015) that the Company has already started charging the interest on mobilisation advance at SBI rate.

- **2.2.9** Central Vigilance Commission (CVC) issued (April 2007 and February 2011) Guidelines pertaining to Mobilisation Advance (MA) which, *inter alia*, stipulated that MA should essentially be need-based and preferably be given in instalments and subsequent instalments should be released only after obtaining satisfactory utilization certificate from the contractor for the earlier instalment. In this regard the following irregularities were noticed:
- In case of Sewerage System and Sewerage treatment plant, Buxar, the Company in violation of the CVC Guidelines provided (October 2012) MA of ₹ 5.20 crore (10 *per cent* of contract value) in one instalment only.

The Management, while accepting the facts and figures, stated (October 2015) that the suggestion of audit is under implementation.

The Company extended undue benefit of ₹ 3.21 crore to the contractor due to lack of uniform rate for grant of interest bearing mobilisation advance

• In case of Sewerage System and Sewerage treatment plant at Buxar, Rajgir and Bodhgaya projects, the Company provided mobilisation advance of ₹ 99.60 lakh to the contractor for the operation and maintenance (O&M) component of the project though the work was still under execution and the O&M activity was to be carried out only after completion of the project.

The Management stated (October 2015) that the MA was provided to contractor as per the provisions of agreement. The reply is not convincing as the advance against O&M component was extended without need and contrary to CVC Guidelines.

• In case of two projects, MA amounting to ₹ 7.61 crore [Water Supply System, Muzaffarpur: ₹ 5.90 crore, Sewerage System, Begusarai: ₹ 1.71 crore (For STP and IPS)] was released without ensuring the availability of land.

The Management stated (October 2015) that non-availability of land came to notice only after grant of mobilisation advance to the contractor. The reply is self explanatory that mobilisation advance was granted to the contractor without exercising due diligence.

Failure of the Company to renew the validity of Bank Guarantee resulted in non-recovery of ₹ 6.70 crore

• In Danapur water supply project an interest bearing mobilisation advance of ₹ 7.02 crore was released to contractor against the Bank Guarantee which was valid upto 20 October 2013. We noticed that due to non-performance of the contractor the contract was terminated (July 2014). Further, the Company failed to renew the validity of the Bank Guarantee pledged against mobilisation advance. This resulted in non-recovery of mobilisation advance of ₹ 6.70 crore (₹ 5.84 crore outstanding mobilisation advance + ₹ 0.86 crore interest at the rate of 10 *per cent* for 538 days from 9^{th} running bill).

The Management stated (July and October 2015) that monthly physical verification system is now being implemented and the said contractor has been blacklisted and FIR has been lodged against him. Further, the Government stated (October 2015) that directives for fixation of responsibility has been issued to the Company.

Recommendation

The Company needs to exercise due diligence in grant of mobilization advance keeping in view the CVC Guidelines.

Planning and Execution of Infrastructural Projects

2.2.10 The Company executes infrastructure development works allotted to it by the UD&HD. Proper and effective planning is essential for execution of any infrastructural project. An execution plan specifying time schedule for completion of different stages of the project should be laid down for its timely completion. Planning includes in its purview preparation of accurate and realistic DPRs, designs and estimates based on site-survey, preparation of realistic Bill of Quantities, estimates and ensuring the availability of required

land and adequate fund for execution of the project. This follows according of technical sanction as per site conditions, invitation of tender and award of work either through item rate basis or bill of quantity or turnkey basis.

Deficiencies noticed in planning and execution of projects under different schemes are discussed in succeeding paragraphs:

Jawahar Lal Nehru National Urban Renewal Mission (JnNURM)

2.2.11 The Government of India launched (2005-06) Jawaharlal Nehru National Urban Renewal Mission (JnNURM) to encourage Urban Infrastructural Development in a financially sustainable manner. The JnNURM consisted of two sub-schemes, the Urban Infrastructure and Governance (UIG) and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT). Under UIG scheme, 50 per cent of project cost was to be borne by the GoI, 20 per cent by GoB and remaining 30 per cent by Urban Local Bodies (ULBs). Similarly, under UIDSSMT 80 per cent of project cost was to be borne by GoI, 10 per cent by GoB and the remaining 10 per cent by Nodal/Implementing agency.

The Company completed five projects out of 11 with time overruns ranging from 14 to 24 months During the performance audit period, 11^1 construction projects with AA of ₹854.92 crore were undertaken by the Company out of which only five projects were completed at a cost of ₹60.48 crore with time overruns ranging from 14 to 24 months. Further, the work in respect of the remaining six projects with AA of ₹748.88 crore was in progress in respect of which an expenditure of ₹168.76 crore had already been incurred (July 2015). These projects had already suffered time overruns by 13 to 28 months with the progress being in the range of 10.91 to 63.80 per cent (Annexure -2.2.1).

The slow execution of various projects was primarily attributable to outsourcing of DPR preparation and other pre-tendering activities without fixing any timeline for completion of the work and the consequent delay in award of work to the contractor, award of work without availability of land/sites, change in location of sites, change in designs, etc.

The project-wise audit findings are discussed in succeeding paragraphs:

Road with Drainage Projects at Narkatiyaganj and Rosera

2.2.12 Road with Drainage Projects at Narkatiyaganj and Rosera was approved by Government of India under JnNURM with an estimated cost of ₹ 47.13 crore and ₹ 29.21 crore respectively. The same was assigned to the Company by UD&HD, GoB in December 2009. For execution of said projects NITs were published in November 2011. The works were awarded to contractors in March 2012 at a cost of ₹ 33.85 crore and ₹ 23.74 crore respectively with the scheduled date of completion in December 2012. The said projects were completed in February 2014 and May 2014 with a delay of 14 and 17 months at a cost of ₹ 24.71 crore and ₹ 22.16 crore respectively.

Five projects of UIG scheme and six projects of UIDSMMT.

The reasons for delay were change in design and non-handing over of hindrance free complete site, etc.

We further observed that:

Due to unrealistic estimate, items not associated with the work were also included in the estimates

- The estimates were not realistic and prepared without scrutiny of DPR and conducting actual site survey as a result of which items unrelated to the work viz. construction of roofs, balconies, chajjas, lintels, etc., valued at ₹ 4.78 crore were included in the estimates for construction of roads and drainages;
- As estimates were not prepared with due diligence, wide variations in actual work vis-à-vis estimates were observed. It was seen that in case of 24 items, quantity of work actually executed was 4.39 to 99.56 *per cent* less than specified in BOQ (Narkatiyaganj ₹ 16.31 crore, Rosera- ₹ 8.61 crore) and in respect of eight items, the quantum of work exceeded from 148 to 1151 *per cent* (Narkatiyaganj ₹ 4.64 crore and Rosera- ₹ 13.90 crore). The work related to 17 items worth ₹ 6.64 crore (Narkatiyaganj ₹ 3.45 crore and Rosera ₹ 3.19 crore) was not taken up altogether. Further, the projects were completed at a cost of ₹ 46.87 crore (75.52 *per cent*) as against the total awarded cost of ₹ 66.35 crore.

The Management stated (October 2015) that tender was invited on the basis of DPR made available by UD&HD. The reply of the Management is self-explanatory that estimates were prepared without due diligence, site-survey and scrutiny of DPR. Moreover, the Government directed (October 2015) the Company that the DPR should be finalised after selection of projects and sites.

Recommendation

The Company needs to conduct actual site-survey for preparation of accurate and realistic estimates.

Muzaffarpur Water Supply project

2.2.13 With an objective to establish 24 x 7 water supply system in Muzaffarpur District, the work of Augmentation and Improvement of water supply system of Muzaffarpur under JnNURM (UIDSSMT) was approved by the GoI in February 2009. The UD&HD assigned the said work to the Company in December 2009.

The Company issued a Notice Inviting Tender (July 2011) for execution of the project on an estimated price of ₹ 69.88 crore. The work was awarded (December 2011) to the L1 bidder at a cost of ₹ 59.31 crore with scheduled date of completion by June 2014. Since the progress of work was very slow and work valuing ₹ 8.56 crore (i.e. 14.43 per cent of awarded cost) only was executed by the contractor till June 2014 i.e. scheduled date of completion, the Company finally terminated (June 2014) the contract and the incomplete portion of the project was not awarded to any other contractor so far despite lapse of 15 months (September 2015) since termination of the contract. This

not only resulted in blocking of fund of $\mathbf{\xi}$ 8.56 crore but also time overrun of more than one year.

We further observed that:

• The Company had finalised the tender without taking possession of land and seven out of ten sites were handed over to contractor with a delay ranging from five to 12 months which affected the execution of the project adversely.

The Management, while accepting the audit observation stated (September 2015) that in future efforts will be taken to ensure the availability of the land prior to approval of DPRs.

• As per para 43 of the conditions of contract, if the contactor fails to comply with time schedule, liquidated damages (LD) at the rate of 0.10 per cent per day of the contract price for the period of delay shall be deducted from contractor's payment. However, LD of ₹ 3.68 crore recovered from the contractor was subsequently returned (September 2013) to him on request of the contractor in disregard of the financial interests of the Company. This resulted in extension of undue favour to the contractor.

The Management stated (October 2015) that the liquidated damage of ₹ 3.68 crore was recovered by encashment of Performance security, security deposit and from RA bills. On termination of contract the performance security was again confiscated. The reply is not acceptable since the LD was deducted to penalise the contractor for non-achievement of targets as per approved work plan and confiscation of performance security was to be invoked for non-performance by the contractor and consequent termination of contract. Further, return of LD was also in contravention of provisions of agreement.

• The effective period of UIDSSMT was extended upto March 2014. Against the above work, $\stackrel{?}{\underset{?}{?}}$ 49.36 crore was released by the GoI (August 2008). Since the Company failed to complete the project within effective period of the scheme, further grant of $\stackrel{?}{\underset{?}{?}}$ 29.62 crore² was not released by the GoI.

Thus, due to deficient planning, slow execution of work and the consequent abandonment of the project, the State was deprived of the intended benefits envisaged under the project.

The Management, while accepting the audit observations stated (October 2015) that adequate infrastructure and necessary expertise was not available with them which resulted in delay in execution of the projects.

⁸⁰ per cent of ₹ 98.72 crore = ₹ 78.98 crore - ₹ 49.36 crore = ₹ 29.62 crore.

Patna Water Supply Project

2.2.14 Reference is invited to paragraph no. 2.2.13. Similar to it, the work of Patna Water Supply Project was assigned by UD&HD (August 2010) to the Company at an estimated cost of ₹ 426.98 crore. The estimated project cost was reassessed and technically sanctioned (July 2011) for ₹ 535 crore by the Company. The Company awarded the work to the contractor in March 2012 at a cost of ₹ 548.83 crore. After lapse of 27 months from award of work and after incurring an expenditure of ₹ 59.90 crore, the Company terminated (July 2014) the contract on ground of slow progress of work by the Contractor. This work is yet to be awarded by the Company despite lapse of 14 months (September 2015) from date of termination of contract. This resulted in blocking of fund to the tune of ₹ 59.90 crore. Besides, the State was deprived of the intended benefits envisaged under the JnNURM scheme.

Non-award of residual work to new contractor resulted in blocking of ₹ 59.90 crore

In this regard we also observed that:

- The Company finalised the tender without taking possession of land and out of 72 sites only 26 were handed over to contractor with a delay ranging from three to nine months. This affected the execution of project adversely.
- The Company without obtaining 'No Objection Certificates' (NoC) for land use from Patna Municipal Corporation had commenced execution of works on three sites viz. Rajendra Nagar, Arfabad and Kadam Kuan and incurred expenditure of ₹ 55 lakh. The work was abandoned as the construction sites at which work was started (sites as per DPR) was already allotted for construction of park. Thus, the expenditure of ₹ 55 lakh had become infructuous.
- The State was deprived of a further grant of ₹ 159.92 crore from GoB due to non-execution of the project by the Company within the effective period of scheme upto March 2014.

The Management stated (October 2015) that the observation of audit has been noted for future compliance.

Recommendation

The Company should avoid delays in pre-tendering activities and ensure availability of land prior to award of work to contractor so that delay in completion of projects may be avoided.

Danapur Water Supply Project

2.2.15 Reference is invited to paragraph no. 2.2.13. Similar to it, the work of Danapur Water Supply Project was assigned (December 2009) by UD&HD to the Company at an estimated cost of ₹ 68.96 crore. A technical sanction of ₹ 84.41 crore was accorded by the Company (July 2011).

Failure in reawarding of the work after termination of contract led to blocking of ₹ 9.24 crore

The work was awarded (October 2011) to the contractor at a cost of ₹ 70.19 crore. The contract was terminated in July 2014 after incurring expenditure of ₹ 9.24 crore (13.17 per cent) due to slow/non-execution of work by the contractor. The work of incomplete portion was not awarded to any other contractor despite lapse of 14 months (September 2015) from date of termination of contract. This resulted in blocking of project fund to the tune of ₹ 9.24 crore, besides the State was deprived of the intended benefits envisaged under the scheme.

We also observed that:

• In the utilisation certificate submitted by the Company to UD&HD (March 2015), the mobilisation advance of ₹ 5.84 crore recoverable from the contractor had been shown as expenditure though the contract had been terminated (July 2014).

The Management stated (October 2015) that the unadjusted mobilisation advance of ₹ 5.84 crore was an outflow for the Company and was included in the utilisation certificate. The reply of the Management is not acceptable as fact about termination of the contract and unrecovered mobilisation advance from the contractor were not specifically stated in the UC. Further, the Government stated (October 2015) that direction has been given to the Company to take action against persons responsible for it.

• The State was deprived of a further grant of ≥ 20.69 crore³ due to non-execution of the project by the Company within the effective period of the scheme upto March 2014.

The Management and the Government had given same reply on the above observations as stated in para no. 2.2.13.

Recommendation

The Company should keep proper watch on validity period of Bank Guarantee to safeguard its financial interests.

Sewerage System and Sewage Treatment Plant, Bodhgaya

2.2.16 The work relating to "Designing, Providing, Laying, Testing and Commissioning of Sewerage system" for Bodhgaya Town was approved by the GoI in February 2009 under UIG scheme with an estimated cost of ₹ 95.94 crore. The project was assigned (December 2009) to the Company by the UD&HD. The Company awarded the work (October 2011) to L1 bidder on turnkey basis at a cost of ₹ 92.75 crore. The agreement stipulated completion of the project in 24 months by December 2013 and its maintenance thereafter for five years by the contractor. However, despite lapse of more than 18 months since stipulated date of completion, the said project was incomplete (July 2015) after incurring expenditure of ₹ 59.16 crore (63.80 per cent).

 $^{50 \}text{ per cent of } ₹ 68.96 \text{ crore} = ₹ 34.48 \text{ crore} - ₹ 13.79 \text{ crore} = ₹ 20.69 \text{ crore}$

In this regard we observed that:

- As per scope of work, Sewer Network of 65.33 Km, Intermediate Pumping Stations (five in numbers), Sewage Treatment Plant (STP) of 10 million liter discharge (MLD), 2570 House connection chambers, 3607 manholes were to be constructed. Against this till March 2015 only, sewer network of 58.06 Km (88.87 per cent), 1122 house connection chambers (43.66 per cent) and manholes (82.20 per cent) only were completed.
- The Company floated an NIT (June 2011) based on provisions in DPR for construction of Sewer network of 58.05 Km with 10 MLD STP and eight Intermediate Pumping Stations (IPSs) having capacity of 132 HP at Bodhgaya town. The rate for IPSs was invited on a job basis. As per the contract, after assignment of work, the contractor was required to submit a new design on the basis of actual site-survey. We observed that, the scope of work pertaining to IPSs was reduced considerably by the contractor. As per the new design only five IPSs of 90 HP, as against the eight IPSs of 132 HP envisaged in DPR, were executed. This not only resulted in excess expenditure of ₹ 1.31 crore⁴ on account of three IPSs but also led to extension of undue benefit to the contractor.

The Management stated (October 2015) that despite reduction in number of IPSs the overall capacity of the IPSs (i.e capacity of well) was not reduced. The reply of the Management did not address the issue raised in audit and was silent on the reduced capacities (i.e. HP) of pumps and its impact on cost. The Government stated (October 2015) that directives for responsibility fixation in this regard has been issued to the Company.

Recommendation

The Company needs to carry out cost benefit analysis of the new design submitted by the contractor in case of turnkey contract.

Khagaul Water Supply Project

2.2.17 With a view to provide tariff based safe potable drinking water to the households of Khagaul area the work of Khagaul Water Supply Project (KWSP) was awarded (October 2011) to the contractor at a cost of ₹ 16.65 crore. A tripartite agreement (December 2011) was signed between the Company, the Contractor and the Nagar Parishad, Khagaul being the facilitator for the Company. The scheduled date of completion of project was December 2012 which was extended upto December 2014. After completion of the project at a cost of ₹ 14.57 crore, it was handed over to Khagaul Nagar Parishad (December 2014).

Following irregularity was noticed in execution of this project:

Quoted rate by contractor for eight IPSs was $\stackrel{?}{\underset{?}{?}}$ 3.50 crore (i.e. on the basis of DPR). Therefore, cost of three IPSs = $\stackrel{?}{\underset{?}{?}}$ 3.50/8*3= $\stackrel{?}{\underset{?}{?}}$ 1.31 crore.

The expenditure of ₹ 1.22 crore incurred on installation of water meters was irregular/doubtful

• The commissioning of the Water Supply Project, Khagaul was to be done in terms of Section V, para 12.3 of Technical Specification of the agreement which provided, inter-alia, methodology for water connection to households. As per the Measurement Book (MB), the work relating to house connection and installation of water meters to 6300 households was done by the contractor in the year 2013-14 at a cost of ₹ 1.60 crore. The contractor was paid a sum of ₹ 1.22 crore upto July 2014. However, no supporting details of work done by the contractor viz. copy of application filed by households, fee deposited thereagainst and sanction accorded by Khagaul Nagar Parishad for release of connections in respect of work executed by the contractor were furnished by the company. Besides, Khagaul Nagar Parishad also confirmed (June and September 2015) that details of house connection and installation of water meters were not provided to them by the Contractor. The Parishad also stated (September 2015) that meter reading with respect to supply of water to households was also not being done. Thus, in absence of details of water connection to households and meter reading taken thereagainst, the expenditure of ₹ 1.22 crore was irregular/doubtful.

The Management stated (October 2015) that due procedure as per agreement was adopted while providing metered connections to the households. The reply of the Management was not acceptable as it failed to produce details of connections installed as stated above. Further, no water metering is being done in the project area.

The Government stated (October 2015) that directives have been issued to the Company for fixation of responsibility in this regard.

National Ganga River Basin Authority (NGRBA)

2.2.18 The Government of India (GoI) established (2009) National Ganga River Basin Authority (NGRBA) with a view to clean-up and conserve the river Ganga. The NGRBA was mandated to develop a multi-sector program ("the NGRBA Program") for ensuring pollution abatement in the Ganga. The cost of the NGRBA Program was to be shared in 70:30 ratio between the Central and State Governments.

During the period 2010-11 to 2014-15, the Company had undertaken four projects namely Sewerage System and Sewage Treatment Plants at Buxar, Hazipur, Begusarai and Munger with an AA of ₹ 441.86 crore. The scheduled date of completion of Buxar, Hazipur, Begusarai projects was December 2013 while for the Munger project it was March 2014. An expenditure of ₹ 29.88 crore was incurred on these four projects as of July 2015 and works were still in progress. These projects have already suffered time overrun of 16 to 19 months with the financial progress being in the range of 1.57 per cent to 18.14 per cent of agreement value. The delay was mainly due to delay in award of work and delayed handing over of the construction sites to contractor. The details of NGRBA aided projects are depicted in *Annexure-2.2.1*.

Deficiencies noticed in planning and execution of infrastructural projects under this scheme are discussed in succeeding paragraphs:

Sewerage System and Sewage Treatment Plant at Buxar, Hazipur and Begusarai

2.2.19 The work related to "providing, laying, testing and commissioning of Sewerage System and designing & construction of STP at Hajipur, Begusarai and Buxar town" was approved by GoI in February 2010. The estimated cost of the projects was ₹ 113.62 crore, ₹ 65.40 crore and ₹ 74.95 crore respectively. The implementation period of the projects was 24 months and period for operation and maintenance was for 60 months after completion. The work of above three projects was awarded (December 2011) to the contractors at a cost of ₹ 94.88 crore, ₹ 58.88 crore and ₹ 52.05 crore respectively, with the scheduled date of completion being December 2013. The progress of these works were very slow and work costing ₹ 17.21 crore (18.14 *per cent*), ₹ 4.13 crore (7.01 *per cent*) and ₹ 6.61 crore (12.70 *per cent*) respectively were only executed by the contractors after lapse of 43 months (July 2015).

We noticed that:

- In case of Sewerage System and Sewage Treatment Plant at Buxar, Hazipur and Begusarai, the Company obtained possession of land with delay of 29 months to 36 months, which delayed the execution of projects. We observed that notwithstanding a payment of ₹ 2.86 crore in May 2011 and ₹ 8.49 crore in June 2011 for acquisition of land for STP, Begusarai and STP, Hajipur respectively, persuasion by top level Management for early acquisition of land was not found on records.
- Clause 64 of the agreement stated that the settlement of disputes, if any, shall be subject to the law of People's Republic of China's jurisdiction which limited / compromised the legal standing of the Company seriously in case of disputes.

The Management accepted the observations and stated (October 2015) that the same has been noted for future compliance.

• Delay in providing required land for construction of the aforementioned STP and IPS to the contractor resulted in to avoidable payment of price escalation to the tune of $\stackrel{?}{\underset{?}{?}}$ 2.71 crore (Begusarai: $\stackrel{?}{\underset{?}{?}}$ 35 lakh, Buxar: $\stackrel{?}{\underset{?}{?}}$ 69 lakh and Hazipur: $\stackrel{?}{\underset{?}{?}}$ 1.67 crore).

The Management accepted (October 2015) the audit observation and noted it for future compliance. The Government stated (October 2015) that directives has been given to the Company in this respect.

State Funded Infrastructural Development Projects

2.2.20 For infrastructure development and to provide public amenities in the State of Bihar, GoB through UD&HD assigned various construction works to the Company under the above scheme.

During the period 2010-11 to 2014-15, 12 construction projects having AA of ₹270.36 crore were undertaken by the Company out of which, only five projects were completed (July 2015) at a cost of ₹115.31 crore with time overruns ranging from two to 18 months. Further, the work in respect of seven projects having AA of ₹40.48 crore was in progress on which an expenditure of ₹17.41 crore had already been incurred. The completion of these projects had already suffered time overrun by nine to 26 months with the progress being in the range of 7.45 to 73.08 per cent (Annexure-2.2.1). The delay was mainly due to preparation of faulty DPR by consultant and its review by the Company, non-obtaining of NoC for land and non-framing of any timeline for each activity of pre-tendering stage.

Deficiencies noticed in planning and execution of projects under the scheme are discussed in succeeding paragraphs:

Storm Water Drainage System, Sewerage System and Sewage Treatment Plant at Rajgir

2.2.21 With a view to provide integrated system of collection, conveyance and disposal of storm water through drainage and providing proper sewerage system with proper conveyance, treatment and disposal of waste water, a cumulative Administrative Approval (AA) of ₹ 77.67 crore for the construction of Storm Water Drainage System (SWDS) and Sewerage System and Sewage Treatment Plant (STP) at Rajgir was accorded (January 2010) to the Company by the GoB. The Company bifurcated the said accumulated AA into ₹ 55.80 crore for the STP and ₹ 21.70 crore for the SWDS.

The work of SWDS was awarded to contractor in December 2011 at a cost of ₹ 29.12 crore with the completion schedule by March 2014. The work was completed in February 2014 at a cost of ₹ 19.66 crore. Similarly, the work of STP was awarded to contractor on March 2012 at a cost of ₹ 47.37 crore with the schedule completion by March 2015. The construction of STP was completed at a cost of ₹ 51.01 crore in March 2015. However, the work of connection of houses to sewerage network has not yet commenced (July 2015) and the said project has not been handed over to Nagar Parishad till date (October 2015).

The following irregularities were also observed in execution of project:

• In the work of STP there were significant increase in the length and capacity of sewerage network by 45 per cent and 25 per cent respectively over the estimates for which a supplementary agreement valuing ₹ 12.87 crore was entered into with the contractor. Besides, there were huge deviation of up to 81.8 per cent on individual items of BoQ which indicated that the estimates were not realistic and prepared without conducting actual site survey.

The inaccurate and unrealistic estimate resulted in huge deviation at the time of execution The Management stated (October 2015) that DPR submitted by the consultant was deficient hence, the cost increased. The reply of the Management itself is an acceptance that estimates were deficient and prepared without conducting site-survey.

• One of the components of SWDS work viz. Trapezoidal Drains of length of

Failure of the Company to restrict the payment of lead as per actual Km resulted in excess expenditure of ₹ 2.28 crore

7.89 Kms involved carriage of stone boulders. The carriage rates were allowed to the contractor by taking lead of 165 Kms. However, scrutiny of the certificate of carriage issued by Mining Office revealed that the stone boulder was obtained from quarry which was only 70 Km away from work site. The payment of carriage for lead was, however, made for a distance of 165 KMs as against 70 KMs. This not only resulted in avoidable excess expenditure of ₹ 2.28 crore but also amounted to extension of undue benefits to the contractor to that extent.

The Management stated (October 2015) that the matter is being examined and excess payment if any, will be recovered from the security deposit of the contractor.

• Since the commencement of the execution work of both projects, the Company was well aware of the fact that the earth filling was required for the said work (13600 M³ earth filling work was required in SWDS). However, the Company disposed off 66,272.01 M³ and 18556.30 M³ excavated earth in SWDS and STP work respectively after incurring an expenditure of ₹ 99.78 lakh⁵ on disposal which included loading, unloading and carriage cost. Further, the Company purchased fresh earth of 13503.22 M³ and 5015.78 M³ in Rajgir Drainage and Rajgir Sewerage respectively at the rate of ₹ 410 per M³. The surplus earth, being a saleable commodity should have been sold on the spot after deposit of due royalty. The utilisation of available excavated earth and sale of surplus excavated earth on spot would have served a threefold purpose i.e. elimination of disposal cost of excavated earth, procurement cost of fresh earth and further it would have fetched revenue on surplus excavated earth.

Thus, due to lack of propriety, the Company incurred an avoidable expenditure of ₹ 99.78 lakh on disposal of surplus earth, an avoidable expenditure of ₹ 42.52 lakh on procurement of fresh earth and suffered a revenue loss of ₹ 40.38 lakh⁶ on the non-sale of surplus earth.

The Management stated (October 2015) that the excavated earth was mixed with organic matter and as such was not suitable for filling. Hence, the question of selling the excavated material does not arise. Reply is not acceptable as no quantification of component of silt/slush and organic matter in the excavated earth was carried out in DPR/BOQ. Further, no soil test report in support of reply was provided by the Management. Further, the reply did not address the issue of non-disposal of surplus earth excavated in STP

The Company could not evolve the system of utilising and disposal of surplus earth which resulted in avoidable expenditure on disposal and procurement

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⁵ [66272.01 M³* ₹ 108 per M³ = 71,57,377 (SWDS)] + [18556.30 M³* ₹ 152 per M³= 2820557.60 (STP)] Total = ₹ 99,77,934.60

⁶ (66272.01 M³+ 18556.30 cum) – (13503.22 M³+ 5015.78 M³) = 66309.31 M³ 66309.31 M³* ₹ 60.90 = ₹ 40.38,237

work. Moreover, the Government (October 2015) also directed the MD to take action against persons responsible for it.

• In the work of Sewerage System and Sewerage Treatment Plant (STP) at Rajgir, the Company entered into supplementary agreement with the same contractor to fill 74,024 M³ earth in different segments at filling charges of ₹83.80 per M³ (rate worked out on the basis of CPWD SoR rate). It was observed that a separate lot of 5015.78 M³ earth was filled at lower rate of ₹51.79 per M³ which was as per the rates of Building Construction Department (BCD) SoR, of GoB. Thus, non-consideration of the BCD SoR by the Company in respect of earth filling work executed by the contractor for 74,024 M³ resulted in avoidable excess expenditure of ₹23.70 lakh².

The Management stated (October 2015) that in case of normal back filling, rate of BCD had been considered whereas in the area where compaction of earth was required for road construction for vehicular movement envisaged, the rate of CPWD had been considered. The reply of the Management is not acceptable as there was no description regarding filling and compaction by mechanical means in approved BoQ. Further, no document in support of use of mechanical compactor was furnished to audit. Moreover, the Government also directed (October 2015) the Company to take action against responsible person.

Monitoring and Internal control

Monitoring

2.2.22 Monitoring at every stage of implementation of Projects is vital for Company to ensure that the quality of execution work is maintained as per the contract agreement and as per the prescribed Standards and codes, etc. This process commences from the approval stage and continues during implementation to the post-completion stage. Monitoring of actual execution work in the Company is responsibility of concerned Engineers and a hired consultant *viz* Construction Supervision and Quality Control Consultants (CSQC). Further, Top Level Management is responsible for monitoring of progress of execution work/project.

Deficiencies noticed in monitoring of projects are discussed below:

• As per Bihar PWD Code, accounts of all the completed works should be closed and the work-wise funds should be reconciled with the concerned departments for proper accountal in the books of accounts. Any amount remaining in excess or short with respect to the administrative approval should be returned/claimed. We noticed that in violation of the Bihar PWD Code, in respect of nine projects completed by the Company, closure of accounts was not done in spite of a lapse four to 29 months from the date of completion of projects.

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Rate difference in filling cost per M³ = Rates in CPWD SOR ₹ 83.80 per M³ - Rates in BCD SOR ₹ 51.79 per M³, Difference of rate ₹ 32.01 per M³. Total extra payment = ₹ 32.01 * 74024.92 = ₹ 23,69,537.68.

The Management stated (October 2015) that the Company has started the process of closure of accounts of the completed projects and reconciliation of accounts with the concerned departments is in progress. The Government stated (October 2015) that direction has been given to the Company to complete the process.

Role of Construction Supervision and Quality Control (CSQC) consultants in the Company

• The Company appoints CSQC just after release of work order to works contractor for supervision of construction work. We observed that the appointment of CSQC is being made in ad-hoc manner without considering the actual requirement thereof. In case of two projects *viz*. Road and Drainage, Rosera and Water Supply project, Bodhgaya, the Management appointed the CSQC belatedly by nine to 12 months from the date of signing of the agreement with works contractor. By that time nine *per cent* to 37 *per cent* work had already been executed by the contractor. Thus, belated appointment of CSQC defeated the very purpose of appointment of CSQC.

The Management accepted (October 2015) the audit observation and stated that in few cases the deployment of CSQC has been delayed. However, alternative mechanism for supervision in place of CSQC is being explored.

• In case of Road and Drainage projects at Bakhtiyarpur and Murliganj, the Payment to CSQC was linked with progress of the project. However, in other projects the payment to CSQC was not linked with the progress of work but was made on the monthly basis, and therefore even in case of non-performance/stoppage of work by work contractors, CSQC were continued to be paid on monthly basis which resulted in unfruitful expenditure to the tune of \mathfrak{T} 9.53 crore (*Annexure-2.2.5*).

The Management while accepting the observation stated (October 2015) that the modalities to minimize the cost on account of CSQC are being explored.

Recommendation

The Company needs to strengthen its monitoring mechanism and to link the payment of CSQC with the progress of work.

Internal control

- **2.2.23** Internal control is a management tool used to provide reasonable assurance that objectives of the Company are being achieved in an economical, effective and orderly manner. Following deficiencies in the internal control system prevalent in the Company were observed:
- The Company had not prepared any Functional Manual.

The Management stated (October 2015) that draft manuals for Human Resource/Accounting function etc. has been prepared by Consultants and it is under review.

Payment to CSQC was not linked with the progress of work which resulted into unfruitful expenditure of ₹ 9.53 crore

• No system regarding maintenance of stock register and periodical physical verification of stock existed in the Company. Instances of non-maintenance of stock register in case of material valuing ₹ 26.58 crore taken from contractor post termination of two⁸ projects were observed. Besides, physical verifications too in respect thereof was not done (March 2015).

The Government stated (October 2015) that direction has been given to M.D. of the Company to comply with the audit observation in future.

Recommendation

The Company needs to strengthen its internal control system by formulation of functional manuals. Stock account must be maintained properly and physically verified periodically.

Conclusion & Recommendations

• During the period 2009-10 to 2014-15 utilisation of fund by the Company ranged between 1.03 per cent and 42.13 per cent of available funds due to delay in award of works, slow execution of projects, termination of contracts and non-award of balance works.

The Company should improve utilization of fund by timely execution of projects, by removing the bottlenecks.

• In Danapur Water Supply Project, there was non-recovery of mobilisation advance of ₹ 6.70 crore as the Company failed to renew the Bank Guarantee and the contract was terminated.

The Company needs to exercise due diligence in grant of mobilization advance in view of CVC Guidelines. Further, the Company should also keep proper watch on validity period of Bank Guarantee to safeguard its financial interests.

- Under JnNURM Scheme the contracts for Muzaffarpur Water Supply Project, Patna Water Supply Project and Danapur Water Supply Project were terminated due to non-performance of the contractors. Non-award of the remaining portion of the work despite lapse of more than one year resulted in blocking of funds amounting to ₹77.70 crore.
- In Muzaffarpur Water Supply Project the Liquidated Damages of ₹ 3.68 crore recovered from the contractor for delay in execution were subsequently returned to him in disregard of the financial interest of the Company and provisions of agreement.

The Company should safeguard its financial interest by adhering to the provisions of agreement.

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Water supply project, Muzaffarpur and Patna

- In case of four projects of Sewerage System and Sewage Treatment Plant at Buxar, Hazipur, Begusarai and Munger undertaken under NGRBA funding, the financial progress was only 1.57 per cent to 18.14 per cent as of July 2015 despite lapse of 16 to 19 months from their scheduled date of completion due to delay in award of work to contractors, non-availability of land and slow/non-execution of work by contractors.
- Under the State funded schemes out of 12 projects undertaken during 2010-15, only five projects were completed with time overruns ranging from two to 18 months. In case of remaining seven projects the financial progress was only 7.45 to 73.08 per cent as of July 2015 despite lapse of nine to 26 months from its scheduled date of completion. The delay was mainly due to preparation of faulty DPR by the Company and delay in award of work to contractors.

The Company needs to ensure completion of projects within schedule time by ensuring timely availability of land and timely award of works to contractors.

• Monitoring mechanism of the Company was inadequate and it was dependent on Construction Supervision and Quality Control (CSQC) consultants for supervision and quality control. The Company failed to link the payment of Construction for CSQC with progress of work which resulted in unfruitful expenditure to the tune of $\mathbf{7}$ 9.53 crore.

The Company needs to strengthen its monitoring mechanism and to link the payment of CSQC with the progress of work.