

CHAPTER IV

SECTION – A AUDIT REVIEWS

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IRRIGATION AND WATERWAYS DEPARTMENT

4.1 WORKING OF IRRIGATION AND WATERWAYS DEPARTMENT

HIGHLIGHTS

Irrigation and Waterways Department is responsible for creation and maintenance of irrigation facilities and management of flood control in the state. West Bengal is having a total geographical area of 88.75 lakh hectare of which cultivable area is 53.25 lakh hectare. As of March 2000 the department could create irrigation potential of 14.30 lakh hectare (53 per cent) through major and medium irrigation schemes although the maximum irrigation potential of the state was 27 lakh hectare. The department failed to fully harness irrigation potential on account of lack of concerted planning, poor implementation and time overrun of projects/schemes. Deficient budgetary control and unreliable estimates led to persistent and significant savings on Capital account. LOC system was not effective and expenditure control system was virtually non-functional. Rush of expenditure in the last months of the year was endemic. Due to deficiencies in planning, execution and efficient management of protection and drainage schemes, the problem of inundation and water-logging of the flood-prone basins and sub-basins had not been mitigated. Human resource management was deficient as huge manpower was idling. Procurement of stores was budget driven and every year huge quantity of hume pipes, steel rods and cement were procured unnecessarily. Stock verification was given a go by which resulted in misappropriation of stores and lack of proper accountal of stores.

The Department could not spend Rs 106.88 crore and Rs 509.71 crore (27 per cent of the total budget provision of Rs 2263.61 crore) under Revenue and Capital heads during 1997-2001. Savings was considerable under the Capital head being Rs 509.71 crore out of Rs 1240.88 crore. Due to non-receipt of budget estimates from the Divisional Officers in time, the Controlling Officer had to prepare budget estimate without input from field offices and could not submit the budget estimate to the Finance Department within the prescribed time. Absence of control in preparation of budget and monitoring by the Controlling Officer over allotment of fund vis-à-vis budgetary provision led to huge savings. The Controlling Officer did not fully surrender total unspent fund of Rs 176.64 crore during 1997-2001.

(Paragraphs 4.1.4.1, 4.1.4.2, 4.1.4.3 and 4.1.4.6)

The existing scheme of Letter of Credit (LOC) provides scope for diversion of funds from Capital to Revenue head by Divisional Officers as the LOC is not released scheme-wise and the expenditure of schemes are not monitored as per LOC releases.

(Paragraph 4.1.4.9)

The abbreviations used in this review have been listed in Glossary in Appendix 60 (page 302)

Expenditure control mechanism was non-functional as monthly statement of expenditure and liabilities were not submitted by the Divisional Officers. The Controlling Officer did not reconcile departmental expenditure figures with those maintained by the Principal Accountant General (A&E) and therefore departmental figures were not reliable.

(Paragraphs 4.1.5.1 and 4.1.5.2)

Non adherence to contractual terms of agreements in the works of Teesta Canal and Irrigation Divisions led to extra expenditure of Rs 1.55 crore and expenditure of Rs 30.62 lakh on renovation of canal system was wasteful.

(Paragraphs 4.1.6.1 and 4.1.6.2)

Teesta Barrage Project which commenced in 1976, was completed to the extent of 70 per cent and only 0.96 lakh hectare of irrigation potential was created against target of 9.23 lakh hectare even after investment of Rs 833.47 crore as of March 2001. The Cost Benefit Ratio has not been revised despite the revision of estimates.

(Paragraph 4.1.7.1 (i))

Kangsabati Reservoir Project taken up in 1956 was still under execution, even after lapse of 45 years. Cost overrun was 11 times of the original cost. The project created irrigation potential for 3.98 lakh hectare against the target of 4.02 lakh hectare as of March 2001.

(Paragraph 4.1.7.1 (ii))

Extension and improvement of Barrage and Irrigation System of Damodar Valley Corporation was taken up in 1964 at a cost of Rs 30.74 crore for creating irrigation potential of 5.15 lakh hectare. After an expenditure of Rs 81.10 crore (March 2001) irrigation potential created was for 4.91 lakh hectare. Cost overrun worked out to 264 per cent over the original estimate.

(Paragraph 4.1.7.1 (iii))

Subarnarekha Barrage Project, taken up in 1994 at an estimated cost of Rs 215.61 crore to develop irrigation potential of 1.14 lakh hectare. Even after 7 years, project work was not started except infrastructure work although an expenditure of Rs 27.93 crore was incurred upto March 2001.

(Paragraph 4.1.7.1 (iv))

Wasteful expenditure and malpractices in the implementation of Anti-erosion scheme on Ganga-Padma System were commented in the Audit Report (Civil) for the year ended 31 March 1999. Government took no action on these irregularities.

(Paragraph 4.1.8)

Protective work of retired embankment executed during monsoon was partially washed away resulting in wasteful expenditure of Rs 1.37 crore. Further, in a bank protection work, the partially executed work failed due to sudden rise in the water level during flood rendering the expenditure of Rs 85.59 lakh wasteful.

(Paragraphs 4.1.8.2 and 4.1.8.5)

Unplanned and unnecessary procurement of Steel and Hume Pipe in excess of requirement resulted in blocking of Rs 5.01 crore and loss of

Rs 29.28 lakh due to clotting of 861.301 MT Cement. Besides, purchase of boulder at higher rate resulted in extra expenditure of Rs 2.80 crore.

(Paragraphs 4.1.9.1 to 4.1.9.3)

Physical verification of stores was not done in most of the Divisions for 16 years. As a result, misappropriation of stores, retention of idle stores, obsolescence of stores, etc. were not controlled.

(Paragraphs 4.1.10.1 and 4.1.10.2)

Deployment of manpower under the Directorate was not linked to workload, thus increasing scope for unproductive and uneconomic use of manpower. Rupees 4.99 crore was spent on 270 staff in 6 Divisions without adequate work.

(Paragraph 4.1.12.1 (i and ii))

Though there were sufficient infrastructure for survey, investigation, drawing and designs, department unnecessarily executed these works through consulting firms at an expenditure of Rs 1.91 crore.

(Paragraph 4.1.12.1 (iii))

The Superintendent Engineers and Executive Engineers did not inspect the units as required. They were thus unaware of various deficiencies in the field

(Paragraph 4.1.14.4).

4.1.1 Introduction

The Irrigation and Waterways Department is responsible for extension of irrigation facilities of the State through major and medium irrigation projects and for offering reasonable protection to the areas prone to flood by flood control measures, bank protection, anti-erosion schemes. Irrigation potential of the state was 1.39 lakh hectares upto 1951 which was raised 14.30 lakh hectare by 1999-2000. Five major irrigation projects and thirty-four medium irrigation schemes were being managed by the department. Total area of the State was 88752 sq km out of which 12,060 sq km area are covered by irrigation. During the period from 1985-2000, the creation of irrigation potential increased by 26 *per cent* whereas crop production (Rice) increased by 72 *per cent* (Appendix 53). West Bengal is one of the major flood prone States in the country with an estimated flood prone area of 37660 sq km out of which 21760 sq km only was protected from flood and drainage hazards.

4.1.2 Organisational Set-up

The Secretary, Irrigation and Waterways Department is responsible for the overall planning and management of water resource of the state. He is the Controlling Officer of the budget grants of the department. The Directorate of Irrigation and Waterways was responsible for execution and maintenance of schemes and works consisted of 8 Chief Engineers (CE) (details in Appendix 54) with 29 Superintending Engineers (SE) and 85 Executive Engineers (EE) who are Drawing and Disbursing Officers (DDO). The Revenue Officers under Irrigation and Waterways Department collect Water Tax (Revenue) for supplying water for irrigation work under the control of SE.

4.1.3 Audit Coverage

Functioning of the Department was reviewed in audit through test-check of records of 22¹ division offices, 4² circle offices and in Directorate's office for the period for 1997-2001. Transactions test-checked in audit covered Rs 413 crore (i.e. 22 *per cent*) out of the total expenditure of Rs 1915 crore during this period. Major audit findings are discussed in the following paragraphs.

4.1.4 Financial Management

4.1.4.1 Budgetary performance

Details of Budget grant vis-à-vis expenditure during the last 4 years ending March 2001 were as under:

Revenue Expenditure :-

Year	Budget Grant		Actual Expenditure		Excess(+)/Savings(-) over budget grant	
	(R u p e e s i n c r o r e)					
	Gr.-66	Gr.-68	Gr.-66	Gr.-68	Gr.-66	Gr.-68
1997-98	118.27	56.39	116.85	52.29	(-) 1.42 (1.20 %)	(-) 4.10 (7.27%)
1998-99	176.59	60.48	144.88	63.69	(-) 31.71 (17.96%)	(+) 3.21 (5.31%)
1999-2000	168.14	133.83	174.35	108.45	(+) 6.21 (3.69%)	(-) 25.38 (18.97%)
2000-2o01	201.94	241.09	194.61	194.73	(-) 7.33	(-) 46.36

Capital Expenditure :-

Year	Budget Grant		Actual Expenditure		Excess(+)/Savings(-) over budget grant	
	(R u p e e s i n c r o r e)					
	Gr.-66	Gr.-68	Gr.-66	Gr.-68	Gr.-66	Gr.-68
1997-98	305.08	76.43	148.69	62.05	(-) 156.39 (51.26%)	(-) 14.38 (18.82%)
1998-99	258.58	145.40	143.63	69.60	(-) 114.95 (44.45%)	(-) 75.80 (52.13%)
1999-2000	242.83	94.80	158.61	74.12	(-) 84.22 (34.68%)	(-) 20.68 (21.82%)
2000-2o01	121.42	130.34	122.39	86.08	(+) 0.97	(-) 44.26

N.B. Grant No.-66—Irrigation (Major & Medium) and Grant No. -68—Flood Control.

Department could not spent 41 *per cent* of Capital Grant under Grant No. 66 and Grant No. 68 during 1997-2000. Huge savings in the Grants indicated major deficiency in estimates and control of expenditure. Further, this was also partly attributable to late release of funds by Finance Department.

¹ Contai Irrigation Division, West Medinipur Irrigation Division, Berhampore Irrigation Division, Ganga Anti Erosion Division-II, Malda Irrigation Division, Mahananda Embankment Division, Teesta Canal Division-III, Teesta Canal Hd.Qtr.Division, Teesta Canal Division-II, Jalpaiguri, Irrigation Division, Teesta Irrigation Division, Siliguri Irrigation Division, Damador Hd. Works Division., Damodar Canal Division, Purulia Inv. & Planning Dn., Purulia Irrgn. Dn., Mayurakshi South Canal Dn., Jaynagar Irrgn. Dn., Kakdwip Irrgn. Dn., East Medinipur Irrgn. Dn, Right Bank Irrgn. Dn., and Metropolitan Drainage Mechanical Dn.

² Superintending Engineer-Advance Planning, Superintending Engineer-Western Circle-II, Superintending Engineer-Central Irrigation Circle, Member Execution NBFCC.

4.1.4.2 Trend of Revenue and Capital Expenditure

During 1997-2001, the total expenditure of the Department was Rs 1915.02 crore. Capital expenditure and Revenue expenditure during the period was as under :

Year	Capital expenditure	Revenue expenditure	Total expenditure	Percentage of Capital expenditure to total expenditure	Percentage of Revenue expenditure to total expenditure
	(R u p e e s i n c r o r e)				
1997-98	210.74	169.14	379.88	55	45
1998-99	213.23	208.57	421.80	51	49
1999-2000	232.73	282.80	515.53	45	55
2000-2001	208.47	389.34	597.81	35	65
Total	865.17	1049.85	1915.02		

During the years under review, the percentage of Capital expenditure with reference to total expenditure declined from 55 *per cent* in 1997-98 to 35 *per cent* in 2000-2001, while the percentage of Revenue expenditure which mostly comprised of establishment and maintenance expenditure increased from 45 to 65 *per cent*.

4.1.4.3 Savings not surrendered

The Controlling Officer did not surrender savings, while in some cases made part and excess surrender during 1997-2001 as below:

Year	Savings not surrendered		Savings surrendered in		Savings partly surrendered	
	Revenue	Capital	Revenue	Capital	Revenue	Capital
	(R u p e e s i n c r o r e)					
1997-1998	--	--	14.38 (Gr.-68)	19.96	156.39 (Gr- 66)	64.04
1998-1999	--	--	--		144.95 (Gr- 66)	28.00
1999-2000	25.38 (Gr -68)	104.90 (Gr- 66, 68)	--		75.80(Gr- 68)	72.69
2000-2001	46.36 (Gr - 68)		7.33 (Gr - 66) 44.26 (Gr- 68)	24.83 48.56		

Failure to surrender substantial savings indicated that the budget formulation and expenditure control systems were deficient.

4.1.4.4 Expenditure without provision

Expenditure of Rs 1.05 crore was irregularly and unauthorisedly incurred by the Department during 1998-99 on Modernisation of Kangsabati Irrigation Project (Rs 0.57 crore) and Sali Diversion Scheme (Rs 0.48 crore) (Grant Nos. 66 and 68) without any provision of fund.

4.1.4.5 Parking of fund

i) The department irregularly parked an amount of Rs 2.25 crore with six Zilla Parishads³ in March 2001 out of the State Plan Fund for execution of various departmental schemes with financial assistance from NABARD. The fund was credited to local fund account of the respective Zilla Parishads by *per contra* debit to the budget head of the department. Utilisation certificates for these funds are yet to be submitted by Zilla Parishads as of March 2001.

³ Malda, South 24-Parganas, Nadia, Bankura, Howrah and Medinipur.

(ii) EEs of ten divisions made advance payment of Rs 3.20 crore to the Resources Divisions in the months of March each year between 1997 and 2001 to procure materials for future utilisation in work. The Resources Divisions parked the funds under PW Deposit and no expenditure was incurred even as of June 2001.

4.1.4.6 No input for Budget estimates from Divisions.

West Bengal Budget Manual stipulated that the budget estimates were to be prepared by the CE-I and be submitted to the Secretary, I&W Department who will in turn submit the same to the Finance Department. For this purpose EEs of the working division are to submit their budget estimate to SE by 15th September each year and the SE's are to prepare Circle wise budget estimate and submit the same to CE-I by 15th October each year. Scrutiny revealed that 10 circles endemically delayed submission of budget proposals with delays ranging between 7 and 107 days during 1998-2001. Four circles did not submit their budget estimates at all for the year 1999-2000. As the budget estimate was not received by the CE-I at all or was received long after the stipulated time, the CE-I had to prepare the budget estimate without any input from the field formation. The Controlling Officer was not enforcing financial discipline in the department to obtain budget estimates from the estimating officers in time. Thus budget has no sound basis of actual or estimated expenditure.

4.1.4.7 Delayed submission of budget estimate to the Finance Department

As per the Budget Manual the department was to submit the budget estimate (BE) to the Finance Department by 1 November each year. Scrutiny revealed that there were delays in submission of BE ranging more than one month to nearly three and half months by the Secretary/CE-I during the years 1998-2001. The persistent delays in submission of budget estimate every year was attributed to delay in finalisation of State Annual Plan and fixing of ceiling of Departmental Plan allocation by Finance Department.

4.1.4.8 Unrecouped advance from the Contingency Fund

An expenditure involving Rs 26.29 lakh was incurred in 1997-98, 1998-99 and 2000-01 out of advances from the Contingency Fund for payment of arbitration awards. The amount was not recouped during the same year as required.

4.1.4.9 Ineffective LOC system.

Finance Department authorised CE-I to issue LOC monthly as a percentage of the annual budget allocation, who in turn issues LOC to the Executive Engineers for meeting the works expenditure, indicating the chargeable head of account and the maximum amount to be drawn from a particular designated bank. But the details of works covered under the release of funds were not specified by the CE-I while releasing the LOC. As a result the EEs could divert allotment from Capital Head to Revenue Head. Test check revealed that between 1997-2001, the EEs diverted Rs 119.20 crore (Rs 107.95 crore under Grant No. 66 and Rs 11.25 crore under Grant No. 68) unauthorisedly in violation of the instructions of LOC. Major diversions were noticed in six divisions⁴.

⁴ *Mayurakshi South Canal Dn, Damodar Canal Dn, Damodar Headworks Dn, Right Bank Irrigation Dn, Ganga Anti-erosion Dn-I and Jalpaiguri Irrigation Dn.*

4.1.5 Control over expenditure

4.1.5.1 Lack of expenditure control system

As per Budget Manual the Controlling Officer of the department was required to keep constant watch over the progress of expenditure and liability and to take remedial action for obtaining supplementary grants or timely surrendering of funds in case of any probable savings. For this purpose EEs are to send the monthly expenditure statement to the SEs who compile them and submit quarterly expenditure statement to CE-I. The CE-I, compiles all the expenditure statements for Plan Sector only on the basis of the statements received from SE. He is not compiling the non-plan expenditure. Consequently, the C.E-I has little control over the non-plan expenditure. Test check revealed that no record/register was maintained by the CE-I to watch the timely submission of quarterly expenditure statements by 85 DDOs of the department and against 336 quarterly expenditure statements required to be received from SEs, 116 (35 *per cent*) were not submitted by them during 1997-2001. There was no system of reporting outstanding liabilities by Divisional Officers at periodical intervals to the Controlling Officer for which he was not in a position to monitor the cumulative liabilities and exercise prescribed control with a view to enforcing financial discipline. Due to improper functioning of envisaged control, the excess or saving under various sub-heads could not be detected and Rs 616.61 crore (24.36 *per cent* of the budget provision) of budget provision of Rs 2531.61 crore was not spent during 1997-2001. Thus despite LOC system budget control was not effective and adequate.

The Controlling Officer failed to reconcile expenditure of Rs 1915 crore during 1997-2001 with the figures booked by the Principal Accountant General (A&E), West Bengal for which the excess or savings under different Sub-heads of expenditure both under Capital and Revenue, could not be identified and thus improper utilisation of allotments, incorrect classification and unauthorised expenditure without budget provision could not be effectively monitored by the Controlling Officer.

4.1.5.2 Non-reconciliation of departmental expenditure

i) In order to exercise effective control over expenditure, the Divisional Officers were to reconcile departmental figures with the Treasury Officers and to submit monthly reconciled expenditure statement to the Controlling Officer through respective SEs which enable the Controlling Officer and Divisional Officer in timely detection of frauds and defalcation, if any, and can suggest steps for their eventual prevention. But the Controlling Officer did not carry out the required reconciliation during 1997-2001 as the receipt of monthly expenditure statements from EEs were not monitored by him.

ii) The following differences in the expenditure figures under Plan Sector compiled by the Controlling Officer and reported to the Finance Department with the accounts of the Principal Accountant General (A&E), West Bengal were noticed during 1997-2001:

Year	Figures of Controlling Officers	Figures of Principal Accountant General	Difference
	(R u p e e s i n c r o r e)		
1997-98	157.63	164.76	7.13
1998-99	156.95	176.09	19.14
1999-2000	228.24	231.12	2.88
2000-2001	384.31	358.89	25.42

The Controlling Officer failed to reconcile (March 2001) the difference in expenditure of Plan Sector for Rs 54.57 crore (5.86 per cent of total plan expenditure) of the department during 1997-2001. In view of the above, the authenticity of departmental figures of expenditure was questionable.

4.1.5.3 Non-reconciliation of issue of cheques /remittance

Certificate of Treasury Issues (CTI) and Consolidated Treasury Receipts (CTR) were to be prepared by Divisional Officers after reconciliation with the bank. But the same were in arrears since 1973-74 for want of effective steps by the Divisional Officers. In the absence thereof, the possibility of serious irregularities viz, fraud, misappropriation, etc. can not be ruled out.

4.1.5.4 Rush of expenditure in March

The Department did not prepare its work programme systematically to facilitate proportionate release of funds during the financial year. Consequently, there was endemic rush of expenditure during March of 1998-2001 as shown below :

Year	Total works expenditure during the year (Rs in crore)	Expenditure incurred during month of March (Rs in Crore)	Percentage of expenditure incurred during in March
1997-98	270.09	69.23	26
1998-99	277.59	77.32	28
1999-2000	305.56	124.62	41
2000-2001	522.62	193.71	37

The expenditure in March alone ranged between 26 and 37 per cent of the total expenditure during the aforesaid years. Test-check revealed that funds released through LOC during the last quarter of the financial year ranged between 28 and 32 per cent of the total release during that year which resulted in rush of expenditure during March. Release of funds at the fag end of the financial year was indicative of deficient financial management.

4.1.5.5 Non-maintenance of accounts records

As per codal provision Suspense Registers for Purchase, Stock and Miscellaneous Public Works Advance (MPWA) are required to be maintained with itemwise details so that outstanding balances under Suspense Heads could be watched/monitored properly and cleared by timely adjustment to appropriate heads of account. Test-check of records of 14 divisions⁵ revealed that the EEs did not maintain accounts records though huge outstanding balances under MPWA were noticed. The balances during the last three years were as shown below:

⁵ Kakdwip Irrigation, East Medinipur, Hooghly Irrigation, South Dinajpur Irrigation, Jalpaiguri Irrigation, Siliguri Irrigation, Teesta Resource-I & II, Aliporeduar Irrigation, Teesta Mechanical, Kangsabati Canal-II, Cooch Behar Irrigation, Nadia Irrigation, Howrah Irrigation.

Suspense Head	As on 31.03.1999	As on 31.03 2000	As on 31.03.2001
	(R u p e e s - i n c r o r e)		
Purchase	23.22	22.49	22.28
MPWA	06.25	06.16	15.27
Stock	15.16	11.54	09.39

In the absence of relevant registers the liabilities could neither be identified nor liquidated.

4.1.6 Execution of works

Major Irrigation Projects and schemes in Flood Control and Medium Irrigation Sector are prepared by CE (D&R). After approval by the Committee of CE's and Technical Committee of Flood Control Board, the scheme under Flood Control Sector are placed before Ganga Flood Control Commission (GFCC), if the cost is above Rs 3 crore and to the Planning Commission (PC) if the costs exceeds Rs 7.5 crore and to the Central Water Commission (CWC) in case of Major Irrigation Projects. After clearance by PC/CWC/GFCC, the project/scheme is submitted to the department for according administrative approval with the concurrence of State Development and Planning Department, State Planning Board and Finance Department. Technical sanction is accorded by the concerned CE after obtaining administrative approval. The department implements all its schemes and programmes through the EEs. The Secretary of the department monitors the implementation of the scheme through the concerned CEs and the monitoring division of the directorate. The Department managed on-going 5 Major and 34 Medium Irrigation Projects/Schemes during 1997-2001. No new project/scheme under Major and Medium Irrigation sectors were taken up during this period.

4.1.6.1 Irregularities in execution of works

(i) *Unauthorised expenditure beyond permissible limit*

EEs made irregular payments for work beyond approved estimates

As per codal provision excess/supplementary work in excess of 5 per cent of the estimated cost or 10 per cent of the tendered cost requires approval of Government. In 3 Divisions⁶ in case of 42 tenders executed during 1987-98 approval of Government for excess and supplementary items of work executed beyond the prescribed limit were not obtained and payments were made to the tune of Rs 14.71 crore unauthorisedly (details vide Appendix 55).

(ii) *Extra expenditure on supplementary/separate tenders*

SEs/EEs irregularly got ancillary works executed through separate tenders of Rs 1.55 crore

The SEs of Teesta and Mahananda Barrage Circle awarded works for construction of cross drainage structure, excavation and lining of canals, etc. As per agreements, the contractors were to execute certain ancillary works of the original tender viz., construction and maintenance of the diversion, approach, fair weather road, etc. and it was considered that rates quoted included these items. Scrutiny of the records in 3 test-checked divisions⁷ revealed that these items in the case of 133 works were executed during 1997-2001 by the concerned SE/EEs irregularly either as supplementary items or by inviting separate tenders and payments were made. Non-adherence to the contractual terms of agreements thus led to extra expenditure of Rs 1.55 crore

⁶ Teesta Canal Division, Teesta Irrigation Division, Teesta Canal Division-II.

⁷ Teesta Canal HQs Division, Teesta Canal Dn.-II and Teesta Irrigation Dn

(iii) Defective SOR

In Teesta Barrage Project (TBP), SE prepares Circle Schedule of Rates (SOR) on the basis of which estimate for works were prepared. Steel, Cement, etc. were supplied by the Department. Accordingly issue rates of such materials were required to be revised along with the cost of item of work in the SOR. Scrutiny revealed that the SEs of TBP revised the item rates in SOR for "Reinforcement of steel works" twice in November 1996 and in August 1997 while the rate of tor-steel supplied departmentally were not revised correspondingly. Non-revision of issue rate of tor-steel correspondingly with the enhanced item rate led to extra expenditure of Rs 23.85 lakh. There was also a further liability of Rs 15.22 lakh in 25 number of tenders of work under 4 Divisions⁸ where payments are yet to be made as of March 2001.

(iv) Avoidable expenditure on carried earth

Construction of cross drainage structure at 79.81 km of Dauk Nagar Main Canal (DNMC) was undertaken by Asha Alpana Enterprise in which 65225 M³ of carried earth was utilised by the executing agency. This work was commenced in November 1998 and completed in June 2001. Mackintosh Burn Limited (MBL) was awarded another work of construction of aqueduct over river Nagar at 80.62 km of DNMC located in the same locality which was commenced during November 1998 and the work is still in progress (March 2001) though due to be completed in January 1999. MBL excavated 68975 M³ of earth during execution of this work. The date of completion of work awarded to MBL was January 1999. When both the works were undertaken in the same locality simultaneously, proper planning for utilisation of excavated earth by MBL could have expedited the work as well as saved Government from an avoidable expenditure of Rs 25.44 lakh.

Non-utilisation of earth available in a nearby site resulted in extra expenditure of Rs 25.44 lakh

4.1.6.2 Wasteful renovation of canal system

Renovation work of the Sali Reservoir Irrigation Scheme and Sali Diversion Irrigation Scheme taken up in 1995, were completed in March 1998 at a total cost of Rs 75.54 lakh and Rs 75 lakh respectively. The SE/DIC in the report submitted to the RIDF authority in September 1997 informed that the work of renovation of Sali Reservoir Irrigation Scheme was restricted at 170 ch instead of upto 218 ch of it's canal system and in case of Sali Diversion Irrigation Scheme the renovation in Left Bank Main Canal (LBMC) was restricted at ch. 255 instead of upto ch.399.50 owing to scarcity of water in the reservoir. Despite this, the SE/DIC went ahead and executed renovation work beyond that chainages as fund was available from RIDF, without assuring supply of water. The expenditure of Rs 30.62 lakh (Rs 12.53 lakh for Sali Reservoir Irrigation Scheme and Rs 18.09 lakh for Sali Diversion Irrigation Scheme) was thus wasteful.

Expenditure of Rs 30.62 lakh on renovation of canal system was wasteful as irrigation water was not available

4.1.7 Incomplete Irrigation Project

4.1.7.1 Major irrigation projects

All four major irrigation projects⁹ remained incomplete as of March 2001 and partial benefit was derived from all these projects:

⁸ Teesta Canal Hq.Division, Teesta Irrigation Division, Teesta Canal Division-II and Teesta Canal Division-III.
⁹ Teesta Barrage Project, Kangsabati Reservoir Project, Barrage and Irrgn. System of DVC and Subarnarekha Barrage Project.

i) Teesta Barrage Project

Planning Commission approved the stage-I of phase-I of the project in May 1975 at an estimated cost of Rs 69.72 crore. The cost estimates in respect of the 1st sub-stage was revised 5 times in 1980, 1985, 1987, 1990 and 1996 and finally the project cost increased to Rs 1177 crore by 1996. The revised year of completion of the project was fixed as 2007. The work in 1st sub-stage due for completion was still under implementation as of March 2001 with physical progress of 70 *per cent* (approximate) up to that time. Three Barrages and two Canals were completed between 1989 and 1995 with 75 and 82 *per cent* completion of two canals while one was yet to commence as of March 2001 as per details in Appendix 56. Most of the distributaries were yet to be constructed. The non-completion of the distributary system and structures was attributed to various factors viz. paucity of fund, non-acquisition of land, abnormal delay in construction of railway and road crossing over canal, etc. Consequently against target of 9.23 lakh hectare fixed by Government only 0.96 lakh hectare (10.40 *per cent*) of irrigation potential could be created out of which only 0.58 lakh hectare of irrigation potential was utilised as of March 2000, after investments of Rs 833.47 crore. Full irrigation benefits can not be achieved until the distributaries were completed and water supplied to the field in a regulated manner. Cost benefit ratio (CBR) is an indicator of the economic viability of the project/scheme. According to the norms approved by the Central Water Commission, irrigation scheme having CBR greater than 1.50 calculated at 10 *per cent* discounted value was considered economically viable. CBR was worked out at 1:2:36 while approving the scheme (1973).

However, the scheme was more than 26 years behind the scheduled date of completion (1987) and still incomplete. Expenditure incurred as of March 2001 (Rs 833.47 crore) was 12 times of the original estimate (Rs 69.72 crore). Total area irrigated was only 0.58 lakh hectare (March 2000) as against the target of 9.23 lakh hectare. Thus, CBR projected originally lost its relevance. Though, the estimate of the scheme was revised in 1996 no CBR was worked out. As such, it was not possible to examine the economic viability of the scheme.

ii) Kangsabati Reservoir Project

Kangsabati Reservoir Project was taken up in March 1956 at an estimated cost of Rs 25.26 crore. Although the project was scheduled to be completed by the end of March 1962, the same was still under construction after lapse of long 45 years. The project had created irrigation potential of 398100 hectare against target of 401600 hectare as of March 2001.

Cumulative expenditure incurred for this project was Rs 285.31 crore. The delay in execution resulted in 1130 *per cent* cost overrun over the original estimate owing to escalation of cost of labour and material. Estimate was revised to Rs 280 crore during March 2000 and the project was proposed to be completed in 2000-2001 with assistance from AIBP¹⁰. Revised administrative approval to the estimate was yet to be accorded by Government (March 2001).

¹⁰ Accelerated Irrigation Benefit Programme.

iii) Barrage and irrigation System of DVC

The Barrage and Irrigation System of DVC was transferred to Government of West Bengal in 1964. The work of extension and improvement was taken up at an estimated cost of Rs 30.74 crore aimed at creating ultimate irrigation potential of 515380 hectare against which potential so far created was 491000 hectare and cumulative expenditure incurred was Rs 81.10 crore upto March 2001. Cost overrun worked out at 264 *per cent* over the original estimate. The project is targeted to be completed by 2001-2002 with AIBP assistance. Revised estimate was yet to be approved by Government.

iv) Subarnarekha Barrage Project

Subarnarekha Barrage Project was taken up in 1994-95 at an estimated cost of Rs 215.61 crore (1986). Administrative approval was not received but work was started on the basis of go-ahead order from the Irrigation and Waterways Department. Investment clearance of the Planning Commission was received in 1995. Project was intended to develop ultimate irrigation potential of 114200 hectare. Project work had not yet been started, except infrastructural work i. e. construction of residential and non-residential buildings and advance colony which were in progress. An expenditure of Rs 27.93 crore was incurred upto March 2001. The project was targeted to be completed within 11th Plan period (2012) at an revised estimated cost of Rs 395.34 crore. The cost overrun of 183 *per cent* was due to escalation of labour and land compensation. Revised estimate is yet to be approved by Planning Commission. The project had so far been financed from the State Budget.

4.1.7.2 Medium Irrigation Projects

Expenditure on incomplete irrigation schemes were Rs 65 crore against sanctioned estimate for Rs 10 crore

According to the original estimates each Medium Irrigation Schemes was to be completed within four years from the date of sanction. Test check of records revealed that out of 34 medium irrigation schemes taken up during 1975-76, execution of 11 schemes¹¹ were still continuing execution for 19 to 26 years resulting in cost overruns for 2 to 29 times over original estimate though there was no change in Culturable Commend Area (CCA) (Appendix 57) Consequently, the estimates of these schemes were revised to an aggregate of Rs 66.37 crore as of March 2001 which is six times of the original estimated cost of Rs 10 crore. None of the revised estimates were administratively approved by the Government (March 2001). The delay in completion of the projects were attributable to:

- i) delay in land acquisition and payment of compensation (for all schemes).
- ii) absence of Geo-technical Survey (for Extension of Bandhu and Futuary schemes)
- iii) improper soil testing (for Beko, Extension of Bandhu, Futuary, Kharaberia and Patloi schemes)
- iv) changes of design (for Futuary scheme)
- v) inadequate provision in the estimate (for Beko, Extension of Bandhu, Futuary, Kharaberia and Patloi schemes)

¹¹ Golamorajore, Beko, Moutorjore, Patloi, Tatko, Hanumata, Khairaberia, Extension of Bandhu, Futuary Medium Irrigation, Ranichak Pump Irrgn. And Hinglow Irrgn. Schemes.

Further scrutiny revealed that though non-acquisition of land was the common cause of delay in all cases, in respect of six ongoing schemes land acquisition proposals were submitted after the scheduled period of their completion (as shown in Appendix 58 of the report). Department was unable to attribute reasons for delayed submission of land proposal. Evidently this was not being monitored. Due to prolongation of work targeted irrigation potential was not achieved and the life of the schemes reduced.

4.1.8 Flood Control and Anti Erosion Sector

West Bengal is divided between three Major Basins viz. i) Bramhaputra Basin, ii) Ganga Basin including Sundarban Area and iii) Subranarekha Basin. Each of these basins have their respective flood prone areas. Total flood prone area of the State is 37660 Sq. km., spread over 111 blocks. During 1997-2001 total expenditure of Rs 284.30 crore was incurred on flood control sector (viz. i) Flood Control and Anti-erosion Rs 198.69 crore, ii) Anti-Sea-Erosion Rs 5.33 crore and iii) Drainage and Anti-water logging Rs 80.28 crore. The Major Projects/Schemes in this sector are :

- (i) Flood Control Scheme under North Bengal River Commission.
- (ii) Anti-erosion and Flood Protection works in Malda and Murshidabad District.
- (iii) Development works in Sundarban Areas.
- (iv) Departmental execution of Flood Control and Drainage works with HUDCO assistance.

Review of the major flood control and anti-erosion works executed by the Directorate revealed the following:

Government took no action on irregularities in the Ganga-Padma anti-erosion works

Implementation of Anti-erosion scheme on Ganga-Padma System, indicated huge wasteful expenditure and malpractices in works which were commented in Audit Report (Civil) for the year ended March 1999. Government did not furnish specific reply to various malpractices relating to work, fictitious receipt and utilisation of boulder pointed out by audit. However Government commented that unless long spur was constructed under master plan and dredging was done at mid-stream, flood control and anti-erosion work would not be fruitful.

4.1.8.1(A) Wasteful expenditure on abandoned Retired Embankment

3 REs constructed within a span of 4 years was abandoned, wasteful expenditure of Rs 10.70 crore

Malda Irrigation Division constructed (July 1997) a 12.40 km long 5th Retired Embankment (RE) at Aswinitola at a cost of Rs 10.69 crore. Although Keskar Committee recommended construction of embankment at a safer distance with two armoured spur at tagging point and studs at 1 km interval, the division constructed the embankment at about 800 metre away from the eroding bank without any provision for spur and stud. On every occasion the alignment was shifted towards river banks due to political pressure followed by intervention of Ministers. The seepage of water followed by severe erosion reduced the gap ranging from 40 to 200 metre, between the 5th RE and river bank within the year of construction (1997). The departmental decision to shift the alignment towards the river bank compelled the division to construct the RE every year and abandon a portion for next year. Thus the division constructed three REs during four years (1997-2000) and the construction of 8th RE was underway as of March 2001. Thus, 7.555 km of 6th RE and 4.095 km of the 7th RE was abandoned and the expenditure of Rs 10.70 crore on construction of earlier REs became wasteful.

Had the alignment of the RE been fixed at a safer distance as per the recommendations of the Keskar Committee and Committee of Chief Engineers the wasteful expenditure on abandoned RE's could have been avoided.

B Non-utilisation of earth from the borrow pit land

Department acquired land for making embankment but did not utilise borrow pit earth for the embankment

For construction of every RE Malda Irrigation Division acquired 300 ft (90 mtr) strip of land along the alignment out of which 30 mtr strip of land along the alignment was required for making the RE with a portion of 5 mtr berm on the river side and 2 mtr space on the country side. Therefore, 53 mtr land along the embankment was available for borrow pit earth. The division without utilising 15.57 lakh M³ earth available from the borrow pit which was sufficient for the construction of two RE's (6th and 7th) carried earth for the purpose from outside. Thus, for use of 7.49 lakh M³ carried earth for 6th and 7th RE there was an avoidable expenditure of Rs 3.43 crore.

4.1.8.2 Protective work executed during monsoon

Protective work taken up during monsoon was washed away

After the devastating flood of 1996, as per recommendation of the Expert Committee, 12 km long 5th RE was constructed at Aswinitala, Malda in June 1997 at a cost of Rs 10.69 crore keeping the alignment at a distance of 800 to 1000 mtr from the river bank. Flood in the river Ganga same year reduced the gap between river bank and the embankment by 100 mtr. A composite tender for construction of 6th RE for 5 Km. and protection work of 5th RE was accepted by the SE-II/CIC (May 1998) at an estimated cost of Rs 7.19 crore. Due to non-acquisition of land for 6th RE, agencies were instructed to take up the protection work first, which required 93300 M³ of boulder for laying of boulder crates and pitching at slope of the embankment. The agencies actually commenced the protection work in first week of June 1998 at the commencement of monsoon. The river started swelling and the work was stopped on 9th July 1998 due to further rise of water level. By that time agencies had reportedly executed 37180.94 M³ of boulder work which was 40 per cent of the total work at a cost of Rs 1.37 crore. Inadequate and incomplete boulder work during high rains were doubtful and was not capable to protect the embankment, which was ultimately washed out for a length of 2 km in July 1998 rendering the entire expenditure wasteful.

4.1.8.3 Extra expenditure in carriage of boulder

Murshidabad Zilla Parishad supplied boulders far away from the work site resulting in extra expenditure of Rs 44.39 lakh

The work Protection to the river bank of river Ganga/Padma at Jallangi Bazar Township in PS and Block-Jallangi from ch. 1360 to ch.2400 totalling 1040 meter divided into 9 reaches was awarded to 23 contractors at a cost of Rs 5.23 crore (excluding the cost of boulders) for completion by May 2000. The work was in progress and an amount of Rs 3.56 crore was paid to the contractors as of March 2001.

The job of supply of boulders was entrusted to Murshidabad Zilla Parishad (Parishad) with the condition of supply of the same at different work sites. The Parishad unloaded the boulders far away from the work site. The SE, CIC allowed extra rate for carriage of boulders to work sites including one extra lead for unloading from 3 km at a rate of Rs 93.70 per M³. By allowing extra carriage to the agencies the Department incurred extra expenditure of Rs 44.39 lakh.

4.1.8.4 Wasteful expenditure in incomplete protective work

Protective work taken up before onset of monsoon washed away

Anti-Erosion work over river Ganga at Khaskol-Daulattola in Malda District was entrusted to M/S MBL in April 2000 on single tender basis at an estimated cost of Rs 7.16 crore with 15 *per cent* above the Circle Schedule. The CE-I forwarded the proposal to the Government for awarding the job to the said agency and approval was accorded on March 2000. Work order was issued in April with instructions to complete the work within 90 days. The agency started carriage of boulder from 13th May 2000 with 47 effective working days available to complete the work. The SE/EE modified the design and programme of work on several occasions and also suspended many activities due to swelling water level in river Ganga followed by bank erosion in June, 2000. The protection work partially completed failed to resist the thrust of water and the river finally engulfed the whole work (July 2000) resulting in wasteful expenditure of Rs 7.35 crore.

4.1.8.5 Wasteful expenditure on incomplete works

Contractors laid only 3 row boulder crates instead of 6 rows which failed to protect the embankment

Bank Protective work in Bilaimari Anchal commenced late in May 1999 with boulder works partly done by June 1999 was severely damaged due to rapid rise of water level of the river Fulahar during flood. EE stopped the work and did not allow the contractors to resume the work even after recession of flood. Records also revealed that instead of providing six rows of boulder crates as per the design only three rows of boulder crates were laid which ultimately failed during the flood at the end of June 1999. Thus, non-compliance of the work as per design and late commencement of embankment protection work the entire work resulted in wasteful expenditure. The work although was stopped in June 1999 measurement was taken in October 1999. Value of the work was for Rs 85.59 lakh. As the works were taken up without obtaining administrative approval and availability of fund from the competent authority the payment was yet to be made as of November 2001.

4.1.8.6 Defective design of protective work

Defective boulder pitching work was dislocated due to wave dash. This resulted in nugatory expenditure of Rs 54.47 lakh

The scheme “ Protection of the embankment from sea erosion by armouring with laterite boulder at mouza-Beguakhali facing Bay of Bengal “ for a length of 860 metre at an estimated cost of Rs 57.47 lakh (1989) was administratively approved in 1993. The CE-II ordered (February 1996) for caulking¹² work on laterite boulder pitching for the stability of the embankment which was not provided in the original estimate and in November 1996 the SE., advised to provide 1:6 slope towards R/S as against 1:3 in the original estimate. The decision of the technical authority was however, not followed by the EE in execution of the work (i.e. caulking work and 1:6 slope) and most of the laterite boulders were dislocated due to wave dash in August 1997 and broken into pieces beyond use. During June 1996 to July 1997, 9866.53 M³ of laterite stone boulders were supplied and used in the embankment protection work at a total cost of Rs 58.74 lakh out of which only 731.13 M³ boulder valued at Rs 4.34 lakh could only be salvaged at a cost of Rs 0.06 lakh for reuse. Defective design of the scheme and disregard of decision of the technical expert during execution led to failure of the embankment resulting in nugatory expenditure of Rs 54.47 lakh.

¹² Caulking means watertight by filling the seams or joints with water proof materials.

4.1.9 Material management

In the budget estimate the Department did not allocate funds separately for purchase of materials, except that under the minor head 'Stock Suspense' for procuring initial stock of materials by the Resources Divisions. The working/user divisions after assessing their requirements as per work programme, made advance payment to Resources Division for cost of materials required by them. The Resources Division received LOC from the Chief Engineer and purchased materials. During the period from 1997-2001, Resources Division-I&II procured materials of Rs 80.27 crore for use in works. While cement was procured from WBECSC. Ltd¹³, steel materials and hume pipes were purchased through limited quotation. However some working divisions also purchased materials from the manufacturers directly through open tender/quotation. Scrutiny revealed that procurement was made by the divisions without assessing requirement which resulted in accumulation of huge quantity of unutilised materials. Excess materials ultimately became unserviceable due to prolonged and defective storage as discussed below:

4.1.9.1 Excess procurement

(i) As there was no separate budget for procurement of materials, the working divisions placed unspent funds to the Resources Divisions mainly during the month of March to avoid lapse of budget grant. Indents placed by the working divisions were grossly in excess of quantity actually required by them. This would lead to avoidable and excess procurement of stores. Scrutiny of records of 6 divisions¹⁴ revealed that due to excess procurement of Sheet Pile, Hume Pipe, Tor Steel and steel materials valued at Rs 5.01 crore were lying unutilised in different stores/godowns for five to twenty five years. These were not utilised in work or transferred to other divisions. Possibility of part of such stores becoming obsolete cannot be ruled out. However, no stock verification was done to ascertain the nature of such stores.

(ii) During 1995-98 in 5¹⁵ godowns of Teesta Barrage Project 861.301 MT of cement valuing Rs 29.28 lakh were clotted due to prolonged storage and not following 'First in' 'First out' issue system. No write off proposal for the loss has been initiated till March 2001.

4.1.9.2 Unplanned procurement of hume pipe

Teesta Resources Division-I purchased two different dia hume pipe and collar in 1996 at a cost of Rs 1.04 crore in routine manner in spite of huge available stock of the same valued at Rs 69.26 lakh, though there was no indented requirements for the same from working divisions. The procurement was unwarranted considering the stock position as on April 1996 as shown in the table below:

Unnecessary procurement of hume pipe resulted in blocking of Rs 1.04 crore

¹³ West Bengal Essential Commodities Supply Corporation Limited.

¹⁴ Contai Irrigation Division, Malda Irrigation Division, Mahananda Embankment Division, Subarnarekha Barrage Division, Teesta Resources Division-I and Purulia Irrigation Dn.

¹⁵ Fulbari, Ambari, Lichupukuria, Oodlabari and Tinbatti.

Item	Stock as on 1.4.96	Purchase during 1.4.96 to 31.3.2001	Consumption during 1.4.1996 to 31.3.2001	Stock as on 31.3.2001	Rate per piece (In Rs.)	Value of closing stock (Rupees in lakh)
	(In Number)					
Hume pipe						
1200 mm	503	384	40	847	4767	40.38
150 mm	6562	11506	1086	16982	470	79.82
Collar						
1200 mm	187	370	36	521	6281	3.27
150 mm	3960	7227	824	10363	68	7.05
						130.52

In view of huge stock balance as of April 1996 and the rate of consumption of the stock material during 1996-2001 no further purchase was necessary which resulted in blocking of fund of Rs 1.04 crore.

4.1.9.3 Injudicious purchase at higher rate

Injudicious procurement of stone boulders from Murshidabad Zilla Parishad at a higher rate resulted in extra expenditure of Rs 2.80 crore

For execution of anti-erosion work by dumping stone boulder on the river Ganga/Padma, the Ganga Anti-Erosion Division-II entered into a Memorandum of Understanding in January 1998 with Parishad for supply 95000 M³ of stone boulder at the rate of Rs 766.35 per M³ at a total cost of Rs 7.28 crore. As of April 2001, Parishad supplied 70535 M³ stone boulders. Scrutiny of records revealed that the same "Panchami" variety of stone boulders was available at the rate of Rs 370 per M³ from WBMDTC¹⁶ although it is an autonomous body under management by Government of West Bengal. The SE/CIC-1 did not consider the lower rate of WBMDTC and procured the same through Parishad at a higher rate of Rs.766.35 per M³ which involved an extra expenditure of Rs 2.80 core. Thus possibility of malpractice in this case cannot be ruled out.

4.1.9.4 Doubtful purchase for flood damaged repair work

No records of procurements and utilisation of material worth Rs 1.02 crore

Scrutiny of records revealed that three Divisions¹⁷ purchased huge number of empty cement bags, poly bags, nylon crates, hume pipes, geo-textile fabrics etc. worth Rs 1.02 crore for utilisation in flood damage repair works during 1999-2001. But no stock/site account for these materials were maintained by the concerned divisions. The divisions failed to clarify regarding processing and payment of supplier's bills at divisional level without stock entry certificate. The Divisions also failed to produce the account of year-wise procurement vis-à-vis consumption of such materials. The entire procurement of materials amounting to Rs 1.02 crore therefore appears to be doubtful.

4.1.10 Inadequate inventory control

4.1.10.1 Absence of physical verification of stock and stores

Average yearly stock of different materials valued at Rs 12 crore were stored in 36 godowns and 4. stock-yards under two Resources divisions of the department during the period from 1997-2001. In total disregard of codal provision, annual physical verifications were not conducted since 1985 in any division except at godowns and stock-yards at Oodlaburi and Phulbari in

¹⁶ West Bengal Mineral Development and Trading Corporation.

¹⁷ West Medinipur Division, Berhampore Irrigation Division and Ganga Anti-erosion-II.

1998-99 and 1999-2000 respectively. Thus it could not be ascertained whether physical balance in stock agrees with the book-balance or not. Possibility of obsolete/unserviceable stock and store, loss due to theft or otherwise remaining undetected in time and malpractice in store management can not be ruled out. Chief Engineers and SEs took no steps to enforce compliance of an important codal control.

4.1.10.2 Misappropriation of stores

Finding of Enquiry Committee for misappropriation of stores valuing Rs 94.62 lakh awaited for 3 years

Mention was made in Paragraph 5.1.8.2 of the Audit Report (Civil) for the year ended 31st March 1999 regarding mis-appropriation of stock worth Rs 94.62 lakh at Oodlabari godown. The Chief Engineer constituted an enquiry committee (September 1998) but even after three years the Enquiring Committee has not submitted its report for which responsibilities for misappropriation could not be fixed and cost of materials could not be realised as of March 2001.

4.1.10.3 Deficiency in stores accounting

Resources Division not maintained the PSL and Profit & Loss A/c on store materials

The EEs are responsible for management and accounting of all stock and stores materials. He is required to maintain Priced Stock Ledger (PSL) in which receipt and issue of materials (quantity and value) are to be entered in order of their occurrence and are to be balanced at the end of each day and closed at the end of each month with reference to the bin cards. EEs, Resources Division-I & II did not maintain and closed PSL during 1997-2001. Consequently profit and loss on stores transactions were not ascertained, issue rates were not charged on the basis of actuals, project costs were understated.

4.1.11 Working of mechanical Wing

The percentage of utilisation of machinery and equipment was between 9.53 and 57.81 per cent only

Review of the Mechanical Wing of the Directorate revealed the following :

(i) Low utilisation of machinery and equipment

Utilisation of machines by two Mechanical Divisions¹⁸ ranged between 9.53 and 57.81 per cent during 1997-2001 as below:

Year	No. of Machines	Working hours available	Actual working hours	Percentage efficiency of utilisation
1997-1998	110	201600	116553	57.81
1998-1999	110	132000	24464	18.53
1999-2000	110	132000	39769	30.12
2000-2001	110	132000	12576	09.53

The Department had a fleet of different constructional machineries like Scraper, Tractor, Hydraulic Excavator, Vibratory Compactor, Dragline, Dozer, Crane, Tipper Truck and Well point pump for construction of canal, hydraulic structure, etc. for deployment in its projects and schemes. Scrutiny revealed that although a sum of Rs 2.85 crore (40 per cent of the capital cost of Rs 7.18 crore of the machinery and equipment) was incurred for maintenance and repairs during 1997-2000 by two mechanical divisions on these machinery

¹⁸ Teesta Mechanical Division and Kangsabati Mechanical Divisionn.

and equipment, work awarded to private agencies for construction of canal and structures, etc. were executed by their own machineries and equipment. Government did not consider utilisation of its own machinery and collect hire charges for the same while pay and allowances for the staff attached to each machine are paid from Government exchequer every month.

(ii) Idle investment on purchase of stock and stores

Scrutiny revealed that 475 machines and equipment valuing Rs 1.05 crore were lying unused in two mechanical divisions for the last 20 to 25 years out of which 452 machinery valuing Rs 57.47 lakh were in working condition, 10 machines valuing Rs 38.90 lakh were beyond economical repair and 13 machines valuing Rs 8.67 lakh had been declared obsolete by the Government in 1993. But no action had been taken by the EEs/SE during last 10 years for utilising the 452 machines in other projects/schemes and disposing the remaining 23 machines through auction sale. The abnormal delay in disposal resulted not only in blockade of fund but also decreased in sale value of the stock and stores. Huge expenditure is also incurred annually by these divisions towards watch and ward. Losses due to spoilage, theft etc. can not be ruled out.

(iii) Accumulation of spares

Mention was made in Para 5.14 of Audit Report (Civil) for the year 1986-87 regarding the accumulation of spare parts of earth moving machines valuing Rs 116 lakh, at Kangsabati Mechanical Division. As of September 2001, the department did not utilise spare parts valuing Rs 51 lakh in machines or by transfer to other divisions out of the aforesaid stock even after lapse of 14 years which cast doubt about the genuineness of indented requirement. Though the matter was brought to the notice of Government in 1986, no action was taken.

4.1.12 Manpower Management

4.1.12.1 Uneconomic expenditure over manpower

The manpower of an organisation should be so utilised that optimum output is derived and the desired goals and objectives are achieved. There was three types of divisions in the directorate—i) Engineering Divisions—for execution of Projects/Schemes ii) Engineering Divisions—for survey, investigation and planning and iii) Revenue Divisions—for collection of water tax. Deployment of staff under the Directorate were not properly reviewed from time to time on the basis of existing work load for which their services were not productively and economically utilised. A summary of idle engagement of staff noticed during test check is indicated in the following table:

Sl. No	Name of the Division	No. of staff idle during 1997-2001	Expenditure incurred towards pay and allowances
1.	West Medinapur Irrigation Division	14	Rs 51.17 lakh
2.	Kangsabati Mechanical Division	42	Rs 167.00 lakh
3.	Teesta Resources Division-II	10	Rs 29.50 lakh
4.	Teesta Irrigation Division (Revenue Sub-Division)	07	Rs 24.11 lakh
5.	Investigation and Planning Division (North)	58 (98-99)	Rs 46.90 lakh
6.	North Bengal Planning Division	139 (1998-2001)	Rs.181 lakh
	Total	270	Rs 499.76 lakh

A review of the Human Resource Management (HRM) of the department indicated the following deficiencies:

i) Two Divisions viz. Investigation and Planning (North) and (South) were created in 1970 which were attached to HQs Directorate to conduct survey, investigation and planning work for Major and Medium Irrigation Schemes in the districts of North and South Bengal. Records revealed that performance of these two divisions in field survey, investigation and planning was very negligible as would be evident from the following table :

Year	Investigation and Planning Division (South)				Investigation and Planning Division (North)			
	Value of work done (Rs in lakh)	No. of work executed	Expenditure on Establishment	No. of staff/officers employed	Value of work done (Rs in lakh)	No. of work executed	Expenditure on Establishment	No. of staff/officers employed
1997-98	25.07	02	92.12	132/07	3.48	01	32.26	55/03
1998-99	17.54	03	141.50	132/07	Nil	Nil	46.90	55/03
1999-2000	11.59	03	137.20	132/07	0.82	03	45.87	48/04
2000-2001	24.75	03	140.38	132/07	0.45	01	55.51	48/04

In addition North Bengal Planning Division was created in 1977 at Malda to cover in the district of Malda, Uttar Dinajpur and Dakshin Dinajpur. During the year 1998-99 the division did not undertake any survey and investigation work while during the years 1997-2001 only six survey and investigation works worth Rs 4.75 lakh were undertaken while 139 staff was employed for the purpose and Rs 1.81 crore was spent for their pay and allowances

Investigation Sub-Division executed no survey and investigation work

ii) Investigation Sub-Division No. II under West Medinipur Division consisting of 14 staff was assigned the job of survey work and preparation of schemes. Scrutiny revealed that no survey work, preparation of investigation report or scheme was undertaken by the Sub-Division during last five years. The executing divisions/sub-divisions at present, were preparing the surveys and schemes and staff of this subdivision remained idle during 1997-2001 and an expenditure of Rs 51.17 lakh was incurred towards their pay and allowances.

Non-utilisation of departmental men in survey works - extra expenditure Rs 1.91 crore.

iii) The Department as well as Teesta Barrage Project authority had 1 CE, 8 S.Es, 27 E.Es, 53 A.Es and 95 SAEs for survey, investigation, drawing, design, monitoring and planning of irrigation project works. Scrutiny revealed that the CE-I executed an agreement (February 1998) with WAPCOS¹⁹ (INDIA) LTD involving an expenditure of Rs 1.13 crore for execution of Macro Planning Survey and preparation of drawings for the distribution net work of Mahananda Main Canal (MMC) up to 18th Km of Teesta Barrage Project, on the ground that the concern had required expertise and was directly linked with Ministry of Water Resources, Government of India. Further, the same agency was also awarded with the survey of Kortowa Irrigation Scheme at Rs 24.60 lakh and Mayurakshi Reservoir Project at Rs 53.03 lakh. The total expenditure of Rs 1.91 crore could have been avoided by executing the work departmentally.

¹⁹ Water and Power Consultancy Services (India) Ltd.

Workshop at Gorabari wound up in March 1991 but staff not shifted

iv) After completion of the Kangsabati Dam in 1979, the 42 staff at Gorabari workshop under Kangsabati Mechanical Division remained idle since April 1991. C.E-I proposed (February 1991) to Secretary, I & W Department to move Govt. for shifting the workshop from Gorabari to Khatra followed by an estimate for Rs 8 lakh for shifting of workshop during October 1994. Government approval was awaited as of March 2001 and the division incurred an expenditure of Rs 1.67 crore between April 1991 and March 2001 on idle staff of the work shop which was unproductive.

v) Teesta Resources Division-II has a transit store at Salt Lake for temporary storage of steel materials. Temporary storing system had been discontinued since April 1994 as the materials were being supplied by the manufacturing units directly to the user divisions. Thus, the 10 staff at Salt Lake store remained idle since May 1994. As of March 2001, the division incurred an expenditure for Rs 29.58 lakh on idle staff of the store since May 1994 which was unproductive.

A Revenue Unit was created for collection of water tax under TBP. But there was no tax collection as yet

vi) Since June 1996, a Revenue Unit consisting of seven officials was functioning under Teesta Irrigation Division at Jalpaiguri for collection of water tax from the land irrigated under Teesta Barrage Project. Although total Rs 24.11 lakh was spent towards the pay and allowances of the staff attached with the Revenue Unit between June 1996 and March 2001 no tax was levied and collected by them during this period.

4.1.12.2 Irregular appointment/regularisation of service

Irregular creation of workcharged posts by the SE and appointment by the Executive Engineer

The SE/WC-I in February 1997 created 27 posts under work-charged establishment in Howrah Irrigation Division, for absorption of muster roll and seasonal casual workers, subject to their final absorption under regular establishment. The EE/Howrah Irrigation Division appointed 24 work-charged staff during February 1997 to June 1998, with retrospective effect from March 1996 and fixed their pay accordingly. Since the G.O of March 1996, stipulated absorption of casual workers in regular establishment, and not in workcharged establishment the creation of posts under workcharged establishment by SE/WC-I in February 1997 and appointment of muster roll and casual workers in the said establishment by the EE with retrospective effect i.e. from March 1996 was unauthorised and irregular. Possibility of engaging further work-charged staff against these posts, once the existing staff are regularised, can not be ruled out.

4.1.13 Collection of water-rates vis-à-vis expenditure therefor

Cost of collection is 16 times the total revenue collected

Water rate is assessed and levied by the department under two Acts²⁰ based on the land surface actually irrigated by canal water. Water rates for Irrigation purpose was last revised in 1979. The Committee on Public Accounts in its seventeenth Report (1988-89) desired that the system of assessment and collection of water rates should be modernised, so that there is a fair balance between the expenditure incurred and collection made. The revenue realised

²⁰ West Bengal Irrigation (imposition of water raters for DVC) Act-1958 and West Bengal Irrigation (imposition of water raters) Act-1974.

from water rates, working expenses on maintenance, operation of irrigation projects and cost of collection during the period 1997-2001 was as below:

Year	Budget Estimate (Rs in crore)	Revenue collected (Rs in crore)	Working expenses (Rs in crore)	Percentage of working expenses to Revenue collection	Establishment cost (Rs in crore)	Percentage of Establishment cost to Revenue collection
1997-98	3.56	1.34	42.64	3182	16.65	1243
1998-99	4.00	1.71	50.51	2954	30.81	1802
1999-2000	4.08	1.81	56.46	3119	28.37	1567
2000-2001	8.55	2.08	59.01	2837	37.62	1809
		6.94	208.62		113.45	

The above figures showed that the establishment cost of the Revenue Divisions was on an average 16 times of the revenue collected. Thus, the specific recommendation of PAC was not implemented as of March 2001. The shortfall of revenue collected during 1997-2001, vis-a-vis total working expenses (including cost of establishment) worked out to Rs 201.68 crore.

4.1.14 Other points of interest

4.1.14.1 Over payment on purchase of irrigation water

EE paid for irrigation water to Government of Bihar without deducting the dry weather flow

As per accepted norms dry weather flow of river (November to May) cannot be intercepted by any authority in their reservoir on the upstream side. During the years 1985, 1995 and 1997 the Department purchased 54.395 acre ft water for irrigation (Boro cultivation) from Tenughat Dam on payment of Rs 3.98 crore to Government of Bihar. As no deduction for the dry weather flow was effected there was overpayment to the extent of Rs 3.98 crore.

4.1.14.2 Irregular hiring of Vehicle/launches

Vehicle hire charges of Rs 56.54 lakh was paid unauthorisedly

The Finance Department under GO of July 1999 issued instructions that Finance Department approval must be obtained and that vehicle must not be used on holidays except in cases of emergency with prior written permission of the departmental secretary. This procedure is also applicable to hiring of motor launch too. Scrutiny of records in 12 test checked divisions revealed that the EEs of these divisions hired vehicles as well as launches after July 1999 without prior approval of Finance Department and paid hire charges of Rs 44.66 lakh for hiring vehicles during 1999-2001 and Rs 11.88 lakh for hiring launches during December 1995 and March 2000. Scrutiny also revealed that EEs hired vehicles/launches on Holidays/Sundays without prior written permission of the Secretary and recording the particular nature of emergent job for which the same were hired on Holidays/Sundays as shown in Appendix 59. Possibility of misuse of these vehicles for non-official work cannot be ruled out.

4.1.14.3 Over payment of Pay and Allowances

Finance Department issued instructions from time to time for fixation of pay on promotion/career advancement scheme. Due to incorrect fixation of pay of Sub-Assistant Engineers and others on promotion/CA. Scheme by the SE/EE, there was an over payment of Rs 11 lakh (10 Nos. of Divisions and 20 Nos. of incumbents).

4.1.14.4 Inadequate inspection by senior officers

SE s and EE s did not conduct periodical inspections of Division and Sub-division

SEs and EEs are required to conduct annual inspection of Divisions and Subdivisions under their control. Divisional Accountants (DA) are also required to conduct annual inspection of the accounts of the Sub-divisions. Test check revealed gross failure in this respect.

Out of the 12 test-checked divisions only two were inspected by the SE during 1997-2001 while the remaining were not inspected for periods varying from 3 to 9 years and 4 divisions were never inspected since inception.. Similarly out of 38 Sub-divisions under 12 divisions are required to be inspected annually, both by EE and DA. But 14 Sub-divisions were never inspected by EE and DA since its inceptions, 13 Sub-divisions were not inspected for 5 to 15 years. Only 11 Sub-divisions were inspected by EE and DA during last 5 years.

4.1.14.5 Position of outstanding IRs and paragraph

Audit observations on financial irregularities and defects in initial accounts noticed during local audit are communicated to the heads of the offices and to the next higher departmental authorities through Inspection Reports while serious irregularities are reported to the Government through Audit Reports. The position of outstanding paragraphs of Inspection and Audit Reports at the end of the year 2000-2001 as under :

		As on March 31, 2001
A	Number of Inspection Reports (IR)	1243
B	Number of IR paragraphs	3310
C	Number of Audit Report paragraph for which reply not received.	54

Only 1(one) Audit Committee meeting was held by the Principal Secretary to Government in December 1998 during the last 4 years (1997-2001). 252 IR paragraphs could not be settled for want of specific reply from Chief Engineer, Engineer-in-Chief and Principal Secretary to Government as of March 2001.

4.1.14.6 Monitoring

The department created (May 1997) Advance Planning, Project Evaluation and Monitoring Cell consisting of 63 staff (5 Divisional Officer and 1 S.E) under the charge of a Director (Superintending Engineer). The Cell was required to monitor and evaluate the performance of each scheme. But the Cell neither received reports of works regularly nor monitored or evaluated the execution of work by executing divisions. The Director, however, stated that the Chief Engineer-II monitored the performance by keeping close liaison with the other Chief Engineers. But no documentary evidence in support of the contention could be produced to audit.

The matter was referred to the Chief Engineer on June 2001 and forwarded to the Secretary to the Government. No reply was received from the Secretary (January 2002).

PUBLIC HEALTH ENGINEERING DEPARTMENT

4.2 DRINKING WATER SUPPLY PROGRAMME

HIGHLIGHTS

There are 79036 rural habitations in the state having 4.94 crore population. Though the Public Health Engineering Department (Department) spent Rs 388.34 crore on Accelerated Rural Water Supply Programme (ARWSP) and Minimum Needs Programme (MNP) during 1997-2001, 65.39 lakh population (13 per cent) remained uncovered and 17695 habitations (22 per cent) were partially covered as of March 2001. The Department covered only 3 towns out of 73 small towns under Accelerated Urban Water Supply Programme (AUWSP).

Improper planning, wrong selection of site for 'Head-Works', execution of works before ensuring the availability of adequate ground water resulted in abnormal time and cost over run, wasteful and unfruitful expenditure. Unnecessary purchase of materials without actual necessity and uneconomic procurement resulted in blockade of funds and extra expenditure. Large amount of programme funds were parked in 'Local Fund Account' and 'Deposit Account' and amounts advanced were treated as final expenditure.

In the State 68 blocks in 8 districts having a population of 44.42 lakh were affected by the arsenic pollution in drinking water. State Government launched with the sanction of Government of India (GOI) two Action Plans and two Surface Water Supply Schemes due for completion by 1998-99. Most of the schemes remained incomplete though funds were not a constraint.

Community participation in the programme was poor as no Water Committee was formed. Assets created under the programme were not handed over to local bodies for maintenance. The programme was poorly monitored.

SECTION – A Accelerated Rural Water Supply Scheme

Inadequate planning and improper programme for implementation of schemes resulted in non-utilisation of funds of Rs 62.05 crore in four years.

Though State Government was to bear equal expenditure under MNP as of GOI under ARWSP, actual expenditure by the State was less by Rs 104.38 crore for MNP.

(Paragraph 4.2.4)

The abbreviations used in this review have been listed in the Glossary in Appendix 60 (page 302)

Chief Engineers parked Rs 22.92 crore of MNP/ARWSP funds in Local Fund Account of the Zilla Parishads and treated these as final expenditure to avoid lapse of budget grant.

(Paragraphs 4.2.4.1)

Adequate priority was not seen in completing 203 Piped Water Supply Schemes which suffered from non-allotment of fund, wrong selection of sites, inadequate water sources while Government further sanctioned 108 new schemes.

(Paragraph 4.2.5.1(a))

The Department failed to complete 42 Piped Water Supply Schemes due to be completed by 1997-98 in draught-prone districts of Bankura, Birbhum, Purulia and Medinipur.

(Paragraph 4.2.5.1(b))

The Department allotted (1997-2000) Rs 47.10 crore to Zilla Parishads for creation of spot sources. Due to inadequate planning, ZP created 1.03 lakh spot sources in excess.

(Paragraph 4.2.5.1(c))

As the completion of the schemes were delayed by 4 to 15 years there was an escalation of cost by Rs 9.28 crore for 10 schemes.

(Paragraph 4.2.5.2)

Non-availability of sufficient ground water for Chekya Water Supply Scheme in Purulia District and procurement of unsuitable Iron Removal Plant (IRP) resulted in wasteful expenditure of Rs 1.42 crore on construction of water supply scheme and procurement of IRP.

(Paragraph 4.2.6.1(a) and (b))

Suspension of execution of Ranipur Water Supply Scheme in Purulia District resulted in unfruitful expenditure of Rs 1.14 crore.

(Paragraph 4.2.6.3)

Purchase of AC pipes and cement from distant sources and unnecessary payment of carriage led to extra expenditure of Rs 1.44 crore.

(Paragraph 4.2.6.4)

Failure to redeploy 112 employees of defunct rig machines for 4 years led to payment of idle wages of Rs 4.61 crore.

Though departmental rigs were available private rigs were deployed for exploitation of spot sources which led to extra expenditure of Rs 74.58 lakh.

(Paragraphs 4.2.7.1 and 4.2.7.2)

SECTION – B Accelerated Urban Water Supply Scheme.

The Department completed water supply programme only in 3 towns out of 73 small towns having population less than 20000.

(Paragraph 4.2.1)

SECTION – C Arsenic Pollution in Drinking Water.

Though the programme was taken up in 1993 and Rs 207 crore were spent, none of the 68 affected blocks has been declared as arsenic free. Most of the schemes remained incomplete.

(Paragraph 4.2.11)

In the district of Malda and South 24 Parganas, the Department failed to complete 2080 spot sources (62 per cent), 15 big dia tubewells (65 per cent),

50 new piped water supply schemes (89 per cent) and 2 arsenic free surface water supply schemes. Consequently 38 lakh people were deprived of arsenic free water though funds were not a constraint.

(Paragraph 4.2.13)

‘Detailed Project Report’ (DPR) for execution of 2 Action Plans and 2 arsenic free Surface Water Supply Schemes were prepared without proper investigation. As a result funds of Rs 79.99 crore were not utilised.

Chief Engineer, Eastern Zone and Executive Engineer, Malda Arsenic Division-I parked Rs 7.48 crore meant for Arsenic Area Water Supply Project in Personal Ledger Account and PW Deposit.

(Paragraphs 4.2.14 and 4.2.14.1(a))

Payment of interest free advance beyond the terms of agreement resulted in undue financial aid of Rs 2 crore to a contractor.

(Paragraph 4.2.14.1(d))

In 3 districts 220 tubewells were sunk at lower depths at an expenditure of Rs 45 lakh and these discharged arsenic contaminated water. Of these, tubewells in 2 districts were not sealed off and continued to be used.

(Paragraph 4.2.15.1)

Non-availability of arsenic-free water from tubewells of Juranpur Water Supply Scheme in Nadia District and sinking of exploratory-cum-production tubewell without ancillary works in Murshidabad District led to unfruitful expenditure of Rs 1.32 crore.

(Paragraph 4.2.15.2)

Intake Point to draw raw water for Malda Water Supply Scheme (Southern Sector) could not be decided in 5 years and expenditure of Rs 24.19 crore on the other works provided no result for 5.43 lakh arsenic affected population.

(Paragraph 4.2.16.1(a))

An arsenic free water supply scheme for 18 lakh people in South 24-Parganas districts, in operation since 1997, is no where near completion. Rupees 128 crore has been spent mostly on purchase of materials.

(Paragraph 4.2.16.1(b))

In Nadia district, 45 Piped Water Supply Schemes were not completed even 3 years after the target date despite expenditure of Rs 7.14 crore and the arsenic affected people got no relief from arsenic polluted water.

(Paragraph 4.2.16.2)

Rupees 36.58 lakh was spent on unnecessary installation of Arsenic Elimination Plant at Sadipur Water Supply Scheme which was covered within the command area of Malda Water Supply Scheme (North).

Proper disposal of absorbed candles of arsenic removal plants to avoid risk of contamination of surrounding water sources, was not ensured for most of the tubewells in the State.

(Paragraph 4.2.16.3)

Though Rs 2.93 crore was spent on 8 Water Quality test laboratories, the Divisional officers did not conduct quarterly test of tubewell water to ascertain the arsenic pollution.

(Paragraph 4.2.17)

4.2.1 Introduction

Government of India (GOI) launched (1973) Accelerated Rural Water Supply Programme (ARWSP) subsequently renamed (1986) as National Drinking Water Mission (NDWM), and Rajib Gandhi National Drinking Water Mission (RGNDWM) to supply safe drinking water to problem villages. GOI financed this programme subject to the condition that the State Government should also bear equivalent expenditure under Minimum Need Programme (MNP). As of April 2000, 203 piped water supply schemes remained incomplete. Yet the Department sanctioned 108 new piped water supply schemes in April 2000. GOI launched (1994) Accelerated Urban Water Supply Programme (AUWSP) to supply safe drinking water to small towns having population less than 20,000. However, 70 small towns out of total 73 towns remained uncovered under AUWSP till March 2001.

In several districts of the State drinking water supply was plagued with the problem of arsenic pollution which was first detected in early eighties. Considering the gravity of the situation, State Government and GOI constituted committees in 1983 and 1988 respectively to study the cause, nature and degree of arsenic pollution and to suggest remedial measures. State Government constituted another committee in 1992 for indepth study of arsenic pollution. This committee opined that the source of arsenic was geological and not anthropogenic (i.e. for human interference) and use of heavy duty pumps for irrigation in the arsenic zone led to wide spread arsenic contamination. The committee identified 68 blocks having a population of 44.42 lakh in 8 districts as affected by arsenic pollution

GOI sanctioned two arsenic free Surface Water Supply Schemes and two Action Plans under 'Sub-Mission programme' of ARWSP with a financing pattern in the ratio of 75 : 25 (GOI : State).

Actual expenditure against ARWSP and MNP was Rs 388.34 crore during 1997-2001 and that against AUWSP and Arsenic Sub-Mission was Rs 6.19 crore and Rs 207.18 crore respectively. As of March 2001, 65.39 lakh population (13 per cent) were not covered and 17695 habitations (22 per cent) were partially covered. Further, 1984 habitations having a population of 30.43 lakh re-emerged as problem villages due to arsenic pollution in drinking water.

Results of review of implementation of these programmes are discussed in following sections viz. A-ARWSP, B-AUWSP, C-Arsenic Pollution in drinking water.

4.2.2 Organisational set up

The Principal Secretary, Public Health Engineering Department is in overall charge of these programmes in the state. He is assisted by 4 Chief Engineers, 15 Superintending Engineers and 46 Executive Engineers. The Department allocated funds from ARWSP and MNP to the Zilla Parishads for creation of spot sources.

4.2.3 Audit coverage

Implementation of the programmes under ARWSP and MNP during 1997-2001 and AUWSP and Sub-Mission Programme during 1994-2001 was reviewed in audit between October 2000 and April 2001 with reference to records in the Department, Directorate and office of 21 Executive Engineers spread over 9 districts. Out of total expenditure of Rs 620.57 crore, expenditure of Rs 356.04 crore (57 per cent) were test-checked in audit.

SECTION – A Accelerated Rural Water Supply Programme (ARWSP)

4.2.4 Budget and Expenditure

Budget provision and expenditure for 1997-2001 are shown below :

Year	Budget Provision (State Plan)	Budget Provision (Central Sector)	Total	Expenditure (State Plan)	Expenditure (Central Sector)	Total	Savings State Plan and Central Plan
	MNP	ARWSP		MNP	ARWSP		
(R u p e e s I n C r o r e)							
1997-98	28.69	48.70	77.39	27.52	36.07	63.59	13.80
1998-99	28.90	54.09	82.99	26.11	57.42	83.53	(-) 0.54
1999-2000	45.00	80.00	125.00	42.28	69.85	112.13	12.87
2000-2001	65.01	100.00	165.01	46.07	83.02	129.09	35.92
Total	167.60	282.79	450.39	141.98	246.36	388.34	62.05

Source : Appropriation Accounts, Government of West Bengal

Scrutiny revealed that due to inadequate planning and improper work programme there was saving of funds of Rs 62.05 crore.

Though it was obligatory that State Government would bear equal expenditure under MNP with that of GOI under ARWSP the actual expenditure incurred by the State was less by Rs 104.38 crore.

4.2.4.1 Non-utilisation of Fund

Department parked Rs 22.92 crore in PL Account and Deposit head.

To avoid the lapse of budget grant against ARWSP and MNP two Chief Engineers (Eastern Zone and Water Quality Management) paid Rs 22.92 crore²¹ during 1999-2001 to the Zilla Parishads who kept it in 'local fund'. Zilla Parishads reallocated the funds during subsequent years to the Executive Engineers who again kept those amounts under 'PW Deposit'.

4.2.4.2 Advances debited to the final head of account

Advance of Rs 3 crore debited to final head of account.

The Department paid (March 2000) Rs 3 crore to the West Bengal State Electricity Board as lump sum advance for new connection charges without indicating the numbers of schemes. The advance was however, shown as expenditure and debited to the final head of account under ARWSP. Audit observation was accepted by Government.

²¹ CE. EZ-Rs 10.92 crore (ARWSP) and Rs 7.00 crore (MNP) (March 2000) C.E. Water Quality Management – Rs 5.00 crore (March 2001).

4.2.4.3 Diversion of fund

(a) The Department implemented Neoravally Water Supply Schemes and Siliguri Water Supply Scheme to cater to the need of inhabitants of Kalimpong and Siliguri Municipality respectively and of defence personnel. Scrutiny revealed that the Executive Engineers incharge of these water supply schemes diverted (1997-2001) Rs 66.36 lakh for maintenance and guarding charges of these existing schemes from the funds provided for execution of the schemes under ARWSP and MNP.

ARWSP funds misused for construction of office buildings

(b) Executive Engineer, Bankura Division constructed (1997-99) office buildings and garage cum meeting hall at Bankura at a cost of Rs 14.47 lakh from funds provided for Borjora Water Supply Scheme without any administrative approval. The expenditure was irregularly debited against Barjora Water Supply Scheme under ARWSP. Audit observation was accepted by Government.

4.2.5 Planning

4.2.5.1 Inadequate Planning

Inadequate planning resulted in non-completion of 203 schemes.

a) As of April 2000, 203 rural piped water supply schemes under ARWSP and MNP remained incomplete. Out of the above, 89 schemes were to be completed by 1998-99 (20 schemes by 1987-88, 27 schemes by 1992-93 and 42 schemes by 1998-99) and 114 schemes were to be completed by 1999-2000. Delay in completion of these schemes ranged up to 12 years.

Scrutiny revealed that non-allotment of fund, inadequate water sources, wrong selection of sites were the main reasons for the schemes to remain incomplete. Pending completion of the earlier schemes, the Department continued to sanction the implementation of new schemes in each year. In April 2000, 108 schemes estimated to cost Rs 136.91 crore were further sanctioned by the Department. Thus, completion of earlier schemes were not given priority while new works were taken up.

b) Bankura, Purulia, Birbhum and Medinipur districts are draught-prone areas. The Department did not pay proper attention in completing the piped water supply schemes in those districts early. Scrutiny revealed that 42 (28 *per cent*) schemes out of 149 schemes remained incomplete in those areas for 2 to 8 years. Rupees 14.10 crore were blocked in these schemes.

c) The Department paid Rs 47.10 crore (1997-2000) to the Zilla Parishads to create spot sources. RGNDWM issued specific guidelines for creation of one spot sources for every 250 rural people. The Department covered only 1.88 crore rural population through piped water supply schemes and rig-bored tubewells against total rural population of 4.94 crore. As per guidelines ZPs were to create 1.22 lakh spot sources against which ZPs created 2.25 lakh spot sources. Records did not reveal any justification for creation of excess spot sources. Thus, there was lack of proper planning by the Department in creating spot sources leading to wastage of funds.

4.2.5.2 Cost and time over-run

The Divisional Officers did not conduct proper survey for availability of site, water sources, etc before submission of proposals for implementation of schemes. Consequently, the target date for completion of each scheme, i.e. within a period of 3-4 years from the date of sanction, could not be achieved and the Divisional officers dragged the schemes for years together which led to abnormal cost and time over-run. A few cases are cited below :

Sl. No.	Name of the scheme	Year of sanction	Estimated cost (Rs.in lakh)	Actual expenditure up to March 2000	Proposed date of completion Actual date of completion	Cost over-run (Rs. in lakh)	Percentage of escalation	Time over run (in years)
1.	Ranipur, Bankura	1988-89	63.12	114.49	91-97 O.G	51.37	81	9
2.	Onda, Bankura	1989-90	144.28	289.14	92-93 96-97-PC	144.86	100	4
3.	Saltora, Bankura	1978-79	135.02	226.70	81-82 96-97 - PC	91.68	67	15
4.	Gopalpur, Medinipur	1988-89	59.32	115.14	91-92 96-97-PC	55.82	94	7
5.	Mandar, Medinipur	1984-85	8.25	31.02	87-88 98-99 - FC	22.77	276	8
6.	Srinagar, Medinipur	1984-85	59.73	110.28	87-88 99-2000 - PC	50.55	085	8
7.	Hasininagar, South 24-Paranas	1984-85	29.86	71.65	87-88 98-99 - FC	41.79	140	11
8.	Amlagora, Medinipur	1988-89	56.96	174.46	91-92 99-2000 - FC	117.50	206	8
9.	Belpahari, Midinipur	1984-85	130.00	433.20	87-88 97-98 - C	303.20	233	10
10.	Rukumpur, Nadia	1983-84	55.35	103.35	86-87 98-99 - C	48.18	087	12
	Total		741.89	1669.43		927.72	125	

(OG - On going, PC- Partially commissioned, FC- Fully commissioned, C- Complete)

4.2.6 Deficiencies in implementation

4.2.6.1 Wasteful expenditure

Absence of adequate ground water and suitable Iron Removal Plant resulted in wasteful expenditure of Rs 1.42 crore

(a) 'Detailed Project Report' of Chekya Water Supply Scheme in Purulia District *inter-alia* provided that water for the scheme would be available from the river bed tubewells. Accordingly the Executive Engineer sunk (1990-91) three tubewells in the river bed. Before final testing of actual discharge of water, the Executive Engineer executed other ancillary works. Yield from those tubewells were inadequate and did not meet the expected requirement.

Alternative site for sinking of tubewells though searched was not available. Thus sinking of tubewells and execution of ancillary works with an expenditure of Rs 1.12 crore turned out to be unfruitful.

(b) The Department procured (1989-90) 502 'Excess Iron Removal Plants' at a cost of Rs 30.12 lakh from BPMEL (202) and CMERI (300) while 22 plants were only installed in different water supply schemes. These plants, however, could not be put to use as the design of the plants was not suitable for the state. The Department stated that GOI prepared the design, selected the suppliers and placed orders for the same. Non-utilisation of plants procured by GOI resulted in wasteful expenditure of Rs 30.12 lakh.

4.2.6.2 Wasteful purchase

Injudicious procurement of HDP strainers led to blockade of Rs 71.45 lakh.

The Executive Engineer, Resources Division procured (1997-2001) High Density Polythene (HDP) strainers for utilisation in deep tube wells. These strainers were not suitable for safe lowering of higher depth tube wells.

The Executive Engineer, Murshidabad Division identified in field study that Low Carbon Galvanised (LCG) strainers were more suitable than HDP strainer for safe lowering of higher depth tubewells to save against shaping of ERW pipes and strainers and more longevity of tubewells with LCG strainers.

In view of above, the Executive Engineer, Murshidabad Division did not utilise the HDP strainers procured by the Resources Division. On the contrary LCG strainers costing Rs 12.34 lakh were procured for utilisation in the division. Scrutiny revealed that the Executive Engineer, Resources Divisions procured HDP strainers costing Rs 71.45 lakh during 1997-2001 without ascertaining the actual requirement. Thus procurement of HDP strainers without considering technical viability, longevity and without ascertaining the actual requirement was injudicious. Government funds to the extent of Rs 71.45 lakh were thus wasted.

Government stated that the Resources Division procured the strainers on demand and based on experience. Reply was not tenable because Resource Division neither obtained field study report nor had any opportunity to conduct field study on its utilisation.

4.2.6.3 Unfruitful expenditure

The Executive Engineer suspended the execution of Ranipur Water Supply Scheme in Purulia district sanctioned in 1989 after execution of work worth Rs 1.14 crore and during suspension period the miscreants stole the distribution pipelines costing Rs 19.40 lakh. To replenish the stolen portion, Executive Engineer prepared a revised estimate for Rs 1.76 crore to which the Department did not accord sanction till March 2001. Consequently, expenditure of Rs 1.14 crore turned into an unfruitful one and the execution of the scheme was delayed depriving the beneficiaries of the expected benefit. Government accepted audit point.

4.2.6.4 Extra expenditure

Procurement of materials from distant sources - extra expenditure of Rs 1.44 crore.

a) The Executive Engineer Resources Division procured 12.84 lakh metres AC pipes of different dia metres from Mahindra Tubes Co., Jalpaiguri (North Bengal), having factory at Jalpaiguri worth Rs 9.70 crore during the period from 1995 to 2000 (October) and supplied 7 lakh metres AC pipes valuing Rs 5.44 crore to different divisions located in and around Jalpaiguri (North Bengal). The price quoted by the firm for supply of materials was inclusive of carriage from Jalpaiguri factory to Kalyani and Kolkata stockyard. While the Executive Engineer was aware of the supply to be made to different divisions of North Bengal he could have directed the supplier to supply the materials directly to the respective divisions instead of once carrying from North Bengal factory to Kolkata and Kalyani and again despatching the materials to divisions in North Bengal. The injudicious decision of the Executive Engineer, Resources Division resulted in an additional expenditure to the extent of Rs 49.74 lakh as double carriage charges.

(b) Essential Commodities Supplies Corporation Ltd. (ECSC) have their stockyard at Malda and Siliguri to meet the requirement of North Bengal. The Resources Division did not, however, procure any cement from Malda and Siliguri to meet the requirement of divisions located in those areas. Executive Engineer, Resources Division procured entire cement required for the Directorate from ECSC from their Kolkata stockyard and distributed the same to the different divisions as per requisition. Thus the division had to pay extra carriage charges to carry the cement from their stockyard at Kolkata to different divisions in and around Malda and North Bengal. Thus, extra carriage charges for Rs 93.82 lakh was incurred towards despatch of cement from Kolkata stockyard to different divisions situated in North Bengal during 1996-2000 (up to August 2000).

Government stated (September 2001) that the materials were procured in advance and the demanding officers placed indents according to their requirement. The reply was not tenable since as per present system the Resources Division was to procure materials on the basis of indent and funds placed by the executing divisions.

4.2.7 Rig Management

4.2.7.1 Idle wages

**Idle wages of
Rs 4.61 crore.**

The Department had 67 rigs out of which 17 rigs were beyond economical repair. Four (4) test audited divisions had 47 rigs, out of which 16 rigs were beyond economical repair. Non-utilisation of the rigs in those divisions resulted in payment of idle wages as detailed below.

Each rig machine requires 7 personnel for operation. Though 16 rigs were beyond economical repair, the Divisional Officers did not utilise the services of 112 employees and continued the payment of wages of all such staff despite an order from the Department to utilise the services of such personnel for repair and renovation work of existing tubewells. Due to non utilisation of services of staff attached to condemned rig machines Government had to bear an expenditure of Rs 4.61 crore towards idle wages during 1997-2001. Government accepted audit point.

4.2.7.2 Extra expenditure

**Extra expenditure of
Rs 74.58 lakh for
creation of rig-bored
tubewells**

The Superintending Engineer, Mechanical Circle – II, without invitation of any tender/quotation placed (May 1999) an order through open bid to a ‘Driller’ for boring of 250 rig bored tubewells in two districts (Bankura – 100, Medinipur – 150) to combat the drought situation. Scrutiny revealed that the private Driller did not complete the work within the stipulated 4 months time from the date of issue of work order (31 May 1999), and continued the work till December 2000 and got paid Rs 74.58 lakh. The work could have been completed in due time by utilising the departmental rigs. Thus decision to engage private rigs for drilling purpose was unnecessary and resulted in an avoidable extra expenditure.

The Government stated (September 2001) that there was no additional financial involvement in engaging private agencies. The reply was not tenable as departmental rigs were lying idle during this period and the staff attached to the rigs were paid salary without any work.

4.2.8 *Drinking water in schools*

There are 10302 Secondary and 51021 Primary schools in the state. The Department did not have any information regarding number of schools having safe drinking water supply arrangement. It, however, sanctioned Rs 8.80 crore from ARWSP to sink tubewells in 2152 schools (3.5 per cent of total schools) and the Executive Engineers created 1171 tubewells in 1171 schools at a cost of Rs 4.79 crore till March 2001. No 'Action Plan' was prepared to provide drinking water in schools within a particular time frame. As all the schools could not be provided with safe drinking water by March 2001, the very purpose of the scheme was not achieved.

SECTION – B Accelerated Urban Water Supply Programme (AUWSP)

4.2.9 *Budget and expenditure*

This is a centrally sponsored scheme, GOI and State Government share the funding equally with 5 per cent contribution from the beneficiary. The programme aimed at providing safe and adequate water supply; improving the environment and quality of life and enhancement of socio-economic conditions and productivity to sustain the economy of the country.

Following is the budget provision and expenditure:

Year	Budget Provision (SP)*AUWSP	Budget Provision (CS)*AUWSP	Expenditure (SP)*AUWSP	Expenditure (CS)*AUWSP
	(R u p e e s i n C r o r e)			
1994-95	0.20	0.39	0.95	-
1995-96	0.55	0.40	1.03	-
1996-97	1.00	0.40	0.98	0.10
1997-98	0.20	-	0.30	-
1998-99	0.39	-	0.33	0.76
1999-2000	0.41	-	0.17	-
2000-2001	1.48	-	1.57	-
Total	4.23	1.19	5.33	0.86

Source : Appropriation Accounts, Government of West Bengal

- SP= State Plan, CS = Central Sector.

Scrutiny revealed that

Finance Department did not release Rs 43.97 lakh credited in state Account (1997-98) till March 2001.

The Department did not recover contribution from beneficiaries (March 2001) though 3 schemes were commissioned in 1996-97.

4.2.10 *Inadequate planning*

The GOI, with the launching of AUWSP, directed to form State Level Selection Committee for selection of towns to be covered under the programme. There were 73 small towns with a population 7.55 lakh. The

Department formed the committee in February 1997. The Committee, however, selected 13 towns as of March 2001. Work was completed in 3 towns²². The GOI further accorded (2000) administrative approval for 5 towns and provided funds. The Department did not however, submit (March 2001) the proposals against balance 5 towns to the GOI for clearance. Delay in preparation of the schemes deprived the residents of 70 towns of getting safe drinking water.

SECTION – C Arsenic pollution in drinking water

4.2.11 Introduction

Ground water of 68 blocks in 8 districts having a population of 62.85 lakh contains arsenic beyond permissible limit.

Ground water is the main source of drinking water in West Bengal. For the past two decades arsenic contamination of ground water has assumed serious proportion in rural districts of the state. Arsenic, a brittle metalloid with many highly poisonous compounds when oxidised, dissolves in water. Drinking water containing arsenic beyond 0.05 mg/l is unfit for human consumption. Continuous consumption of arsenic contaminated water may affect many organ systems including respiratory, gastrointestinal, cardiovascular, nervous, haematopoietic, etc. and may cause death ultimately. The Government of West Bengal and GOI constituted committees (1983, 1988 1992) to enquire into the nature, degree and cause of arsenic pollution and to recommend the remedial measures.

The Committees identified that ground water of 68²³ blocks in 8 districts having a population of 44.42 lakh (62.85 lakh as of December 2000) contained arsenic contamination beyond permissible limit of 0.05 mg/l. Committees further opined that :

Source of arsenic is considered to be geological and not anthropogenic (i.e due to human interference).

Use of heavy duty pumps for irrigation in the arsenic zone leads to wide spread arsenic contamination.

On the basis of the these study reports, the Public Health Engineering Department (Department) launched first and second phase Action Plans during 1993 and 1995 for sinking of 3345 spot sources (hand-pumps and ring-wells), replacement of 23 big dia tubewells, execution of 56 new piped water supply schemes and arsenic free surface water supply schemes in the districts of Malda and South 24 Parganas.

Government stated (September 2001) that 67 blocks were affected. Number of blocks actually affected was, however, 68. None of the blocks had been declared as arsenic free despite an expenditure of Rs 207.18 crore (1993-2001).

²² Ramjibanpur, Khirpai and Kharar in Medinipur District.

²³ Malda-5 blocks,; Murshidabad-15 blocks,; Nadia-13 blocks; Bardhaman-2 blocks; Hooghly-1 block; Howrah-3 blocks,; North 24-Parganas-19 blocks; South 24-Parganas-10 blocks. Map annexed.

4.2.12 Nature of schemes to tackle arsenic problem

The Department undertook following schemes to supply arsenic free water to the people of arsenic affected area :

- a) Replacement of spot tube wells (hand pumps)
- b) Replacement of big dia tubewells
- c) Implementation of rural piped water supply scheme
- d) Ring wells
- e) Surface water supply schemes at Malda and South 24-Parganas

In spite of operation of 2 Action Plans and 2 Surface Water Schemes since 1993 the achievement of the Department to combat arsenic contamination was insignificant as most of the schemes remained incomplete as of March 2001.

Government stated (September 2001) that audit comment was sweeping and unacceptable. Replies were not tenable as most of the tubewells were sunk at shallow depth and major portion of Surface Water Supply Schemes and Piped Water Supply Schemes remained incomplete even after 8 years of sanction.

4.2.13 Target and achievement

The action plan undertaken under various schemes and achievements therein are shown vide table below:

Items of Works	Target				Achievement			
	1 st phase Action Plan		2 nd phase Action Plan		1 st phase Action Plan		2 nd phase Action Plan	
	No.	Population (in 000)	No.	Population (in 000)	No.	Population (in 000)	No.	Population (in 000)
A. Replacement of spot tube wells	1002	154	2221	543.5	754		446	
B. Replacement of big dia tube well of existing piped Water Supply Scheme.	23	230	--	--	08			
C. Implementation of new rural piped water supply scheme	10	164	46	473	06		- Nil -	167
D. Ring-Wells	--	--	122	305		367	65	
E. Surface water Supply Scheme. i) Malda Water Supply Scheme Northern and Southern Sector ii) South Parganas Water Supply Scheme Zone I & II.			02	832 1764	Northern Sector of Malda Water Supply Scheme Commissioned			132

The Department failed to achieve the targets due to preparation of Project report without proper survey and investigation, lack of planning, slow progress of work, etc.

Government stated (September 2001) that target of first phase Action Plan was revised on receipt of third Expert Committee Report (1992) and target under second phase Action Plan was revised by the GOI in 1997. The Government further stated that GOI, before sanction of schemes, scrutinised whether the Department conducted proper survey and investigation or not. Replies were not acceptable because third Expert Committee's Report had no bearing with first phase Action Plan. Work under first and second phase Action Plans commenced during 1993 and 1995 respectively. Appointment of one man Committee for selection of site of 'intake point' of Malda Surface Water Supply Scheme and abnormal delay in completion of other works clearly indicated that the Department did not conduct adequate survey and investigation.

4.2.14 Financial management

GOI sanctioned 2 Action Plans and 2 Surface Water Supply Schemes²⁴ under Sub-Mission Programme and financing of the schemes was in the ratio of 75:25 (GOI : State Government).

Details of budget provision and expenditure as indicated in the Appropriation Accounts of Government of West Bengal are shown below :

Year	Budget Provision			Expenditure			Excess(+) Savings(-)	
	State Plan (SP)	Central Sector (CS)	Total	State Plan (SP)	Central Sector (CS)	Total	State Plan (SP)	Central Sector (CS)
	(R u p e e s I n C r o r e)							
Up to 1993-94	- NIL	- NIL	- NIL	- NIL	- NIL	- NIL	- NIL	- NIL
1994-95	1.24	4.81	6.05	0.16	1.55	1.71	(-)1.08	(-)3.26
1995-96	2.34	8.47	10.81	8.46	0.99	9.45	(+)6.12	(-)7.48
1996-97	2.61	27.11	29.72	0.23	7.37	7.60	(-)2.38	(-)19.74
1997-98	20.92	55.00	75.92	21.93	14.01	35.94	(+)1.01	(-)40.99
1998-99	21.54	35.22	56.76	20.76	22.41	43.17	(-)0.78	(-)12.81
1999-2000	18.70	45.30	64.00	13.54	31.97	45.51	(-)5.16	(-)13.33
2000-2001	23.41	20.50	43.91	19.85	43.95	63.80	(-)3.56	(+)23.45
Grand Total	90.76	196.41	287.17	84.93	122.25	207.18	(-)5.83	(-)74.16

Scrutiny revealed that 'Detailed Project Report' for Surface Water Supply Schemes were prepared without proper survey and investigation resulting large scale savings under Central Sector. Further, the Chief Engineer, Water Quality Management intimated (April 2000) to the GOI the actual expenditure as Rs 154.89 crore (1994-2000) against the booked expenditure of Rs 143.38 crore. Reasons for difference between the actual expenditure and booked figure were not explained to audit.

Government stated (September 2001) that booked expenditure figures reported in audit were not in conformity with the verified expenditure figures. The reply was not tenable because the Appropriation Accounts included figures after reconciliation by the Divisional Officers.

²⁴ First Phase Action Plan, Second Phase Action Plan, Malda Water Supply Scheme and South 24-Parganas Water Supply Schemes.

4.2.14.1 *Improper financial management*

(a) *Parking of Fund*

The Directorate kept Rs 7.48 crore in P/L Account and Deposit Account

(i) The Chief Engineer, Eastern Zone paid Rs 5 crore to North 24-Parganas Zilla Parishad in March 2001 to be kept in Personal Ledger Account to avoid lapse of budget grant. The ZP repaid the amount in April 2001 to the Executive Engineer, Barasat Division who kept the same under 'PW Deposit' for future utilisation in North 24-Parganas Arsenic Area Water Supply Project sanctioned (February 2001) by the Department under "Accelerated Rural Water Supply Programme."

Government accepted (September 2001) the audit observation.

(ii) Executive Engineer, Malda Arsenic Division-I deposited Rs 2.48 crore in March 1998 with the Executive Engineer Resources Division to procure materials in future, evidently to avoid the lapse of budget grant. The Resources Division kept the amount under 'PW Deposit', out of which an amount of Rs 1.45 crore remained unutilised till January 2001.

Government stated (September 2001) that Malda Arsenic Division-I received all the materials. The reply was not tenable, as the factual position did not agree.

(b) *Blockade of fund*

Unnecessary procurement of pipes, etc. for Rs 29.49 crore.

(i) South 24-parganas Water Supply Division-II procured CI pipes worth Rs 20.34 crore during 1998. The division did not commence work till March 2001 which resulted in blockade of fund. The prospect of actual utilisation of fund was not taken into consideration before procurement.

(ii) Civil Divisions failed to complete the 'Intake Jetty', 'Treatment Plant' and 'Clear Water Reservoir' for South 24-Parganas Water Supply Scheme till March 2001. Execution of mechanical work would commence only on completion of civil work. The Executive Engineer, South 24-Parganas Mechanical Division, however, procured pumping machinery costing Rs 8.45 crore between March and September 2000 and dumped those in the godowns, thus blocking huge funds.

(iii) Due to non-completion of work by the Executive Engineer, South 24-Parganas Water Supply Division I, Executive Engineer, South 24-Parganas Water Supply Division II could not commence work. Scrutiny revealed that the Division II procured DI Pipes valuing Rs 70 lakh upto 1998 and these were lying unutilised till March 2001.

Government stated (September 2001) that the works were material intensive, hence the Department made advance procurement. The reply was not tenable as prolonged and huge advance procurement for several years were not based on work programme for a specific period and/or for the entire project. Consequently these materials are idling for years together and the prospect for their use was not yet identified.

(c) *Injudicious procurement*

Unnecessary purchase of pipes and sheet piles - Rs 2.16 crore

Malda Arsenic Division-I completed (December 2000) Northern Sector of Malda Surface Water Supply Scheme. No major work except construction of two over-head reservoirs was left to be executed. Scrutiny revealed that Superintending Engineer, Malda Water Supply Circle procured (1996-98) materials without assessment of actual requirement. Consequently 'Z' type sheet piles and DI pipes valuing Rs 2.16 crore²⁵ were left unutilised for 3 to 5 years. Evidently the Superintending Engineer procured the materials valuing Rs 2.16 crore unnecessarily.

The Executive Engineer, Malda Arsenic Division I stated that due to financial stringency all the works could not be completed. This is not tenable as there was no shortage of fund. Unplanned procurement of materials led to avoidable shortage.

Government stated (September 2001) that the sheet piles and DI pipes would be utilised in Southern sector. But the Department failed to finalise the site for 'Intake Point' of the aforesaid sector and hence possibility of their use is remote.

(d) *Undue financial aid*

Irregular payment of interest free advance of Rs 2 crore

The Superintending Engineer, South 24 Parganas Water Supply Circle awarded (March 1999) the work of construction of Water Treatment Plant to a contractor at a tendered value of Rs 17.73 crore for completion within 24 months from the date of issue of work order.

The Divisional officer paid interest free mobilisation advance of Rs 50 lakh as per terms of the agreement. Despite its failure to complete proportionate work within proportionate time, the Agency prayed for interest free advance of Rs 2.20 crore to complete the work by December 2000. The Department sanctioned Rs 2 crore again as advance and paid the same to the firm in two instalments (March and July 2000). The Agency failed to complete the work even by December 2000. As there was no provision for payment of second interest free advance, this resulted in undue financial aid to the Agency. Government accepted (September 2001) the audit observation.

4.2.15 Irregularities in implementation of the programme

4.2.15.1 Tube well Water Supply Schemes - Sinking of tubewell in the Arsenic contaminated aquifer

Tubewells sunk at shallow depth discharging arsenic contaminated water

Reports of Study Committee (1992) categorically indicated that arsenic free water will not be available at a depth lesser than 200 mtrs.

²⁵ 'Z' type sheet piles-4943.32 mtr- Rs 0.70 crore and D.I.pipes-9416 mtr – Rs 1.46 crore.

Test-check of records in three districts viz. Malda, Murshidabad and North 24-Parganas disclosed that 625 and 424 shallow tubewells were sunk up to 90 mtrs in first two districts while in North 24-Parganas 300 tubewells were sunk (1993 to 1998) up to 371 mtrs at a cost of Rs 1.04 crore, Rs 0.88 crore and Rs 1.38 crore respectively. Chemical examination of water (2000-01) of the tubewells sunk in aforesaid districts disclosed that 125 tubewells in Malda, 77 in Murshidabad and 18 in North 24-Parganas indicated discharge of arsenic contaminated water beyond permissible limit resulting in wasteful expenditure of Rs 44.81 lakh (Rs 20.78 lakh in Malda, Rs 16.03 lakh in Murshidabad and Rs 8 lakh in North 24-Parganas). While the tubewells in North 24-Parganas districts were sealed off, the tubewells in other two districts were neither marked 'Red' nor sealed off and the people were using water from those spot sources causing health hazard.

Government accepted (September 2001) failure of the Department to adhere to the guidelines recommended by the Expert Committee regarding safe depth of the tubewells. Government further stated that these tubewells could be revived by providing arsenic treatment unit but no action had yet been taken.

4.2.15.2 Non-functional schemes

Improper execution of schemes led to unfruitful expenditure of Rs 1.32 crore.

The Department accorded (1997-98) administrative approval of Juranpur Water Supply Scheme (Nadia) and sinking of exploratory cum production tubewell (Murshidabad) at estimated cost of Rs 1.10 crore and 70 lakh respectively. The Executive Engineer, Nadia Division without tapping suitable aquifer spent (March 2001) Rs 59.31 lakh for ancillary works, while Executive Engineer, Murshidabad Division sunk tubewells at a cost of Rs 72.22 lakh without execution of ancillary works till November 2001. The tubewells are non-functional. This resulted in unfruitful expenditure of Rs 1.32 crore (Nadia – Rs 59.31 lakh, Murshidabad Rs 72.22 lakh) as of November 2001.

Government stated (September 2001) that 'Arsenic Removal Plant' would be installed if attempts of availability of arsenic free water from tubewells failed. It further stated that ancillary work against exploratory-cum-production tubewells would be taken up in future. Thus, evidently the works were taken up without adequate investigation for the scope and nature of work. Consequently the Department failed to supply arsenic-free water despite huge expenditure.

4.2.16 Defective execution of schemes

4.2.16.1 Surface Water Supply Scheme

The Directorate supplied arsenic free surface water to a population of 1.32 lakh spending Rs 84.45 crore.

(a) Ministry of Rural Areas and Employment accorded (March 1995) approval for execution of Malda Water Supply Scheme (Southern Sector and Northern Sector) at a cost of Rs 88.48 crore under Sub-Mission programme to supply arsenic free surface water to 250 villages having population of 8.32 lakh. The project having two separate segments for Northern and Southern Sector was to be completed by September 1996.

The Department constituted (September 1995) one-man Committee to select the site for 'Intake point', etc. for both the sectors. The work executed in Northern Sector was commissioned in February 2000 and provided arsenic-free water to 1.32 lakh people. However, the Directorate failed to finalise the site for 'Intake jetty' of Southern Sector (where 5.43 lakh population lived) till December 2000. Malda Water Supply Division-II, responsible for the work of Southern Sector, however, incurred (December 2000) Rs 24.19 crore for construction of 'Treatment Plant', 'Rising Main', 'Distribution System', procurement of pipes, etc. which were not put to use for 3 years due to non-selection of site for 'Intake Jetty'. As work for procurement of raw water from river did not commence, the expenditure was unfruitful. Actual expenditure (March 2001) against the projects was Rs 84.45 crore (Southern – Rs 24.19 crore and Northern Sector – Rs 60.26 crore). The Superintending Engineer Malda Water Supply Circle prepared a revised estimate for Rs 140.83 crore. However, the department did not sanction the revised estimate and instead declared the remaining work of Southern Sector as phase II work and accorded administrative approval (March 2001) of Rs 43 crore out of funds of Prime Minister's Gramodaya Yojana (PMGY).

By spending Rs 84.45 crore the Directorate could provide arsenic free water to only a population of 1.32 lakh of Northern Sector (Malda District) which was about 16 *per cent* (approx.) of the targeted population. The project in Southern Sector is incomplete even after five years of the target date of completion. Revised date of completion of work of Southern Sector has been fixed at 31 March 2003.

Government admitted (September 2001) that due to non-selection of site for intake point in southern sector and huge price escalation the objective could not be fulfilled.

(b) The Department accorded (May 1997) administrative approval for execution of South 24-Parganas Surface Water Supply Scheme (Zone I and II) at a cost of Rs 232.84 crore to supply arsenic free water in 8 blocks having population of 17.67 lakh. The Department created (December 1997) 3 divisions to execute the civil and mechanical works with the targeted date of completion by March 2000. Scrutiny revealed that the two civil divisions completed only 15 to 20 *per cent* of civil works as of March 2001. As against the estimated cost of Rs 232.84 crore the actual expenditure in the project was Rs 128.42 crore. The amount was mainly spent on procurement of materials. Due to failure of the Divisional Officers in completing the work, a large population of the affected area got no relief from arsenic polluted water.

Government admitted (September 2001) that advance procurement of materials without setting any work programme led to abnormal delay in completion of the work.

4.2.16.2 *Piped Water Supply Scheme*

The Department fixed the target of creation of 46 “Piped Water Supply Scheme” under second phase Action Plan by 1997-98. However, as of 1998-99 Nadia Division partially commissioned one scheme. Despite an expenditure of Rs 7.14 crore on Piped Water Supply Schemes the Department failed to commission any other sanctioned scheme as of March 2001. Due to failure of the Department to commission the Piped Water Supply Schemes, the people of the arsenic affected area are compelled to drink arsenic contaminated water.

Government admitted (September 2001) its failure to achieve the target within the schedule date.

4.2.16.3 *Arsenic removal Plant*

**Unnecessary
Installation of arsenic
elimination plant
costing Rs 36.58 lakh
at Sadipur Water
Supply Scheme**

(a) Department accorded (August 1994) administrative approval for installation of arsenic elimination plant at Sadipur Water Supply Scheme at a cost of Rs 16.27 lakh. The Division, however, commenced execution of the work during 1996-97 and commissioned the plant in November 2000 after spending Rs 36.58 lakh. The Department did not accord sanction to the revised estimate.

Sadipur Water Supply Scheme fell within the command area of Malda Surface Water Supply Scheme (Northern Sector), sanctioned by GOI in March 1995. Operation of big dia tubewells of Sadipur was to be discontinued with the commissioning of Northern Sector Surface Water Supply Scheme which as per design would supply adequate quantity of arsenic free surface water within its command area. The Directorate completed the work of Northern Sector and commissioned the same during February 2000 i.e. nine months before the commissioning of arsenic elimination plant.

Therefore, expenditure of Rs 36.58 lakh incurred for installation of arsenic elimination plant at Sadipur was avoidable.

Government stated (September 2001) that arsenic removal plant was installed by R&D Project. The reply was not tenable because the scheme proposal and the revised estimate included proposal for installation of arsenic removal plants to supply arsenic free water. But records did not indicate that the Department ever installed any such plants on experimental basis.

**Arsenic Removal
plant in tubewells
installed without
technology for
disposal of candle.**

(b) Study Committee (1992) indicated that absorbed candle of Arsenic Removal (AR) Plant might pollute ground water/surface water, if not properly disposed off. Study Committee recommended disposal of candles by putting them into a pit filled up with cow dung and by exposing them to the atmospheric changes. The arsenic absorbed in the candles is subsequently accumulated in sludge which need be disposed carefully with high temperature. The Murshidabad Zilla Paridhad (ZP) entrusted the work (November 2000 and January 2001) to West Bengal Agro Industries Corporation Ltd. (Corporation) for installation of 573 arsenic removal plants in tube wells at a cost of Rs 3.02 crore within 2 months. They, however, did

not ascertain whether Corporation had the requisite technology to develop such plant or not. Corporation supplied the plants developed by Pal Trockner (P) Ltd., a private agency. The plants were to be fixed to the tube wells to absorb arsenic contents in the water. The Corporation neither indicated the longevity of the plant nor transferred the technology of maintenance of the plant. Thus ZP invested Rs 3.02 crore without ascertaining the life of the AR plants and safe disposal of the absorbed candle.

Fifteen affected blocks had 19321 spot sources (ordinary and deep tube wells) having depth ranging between 40 and 90 mtrs. The Zilla Parishad arranged for installation of 573 arsenic removal plants in 15 blocks as of 2000-2001 to cater the need of arsenic affected population. Thus only 3 *per cent* of the affected people were provided with the benefit at a cost of Rs 3.02 crore. Scrutiny of records of the Panchayat Samitis revealed that even after installation of those plants, arsenic contents in water of the spot sources were beyond permissible limit. Thus, there were no effective safeguards against arsenic hazards for the rural people. On the other hand, additional risk was created for the people as ZP did not follow the recommendations of the Study Committee (1992) for safe disposal technology of candles and other ingredients of arsenic removal plants fitted with the tube wells.

Government stated (September 2001) that the matter did not relate to the Department. This was not tenable as the Department funded the expenditure.

4.2.17 Water Quality Testing

The Divisional Officers failed to conduct Quarterly test of water despite expenditure of Rs 2.93 crore for laboratories.

The Chief Engineer, Eastern Zone issued (June 1997) directions to all subordinate officers to conduct chemical analysis of water samples of the deep tubewells of all rural and urban water supply schemes quarterly (February, May, August and November). In view of that the Department installed and maintained 8 water quality test laboratories at an expenditure of Rs 2.93 crore. It did not, however, appoint any regular chemist. The chemist appointed on daily rate/honorarium basis conducted the quality test. In absence of regular chemist the Executive Engineer would not be in a position to fix any accountability for wrong testing, if any. The Executive Engineer did not carry out quarterly quality test as directed by the Department. In absence of quarterly quality test it was not known how the department was satisfying itself whether the water supplied from the sources created were safe or not.

4.2.18 Miscellaneous points

4.2.18.1 Construction of flat without demand

Malda Arsenic Division-I constructed (August 1998) 12 residential flats at a cost of Rs 32.92 lakh out of fund provided for Malda Surface Water Supply Scheme. The Executive Engineer, however, failed to allot any flat as there was no demand for the same. Thus construction of flat without assessing demand resulted in an unfruitful expenditure of Rs 32.92 lakh.

Government admitted (September 2001) its failure to utilise the flats for residential purpose.

4.2.18.2 Irregular expenditure on inaugural ceremony

The Department formally inaugurated (February 2000) the partially commissioned Northern Sector of Malda Water Supply Scheme through a ceremonial function. There was no provision in the detailed Project Report to incur any expenditure for inaugural ceremony. Scrutiny revealed that the Malda Arsenic Division I incurred Rs 14.13 lakh (Temporary rostrum and pandal Rs 7.63 lakh, earth filling in low lying area Rs 4 lakh, Misc. Rs 2.50 lakh) for inaugural ceremony without obtaining sanction from the Finance Department. Government accepted (September 2001) the fact.

4.2.19 Monitoring and evaluation

The Department created a post of Officer on Special Duty (Superintending Engineer), Monitoring Cell to monitor and evaluate different water supply schemes. Scrutiny of records disclosed that the programme was poorly monitored because of the following :

(a) (i) The Monitoring Cell did not monitor and evaluate the spread of arsenic in drinking water and consequential effect of the same on rural people.

Government stated that Monitoring Cell had no relevance with arrest of arsenic. Reply is not tenable because since eighties arsenic assumed a serious problem in the State.

(ii) As per guidelines for implementation of Rural Water Supply Programme Non-Government Organisations (NGO) were to create awareness regarding arsenic pollution in drinking water and to combat the problem. The department did not associate any NGO. It prepared a 'Plan of Action' (1999) to implement 'Information, Education and Communication (IEC)' system in collaboration with Panchayat and UNICEF. But scrutiny of records of the affected districts did not disclose any operational activities by the Panchayats and UNICEF. No report and returns indicating impact of the awareness created by Panchayats and UNICEF could also be shown to audit.

(iii) The Department did not establish a comprehensive 'Data Bank' to record extent of arsenic pollution and number of people affected with arsenic diseases and death therefor. The Government did not make any arrangement for proper rehabilitation and treatment of affected person. Government stated that health aspects were being looked after by Health & Family Welfare Department. Government further stated that it did not agree with the pessimistic view of the audit. The reply is not tenable. It is a serious health hazard for 62.85 lakh population. Therefore, there is urgent need for proper strategy for treatment and rehabilitation of the affected persons.

(b) All India Institute of Hygiene and Public Health (Institute), on being appointed by RGNDWM, conducted monitoring and evaluation study in respect of Rural Water Supply in three selected districts (Bankura, Nadia and Jalpaiguri) of the state. Institute, inter-alia, commented as follows:

- (i) Community did not participate in planning/designing, construction implementation, maintenance and operation.
- (ii) Frequency of occurrence of water related diseases were not studied.
- (iii) Water quality testing before installation and after sinking as well as periodical testing of water sources was not done. There is no system of regular testing of water.
- (iv) No Water Samitis or Committees were formed.

CHAPTER IV

SECTION – B

AUDIT PARAGRAPHS

IRRIGATION AND WATERWAYS DEPARTMENT
4.3 Malpractices in procurement of polythene film

SE-I, Kangsabati Circle procured polythene film valuing Rs 3.26 crore from local contractor at exorbitant rate of Rs 124.80 per kg as against the rate of Rs 65 per kg paid by other Department without quality test.

To prevent leakage/wastage of irrigation water from the Kangsabati Main and Right Bank Canals in Bankura district, the Chief Engineer-I (CE), Irrigation and Waterways Directorate decided (April 1997) to procure Low Density Polythene Ethylene (LDPE) film for covering the surface area of the canal bed and slopes. In July 1998, the EE, Kangsabati Canal Division-II invited quotations from *bona fide* and resourceful suppliers for supply of black heavy duty LDPE film width 6 metre having thickness 250 micron conforming to IS-2508/1984. Five local contractors submitted their rates. The rate of two bidders was Rs 27.25 per square metre (Rs 124.80 per kg) being lowest.

Without verifying the market rate of the material or rates of manufacturers of films, the Superintending Engineer (SE)-I, Kangsabati Circle accepted the lowest offered rate of Rs 27.25 per square metre (Rs 124.80 per kg) of the quotationers. Supply orders were placed in August 1998 for supply of 1.44 lakh square metre of polythene film on each lowest bidder at the total cost of Rs 78.47 lakh though the EE was quite aware that neither of the bidders was an approved dealer of the materials. Three more repeat supply orders for 9.08 lakh square metre were issued between December 1998 and February 1999 to these suppliers at the same rate and in all they supplied LDPE films worth Rs 3.26 crore in four days during August 1998 and February 1999. The materials were issued by four Divisional Officers to different contractors for utilisation in canal work and 3 lakh sq. metre were lying in the store as of July 2000.

Audit scrutiny revealed the following irregularities from which scope of malpractice is evident :

- i) In gross violation of tender rules, the quotation notice did not indicate the quantities to be procured. It also did not stipulate that supply would be accepted only from approved dealers or manufacturers in order to ensure quality as well as fair rate. There were no records to indicate the publication of the quotation notice in newspaper for wide publicity and thus it was not evident that the NIT was published in the newspaper.
- ii) Records of Commercial Tax Officer, Bankura indicated that the two suppliers were related as husband and wife and none of them was registered under West Bengal Sales Tax Act, 1994. There was no records to show that the EE/SE satisfied themselves about the *bona fides* and resourcefulness of the suppliers before allowing them to participate in the tender and issued supply orders on them. SE-I stated (July 2001) that no outsiders participated in the open tender during last five years. This suggested the formation of a ring which prevents the outsiders from participation in the tender/quotation.

iii) Though the quotation notice did not specify quantity of materials to be supplied, repeat orders for a huge quantity (315 per cent of the quantity initially ordered) were issued to avoid further publicity of the deal.

iv) The supply rate of Rs 124.80 per kg was very high compared to the rate of supply of identical material at Rs 65 per kg in Damodar (AI) Command Area Development Division under Minor Irrigation Department during the same period. Therefore, the rates paid in this case was exorbitantly high at Rs 124.80 per kg as against Rs 65 per kg paid by other Department and the suppliers got undue benefit of Rs 1.56 crore on the total supply.

v) The supply order did not provide for quality test before or after the supply. As the materials were accepted without any quality test or pre-supply inspection, SE did not ensure supply of material of specified quality.

vi) The supply challans (letter head of supplier) did not specify mode of transport (truck number, etc.) although at least forty trucks of eight ton capacity each were required to deliver 11.96 lakh square metre polythene film costing over Rs 3.26 crore in four days²⁶ in the store which was located at a very remote place at Khatra located at 40 kms away from Bankura Town. The brand name of the material, manufacturer's name, place of manufacturing, central excise gate pass or valuation certificates were not attached or indicated in the challans of the suppliers. Therefore, genuineness of the source of procurement was doubtful.

The peculiar circumstances of the case, thus, tends to suggest that there was a nexus between the EE/SE and suppliers in providing undue benefit of Rs 1.56 crore to the suppliers. The matter calls for urgent investigation by the department.

The matter was referred to the Chief Engineer in October 2000 and to the Secretary in May 2001 and followed up with reminders to the Secretary in August 2001. No reply was received from the Secretary (January 2002).

PUBLIC WORKS DEPARTMENT

4.4 Infructuous expenditure due to lack of planning and co-ordination

Electrification work of Police quarters was executed by Public Works Department with bulk HT power at higher rate without the consent of the Police Department. Subsequently, at their request HT power supply was changed to LT (domestic) power supply which involved an infructuous expenditure of Rs 48.91 lakh on redundant work

The work of electrification of newly constructed twelve Multi-storied buildings (456 flats) under Police Housing Scheme at Salt Lake City was administratively approved by Government in November, 1988 at a cost of

²⁶ 26 August, 1998 --2.88 lakh sq. mtrs., 04 January, 1999 -- 1.29 lakh sq. mtrs., 26 January, 1999 -- 1.23 lakh sq. mtrs., 26 February, 1999 --6.56 lakh sq. mtrs. : Total : 11.96 lakh sq. mtrs.

Rs 1.75 crore. Electrical Wing of the department took up the work (April 1988) and completed the same in June 1998 at a cost of Rs 2.47 crore after much delay due to non-completion of civil construction work on account of frequent change of drawing/ design of the buildings.

Executive Engineer, Metropolitan Sports Electrical Division prepared drawing-design and estimates of various electrical items which were approved by the Superintending Engineer, Electrical Circle-IV between 1987-88 and 1995-96. As per approved design and lay out plan of electrical work, High Tension (HT) bulk power supply was to be drawn from West Bengal State Electricity Board (WBSEB) at a sub station (to be constructed) for distribution of power to individual block through Low Tension (LT) power cable from the sub station. Internal distribution of power was to be arranged through vertical rising mains with distribution board in each floor along with installation of separate meter in each floor to record the consumption of electricity by the occupants.

When execution of work as per design-drawing of electrical wing was almost complete, the Police Authority objected (April 1996) to it on the ground that the rate of HT bulk power was more than that of the LT (domestic) power and they would face stiff opposition from police personnel and they (Police Authority) insisted on arranging direct consumership with WBSEB through LT (domestic) supply. The proposal of the police department was ultimately accepted (March 1997) and it was also decided to hand over the newly constructed sub station to WBSEB and all individual LT (domestic) meters for each building would be installed on the ground floor. The work of re-arrangement of electrical work was in progress (March 2001). As a result of change of electrical arrangement from bulk HT power supply to direct LT (domestic) power supply, the newly constructed sub station (cost Rs 14.11 lakh), transformer and other appliances (cost Rs 24.61 lakh) and the specially designed vertical rising main (cost Rs 10.19 lakh) became redundant.

Scrutiny of records revealed that PWD while preparing the design and lay out plan of electrical works did not initially consider the prevailing system of direct consumership of individual occupants of the Police Housing Estates with the Electricity Supply Authorities and payment of energy bills directly by the consumers. PWD was also aware of the high cost of HT power compared to the LT (domestic) power and the difference of cost of HT power supply received at the sub-station and the cost realisable from the individual consumers at LT (domestic) power rate. PWD also knew that on ground of high cost, Police Authority had objected (June 1993) to the proposal of Calcutta Electric Supply Corporation (CESC) for supply of HT bulk power in the Police Housing Complex on Plot No. J under CIT Scheme No. VIIM near Bidhan Sishu Udyan in Kolkata and ultimately direct consumership with CESC through LT power supply was arranged there. PWD, however, did neither obtain the consent of the Police department for the design nor got the design plan vetted by them before execution of the work.

Unilateral finalisation of the electrification scheme resulted in infructuous expenditure of Rs 48.91 lakh.

Government stated (July 2001) that changes were made at the insistence of Police authority. The reply is not convincing. Necessity for LT power supply was foreseeable for economy and to avoid unnecessary administrative problems (maintenance/regularisation of the bills for electric charges consumed by the occupants having transfer liabilities). Had the Public Works Department initially consulted the Police authority the original electrical arrangement could have been planned according to requirement.

4.5 Unjustified carriage of materials through longer route

Divisional Officer unjustifiably allowed carriage lead of 47 km and 46 km for carriage of cement and steel and extended undue benefit of Rs 36.93 lakh to contractors

Resources Division-I centrally procures main construction materials, viz. cement, steel, etc., and issues the same to working divisions. The materials are stocked in Central Store godowns at Buroshibtala (Behala) on the eastern side of the river Ganga. Delivery of cement is taken mainly from railway rakes and dumps of Shalimar yard, Howrah on the western side of the river Ganga while steel is procured from mill/works at Liluah near Howrah. Transport contractors are engaged by the Department on yearly basis for carriage of cement and steel from Shalimar and Liluah respectively. Before construction of the Second Hooghly Bridge (SHB) over the river Ganga, these materials were carried through long distance circuitous route via Bally bridge over the river Ganga and lead of 47 km and 46 km for cement and steel respectively were allowed to transport contractors. Since opening of the SHB in October 1992 and completion of all approach roads (1996-97), the lead distance from Shalimar and Liluah to Buroshibtala godown was drastically reduced to only 11 km and 19 km respectively.

Despite this reduced distance, the Divisional Officer allowed the claim of contractors for longer distance of 47 km and 46 km on the carriage of materials during 1997-98 to 2000-2001 on the ground that there were restrictions on the movement of traffic over SHB. This was not tenable as Calcutta Traffic Police Authority confirmed (February 2001) that there was no restrictions on the movement of goods traffic during 1997-2000 and the bridge remained open to traffic round the clock and also that the distance between Shalimar and Buroshibtala was 11 km if routed through the bridge.

Between 1997-98 and 2000-2001, the Divisional Officer paid Rs 88.02 lakh to transport contractors for carriage of 36603 MT cement and 20067 MT steel reportedly through this longer route (47 km and 46 km). The expenditure would have been only Rs 51.09 lakh inclusive of toll charges had the short distance route through SHB been followed. Unjustified payment for longer carriage thus involved an undue benefit to contractors for Rs 36.93 lakh. The Superintending Engineer and Chief Engineer failed to ensure that unjustified payments are avoided.

Government stated (July 2001) though there was no restriction on mobility of vehicles along SHB but materials could not be carried to the departmental godown at Buroshibtala along SHB as movement of goods vehicles along corridors connecting the two places was restricted during working hours. The reply is not tenable as the Kolkata Traffic Police authority has again confirmed (December 2001) that there was no restriction on movement of goods vehicles from SHB to Buroshibtala along Khidderpore ramp-Clyde Road-Garden Reach Road-Satya Doctor Road-Karl Marx Sarani-Hide Road-Taratolla Road-Diamond Harbour Road.

PUBLIC WORKS (ROADS) DEPARTMENT

4.6 Undue financial aid to a contractor

SE allowed additional 1 km carriage lead for excavation of earth from borrow pit land against actual carriage lead of 100 metres only and this resulted in undue benefit of Rs 2.43 crore to the contractor

Superintending Engineer (SE), National Highway (NH) Design & Planning Circle awarded the work of construction of 22.89 km long realignment in Pundibari-Falakata Section of NH-31 (Package-II) to a contractor in January 1991 at the tender cost of Rs 10.58 crore (36.25 *per cent* above the estimated cost of Rs 7.77 crore) for completion within November 1994. The work was in progress (December 2000) and the contractor had been paid Rs 26.08 crore as of March 2001 including price escalation (Rs 4.98 crore), interest on delayed payment (Rs 0.09 crore), price variation of materials (Rs 1.53 crore), etc., Delay in execution of work was attributable to land acquisition problem (16 km to 22.89 km), dispute over mode of execution of earth work, etc., while excess cost was due to taking up of mechanised earth work at higher rate in place of manual earth work.

The technical specification of the tender envisaged mechanised earth work but the SE provided manual earth work (11.06 lakh cubic metre) in the tender estimate. Immediately after commencement of work in January 1992, the contractor claimed higher rate for execution of mechanised earth work. As the SE did not accept his claim, the contractor suspended the work in June 1993 and ultimately, the dispute was resolved after three years in February 1995 at the intervention of MOST. The contractor resumed work in April 1995. Thus, by modification of an item of work ignoring the technical requirement, the SE delayed the work by more than 3 years which attracted extra liability towards price escalation and price variation.

Based on a supplementary agreement, the contractor executed mechanised earth work with earth (40 *per cent*) excavated from departmental borrow land with additional 1 km carriage for 4.76 lakh cubic metre earth at the rate of Rs 92.51 per cubic metre and 60 *per cent* earth from contractor's own arranged land with additional 4 km carriage for 7.38 lakh cubic metre at the rate of Rs 106.55 per cubic metre.

Scrutiny revealed that while executing supplementary agreement for mechanised earth work, the SE extended undue benefit to the contractor by allowing 1 km additional carriage. For execution of the road project, the department on an average acquired 150 metre width of land and the contractor excavated and brought earth from this acquired borrow pit land. There was no scope for carriage of earth from a distance of 1 km within the borrow pit area. In fact, the original tender estimate for manual earth work (which was not done ultimately) corroborated the same position. The estimate for manual earth work provided one additional lead of 50 metre and two additional lift of 1.5 metre each for carriage of earth from departmental borrow land. The contractor also made no demand for extra 1 km carriage in his offered rate (Rs 92.51) for execution of earth work from borrow pit area. Thus, against the actual carriage lead of 100 metre (Rs 52.14 per cum), the SE allowed additional 1 km carriage lead (Rs 92.51 per cum) which involved an undue benefit of Rs 2.43 crore (including price escalation) to the contractor for execution of 4.76 lakh cum earth work from departmental borrow land.

The matter was referred to the Chief Engineer in March 2001 and to the Secretary to the Government in June 2001 and was followed up with reminders in August 2001. However, no reply was received from the Secretary (January 2002).

4.7 Delay and extra expenditure in road works

Delayed finalisation of tender for more than 20 months and time over run of more than 4 years resulted in extra expenditure of Rs 81.57 lakh due to increased cost of bitumen, intermediate repair and maintenance work and excess carriage lead.

Superintending Engineer (SE), National Highway (NH) Circle-III awarded the work of strengthening of N.H-31 (610 km to 631 km) to a contractor in January 1993 at the tendered cost of Rs 2.64 crore (4.97 *per cent* above the estimated cost of Rs 2.52 crore) for completion within two years. Shortly after award of the work MOST approved (May 1993) change of specification of preliminary item of WBM²⁷ work (150 mm thickness) to BUSG²⁸ (75 mm) and BPM²⁹ (75 mm) in consideration of climatic condition of North Bengal proposed (March 1993) by Chief Engineer, NH on the basis of site condition. As a result of this change the tendered cost was revised to Rs 2.30 crore.

Although the work commenced in November 1993 (10 months after issue of work order), its progress was hampered and delayed in every stage. The contractor's progress of work was only 30 *per cent* within the stipulated time of two years. The work was affected from December 1995 to May 1997 due to short supply of bitumen by the Executive Engineer (EE), NH Division-IX. The contractor submitted a claim for Rs 1.03 crore for idle men and machinery for which arbitration proceeding was in progress (March 2001). Even though the contractor was responsible for abnormal delay in executing the work for more than four years particularly for the period from November 1993 to November 1995 and

²⁷ Water bound macadam.

²⁸ Built up spray grout.

²⁹ Bituminous penetration macadam.

May 1997 to May 1999 but the SE and the EE did not claim liquidated damages as per provision of the contract nor took any penal action against the defaulting contractor. The work was completed in May 1999 (i.e. six years after its commencement against the stipulated time of two years). The contractor had been paid Rs 2.14.crore as of March 2001; final settlement is yet to be made.

Audit scrutiny revealed that due to this abnormal delay in completion of the work for various lapses on the part of the contractor and also the SE and EE, department suffered an aggregate loss of Rs 81.57 lakh as indicated below :-

The Department took 20 months (May 1991 to January 1993) to finalise the tender besides further 10 months (January 1993 to October 1993) to finalise the specification of work. The contractor failed to mobilise his men and machinery before onset of monsoon (June 1993). After monsoon (late June to early October), was over, the work commenced in November 1993.

i) As the completion of work prolonged up to May 1999, 1510 MT bitumen was to be procured at higher cost during November 1996 to May 1999 with extra expenditure of Rs 47.84 lakh.

ii) For execution of BUSG (1.89 lakh Sqm), BPM (1.39 lakh sqm) and hard shouldering work (0.52 lakh sqm), the contractor procured and supplied 0.53 lakh cubic metre stone metals brought from local quarry site for which the SE paid carriage lead of 33 km. Locations of quarry as indicated in royalty certificate were verified in the offices of BL and LRO³⁰ which confirmed that the actual carriage distance was only 13 km and not 33 km. Due to irregular admission of wrong claim of contractor excess payment of Rs 14.47 lakh was allowed to the contractor.

iii) As the completion of strengthening work of the road was delayed department had to incur expenditure of Rs 19.26 lakh on intermediate repair and maintenance to keep the road traffic-worthy.

The matter was referred to the Chief Engineer in October 2000 and to the Secretary to the Government in June 2001 and was followed up with remainder in August 2001. No reply was received from the Secretary (January 2002).

4.8 Excess payment in construction of a bridge

The SE, NH Circle No. III allowed the contractor to prolong the work by more than 3 years without any penalty and made extra payment of price escalation of Rs 23.07 lakh. Rs 53.66 lakh was paid in excess for earth work and cement concrete work and contractual premium was allowed on the material supplied by the contractor.

The Superintending Engineer (SE), National Highway Circle-III awarded the work of construction of RCC well foundation bridge over river Nagar at 418.10 km of NH-34 in North Dinajpur District to a contractor in March 1993 at the tendered cost of Rs 2.99 crore (18.50 percent above the estimated cost of

³⁰ Block Land and Land Reforms Officer

Rs 2.52 crore) for completion within September 1995. The work was completed at a cost of Rs 6.20 crore in March 1999 and the contractor was paid Rs 4.93 crore as of December 2000. Final payment was awaited. The time overrun was attributable to slow progress of the contractor and failure in timely issue of departmental materials while the excess cost was due to huge price escalation (Rs 1.42 crore), execution of supplementary work (Rs 1.78 crore) and payment of certain items at higher rate.

Audit scrutiny (December 2000) revealed the following irregularities :

i) The progress of the work suffered set-back since beginning. Within the stipulated period of completion, the contractor executed only 42.8 *per cent* work valued Rs 128.98 lakh. The slow progress was mainly due to dispute created over the contractor's submission of inadmissible claims for reimbursement of royalty and cess and some supplementary items. SE/EE, however, could not enforce contractual provision regarding timely execution of work. Apart from slow progress, failure of the SE/EE in making stipulated departmental supply of cement for bank protection work on both sides of the bridge caused some delay. The delay in completion of the work by three and a half years resulted in payment of price escalation of Rs 23.07 lakh.

ii) The contractor procured and supplied 1403 MT cement from market. He was paid for this at the rate of Rs 3813.60 per MT as against departmental procurement cost of Rs 3396 per MT. The excess cost was mainly due to 17.25 per cent sales tax reportedly paid by the contractor to the cement company. This payment was avoidable. Had the SE/EE, NH Division VIII issued sales tax declaration form to the contractor, the cement could have been procured on payment of 4 per cent Sales tax with a saving of Rs 5.84 lakh. Further, instead of reimbursement of extra cost of cement to the contractor over the contractual issue rate of Rs 1900 per MT, the SE included the extra cost in item rate and paid at the rate of Rs 2414.85 per cum for cement concrete (1:2:4) and Rs 1229.92 per cum for cement concrete (1:4:8) against the rate of Rs 1784.04 per cum and Rs 886.32 per cum respectively as per the SOR (1999-92). Thus, the SE allowed undue financial benefit of Rs 18.52 lakh on account of contractual premium (Rs 4.96 lakh) and price escalation (Rs 13.56 lakh) on the enhanced part of the revised item rates. So, excess payment on this score was Rs 24.36 lakh (Rs 5.84 lakh + Rs 18.52 lakh).

iii) The contractor supplied 67884 cubic metre earth from his own arranged land at a distance between 4 km and 5 km. He was paid at the rate of Rs 86.85 per cum under supplementary agreement (as approved by the SE in April 1997) though the original tender agreement provided for earth work at the rate of Rs 61 per cum. The higher rate was due to inclusion of cost of royalty and cess on excavated earth. This was not admissible as per Clause 37.3 (Part A-VI) of contract condition which specifically provided that cost of royalty, etc. for borrowing earth from private land would have to be borne by the contractor. Besides, cost of transportation was allowed at inflated rate. Thus, SE made undue, irregular and excess payment of Rs 26.25 lakh (including contractual premium and price escalation) to the contractor on these accounts. These excess payments need be recovered from the contractor.

iv) As per terms of the contract, for execution of supplementary work based on market price, the contractor was entitled to 10 *per cent* profit over the market price. No contractual premium was admissible to him. But in violation of contract condition, the SE allowed contractual premium (18.50 *per cent*) for supply of 32.28 cum expansion joint at the rate of Rs 29,900 per cum despite the market price of Rs 28600 per cum (including 10 *per cent* profit) and this resulted in an excess payment of Rs 3.05 lakh (including price escalation). This amount stands recoverable from the contractor.

The matter was referred to the Chief Engineer in February 2001 and to the Secretary to the Government in June 2001 and was followed up with reminder in August 2001. No reply was received from the Secretary (January 2002).

4.9 Incorrect payment of price escalation in bridge works

Though initial technical bid of March 1995 was cancelled and fresh technical bid was opened in August 1996, the EE, 24 Parganas Highway Division paid price escalation with reference to March 1995 (Base month) resulting in excess payment of Rs 62.29 lakh to the contractor.

The Superintending Engineer, State Highway Circle-I entrusted (December 1996) the work of design and construction of a high level Reinforced Concrete or Pre-stressed Concrete bridge (240 meter long) over river Hogol at Sonakhali on Calcutta-Basanti road in South 24-Parganas district to a contractor at a tendered cost of Rs 8.29 crore on lump sum contract (turn key) basis for completion within December 1999. As of August 2001, the work was in progress and the contractor had been paid Rs 5.52 crore including price escalation of Rs 1.29 crore (against value of work done for Rs 4.23 crore.).

Audit scrutiny revealed the following :

(i) Tenders were invited in January 1995 and technical and financial bids were opened in March 1995. As the tenderers submitted designs and technical terms based on different parameters, the SE brought all technical criteria to a uniform platform and received fresh price bids in July 1995. But the tender committee found some technical deficiencies in the tenders and fresh technical bid was invited from the participating tenderers based on revised design parameters. The revised technical offers were opened in April 1996. The SE could not satisfy himself about the technical soundness of the offer and invited fresh technical offer in June 1996. The contractors submitted fresh technical offers in August 1996. After certain modification (October 1996) of technical terms, revised price bid was obtained in November 1996. The SE accepted the lowest offer in December 1996 and the work order was issued in December 1996. It took two years to finalise the tender although the work was declared emergent.

(ii) Although the work was scheduled to be completed by December 1999, only 51 per cent work was executed till March 2001. Poor progress of work was due to departmental delay in finalisation of the design and drawing and in fixation of alignment of the bridge, encroachment and failure to arrange land for approach road and site office in time. The contractor was paid price escalation of Rs 1.29 crore on work valued at Rs 4.23 crore. It was noticed that price escalation paid last was 40 per cent of the value of work done (price escalation of Rs 23.09 lakh paid in last running account bill against the value of work of Rs 57.62 lakh). At this rate (40 per cent), price escalation on the value of the completed work would be around Rs 3 crore unless further delay in execution of the balance work is avoided. Neither Engineer-in-Chief nor Chief Engineer had made any effort to arrest further delay of work. The matter calls for attention of the Government.

(iii) The contract, *inter alia*, provided payment of price escalation on materials, labour and POL to be effected after one year from the date of opening of the tender and to be calculated on the basis of price index published in Reserve Bank of India Bulletin from the month in which the technical bid was opened (i.e., base month). However, the Executive Engineer, 24-Parganas Highway Division (work executing division) determined price escalation and paid Rs 1.29 crore to the contractor considering price index of March 1995 (as base month) on the ground that contractor's original bid was opened in that month. This contention was not tenable as the original bid (March 1995) was cancelled and tender was accepted on the basis of fresh technical bid (based on latest design parameter) obtained in August 1996 and financial bid of November 1996. Hence the bid of March 1995 had no relevance for the base month for calculation of price escalation. Had the correct base month (August 1996) been considered, the Department was required to pay Rs 66.48 lakh in place of Rs 1.29 crore as price escalation.

Unjustified adoption of incorrect base month worked to the advantage of the contractor and resulted in an excess payment Rs 62.29 lakh beyond the terms of the contract. The amount is to be recovered from the contractor.

The matter was referred to the Chief Engineer in December 2001 and to the Secretary to the Government in May 2001 and was followed up with reminders in August 2001. No reply was received from the Secretary (January 2002).

4.10 Extra expenditure due to unnecessary works on the strengthening of road

Repeated premix carpeting and seal coat items on the same road by the SE made the initial PC and SC works redundant and led to extra expenditure of Rs 27.87 lakh.

To provide a proper road infrastructure and easy access to the proposed Calcutta Leather Complex at Bhojerhat in South 24-Parganas district, the department took up (March 1997) the work of improvement of Calcutta - Basanti Road (0-16 km) at an estimated cost of Rs 13.70 crore for completion within two years. Fund for the work was to be provided by the Commerce and Industries Department of State Government.

The improvement work in 5.80 km to 16 km required widening of existing road surface from 3.80 metre to 7 metre and strengthening of the entire road surface by laying 75mm thick built up spray grout (BUSG), 75mm thick bituminous macadam (BM), 20mm thick premix carpet (PC) and seal coat (SC). Instead of executing both the work at a time, the Superintending Engineer, State Highway Circle No.1 decided (January 1997) to take up the work in two phases (Phase-I : brick bats, jhama metal and stone metal consolidation in widening portion and 75mm BUSG , 12mm PC and SC in entire road portion and Phase II : 75mm BM, 20mm PC and SC). The phase wise execution was contemplated by the Executing Engineer on the ground of short working period before monsoon, and fund constraints. Thus, for phase wise work, PC and SC were to be executed twice due to time gap.

The Superintending Engineer (SE), State Highway Circle I engaged (April 1997) four contractors for Phase I work from 5.80 km to 12 km at a tendered cost of Rs 1.77 crore for completion by June 1997 (before onset of the monsoon). The work was completed between February 1999 and April 1999 at a cost of Rs 1.78 crore. In May 1998 and August 1998 the SE entrusted the Phase II work to four contractors at a tendered cost of Rs 1.42 crore for completion by June 1998 and the work was completed in April 1999 at a cost of Rs 1.32 crore.

Audit scrutiny revealed that in February 1998 when the SE invited the tenders for Phase II work, only 44 *per cent* work of Phase-I was completed and the items of PC and SC were not taken up till then. Though Phase-II had provision for the same work and was to start soon, the contractors were allowed unnecessarily to execute 12 mm PC and SC (43744 square metre) at a cost of Rs 16.58 lakh. The item of PC and SC under Phase I became redundant as it was covered by 75mm BM after its execution. Further, there was no fund constraint at all as the department received Rs 6.75 crore against the expenditure of Rs 3.14 crore till March 1999.

Thus, unjustified repeated execution of premix carpet work and seal coat, in quick succession led to avoidable expenditure of Rs 16.58 lakh.

Similarly, the same SE and EE in respect of the stretches from 12 km to 14 km and 15 km to 16 km of the road executed PC and SC (22600 square metre under Phase I and 22450 square metre under Phase II) simultaneously between September 1998 and June 1999 and as a result the PC and SC (22600 square metre) under Phase I became redundant involving an avoidable expenditure of Rs 11.29 lakh.

Double application of PC and SC on the road due to defective planning thus led to an avoidable expenditure of Rs 27.87 lakh.

The matter was referred to the Chief Engineer in March 2000 and to the Secretary to the Government in the Public Works (Roads) Department in May 2001 and was followed up with reminders in August 2001. No reply was received from the Government (January 2002).

4.11 Undue favour to contractors

Taking advantage of defective provision of contracts, the contractors used lower quality and lower value bitumen but received payment for high value bitumen involving extra expenditure of Rs 26.56 lakh

In January 2000, the Superintending Engineer (SE), National Highway Circle-II awarded the work of special repair (i) from km 242 to km 246 and km 247 to km 253 and (ii) from km 263 to km 271 and km 272 to km 280 of NH-34 to two contractors at the aggregated tendered cost of Rs 4.15 crore (including contractual premium 4.97 per cent and 4.99 per cent) for completion within April 2000. Both the works were completed in August 2000 at a cost of Rs 4.07 crore.

The contracts, inter alia, provided (a) laying of bituminous macadam of 50 mm finished thickness for 8400 cubic metre (3500 cum at the rate of Rs 2214.50 and 4900 cum at the rate of Rs 2130.33 per cum) and (b) semi-dense bituminous concrete of 25 mm finished thickness for 4200 cum (1750 cum at the rate of Rs 3187.20 per cum and 2450 cum at the rate of Rs 3101.75 per cum). The rates were fixed considering supply rate of packed bitumen at Rs 11650 per MT. The contractors, however, executed (a) bituminous macadam for 9345 cum and (b) semi-dense bituminous concrete for 4200 cum by supplying and using 1054 MT bulk bitumen (not packed bitumen) the supply rate of which was fixed at Rs 9250 per MT by the Department.

Audit scrutiny revealed that the SE who executed the contract simply indicated the items of bituminous work without specifying use of packed bitumen the rate of which was included in the tender estimate. As a result, the contractors supplied and used lower valued bulk bitumen in place of higher valued packed bitumen. The Executive Engineer, NH Division-VII also paid the value of bitumen at higher rate of Rs 11650 per MT instead of Rs 9250 per MT even though the Assistant Engineer, at the site of work, confirmed that the contractors supplied and used lower valued bulk bitumen in the work.

Unjustified payment at high rate amounted to undue favour to the contractors by the EE for Rs 26.56 lakh. The defective agreement executed by the SE partly facilitated such excess payment.

The matter was referred to the Chief Engineer in February 2001 and to the Secretary to the Government in May 2001 and was followed up with reminder in August 2001. No reply was received from the Government (January 2002).