



सत्यमेव जयते

**Report of the
Comptroller and Auditor General of India
on
Economic Sector
for the year ended 31 March 2018**



लोकहितार्थं सत्यनिष्ठा
Dedicated to Truth in Public Interest



Government of West Bengal
Report No. 1 of the year 2019

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Comptroller and Auditor General of India
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PREFACE

This Report for the year ended March 2018 has been prepared for submission to the Governor of West Bengal under Article 151 of the Constitution of India.

The Report contains significant results of the Performance Audit and results of the Compliance Audit of 22 Departments of Government of West Bengal under the Economic Sector. Departments which are not included in this report, have, however, been covered in related reports on General and Social Sector and Revenue Sector.

The issues raised in this Report are those, which came to notice in the course of test audit for the period 2017-18, as well as those which had come to notice in earlier years but could not be reported in the previous Audit Reports. Instances relating to the period subsequent to 2017-18 have also been included, wherever necessary.

The Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Chapter 1

Overview of Economic Sector

Chapter 1: Overview of Economic Sector

1.1 Introduction

This Report covers matters arising out of audit of State Government Departments and Autonomous Bodies under the Economic Sector.

For the purpose of administration in West Bengal, there are 54 Departments at the Secretariat level headed by Additional Chief Secretaries/Principal Secretaries/Secretaries who are assisted by Directors/Commissioners/Chief Engineers and subordinate officers under them. This report covers the functioning of 22 Departments of the Economic Sector listed in *Appendix-1.1*.

Of the total expenditure of ₹ 22642.31crore incurred by these 22 Departments during 2017-18, a major portion (64.27 per cent) was incurred by five top spending Departments. These were Public Works (25.25 per cent), Power and Non-conventional Energy Sources (15.38 per cent), Transport (8.22 per cent), Agriculture (7.84 per cent) and Irrigation and Waterways Department (7.58 per cent).

1.2 Trend of expenditure

The trend of expenditure incurred by these 22 Departments under Economic Sector during the period 2015-16 to 2017-18 is given in **Table 1.1**.

Table 1.1: Trend of expenditure over last three years

(₹ in crore)

Sl. No.	Name of the Department	2015-16	2016-17	2017-18	
					%
1.	Agriculture	2113.56	1665.40	1776.27	7.84
2.	Agricultural Marketing	159.37	107.00	135.75	0.60
3.	Animal Resources Development	601.68	666.63	745.84	3.29
4.	Co-operation	399.52	492.49	393.10	1.74
5.	Fisheries, Aquaculture, Aquatic Resources and Fishing Harbours	284.15	287.17	331.97	1.47
6.	Forest	528.12	572.89	546.47	2.41
7.	Industry, Commerce and Enterprises	582.32	736.51	1055.41	4.66
8.	Information Technology & Electronics and e-Governance	181.69	161.96	108.10	0.48
9.	Irrigation and Waterways	1504.35	1721.39	1717.29	7.58
10.	Land & Land Reforms and Refugee Relief & Rehabilitation	822.64	857.78	931.24	4.11
11.	Micro, Small & Medium Enterprises and Textiles	561.95	609.78	811.03	3.58
12.	North Bengal Development	450.91	423.02	752.03	3.32
13.	Paschimanchal Unnayan Affairs	324.46	298.21	566.79	2.50
14.	Power & Non-Conventional Energy Sources	3290.79	5808.23	3483.13	15.38
15.	Public Works	4809.45	4450.00	5717.33	25.25
16.	Sundarban Affairs	286.12	300.91	401.33	1.77
17.	Tourism	125.77	134.74	162.07	0.72
18.	Transport	1264.41	1485.05	1862.02	8.22
19.	Water Resources Investigation and Development	1036.15	963.13	958.29	4.23
20.	Three other Departments ¹	368.12	376.75	186.85	0.83
	Total	19695.53	22119.04	22642.31	

(Source: Appropriation Accounts of Government of West Bengal for the relevant years)

¹ Consumer Affairs, Environment, Food Processing Industries and Horticulture.

1.3 About this Report

Findings arising from audit of 22 Government Departments and 17 Autonomous Bodies (**Appendix-1.2**) under the Economic Sector are in this Report of the Comptroller and Auditor General of India (CAG). Compliance Audit covers examination of transactions relating to expenditure of the audited entities to ascertain whether the provisions of the Constitution of India, applicable laws, rules, regulations and various orders and instructions issued by the competent authorities are being complied with. Performance Audit examines whether the objectives of the programme/activity/Department are achieved economically, efficiently and effectively.

1.4 Authority for Audit

The mandate for audit by the CAG is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) (DPC) Act, 1971. The CAG conducts audit of expenditure of the Departments of Government of West Bengal under Section 13² of the CAG's (DPC) Act. CAG is the sole Auditor in respect of Autonomous Bodies which are audited under Sections 19(3)³ and 20(1)⁴ of the CAG's (DPC) Act. In addition, the CAG also conducts audit of other Autonomous Bodies which are substantially funded by the Government under Section 14⁵ of CAG's (DPC) Act. Principles and methodologies for various audits are prescribed in the Auditing Standards and the Regulations on Audit and Accounts (Amendments), 2012, issued by the CAG.

1.5 Planning and conduct of Audit

The primary purpose of this Report is to bring to the notice of the State Legislature the important results of Audit. Auditing Standards require that the materiality level for reporting should be commensurate with the nature, volume and magnitude of transactions. The findings of Audit are expected to enable the Executive to take corrective action as also to frame policies and directives that will lead to improved financial management, thus contributing to better governance.

The audit process starts with assessment of risks faced by various Departments of the Government based on expenditure incurred, criticality/complexity of the activities, level of delegated financial powers, assessment of overall internal controls and concerns of the stakeholders. Previous audit findings are also

² *Audit of (i) all transactions from the Consolidated Fund of the State, (ii) all transactions relating to the Contingency Fund and Public Accounts and (iii) all trading, manufacturing, profit and loss accounts, balance sheets and other subsidiary accounts.*

³ *Audit of the accounts of Corporations (not being companies) established by or under law made by the State Legislature at the request of the Governor.*

⁴ *Audit of accounts of any body or authority on the request of the Governor, on such terms and conditions as may be agreed upon between the CAG and the Government.*

⁵ *Audit of (i) all receipts and expenditure of a body/authority substantially financed by grants or loans from the Consolidated Fund of the State and (ii) all receipts and expenditure of any body or authority where the grants or loans to such body or authority from the Consolidated fund of the State in a financial year is not less than ₹ one crore.*

considered in this exercise. Based on this risk assessment, the frequency and extent of audit are decided.

After completion of audit, Inspection Reports containing audit findings are issued to the heads of the Departments. The Departments are requested to furnish replies to the audit findings within one month of receipt of the Inspection Reports. Whenever replies are received, audit findings are either settled or further action for compliance is advised. During 2017-18, 217 units out of the 624 auditable units of various Departments/Organisations under the Economic Sector of West Bengal were audited and 223 Inspection Reports (including 28 of previous year and excluding 22 issued in 2018-19) containing 716 Paragraphs were issued.

Important audit observations arising out of these Inspection Reports are processed further for inclusion in the Audit Reports, which are submitted to the Governor of the State for laying before the State Legislature under Article 151 of the Constitution of India.

1.6 Response to Audit

1.6.1 Compliance Audit Observations and Performance Audit

Two Performance Audit reports on “**Functioning of Agricultural Farms**” and “**Functioning of Paschimanchal Unnayan Affairs Department (PUAD)**” and 10 compliance audit observations were forwarded (between June and November 2018) to Additional Chief Secretaries/Principal Secretaries/Secretaries of the Departments concerned with a request to send their responses. Departmental replies in respect of only three compliance audit observations and one performance audit report have been received till date (April 2019). The replies received have been incorporated in the Audit Report.

1.6.2 Follow-up on Audit Reports

After tabling of the Reports of the C & AG of India in the State Legislature, the State Government Departments are required to submit *suo motu* replies to the audit observations within one month. Though the Audit Reports for the year 1981-82 to 2015-16 were presented to the State Legislature between September 1983 and March 2018, replies to 97 audit paragraphs are yet to be received from various departments under the Economic Sector. Status of the pending replies as on 30 November 2018 is given in **Appendix-1.3**.

Action Taken Notes (ATNs) on the recommendations of the Public Accounts Committee (PAC) are required to be furnished within six months from the date of presentation of the PAC Report to the State Legislature. Action Taken Notes for 24 paragraphs contained in 21 Reports of the PAC, presented to the Legislature, had not been submitted by nine⁶ Departments to the Assembly Secretariat as of November 2018. In these 21 Reports, the PAC had suggested recovery, disciplinary action, *etc.* A few significant cases are elaborated in **Appendix-1.4**.

⁶ Agriculture, Co-operation, Fisheries, Food Processing Industries & Horticulture, Irrigation & Waterways, Public Works & Public Works (Roads), Tourism and Transport.

1.6.3 Outstanding replies to Inspection Reports

The Principal Accountant General (Economic and Revenue Sector Audit), West Bengal arranges to conduct periodical inspections of the Government Departments to test check transactions and verify maintenance of important accounts and other records as prescribed in the rules and procedures. These inspections are followed up with Inspection Reports (IRs) incorporating irregularities detected during the inspections and not settled on the spot, which are issued to the heads of the offices inspected with copies to the next higher authorities for taking prompt corrective actions. The heads of the offices/Government are required to promptly comply with observations contained in the IRs, rectify defects and omissions and report compliance through replies. Serious financial irregularities are reported to the heads of the Departments.

Inspection Reports issued upto 30 November 2018 were reviewed and it was found that 1696 paragraphs relating to 609 IRs remained outstanding at the end of November 2018 (*Appendix-1.5*). The large pendency of IRs, due to non-receipt of replies, was indicative of the fact that the heads of the offices and the heads of the Departments did not initiate appropriate and adequate action to rectify defects, omissions and irregularities pointed out by Audit in the IRs.

Chapter 2

Performance Audit

2.1 Functioning of Agricultural Farms

**2.2 Functioning of Paschimanchal Unnayan
Affairs Department**

Chapter 2: Performance Audit

AGRICULTURE DEPARTMENT

2.1 Functioning of Agricultural Farms

Executive Summary

There are 191 Agricultural Farms under the control of the Department of Agriculture (Department). The main purpose for establishment of these farms were to (i) produce quality seeds and to distribute them at reasonable prices to farmers and (ii) encourage cultivators to adopt improved methods of cultivation for profit.

Audit was carried out between November 2017 and April 2018 covering 29 selected farms (15 per cent) from the total 191 farms. Farms were selected through simple random sampling without replacement method in seven⁷ selected districts.

Methodology adopted for audit consisted of document scrutiny, joint inspections, interview and observations, in the selected farms, offices of the concerned Assistant Directors of Agriculture (Admn)/Joint Directors of Agriculture and the Directorate as well as the Department for the period from 2014-15 to 2017-18.

Important audit findings are as follows:

While the Department prepared and set annual targets for production of quality seeds in the State Seed Rolling Plans, it failed to fix and communicate to the farms, farm-wise annual production targets. Even at the district level, only farm-wise annual targets for area to be covered for production of quality seed were framed. As such the Department had no system to ensure achievement of the annual production targets set out in the rolling plans.

The concerned Deputy Directors of Agriculture (Admn)⁸ delayed approval of the cropping programmes in all the selected 19 farms. The delays ranged from 83 days to 123 days in case of Kharif season and from 38 days to 133 days in case of Rabi season.

(Paragraph 2.1.6.1)

The percentage shortfall in yield per kg/acre for Paddy, Mustard, Lentil, Till, Moong and Wheat ranged from 43 per cent to 85 per cent and was less than the average yield of the State in 2014-15. There was shortfall in production, coverage area and productivity of seed.

(Paragraph 2.1.6.2)

In 23 test checked farms, contrary to the State Agriculture Plan 2012-17 and National Seed Policy 2002, in more than 50 per cent of the area covered for seed multiplication, older seed varieties (notified before 2001) were used.

(Paragraph 2.1.6.3)

⁷ Bankura, Burdwan, Jalpaiguri, Murshidabad, North 24 Parganas, Paschim Medinipur and Uttar Dinajpur.

⁸ In-charge of Agricultural farms at district level.

Deficient irrigation facilities on the farms had resulted in the average cropping intensity of all 22 test checked seed multiplication farms being less than the average cropping intensity of the districts.

(Paragraph 2.1.6.5)

Deficiency in processing and storage infrastructure, storage methods were the main reasons for seed turning into Not Recommended (NR) seed.

Of 48 godowns in 27 test checked farms, 39 godowns (81.25 *per cent*) were damaged and required urgent repair. There were no seed godowns in two farms, seed was stored alongwith NR seed grains, machineries, other unserviceable equipment, HSD oil *etc.* Further, there was inadequate space for storage of seed in 13 farms.

(Paragraph 2.1.7.3)

From analysis of data, it was noted that out of total production of 1670.25 MT of quality seed, only 28 *per cent* (471.69 MT) seed was sold to local farmers through gate sale. 24 *per cent* (393.79 MT) seed was lifted by WBSSCL for further multiplication or sale in market. Five *per cent* (81.44 MT) of the seeds were used in the farms for multiplication. As much as 22 *per cent* (371.31 MT) seed became Not Recommended owing to poor storage fetching lesser price and three *per cent* (54.18 MT) seed was damaged. Utilisation data for as much as 18 *per cent* (297.84 MT) of the seed was not furnished to Audit.

(Paragraph 2.1.8.1)

Unsold stocks of seed lying in the godowns of the 23 selected farms became Not Recommended (NR) seed due to deterioration of their physical condition, loss of viability *etc.*, due to time lapse and deficient storage conditions.

274.08 MT out of the total 371.31 MT seed which had turned NR seed during the period from 2014-15 to 2017-18 in 23 farms, was disposed off through auction. As the rates for NR seed were less than the notified price of good quality seed, this resulted in loss of ₹ 28.18 lakh to farms.

(Paragraph 2.1.8.2 & 2.1.8.3)

Farms were running at a loss. Average annual loss of 18 farms was ₹ 8.46 crore, which was more than 85 *per cent* of the total expenditure incurred in a year of ₹ 9.27 crore. As the farms were running in an un-economical manner, they could not motivate farmers to take up scientific farming for higher yield. The State Government may need to reappraise and reassess the role of the State seed farms and their resources including land and manpower in the backdrop of the nonfulfillment of the objectives or rationalize their working to make them more relevant to the needs of the farmers and the State as well as ensure their economic viability.

(Paragraph 2.1.9)

Zero Tillage Technology with zero tillage seed drills was meant to increase yield. 25 out of 29 test checked farms had tractor driven zero tillage seed drills out of which 12 farms did not have tractors to drive the zero tillage seed drills and the remaining 13 farms having tractors were not utilizing the zero tillage seed drills.

(Paragraph 2.1.9.3)

Huge number of farm implements like paddy transplanters, power reapers, land levelers were not being utilized by the farms due to want of operators, absent operating instructions and land profile *etc.* The objective of converting the farms from being labour intensive to mechanised, to prevent production of seed from labour and aging staff crisis could not be achieved.

(Paragraph 2.1.9.4)

Out of 29 test checked farms, six farms had no land records and in seven farms the land was not mutated in the name of Department. Eight farms had mutated only part of their farm land. No survey was done during the period under audit to ascertain actual quantum of land under the possession of the selected farms. There were resultant land encroachments and land disputes.

(Paragraph 2.1.10.1)

In 22 out of 29 selected farms, 252.94 acres of land was diverted for the purpose of construction of various Government buildings not related to farms. This decreased the net cultivable land for the farms and adversely affected production of quality seed.

(Paragraph 2.1.10.2)

Twenty one out of 29 selected farms were affected by unauthorised trespassing and cattle grazing in the absence of boundary wall/fencing around the farm or incomplete boundary wall or damaged boundary wall.

(Paragraph 2.1.10.3)

In all the 29 test checked Government farms there was a shortage of Krishi Shramiks of about 57 *per cent*. To mitigate shortage of manpower various farm implements/machinery were supplied to farms but existing manpower were not trained to operate these implements/machinery. *Department may, therefore, consider putting in place manpower that would enable farms to optimally utilize their farm implements/machinery. Besides, Department needs to reappraise and reassess manpower requirements, particularly in view of the diversion of substantial land in several seed farms in recent years.*

(Paragraph 2.1.11)

2.1.1 Introduction

West Bengal is an agrarian State with share of agriculture in the Gross State Domestic Product (GSDP) of around 15 *per cent*⁹. The net cropped area is 52.05 lakh hectares. This comprises 68 *per cent* of the geographical area and 92 *per cent* of arable land. There are approximately 71 lakh farm families, of whom 96 *per cent* are small and marginal farmers. The average size of land holding per farm family is only 0.77 ha. The State had a surplus production of rice, vegetables and potato. Huge gaps, however, existed between the requirement and production of pulses, oilseeds and maize. Deterioration of soil health due to imbalance in the use of chemical fertilizers, paucity of suitable improved varieties of seed, inadequate farm

⁹ *Advanced figure for the year 2014-15 at current prices Table 1.6 of State Domestic Product and District Domestic Product of West Bengal 2014-15, Published by Bureau of Applied Economics and Statistics Department of Statistics and Programme Implementation, Government of West Bengal.*

mechanization, unorganized marketing structure *etc.* are major challenges to agricultural growth.

In order to meet these challenges, Agriculture Department, Government of West Bengal is working in a mission mode for development of Agriculture and Allied sector in a holistic manner with the vision of “Doubling farmers’ income by 2020 by ensuring farmers’ access to Skills, Technologies, Markets and Financial inclusion”. The State Agricultural Plan for the XIIth Five Year Plan embodies the following objectives to fulfill this vision:

- i) to ensure Quantifiable improvement in Production & Productivity,
- ii) to reduce yield gap with focused interventions,
- iii) to maximize returns to the farmers from Agriculture & Allied sector,
- iv) to augment Marketing interventions and export promotion,
- v) to promote competitiveness in Agriculture and allied Sector and
- vi) to meet the challenges of Climate change and evolve mechanisms for effective drought and flood management.

During the recent years, the focus has been on helping small and marginal farmers to get better returns through (i) improved package of practices, (ii) quality inputs, (iii) crop diversification, (iv) front-ended subsidy for farm mechanization, (v) augmenting irrigation facilities through water conservation and (vi) watershed management *etc.*

There are 191 Agricultural Farms under the control of the Department of Agriculture (Department). The main purpose for establishment of these farms were to (i) produce quality seeds and to distribute them at reasonable prices to farmers and (ii) encourage cultivators to adopt improved methods of cultivation for profit.

Mention was made in the report of the Comptroller and Auditor and General of India (Civil) for the year ended 31 March 2003 regarding poor management of government farms. It was observed in the Audit then that in 47 test checked farms in four districts, only 19 *per cent* of the gross cultivable area was utilized during 1998-2003. The reasons for low utilization were (i) shortage of manpower, (ii) lack of infrastructure facilities, (iii) shortage of agricultural implements like tractors, power tillers *etc.*, (iv) lack of irrigation and drainage facilities and (v) loss of fertility of soil due to constant use of chemical fertilizers. During course of the present audit it was noticed that the weaknesses still persist.

2.1.2 Organisational structure

The Department, headed by a Secretary, executes policies and programmes through Directorate of Agriculture (Directorate). At the field level, District Seed Farms¹⁰ (DSF) and Sub-Divisional Adaptive Research Farms¹¹ (SARF) are managed by Assistant Director of Agriculture (Farm) and Block Seed Farms¹² (BSF) are managed by Assistant Farm Managers. Research farms are managed by Assistant Director of Agriculture (Farm) under the supervision of the

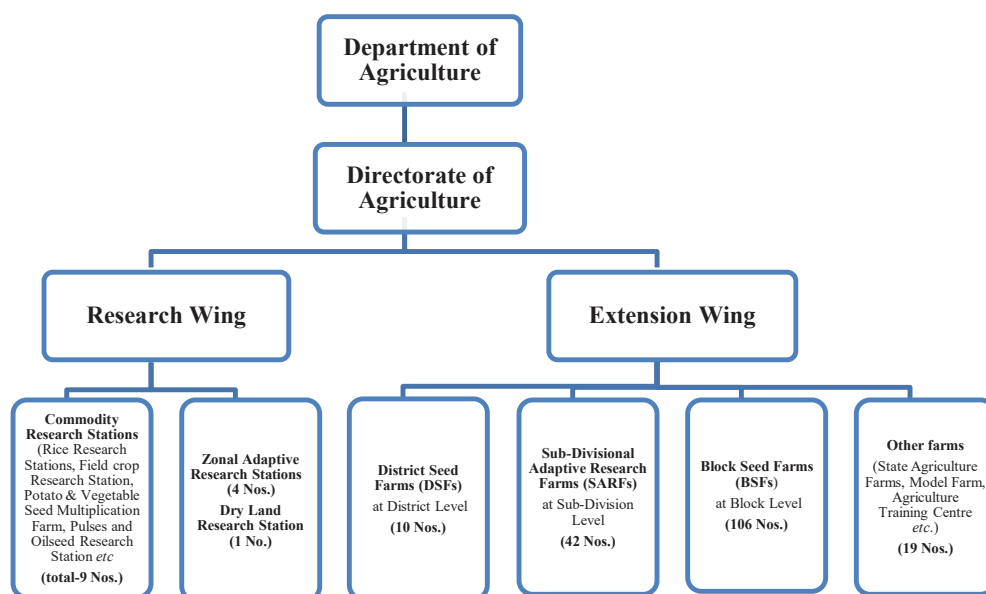
¹⁰ Produces different kinds of seeds of appropriate varieties of crops and sells it to farmers, at district level.

¹¹ Used for trials for adaptation of new varieties of seeds to or in local conditions provided by research stations.

¹² Seed farms at Block level.

in-charge of the concerned Research Stations. The organogram of the Department in respect of functioning of Agricultural farms is shown in **Chart 2.1.1**.

Chart 2.1.1: Organisational structure



2.1.3 Audit objectives

The audit objective was to assess the performance of farms and draw assurance regarding:

- (i) efficient and economical production, processing, storing and distribution of quality seeds, including new and improved seed varieties
- (ii) effectiveness as model centres for demonstration of technology and improved farming practices.

2.1.4 Audit criteria

The following were the audit criteria:

- (i) Seed Act, 1966 and Rules made there under;
- (ii) National Seed Policy 2002;
- (iii) Agricultural Manuals¹³ of Department of Agriculture, Government of West Bengal;
- (iv) Approved cropping programmes of the farms;
- (v) Standards, guidelines and instructions issued by Government of India, State Government and premier institutes from time to time.

2.1.5 Scope and Methodology of Audit

Audit was carried out between November 2017 and April 2018 covering 29 selected¹⁴ farms (15 per cent) of the total 191 farms. Farms were selected through

¹³ Published in the year 1965 and 1966 by the then Agricultural and Community Development Department, Government of West Bengal.

¹⁴ Block Seed Farms-11, District Seed Farms-2, Sub-divisional Adaptive Research Farms-8, State Agriculture Farm-1, Research Farms-6 and Research-cum-Multiplication Farm-1.

simple random sampling without replacement method in seven¹⁵ selected districts. Methodology adopted for audit consisted of document scrutiny, joint inspections, interview and observations in the selected farms, offices of the concerned Assistant Directors of Agriculture (Admn)/Joint Directors of Agriculture and the Directorate as well as the Department for the period from 2014-15 to 2017-18.

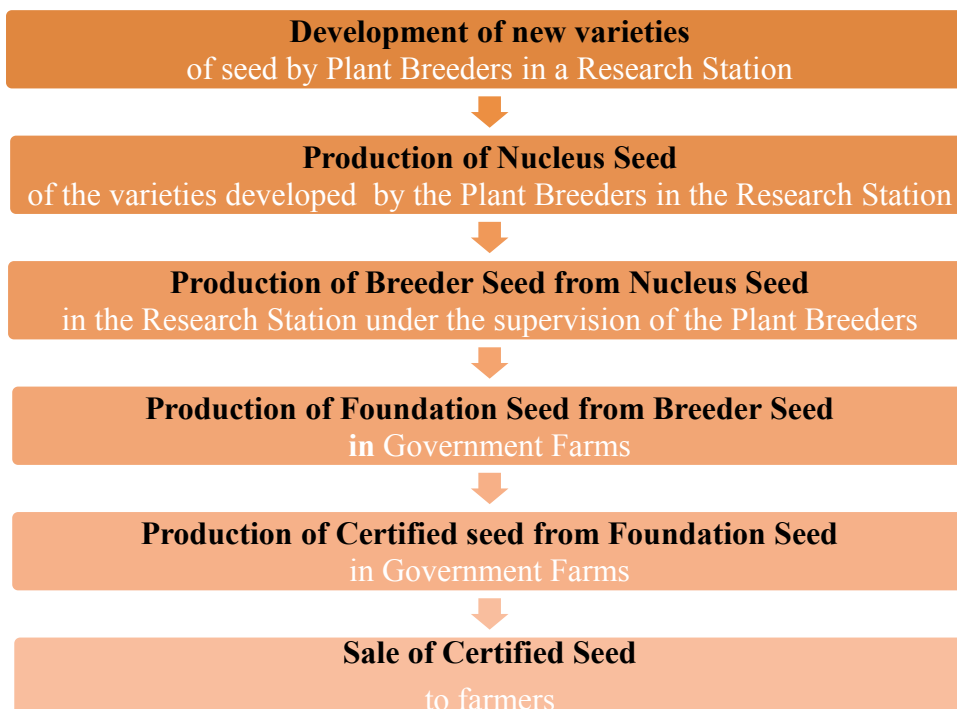
Audit findings

2.1.6 Production of seed

Seed is a critical and vital input, essential for enhancing crop productivity. Quality seed not only plays a key role in increasing productivity but also determines efficacy of other inputs used for enhancing crop production. One of the major objective of agricultural farms was production of variety of good quality seeds and their distribution to increase overall farm productivity.

There are four main classes of seed *i.e.*, Nucleus Seed, Breeder Seed, Foundation Seed and Certified Seed. Nucleus seed is the seed produced by a plant breeder to develop the particular variety and is directly used for multiplication as breeder seed. Genetic purity of Nucleus seed is 100 *per cent*. Breeder seed is the progeny of nucleus seed. Foundation seed is the progeny of breeder seed. Foundation seed may also be produced from foundation seed. Certified seed is the progeny of foundation seed or the progeny of certified seed. Breeder, Foundation and Certified Seeds come under the purview of Seed Certification Agency and conform to the Indian Minimum Seed Certification Standards. There is one more class of seed called as Truthfully Labelled (TL) Seed. This type of seed does not come under the purview of Seed Certification Agency.

The process of seed development and multiplication from Nucleus seed to Certified seed is shown in the flowchart below:



¹⁵ Bankura, Burdwan, Jalpaiguri, Murshidabad, North 24 Parganas, Paschim Medinipur and Uttar Dinajpur.

2.1.6.1 Planning for production of seed

Department had prepared two five-year Seed Rolling Plans for the period 2012-13 to 2016-17 and 2017-18 to 2021-22 and submitted to the Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Government of India. These Plans, *inter alia*, set out annual targets of the Department for production of quality seed during the plan periods. To meet the annual targets set out in the rolling plans the Department in turn had to fix and communicate to the farms, farm-wise annual production targets, which it failed to do. Only the farm-wise annual physical targets for area to be covered for production of quality seed were framed locally, at the district level. This was done by the Deputy Director of Agriculture (Admn) (DDA)/ Joint Director of Agriculture (JDA) of the concerned districts/ranges who approved cropping programmes for Kharif season¹⁶, Rabi season¹⁷ and Boro/Summer/Pre-kharif season. Thus, the Department had no system to ensure achievement of the annual targets set out in the rolling plans. Status of actual production *vis-à-vis* target of certified seed of six¹⁸ crops during the period 2013-14 to 2016-17 is shown in **Appendix - 2.1**. There was shortfall in the actual production against the annual target by 18 Metric Ton (MT) for Lentil, 36.6 MT for Moong, 597 MT for Wheat and 4567.70 MT for Paddy (Kharif).

Agriculture Manual¹⁹ of the GoWB stipulates that the approved cropping programmes for Kharif/ Rabi season should reach the farms in-charge by 31st January/ 31st July, respectively of the particular year. This is necessary for arrangement for seed, manure, fertilizers, pesticides *etc.* well ahead of the sowing season by the farm in-charge.

On scrutiny of approved cropping programmes of selected 19²⁰ farms, it was observed that the concerned Deputy Directors of Agriculture (Admn)²¹ delayed approval of the cropping programmes of all the 19 farms. The delays ranged from 83 days to 123 days in case of Kharif season and from 38 days to 133 days in case of Rabi season. No reason for delay in approval of cropping programme was found on record.

Due to delay in approval of cropping programmes, farms got less time to make arrangement for seed, manure, fertilizers, pesticides *etc.*, which affected production of quality seed.

Recommendation-I

To achieve the targets set out in the five-year Seed Rolling Plans, the Department should fix and communicate farm-wise targets for seed production.

¹⁶ The Kharif season is from July to October during the south west monsoon.

¹⁷ The Rabi season is from October to March (winter).

¹⁸ Lentil (Masur), Green Gram (Moong), Mustard, Paddy, Sesame (Til) and Wheat.

¹⁹ Memo No. 7760 (354) dated 27 December 1962 contained in Agriculture Manual Part-II (Agriculture Production), 1966 issued by the then Agriculture and Community Development Department, GoWB.

²⁰ Cropping programmes approval dates were not made available in respect of DSF Burdwan, SARF Dhugguri, BSF Mal and Potato & Vegetable seed Multiplication Farm Anandpur. Six Research farms which were not engaged in seed multiplication did not make any cropping programme.

²¹ In-charge of Agricultural farms at district level.

2.1.6.2 Achievement vis-à-vis Target

Approved cropping programmes for each farm set out crop-wise and variety-wise target area to be covered, class and quantity of seed required, source of seed *etc.* The quantity of seed (output) to be produced by the farm was, however, not mentioned in the cropping programmes. Of the 29 farms selected for test check, 23 were engaged with production/multiplication of seed. During scrutiny of data in respect of six²² major crops of these 23 farms during 2014-15 to 2017-18, it was observed that there was a total shortfall²³ of 1190.07 MT in production of seed considering the average yield in the State (52 per cent of average yield). The main reasons for shortfall in production were due to coverage of less area (except wheat) and low productivity as shown in **Table 2.1.1**.

Table 2.1.1: Shortfall in production, coverage area and productivity of seed

Crop	Area to be covered (in acre)	Actual covered area (in acre)	Difference (in acre) (2-3)	Coverage percentage (3/2X100)	Target production based on average State yield (in MT)	Actual production (in MT)	Shortfall (in MT) (6-7)	Yield achieved (in kg/acre)	Average yield in the state in 2014-15 (in kg/acre)	Shortfall in yield (in kg/acre) (percentage) (10-9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Paddy	1198.88	1062.98	135.9	88.66	2098.04	1054.88	1043.16	992	1750	758 (43)
Mustard	227.70	203.72	23.98	89.46	98.59	18.04	80.55	89	433	344 (79)
Lentil	56.10	52.03	4.07	92.74	21.88	3.18	18.70	61	390	329 (84)
Til	100.38	70.25	30.13	69.98	37.74	7.64	30.10	109	376	267 (71)
Moong	19.56	16.54	3.02	84.56	5.44	0.72	4.72	43	278	235 (85)
Wheat	15.32	25.62	(-) 10.3	167.23	17.40	4.56	12.84	178	1136	958 (84)
Total	1617.94	1431.14	186.8	88.45	2279.09	1089.02	1190.07			

(Source: Compiled from information provided by test checked farms)

While the farms were supposed to produce higher yields, it was observed that they were not able to even achieve the average yield of the State (shortfall ranged from 43 to 85 per cent). Reasons for shortfall in production, as reported by the in-charge of the farms, were delay in approval of cropping programme, non-supply of seeds, damage of crops due to grazing, water stagnation *etc.*

Detailed analysis of 683 cropping programmes related to these six crops in 23 test checked farms over the period of five years showed that cultivation was not taken up in 138 cases (target area for cultivation 241.62 acre). In another 33 cases (target area for cultivation 49.49 acres) though cultivation was taken up, there was no production. The concerned farms stated (January-June 2018) that the main reasons for nil production were non-supply of seed and delay (10 to 37 days) in supply of seed by West Bengal State Seed Corporation Limited (WBSSCL) and earmarked Government farms.

²² Paddy, Wheat, Mustard, Sesame (Til), Green Gram (Moong) and Lentil (Masur).

²³ In the absence of target of quantity of seed to be produced, Audit calculated the shortfall in production on the basis of average yield per acre (as estimated in Table 16 of "Estimates of Area, Yield Rate & Production of Principal Crops in West Bengal 2014-15" published by Evaluation Wing, Directorate of Agriculture, GoWB) and target area to be covered.

Recommendation-II

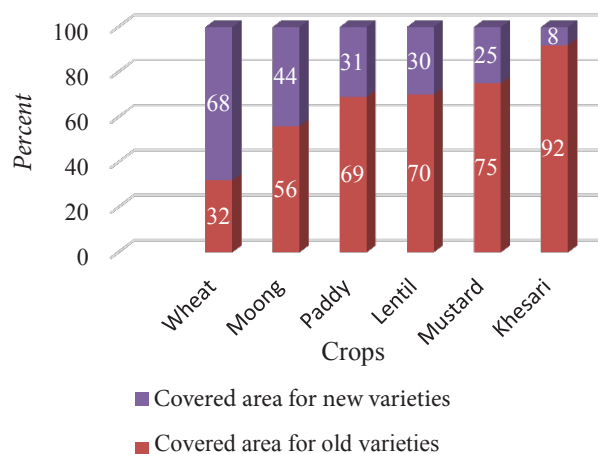
The Department should approve cropping programmes early so as to provide adequate time to the farms for arranging inputs for production of quality seed.

2.1.6.3 Multiplication of seed of older varieties

In the State Agriculture Plan 2012-17, it was envisaged that for increasing the growth rate of different crops, existing varieties of crops be replaced with high yielding, disease resistant and location specific varieties. The strategies proposed to counter the impacts of climate change on crops included introduction of new cultivars of rice and other important staple crops that are heat resistant, can endure water stress, tolerant to salinity of the soil and are fortified with nutrients. The National Seed Policy 2002 had also emphasized replacement of older varieties of seeds with newer varieties as all varieties tend to lose resistance to disease over a period of time. Further, National Food Security Mission (NFSM) guidelines also recommended selection of improved seed varieties of rice, wheat and pulses, not older than 10 years.

During scrutiny of approved cropping programmes of 23 test checked farms, it was observed that in more than 50 per cent of the area covered for seed multiplication, older seed varieties (notified before 2001) of paddy, mustard, lentil (masur), green gram (moong) and khesari were sown (**Chart- 2.1.2**).

Chart 2.1.2:-Preference of older varieties over new/local varieties



The farms, thus, did not give adequate thrust for introduction of new seed varieties in the cropping programmes and preferred to use older varieties of seed. As a result, the farms not only failed to produce but also failed to demonstrate the characteristics and yield of new seed varieties and distribute the same to the local farmers for higher production of crops.

2.1.6.4 Average cropping intensity less than district average

According to Report²⁴ of the Evaluation Wing of the Department, average cropping intensity²⁵ in West Bengal was 185 per cent during the year 2014-15. It was observed that average cropping intensity of all 22 test checked seed multiplication farms was less than the average cropping intensity of the districts as shown in **Table 2.1.2**.

²⁴ Estimates of Area, Yield Rate & Production of Principal Crops in West Bengal-2014-15.

²⁵ Cropping intensity refers to raising of a number of crops from the same field during one agriculture year. It can be expressed as $\text{Cropping intensity} = (\text{Gross cropped area} / \text{Net sown area}) \times 100$.

Table 2.1.2: Status of cropping intensity (*in per cent*) in test-checked Government Farms

Name of the district	Average cropping intensity of the district of the year 2014-15	Number of selected farms	Average cropping intensity of the selected farms during 2014-18	Difference
Bankura	146	4	78	68
Burdwan	171	4	148	23
Jalpaiguri	165	2	150	15
Murshidabad	239	4	134	105
North 24 Parganas	208	3	167	41
Paschim Medinipur	195	2	148	47
Uttar Dinajpur	180	3	139	41

(Source: Compiled from information furnished by test checked farms)

It is evident from the above that during the years 2014-18, the selected Government farms could not achieve the average cropping intensity of the district of 2014-15. This indicates that these farms failed to utilise their farm land even for two crops. The main reason for below average cropping intensity, it was noted, was sub-optimal utilisation of available cultivable land during Rabi season and Boro/ Summer/ Pre-kharif season due to deficiency in irrigation facilities on the farms as discussed in the succeeding paragraph.

It was observed through scrutiny of records and joint physical verification that 16 out of 29 test checked farms had inadequate irrigation facilities. In six farms (as shown in **Table 2.1.3**) net irrigated area was less than 50 *per cent* of the cultivable area of the farms.

Table 2.1.3: List of farms having poor irrigated area

Name of farms (District)	Cultivable area (in acre)	Net Irrigated Area (in acre)	Percentage of irrigated area
DSF Susunia (Bankura)	110.00	5.00	4.55
BSF Barjora (Bankura)	16.20	1.00	6.17
SARF Saltora (Bankura)	15.51	1.10	7.09
DSF Burdwan (Burdwan)	62.00	18.00	29.03
BSF Malbazar (Jalpaiguri)	16.07	8.00	49.78
BSF Barrackpore (North 24 Parganas)	13.00	4.00	30.77

(Source: Information furnished by farms)

Of the remaining 13 farms which claimed to have adequate irrigation facilities, two farms had no irrigation channels, seven farms had damaged irrigation channels and only four had sufficient irrigation channels to distribute water in fields. As a result, farms were unable to utilise the land during dry and summer season. No crop could be raised in SARF, Saltora in Kharif season of 2014-15 due to drought like situation and inadequacy of irrigation facilities.

Case study : DSF Burdwan

Out of 62 acre of cultivable land, only 18 acre of land was irrigated. During the joint inspection of the farm, it was observed that some portion of irrigation channels in the farm was in damaged condition. Due to insufficient irrigation facility, only 12.48 acre to 27.31 acre of land was utilised during 2014-15 to 2017-18 in Rabi and Boro seasons. Its overall cropping intensity ranged from 104 per cent in 2014-15 to 134 per cent in 2016-17, whereas average-cropping intensity in the district of Burdwan was 171 per cent during the year 2014-15. Thus, DSF, Burdwan failed to project itself as a model to the farmers.

2.1.6.5 Shortfall in production of breeder seeds in Research Stations

Out of six test checked research farms, only two farms - Rice Research Station (RRS), Bankura and Pulses & Oilseed Research Station (PORS), Berhampore were engaged in two activities viz, (i) development of new seed varieties and (ii) production of breeder seeds of varieties developed by them. Remaining four research farms were engaged in adaptive trials of new variety seeds.

It was observed that RRS, Bankura developed four varieties²⁶ of paddy and PORS, Berhampore developed five²⁷ new varieties of pulses during 2008 to 2018. No new variety of oilseed was, however, developed by PORS, Berhampore.

Achievement *vis-à-vis* target (as per cropping programmes) in regard to production of breeder seeds from nucleus seeds of paddy, oilseeds and pulses is shown in Table 2.1.4.

Table 2.1.4: Crop-wise and year-wise target and achievement during 2014- 15 to 2017-18

Year	Crop	Target (in kg)	Achievement (in kg)	Shortfall (-) / excess (+) (in kg)
Rice Research Station, Bankura				
2014-15	Paddy	No target	Nil	Nil
2015-16	Paddy	320.00	380.00	60.00
2016-17	Paddy	536.00	625.00	89.00
2017-18	Paddy	632.00	105.00	(-)527.00
Total		1488.00	1110.00	(-) 378.00
Pulses and Oilseed Research Station, Berhampore				
2014-15	Pulses	14250.00	3825.00	(-)10425.00
2015-16	Pulses	11950.00	4165.00	(-)7785.00
2016-17	Pulses	12380.00	5095.00	(-)7285.00
2017-18	Pulses	Data not available	Data not available	Data not available
Total		38580.00	13085.00	(-)25495.00
2014-15	Oilseeds	2162.50	1067.00	(-)1095.50
2015-16	Oilseeds	1437.50	1540.00	102.50
2016-17	Oilseeds	1525.00	1269.00	(-)256.00
2017-18	Oilseeds	Data not available	Data not available	Data not available
Total		5125.00	3876.00	(-)1249.00

(Source: Information furnished by farms)

²⁶ Puspa (IET-17509)-Notified in January 2015, Dhiren-BNKR-1 (IET-20760)-Notified in January 2015, Sampriti-BNKR-3 (IET-21987)-Notified in June 2016 and Dhruba-BNKR-2 (IET-20761)-notified in March 2017.

²⁷ Black Gram (Kalai)- Sulata WBU-109 (2008), Lentil (Masoor)-Moitree WBL-77 (2009), Green Gram (Moong)- Sukumar WBM-29 (2009) and Bireswar WBM-4-34-1-1 (2009), Chickpea (Bengal Gram)-Bidisha WBG-29 (2015).

- It was observed that in RRS, Bankura, against the target production²⁸ of 1.49 MT of breeder seeds of four newly developed varieties of paddy during the period 2015-18, the actual production was only 1.11 MT. Reasons for less production of breeder seed out of more nucleus seed were stated to be absence of fencing and severe cattle grazing on the farm. This indicates that adequate protection of the farms used for scientific research was not being ensured.
- In PORS, Berhampore, against the production target of 38.58 MT of breeder seed of pulses, actual production was only 13.09 MT during 2014-15 to 2016-17. Further, against the production target of 5.13 MT of breeder seed of oilseed crops, actual production was only 3.88 MT. As a result, PORS, Berhampore was unable to meet demand for breeder seed of pulses and oilseeds for further multiplication as foundation and certified seed. The concerned Joint Director of the PORS stated (April 2018) that the main reason for shortage in production of breeder seed was non-availability of nucleus seed.

The farms, thus, failed to produce quality seeds of new varieties for distribution to farmers. This was mainly due to deficiency in planning, delayed approvals of cropping programmes, non-replacement of older seed varieties, deficient irrigation facilities *etc.*, which affected the production of seeds. The objective of setting up the agricultural farms, which was to enhance farm productivity, failed to materialize owing to shortage in production and non-availability of quality seeds.

2.1.7 Processing and Storing of Seed

Harvested seed needs to be properly processed before storage and sale to ensure the necessary physical purity. Seed processing is a vital part of the total technology involved in making available high quality seed and comprise all the operations after harvest that aim at maximizing seed viability, vigour and health. Sequence of operation in seed processing are drying, receiving, pre-cleaning, conditioning, cleaning, separating or upgrading, treating (Drying), weighting, bagging and storage or shipping.

As per Detailed Project Report 2017-18²⁹ (Project No. 9), for processing and storing of quality seeds produced in the farms, infrastructure like open³⁰/covered³¹ threshing³² floors, seed processing units, air conditioned seed storage godowns were required. Following deficiencies were observed in the processing and storing of seeds:

2.1.7.1 Threshing floor

For threshing of different varieties of paddy/other crops which are harvested simultaneously, adequate number of threshing floors are required on each farm.

²⁸ On the basis of seed used and standard Seed Multiplication Ratio of 1:80.

²⁹ Project – 9 (Support to Government agricultural farms and research stations for infrastructure development and irrigation facilities for production of quality seeds in government farms) in the Detailed Project Report 2017-18 under Rashtriya Krishi Vikas Yojana.

³⁰ Open threshing floor is required for drying and extraction of seed from harvested crops.

³¹ Covered threshing floor is also required for protecting harvested crops from rain and dew.

³² Threshing is a process of separating grain from the husk and straw to which it is attached by the action of revolving mechanism.

From joint site inspection³³ of 29 test checked farms as well as replies furnished by farms it was observed that:

- (i) In 17 farms, the existing open threshing floors were in damaged condition.
- (ii) There was no covered threshing floor in nine³⁴ farms.
- (iii) In nine³⁵ farms covered threshing floors were in damaged condition, needing urgent repair.



Figure 2.1.1: Damaged open threshing floor of BSF Kaliaganj

- (iv) In 12 farms³⁶, covered threshing floors were used for storing of old/unserviceable machinery due to insufficiency of storage space, thus defeating the objective of creation of threshing floors.



Figure 2.1.2: Damaged covered threshing floor of SARF Saltora

³³ Joint site inspection of all 29 test checked farms along with the departmental representatives was conducted during November 2017 to April 2018.

³⁴ SARF Bankura, BSF Memari-I, SARF Bhatar, DSF Burdwan, Dryland Research Station Susunia, Potato & Vegetable Seed Multiplication Farm Anandpur, ZARS Mohitnagar, PORS Berhampore and PORSS Beldanga.

³⁵ SARF Saltora, BSF Itahar, BSF Kaliaganj, BSF Jalangi, BSF Hariharpara, BSF Bharatpur-II, SARF Kandi, FCRS Burdwan and RRS Bankura.

³⁶ RRS Bankura, FCRS Burdwan, BSF Mal, SARF Dhupguri, SARF Kalna, BSF Narayangarh, BSF Keshpur, BSF Itahar, BSF Kaliaganj, BSF Hariharpara, BSF Bharatpur-II and SARF Kandi.

2.1.7.2 Seed Processing

Seed processing comprises of all the operations involved in making available high quality seed that aim at maximizing seed viability, vigour and health, *i.e.*, cleaning, drying, seed treatment, packaging and storage.

Seeds are graded as Good Seed, Low Grade/ Light Weight/ Broken Seed and Undersized Seed. Seeds Grader machine is used to grade different type of seed or grains depending upon size and shape and to separate foreign Particles (twigs, leaves, mud *etc.*).

During joint site inspection of 22 selected farms engaged in multiplication of seed, Audit noticed that in 10 farms³⁷, there were no seed grading machines for processing of seed. In 12 farms³⁸, seed grading machines were supplied (2011-12) under Rashtriya Krishi Vikas Yojana (a Government of India scheme), for processing of seeds. These machines, however, were installed only in five farms³⁹ of which three farms⁴⁰ stated that they were using the machines. In remaining seven farms, seed grading machines were not yet (April 2018) installed for want of high voltage electricity connection. Nine seed grading machines costing ₹ 19.62 lakh, thus, were either lying in seed godowns or on covered threshing floors.



Figure 2.1.3: Seed grader lying idle in seed processing unit/godown in SARF Bhatar

³⁷ BSF Barjora, BSF Barrackpore, BSF Bharatpur-II, BSF Itahar, BSF kaliaganj, BSF Malbazar, BSF Memari-I, BSF Narayanagarh, SARF Bankura and SARF Saltora.

³⁸ BSF Keshpur, BSF Jalangi, BSF Hariharpara, DSFSusunia, DSF Burdwan, SARF Deganga, SARF Bhatar, SARF Kalna, SARF Basirhat, SARF Dhupguri, SARF Raiganj and SARF Kandi.

³⁹ DSF Susunia, SARF Deganga, SARF Kalna, SARF Basirhat and SARF Raiganj.

⁴⁰ DSF Susunia, SARF Kalna and SARF Raiganj.



Figure 2.1.4: Old materials dumped in seed processing godown in SARF Bhatar

As a result, processing of seed was being done manually on the farms, which required extra man-power and time leading to higher costs.

2.1.7.3 Seed storage

Availability of adequate storage facility for seed is crucial to maintain the quality of seed. According to National Seed Policy 2002, for storage of seed at farm level, scientific storage structures would be popularised and techniques of scientific storage of seed would be promoted among farmers as an extension practice. Further, as per Agricultural Manual (1965) published by the Department of Agriculture (then the Agriculture and Community Development Department, Government of West Bengal), in case air-tight bins are not available, the seed should be stored either in bulk or in bags placed over dunnage⁴¹ or platform sufficiently above the floor. The godown should be damp proof. During the joint site inspection of test-checked 29 farms, following deficiencies in storage facilities were noticed:

- 27 farms had a total of 48 seed godowns, 39 of which, *i.e.* 81.25 per cent, were damaged/required urgent repair. There were no seed godowns in two farms⁴². Seed was stored in old godowns alongwith NR seed grain, machineries, other unserviceable equipment, HSD oil *etc.*



Figure 2.1.5: Rotten potato seed and NR seed lying in the covered threshing floor of BSF Keshpur

⁴¹ Loose wooden matting for support.

⁴² Rice Research Station, Bankura and Zonal Adaptive Research Station, Mohitnagar.

- Field Crop Research Station (FCRS), Burdwan had a scientific storage godown with temperature and moisture control facility for storage of seeds constructed in the year 2002. This was non-functional since March 2011 for want of funds for repairing and Annual Maintenance Contract. As a result, FCRS had to store seed in their humid/damp dilapidated seed godown. In-charge of the research station accepted that the poor storage conditions had an adverse effect on quality of seeds.
- Thirteen⁴³ farms categorically stated that they had inadequate space for storage of seed on the farms. It was observed that deficiency in storage infrastructure and storage methods were the main reasons for seed turning into Not Recommended seed (NR Seed)⁴⁴.

Case study : BSF Jalangi

During the joint site inspection (April 2018) of BSF Jalangi, Audit noticed that there were two old office-cum-godowns on the farm. Both the godowns were in damaged condition. One godown was being used for storage of seed, farm implements and other old items. The godown was damp and roof was damaged. Rain water was visible on the floor. There was no raised platform in the godown. Seeds were found stored in seed-bins. Another old office-cum-godown was used for storage of old and damaged items.



Figure 2.1.6: Damp seed godown of BSF Jalangi Rain water visible on the floor

As such, the Department failed to ensure that the seeds produced were processed and stored appropriately. This was largely due to inadequate storage infrastructure and poor storage methods on the farms. Inadequate action by the farms/Department on these deficiencies led to reduction of quality and lifespan of seed.

Recommendation-III

The Department should revamp seed storage infrastructure of the farms to maintain seed quality.

⁴³ SARF Saltora, SAF Bankura, DSF Susunia, SARF Dhupguri, DSF Burdwan, BSF Narayangarh, BSF Kaliaganj, BSF Jalangi, BSF Bharatpur-II, SARF Kandi, Potato & Vegetable Seed Multiplication Farm Anandpur and Pulses & Oilseed Research Sub Station Beldanga.

⁴⁴ NR Seed means seed declared as Not Recommended seed by the Seed Testing Authorities after testing of seed sample.

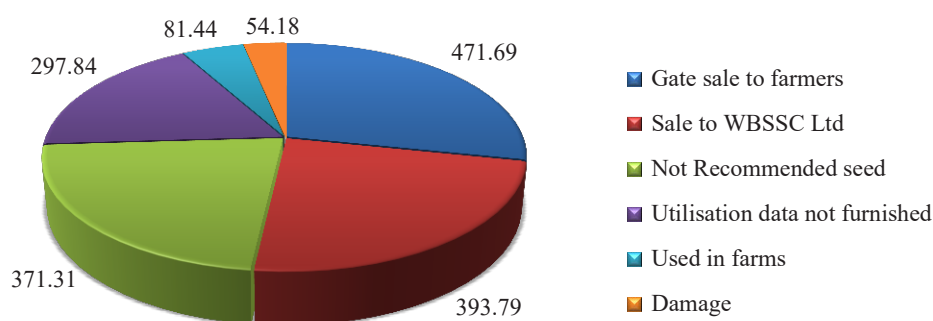
2.1.8 Sale/ Disposal of Seed

One of the main objectives of setting up of farms was to supply quality seed to local farmers. It was observed that Certified seed/Local seed⁴⁵/Truthfully Labelled (TL) seed produced in the test checked farms was sold to local farmers (through gate sale). Foundation seed produced in the farm was generally lifted by WBSSCL. A part of Foundation/Certified/TL seed was used in the Government farms for further multiplication in the next cropping season.

2.1.8.1 Sale of seed to farmers

Audit analysed the seed production data of 679 individual cases of cropping programmes of 23 seed multiplication farms out of 29 test checked farms (remaining six being research farms only) for the period 2014-15 to 2017-18. Out of total production of 1670.25 MT of quality seed, status of utilisation of quality seed is shown in **Chart 2.1.3**.

Chart 2.1.3 : Status of seeds produced in farms and their distribution during 2014-15 to 2017-18 (in MT)



From analysis of data, it was noted that out of total production of 1670.25 MT of quality seed, 28 per cent (471.69 MT) seed was sold to local farmers through gate sale and 24 per cent (393.79 MT) seed was lifted by WBSSCL for further multiplication or sale in market. Five per cent (81.44 MT) of the seeds were used in the farms for multiplication. As much as 22 per cent (371.31 MT) seed became Not Recommended owing to poor storage fetching lesser price and three per cent (54.18 MT) seed was damaged. Utilisation data for as much as 18 per cent (297.84 MT) of the seed was not furnished to Audit. The Department may need to investigate to determine reasons for such huge quantities of seed remaining unaccounted, and fix responsibility.

2.1.8.2 Deterioration of quality seed to Not Recommended (NR) seed

Unsold stocks of seed lying in the godowns of the 23 selected farms became Not Recommended (NR) seed due to deterioration of their physical condition, loss of viability *etc.*, due to time lapse and deficient storage conditions. It was observed that out of total production of 1670.25 MT of quality seed, 371.31 MT (22 per cent) turned as NR seed *i.e.* not suitable for sowing. Five farms stated that it was due to lack of demand of seed by local farmers, poor infrastructure and deficiency in storage of seed *etc.*

⁴⁵ Indigenous variety of seed.

Audit observed (January-April 2018) that in 44 cases out of total production of 29.70 MT of foundation seed (produced from breeder seeds during 2014-15 to 2016-17), 23.61 MT (79.5 per cent) turned NR seed. The scope of production of certified seed from the foundation seed during the next cropping seasons was defeated due to turning of foundation seed into NR seed leading to shortage of foundation seed required for planting in the next year.

It was further observed that out of 679 cases of cropping programmes, in 110 cases entire quantity of 138.19 MT of seed valuing ₹ 32 lakh either turned NR seed or was damaged; reasons were not available on record.

2.1.8.3 Disposal of NR seed

It was observed that 274.08 MT out of the total 371.31 MT seed which had turned NR seed during the period from 2014-15 to 2017-18 in 23 farms, was disposed off through auction. As the rates for NR seed were less than the notified price of good quality seed, this resulted in loss of ₹ 28.18 lakh to farms. Data regarding balance 97.23⁴⁶ MT of NR seed was not produced to Audit. Further, during joint site inspections (November 2017 to April 2018) of the farms, it was noticed that the seeds were either lying on the floor or stocked in gunny bags without any dunnage, so there was further risk of loss of revenue due to further deterioration in the condition of undisposed seed stock.

The Department, thus, failed to ensure provision of quality seeds to the farmers whereby they could increase farm output. Due to deficiencies in storage and sale, valuable seed produced was rendered unfit for cultivation and had to be auctioned off as NR seed. As such, the farms failed to achieve the objective of distribution of quality seed to increase overall farm productivity.

2.1.9 Farms as model centres

As per Departmental instructions⁴⁷, although the main purpose of farms is to multiply seed, they are also intended to demonstrate that scientific agriculture is financially viable. Further, Government farms should be well looked after and efforts should be made to run them smoothly and economically with an aim to maximise production of quality seed and reduce expenditure. Government farms should run on a commercial basis so that it can be shown to the cultivators that adoption of improved methods of cultivation would increase profit as compared to following old practices. This would not only increase farm profits but also demonstrate to local farmers the possibility of raising multiple crops with the help of irrigation.

2.1.9.1 Un-Economic functioning of farms

Scrutiny of Profit and Loss accounts for the year 2014-15, 2015-16 and 2016-17 of the 18⁴⁸ out of 22 test checked seed farms engaged in the multiplication of seed revealed that all these farms were running at a loss. Average annual loss of 18 farms was ₹ 8.46 crore, *i.e.* more than 85 per cent of the total expenditure of ₹ 9.27 crore incurred in one year.

⁴⁶ Total NR seed 371.31 MT less sold NR seed 274.08 MT.

⁴⁷ Memo no 4751 (723) dated 28.08.1962 and Memo No 7760 (354) dated 27.12.1962 referred to in the Agriculture Manual Part-II (Agriculture production), 1966.

⁴⁸ Two farms did not furnish information related to the year 2014-15 and other two farms did not furnish the complete expenditure figure.

As detailed in Table 2.1.1, there was shortfall in production, coverage area and productivity of seed, while the farms were supposed to produce higher yields, it was observed that they were not able to even achieve the average yield of the State. The farm gate average sale price of seeds⁴⁹ were kept low (as noted in the audit period it ranged from ₹ 16 to ₹ 45 per kg) but even then gate sale to farmers was barely 28 *per cent* of the total production. The average unit cost of producing seed in the 18 seed farms ranged from ₹ 113 to ₹ 1603 per kg while the WB State Seed Corporation was selling paddy seed to farmers at prices ranging between ₹ 42 to ₹ 500 per kg in 2018, causing the loss and making them uneconomical and unviable.

As the farms were operating in an un-economical manner, they could not demonstrate to farmers or motivate them to take up scientific farming for higher yield. The State Government may need to reappraise and reassess the role of the State seed farms and their resources including land and manpower in the backdrop of the non-fulfillment of the objectives or rationalize their working to make them more relevant to the needs of the farmers and the State as well as ensure their economic viability.

Farm Managers stated (November 2017 to April 2018) that the main reasons for loss were diversion of cultivable farm land for construction of various Government buildings not related to farms, absence of boundary wall and drainage system, grazing and unauthorised trespassing, shortage of irrigation facilities, delay in supply of seed, shortage of Krishi Shramiks (manpower) among others. These problems were, however, not addressed by the Department and failed to run the farms in an economical manner.

2.1.9.2 Organic Farming

For promoting organic farming in Government farms, Director of Agriculture issued (December 2015) instructions⁵⁰ for participating in organic farming programme. In June 2016, the Director of Agriculture instructed⁵¹ the Government farms and Research stations to select suitable plots (at least one acre) for organic farming of folk rice⁵²/scented rice and/or other suitable crops.

In August 2017, the Directorate selected 34 farms in the State for complete organic farming. Out of 29 farms selected for audit, six⁵³ farms had been declared as complete organic farms and the remaining 23 farms were to take up organic farming on at least one acre area.

According to the Agriculture Manual Part-II⁵⁴, for switching to full organic form of cultivation, these farms were to become self-reliant in production of organic manure and other organic inputs. This was imperative as organic manure

⁴⁹ *Paddy, wheat, mustard, lentil, moong, sesame and maize.*

⁵⁰ *Vide Memo No 650 (30)/ PSJ dated 02.12.2015.*

⁵¹ *Vide Memo No. 246 (30)/ PSJ dated 09.06.2016.*

⁵² *Popular local varieties of rice.*

⁵³ *SAF Bankura, BSF Barjora, Dryland Research Station Susunia, BSF Mal, SARF Raiganj and SARF Kandi.*

⁵⁴ *According to the Agriculture Manual Part-II (Agriculture Production) and "Organic Agriculture (Concept, Scenario, Principals and Practices) by A. K. Yadav, Director, National Centre of Organic Farming, Ghaziabad.*

produced outside the organic farm unit are not permissible under complete organic farming. It was observed that of the six test checked farms⁵⁵ declared (August 2017) fully organic, no organic farming was done on three farms⁵⁶ during Rabi season of 2017-18. Reasons for the same were, however, not on record. The remaining three organic farms, however, were procuring organic inputs from local markets, in violation of the provisions for organic farming. As such, they were not fully organic as declared.

2.1.9.3 Use of modern technology

According to Agricultural Manual Part-II, sowing of seed should be done timely. Wherever possible, seed drills⁵⁷ should invariably be utilised for sowing of seed so that the cost on account of seed and subsequent inter-cultural operations may be minimised. Zero Tillage Technology (ZTT) is a modern, economical, quick method of sowing seed directly in the field with the help of zero tillage seed drills. The Chief Agronomist & ex-officio Joint Director of Agriculture, Field Crop Research Station, Burdwan stated that yield can be increased up to 10 *per cent* (3.91 MT/ha to 4.31 MT/ha) in case of rice and 14 *per cent* (2.56 MT/ha to 2.93 MT/ha) in case of wheat by using ZTT.

Scrutiny of records revealed that 25 out of 29 test checked farms had tractor driven zero tillage seed drills, out of which 12 farms had no tractor to pull the zero tillage seed drills. It was further observed that none of the remaining 13 farms having tractors were utilising zero tillage seed drills. Four farms⁵⁸ having no tractors, cultivated 6.72 acre of land during 2014-18 through zero tillage seed drills by hiring tractors. The farms, thus, failed to increase productivity by utilising the available zero tillage seed drills.

Since the farms themselves were incurring losses, they could not serve to demonstrate to farmers gains in income through adoption of scientific agricultural practices. Farmers could not be motivated to take up adoption of modern technology in the farm sector due to lack of success of the farms. The agriculture farms, therefore, largely failed to function as model centres of technology.

2.1.9.4 Farm implements and machinery

Agricultural Manual Vol-II (1965) emphasises that improved agricultural implements must be used on the farm for preparation of land and wherever possible, for sowing and other operations. To convert the farms from being labour intensive to mechanised farming, so that production of quality seed does not suffer from crisis due to labour and aging staff, the Directorate procured agricultural implements and machinery centrally and supplied them to different farms.

Following deficiencies were observed in management of farm implements:

⁵⁵ *BSF Barjora, SAF Bankura, Dryland Research Station Susunia, BSF Malbazar, SARF Raiganj and SARF Kandi.*

⁵⁶ *BSF Barjora, BSF Mal and SAF Bankura.*

⁵⁷ *A seed drill is a sowing device that sows the seed precisely in the soil at proper depth and distance.*

⁵⁸ *SARF Bhatar, BSF Itahar, BSF Kaliaganj and DSF Burdwan.*

a) Unjustified procurement of farm implements

During joint site visits it was observed that 12 farms⁵⁹ had 22 tractor driven zero tillage seed drills but none of the 12 farms were given tractors to pull seed drills. Three⁶⁰ farms stated that they had to hire tractors from outside to use these implements. As a result, zero tillage seed drill were lying idle on nine farms. Further, in BSF Barrackpore and SARF Raiganj, wheel cage of tractors were supplied at a cost of ₹ 1.10 lakh in December 2017 and March 2016 respectively, although there were no tractors on the farms. Moreover, cultivable land of the Zonal Adaptive Research Station, Mohitnagar was three ha only. It had one tractor in working condition but no driver to run the tractor. In spite of these facts one new tractor of 60 Horse Power (HP) was supplied (March 2017) without any requisition from this research station. As a result, the tractors were lying unutilised on the farm.

b) Non-utilisation of farm implements

During joint site visits it was observed that Paddy transplanters were supplied (2006 to 2017) to 13⁶¹ farms, but only two farms⁶² were using those. Further, in eight test checked farms⁶³, nine power reapers for harvesting of crops were not used for want of operator and/or land profile of the farms. In six⁶⁴ farms, nine land levellers were lying idle for want of operating instructions and absence of operator.

Non-utilisation of the farm implements resulted in non-realisation of the objectives of converting the farms into mechanised farms from being labour intensive farms and hampered production of quality seeds by the farms.

c) Improper storage of farm implements

Agricultural Manual Vol-II (1965) provides that farm implements when not in use should be cleaned, oiled or greased and stored properly. The Manual also provides that repairs of implements must be promptly taken up so that the same may be brought to working condition without delay. Out of 29 test checked farms, 14⁶⁵ farms had no implement sheds and eight⁶⁶ farms had inadequate space for storage of farm implements and machineries. During the joint site inspection of these 22 farms, it was observed that farms had to store farm implements (both operational and unserviceable) on covered threshing floors or in seed godowns

⁵⁹ SARF Saltora, RRS Bankura, BSF Mal, BSF Barrackpore, SARF Bhatar, BSF Burdwan, BSF Keshpur, SARF Raiganj, BSF Itahar, BSF Kaliaganj, BSF Jalangi and BSF Bharatpur-II.

⁶⁰ SARF Bhatar, DSF Burdwan and BSF Itahar.

⁶¹ DSF Susunia, SARF Dhupguri, SARF Deganga, SARF Basirhat, BSF Memari-I, SARF Bhatar, DSF Burdwan, FCRS Burdwan, SARF Kalna, BSF Keshpur, SARF Raiganj, BSF Hariharpara and SARF Kandi.

⁶² SARF Deganga, SARF Basirhat.

⁶³ BSF Barjora, DSF Susunia, BSF Mal, BSF Memari-I, DSF Burdwan, BSF Narayangarh, BSF Keshpur and SARF Raiganj.

⁶⁴ DSF Susunia, SARF Basirhat, BSF Memari-I, SARF Kandi, SARF Raiganj and SARF Dhupguri.

⁶⁵ SARF Saltora, SARF Dhupguri, BSF Mal, SARF Bhatar, DSF Burdwan, BSF Kaliaganj, BSF Jalangi, BSF Hariharpara, BSF Bharatpur-II, SARF Kandi, RRS Bankura, FCRS Burdwan, PORS Berhampore and PORSS Beldanga.

⁶⁶ DSF Susunia, BSF Memari-I, SARF Kalna, BSF Keshpur, BSF Itahar, Dryland Research Station Susunia, ZARS Mohitnagar and Potato & Vegetable Seed Multiplication Farm Anandpur.

or in open air which resulted in damage and deterioration of the farm implements and also shortage of space for processing and storage of seed.



Figure 2.1.7: Damaged Seed Grader lying in covered threshing floor in BSF Hariharpara



Figure 2.1.8 : Damaged Seed grader lying in open threshing floor in SARF Kandi

d) Disposal of unserviceable farm implements and machinery

Director of Agriculture constituted (January 2006) a Condemnation Committee⁶⁷ in each district for preparation of technical report in respect of all old machineries lying on the farms and a Disposal Committee for disposal of unserviceable material lying on the farm. Condemnation Committees had to submit condemnation proposals to the Director of Agriculture for approval. After approval of the condemnation proposal, old implements/machineries were to be moved from Stock Register to Dead Stock Register. The Condemnation Committee was to fix the minimum reserve price for each condemned machinery/ implement. The Disposal Committee was to dispose condemned unserviceable materials centrally by inviting sealed tenders.



Figure 2.1.9: Storage of farm implements and machineries in a godown in SARF, Saltora

⁶⁷ With concerned Principle Agriculture Officer (now Deputy Director of Agriculture (Admn) of the District as Member and Convener.

On scrutiny of records of 29 test checked farms, it was noticed that Condemnation Committees and Disposal Committees were not functioning for any of the farms. Non-functioning of these Committees resulted in piling up of 408 old/unserviceable farm implements/machineries in 27 farms. Consequently, there was shortage of space for storage of new farm implements/machineries and seeds as was evident in the joint site visits of the farms.



Figure 2.1.10: Storage of farm implements in seed godown of SARF, Basirhat

Recommendation-IV

The Department should take necessary steps for adoption of scientific practices on the farms so that the farms may function as model centres for demonstration of modern technologies and improved agricultural practices.

2.1.10 Management of land

Government farms were established (before 1967) during Second and Third Five Year Plans. It was imperative that the farms efficiently utilised the resources available to them to fulfil their objectives.

2.1.10.1 Mutation of land

It was observed that out of 29 test checked farms, six⁶⁸ farms had no land records, land of seven⁶⁹ farms were not mutated in the name of Department and was still being held in the name of different farmers from whom they were acquired. Eight⁷⁰ farms had mutated only a part of their farm land. It was observed that no survey was done to ascertain actual quantum of land under the possession of different farms. Absence of any survey and non-completion of mutation of land

⁶⁸ SAF Bankura, Rice Research Station Bankura, DSF Susunia, Dryland Research Station Susunia, ZARS Mohitnagar and FCRS Burdwan.

⁶⁹ SARF Basirhat, BSF Memari-I, BSF Narayangarh, BSF Keshpur, P&V Seed Multiplication Farm Anandpur, PORSS Beldanga and BSF Bharatpur-II.

⁷⁰ SARF Dhupguri, SARF Bhatar, BSF Barrackpore, DSF Burdwan, SARF Kalna, SARF Raiganj, PORS Berhampore and BSF Jalangi.

in name of Department leaves scope for dispute regarding ownership of land and encroachment of land as discussed below:

- During the joint site inspection in November 2017, it was observed that the work of construction of boundary wall around DSF Susunia was stopped after partial construction due to land dispute between DSF Susunia and the Forest Department. Further, the concerned ADA (Farm) stated that two small villages inside the boundary wall of DSF, Susunia were the cause of grazing inside the farms and approximately 50 acres of land was under encroachment.
- Similarly, 15 plots of DSF, Burdwan in Nari Mouza were encroached by local people but the exact area of land and period from which land was encroached was not known to the farm authorities.
- The Department had acquired 9.28 acres of land in 1962 for SARF, Dhupguri. The land, however, was not mutated in the name of the Department. As a result, dispute arose (May 2015) between SARF, Dhupguri and inheritors of a farmer from whom land was acquired. Similarly, there was a dispute (since January 2018) for a plot measuring 0.17 acre in BSF Memari-I with a local farmer.

2.1.10.2 Diversion of farm land

It was observed that in 22 out of 29 test checked farms, 252.94 acres of land was diverted for the purpose of construction of various Government buildings⁷¹ not related to farms. In nine test checked farms more than 30 *per cent* of the farm land was diverted as shown in **Table 2.1.5**.

Table 2.1.5: List of farms in which more than 30 *per cent* land was diverted

Name of farms	Original area as per notification (in acre)	Diverted area	Percentage of diversion	Balance land (in acre)	Present cultivable land (in acre)
SARF Deganga	23.86	7.40	31	16.46	8.50
BSF Itahar	25.00	8.00	32	17.00	10.50
DSF Burdwan	203.68	64.27	32	139.41	62.00
BSF Malbazar	23.82	7.75	33	16.07	16.07
SARF Kandi	24.18	8.00	33	16.18	9.50
BSF Bharatpur-II	24.41	10.50	43	13.91	5.50
BSF Keshpur	24.83	14.73	59	10.10	5.47
BSF Hariharpara	24.83	20.60	83	4.23	0.30
SAF Bankura	24.10	22.60	94	1.50	1.50

(Source: Information furnished by farms)

As noted above diversion of land in SAF Bankura and BSF Hariharpara was as high as 94 *per cent* and 83 *per cent* respectively, reducing the cultivable land to 1.50 acre and 0.30 acre respectively. Diversion of farm land decreased the net cultivable land for the farms and adversely affected the production of quality seed.

⁷¹ *Krishi Bhawans, Krishak Bazars, Godowns of Food & Supplies Department, Godown of WBSSCL, MatiTirtha, Karma Tirth, ITI College, Madrasa, Motel-Pather Sathi etc.*

Case studies :**BSF Hariharpara**

Established in March 1964, with cultivable land of 20.90 acre. In 2000-01, 19.86 MT of seed was produced on the farm. It was observed that 20.60 acre (98.6 per cent) of land was diverted till April 2018 for the purpose of construction of Krishak Bazar, godown of Food Supply Department, ITI College, BE College and Karma Tirtha where work was still on-going. Due to this diversion of land, the farm was left with only 0.3 acre of cultivable land and production of quality seed drastically reduced to 150 kg in the year 2017-18. As a result, BSF, Hariharpara became almost defunct.



Figure 2.1.11: Hariharpara Krishak Bazar constructed at BSF Hariharpara in Murshidabad District

BSF Keshpur

Established in December 1957 with cultivable land of 21 acres. It was observed that 14.73 acres (70 per cent) of farm land was diverted till March 2018 for the purpose of construction of Krishak Bazar, ITI College, Madrasha including hostel etc. In kharif 2009-10 cropped area was 20.20 acres and production of seed was 27.33 MT which reduced to 5.47 acres and 8.20 MT, respectively in kharif 2017-18.



Figure 2.1.12: Under construction Madrasha and its hostel buildings at BSF Keshpur in Paschim Medinipur District

2.1.10.3 Protection of farm land

Twenty one out of 29 selected farms were affected by unauthorised trespassing and cattle grazing in absence of boundary wall/fencing around the farm or incomplete boundary wall or damaged boundary wall. It was observed that only six out of 29 selected farms were well protected by boundary walls. In SARF, Bhatar there was no production of quality seed (Mustard and Lentil) in Rabi season during the period from 2014-15 to 2016-17 due to grazing. In BSF Memari- I, seed bed of Boro paddy prepared for sowing in one acre of land was damaged due to grazing in 2015-16. Similarly, in DSF Susunia, Rabi crops in seven acres were damaged due to grazing in the year 2017-18.



Figure 2.1.13: Incomplete boundary wall of DSF Susunia in Bankura District



Figure 2.1.14: Unprotected farm land of BSF Itahar in Uttar Dinajpur District

Recommendation-V

The Department should efficiently utilize the available resources of the farms including land and machineries.

2.1.11 Manpower

As per Revised Guidelines for Quality Control Arrangements on seed issued (June 2006) by Department of Agriculture, Cooperation and Farmers' Welfare,

Government of India, although seed production is similar in many respects to general crop production, but it requires specially trained personnel for day to day supervision. In addition to cultural practices associated with crop production, seed producers or supervisors are concerned with isolating fields, plant spacing, water management, pollination, harvesting times, methods of drawing, storage *etc.* Further, as per Agriculture Manual, success of agriculture depends mainly on better management by the man-on-the-spot (farm in-charge). Sanctioned strength *vis-à-vis* men-on-roll in the test checked 29 farms are shown in Table 2.1.6.

Table 2.1.6: Year wise sanctioned strength *vis-à-vis* men in position of different posts in Government Farms

Name of the posts	Sanctioned Strength	Men-on-roll (in Percentage)			
		April, 2014	April, 2015	April, 2016	April 2017
Asstt. Director of Agriculture (Farms)	15	11 (73)	11(73)	13(87)	13(87)
Asstt. Farm Manager	19	5(26)	8(42)	11(58)	9(47)
Light Tractor cum Power Tiller Driver	26	0 (0)	0 (0)	0 (0)	0 (0)
Cattle Keeper	24	5(21)	5(21)	5(21)	6(25)
Chowkidar/Night Guard/ Darwan	40	14(35)	15(38)	15(38)	13(33)
Krishi Shramik	905	474(52)	451(50)	425(47)	385(43)

(Source: Information furnished by farms)

It was observed that out of eight test checked Sub Divisional Adaptive Research Farms (SARFs), five⁷² SARFs had no independent Assistant Director of Agriculture (Farm) for considerable period during 2014-15 and 2017-18 to manage the functioning of the farm. The charge of these farms were given to the nearest Assistant Director of Agriculture (Block). Further, it was observed that all the 29 test checked Government farms were running with shortage of Krishi Shramiks of about 57 *per cent*. Due to shortage of Krishi Shramiks, works like preparation of field, sowing, spraying of chemicals, fertilizers, weeding, harvesting of crops, processing of seed were delayed and non-agricultural works like night/day guarding of crops/ farm implements *etc.*, were hampered. To mitigate shortage of manpower various farm implements/ machinery⁷³ were supplied to farms but existing manpower were not trained to operate these implements/machinery. Even the post of Light Tractor cum Power Tiller Driver (LTCPD) was not filled on any of the 29 test checked farms. Due to this, farm implements such as zero tillage seed drill, paddy transplanter, reaper *etc.* could not be used and farming was done by traditional methods, resulting in poor performance of the farms.

⁷² SARFs-Basirhat, Bhatar, Kandi, Dhupguri and Saltora.

⁷³ Power tiller, Zero tillage seed drill, power reaper, Paddy Trans-planter, Potato grader, Maize decorticator, Land leveler, Multi crop thresher *etc.*

Recommendation-V

To mitigate shortage of manpower various farm implements/machinery were supplied to farms but existing manpower were not trained to operate these implements/machinery. Department may, therefore, consider training existing manpower to enable farms to optimally utilize their farm implements/machinery. Besides, Department needs to reappraise and reassess the actual requirement of manpower, in accordance with the actual workload, particularly in view of the diversion of substantial land in several seed farms in recent years.

2.1.12 Conclusion

The objective of setting up State seed farms was to produce quality seeds and to distribute them at reasonable prices to farmers and encourage cultivators to adopt improved methods of cultivation for profit. It was, however, observed in audit that the selected 23 Government seed multiplication farms spread across seven districts had a total shortfall⁷⁴ of 1190.07 MT in production of seed considering the average yield in the State (52 per cent of average yield). The main reasons for shortfall in production were due to coverage of less area (except wheat) and low productivity as detailed in Table 2.1.1. While the farms were supposed to produce higher yields, it was observed that they were not able to even achieve the average yield of the State (shortfall ranged from 43 to 85 per cent). The farms did not give adequate thrust for introduction of new seed varieties in the cropping programmes and preferred to use older varieties of seed. As a result, the farms not only failed to produce but also failed to demonstrate the characteristics and yield of new seed varieties and distribute the same to the local farmers for higher production of crops. During the years 2014-18, the selected Government farms could not achieve the average cropping intensity of the district of 2014-15. The main reason for below average cropping intensity was deficiency in irrigation facilities on the farms. Seeds produced were inappropriately processed and stored. Twenty two per cent (371.31 MT) seed became Not Recommended seed owing to poor storage fetching lesser price, while 18 per cent (297.84 MT) of the seeds remained unaccounted. Eighteen out of 22 test checked seed farms engaged in the multiplication of seed revealed that they were running at a loss. Average annual loss of 18 farms was ₹ 8.46 crore, i.e. more than 85 per cent of the total expenditure of ₹ 9.27 crore incurred in one year. Though the average farm gate prices of seeds were kept low, gate sale to farmers was barely 28 per cent (393.79 MT) of the total production. As the farms were operating in an un-economical manner, they could not demonstrate to farmers or motivate them to take up scientific farming for higher yield. There were unjustified procurement of farm implements. During joint site visits it was observed that 12 farms had 22 tractor driven zero tillage seed drills but none of the 12 farms were given tractors to pull seed drills. Mechanised farming remained a dream with implements procured for use in mechanised farming

⁷⁴ In the absence of target of quantity of seed to be produced, Audit calculated the shortfall in production on the basis of average yield per acre (as estimated in Table 16 of "Estimates of Area, Yield Rate & Production of Principal Crops in West Bengal 2014-15" published by Evaluation Wing, Directorate of Agriculture, GoWB) and target area to be covered.

remaining unutilised due to absence of trained manpower and ultimately becoming unserviceable. Management of land and other resources by the farms was very poor. There were instances of grazing and illegal encroachments. There was substantial diversion of farm land. It was observed that in 22 out of 29 test checked farms, 252.94 acres of land was diverted for the purpose of construction of various Government buildings not related to farms. In nine test checked farms more than 30 *per cent* of the farm land was diverted. All the 29 test checked Government farms were running with shortage of Krishi Shramiks of about 57 *per cent*. To mitigate shortage of manpower various farm implements/ machinery⁷⁵ were supplied to farms but existing manpower were not trained to operate these implements/machinery.

Mention was made in the report of the Comptroller and Auditor and General of India (Civil) for the year ended 31 March 2003 regarding poor management of government farms namely significant shortfalls in meeting State's requirement of seeds, substantial losses in running of farms, lack of infrastructural facilities, *etc.* It is, however, noted that even after a lapse of 15 years the same issues persist.

The above clearly demonstrates that State seed farms are no longer able to function as envisaged either to meet the quality seed requirement of farmers including adoption of better and newer seed varieties or to promote improved methods of cultivation for profit. The persistent loss is a burden on the State exchequer. **The State Government, may, therefore, need to objectively assess whether the State seed farms have fulfilled any of the objectives which they were set up with, or are likely to do so anytime in the future.**

The draft report was referred (July 2018) to the Department followed by reminders (December 2018 and March 2019). The replies are still awaited as of April 2019.

⁷⁵ Power tiller; Zero tillage seed drill, power reaper; Paddy Trans-planter; Potato grader; Maize decorticator; Land leveler; Multi crop thresher *etc.*

PASCHIMANCHAL UNNAYAN AFFAIRS DEPARTMENT

2.2 Functioning of Paschimanchal Unnayan Affairs Department

Executive Summary

Paschimanchal Unnayan Affairs Department (PUAD) was created in July 2006, with a view to effecting integrated development of the Paschimanchal Unnayan Parshad Area (PUPA) and filling up *critical gaps* in normal development process in the region, situated along the western fringe of South-West West Bengal. The region comprises 74 blocks of seven districts.

The Performance Audit of the functioning of Paschimanchal Unnayan Affairs Department for the period of 2012-13 to 2017-18 was conducted between February and June 2018.

Besides the records of PUAD and its main implementing agency, Paschimanchal Unnayan Parshad (PUP), the records of all seven District Magistrates were also examined. Audit selected 147 schemes under nine sectors out of the 1328 schemes taken up by PUAD, by stratified random sampling method for detailed scrutiny. In addition, three schemes of special importance were also examined.

Important audit findings are as follows:

- As per the Perspective Development Plan of 2007 when PUAD was created (2006), PUPA was lagging behind the State population in respect of both the social and economic status. PUAD, however, had not set any goals for the reduction of the regional disparities based on which PUP could take appropriate actions. During the Audit period examination revealed continuing disparities in terms of developmental indices.

(Paragraph 2.2.6)

- PUAD even after 12 years of its creation, was yet to prepare a comprehensive plan identifying the *critical gaps* and ensuring convergence with activities of other development departments working in the area for an integrated development of PUPA. Further, PUAD failed to act on the long term Perspective Development Plan (PDP), it tasked IIT Kharagpur to prepare at a cost of ₹ 10.13 lakh, rendering the expenditure infructuous.

(Paragraph 2.2.7)

- During 2012-18, PUAD failed to fully utilise the total allotted funds of ₹ 2080.63 crore. This affected completion of schemes which sought to provide benefits to people living in PUPA. Financial irregularities aggregating ₹ 11.47 crore including cases of unauthorized diversion of funds, non-adoption of e-tendering norms and payment of cost escalation charges beyond the scope of agreement were observed in Audit indicating non-judicious use of funds.

(Paragraph 2.2.8)

- PUAD failed to efficiently and effectively implement schemes, which it undertook in critical areas like drinking water supply, roads & bridges, irrigation, health, anganwadi centres, *etc.* Audit observed cases of infructuous and extra expenditure, non-compliance of rules/ regulations, absence of need and feasibility assessments before awarding contracts, blocking of funds due to failure of land acquisition, incomplete works.

This not only led to incurring huge expenditure but also denial of benefits to marginalised area of the state.

(Paragraph 2.2.9)

- Weak systems of internal control, monitoring, co-ordination and evaluation impacted PUAD's ability to not only identify and fill the *critical gaps* in overall socio-economic development of PUPA but also in assessing the actual development made so far in PUPA.

(Paragraph 2.2.10)

2.2.1 Introduction

Within West Bengal, there are a few backward regions with regard to economic and social indices which reflect the problems of acute regional disparities in terms of rural roads, health, irrigation facilities, power supply *etc.* One such region, situated along the western fringe of South-West West Bengal has been termed as Paschimanchal Unnayan Parshad Area (PUPA). This region had been identified as backward by a high level Committee constituted (2000-2001) by the Government of West Bengal at the instance of Development and Planning Department of the State.

PUPA comprises 74 blocks of seven districts⁷⁶ (erstwhile five districts⁷⁷) containing 12,558 inhabited villages. It has total area of 21.82 lakh hectares and total population of 2.37 crore⁷⁸. It covers about one-fourth of the total area and one-fourth of the total population of the State.

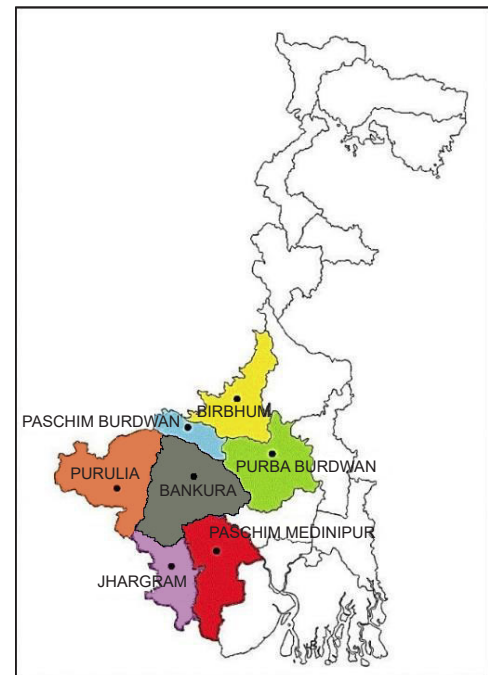


Fig 2.2.1 : Paschimanchal Unnayan Parshad Area (PUPA)

2.2.2 Organizational set up

Government of West Bengal, with a view to effecting integrated development of this under developed area and filling up *critical gaps* in normal development process in close co-ordination with District Planning Committees and Zilla Parishads, constituted⁷⁹ (May 2000) a Board named Paschimanchal Unnayan Parshad (PUP) under Development and Planning Department. Subsequently, a Department called Paschimanchal Unnayan Affairs Department (PUAD) was created in July, 2006. The role of PUP was to act as nodal and main implementing agency of PUAD and to effect integrated development of the

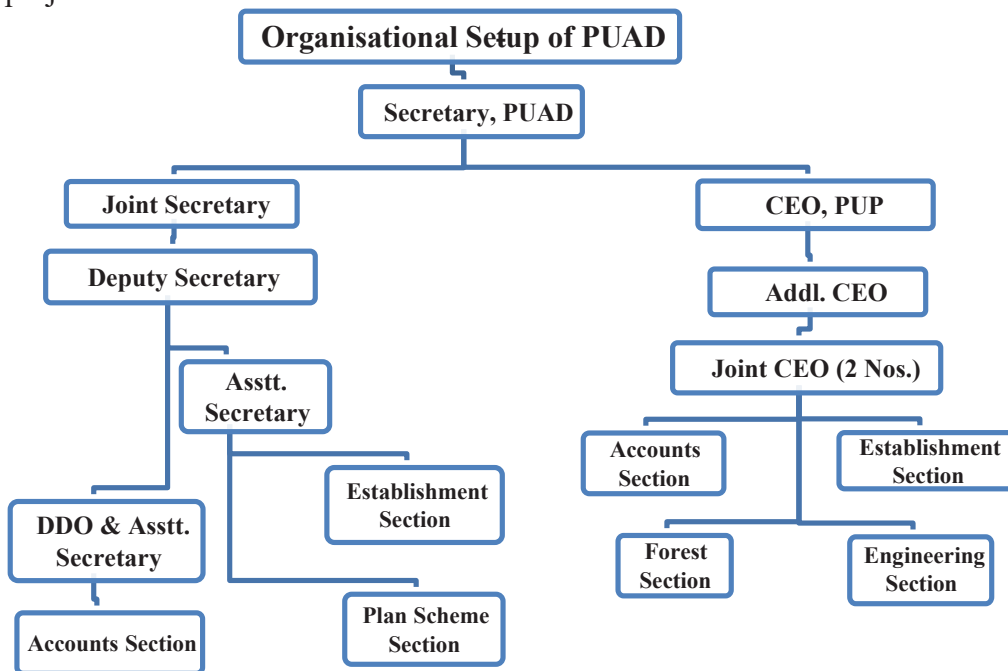
⁷⁶ Birbhum, Bankura, Purulia, Paschim Medinipur, Jhargram, Purba Burdwan and Paschim Burdwan.

⁷⁷ Birbhum, Bankura, Purulia, Paschim Medinipur, Burdwan. Paschim Medinipur was bifurcated into two districts viz. Paschim Medinipur and Jhargram, and Burdwan was also bifurcated into two districts viz. Purba Burdwan and Paschim Burdwan in March 2017.

⁷⁸ According to 2011 Census.

⁷⁹ Resolution No. 1409/DP/P/JA/17C-1/2000 dated 18.05.2000.

under developed red laterite dry zone inhabited predominantly by people of Scheduled Castes and Scheduled Tribes. For this purpose, PUP was required to (i) ensure to meet the *critical gaps*⁸⁰ that might be identified in the plans formulated by the District Planning Committees (DPCs) for these areas, (ii) aim at filling up the critical gap of various developmental projects by carefully avoiding overlapping of activities among other Government Departments or local bodies in close coordination with DPCs and Zilla Parishads (ZPs); and (iii) monitor and coordinate the developmental activities related to the selected projects in backward areas of PUPA.



All the concerned line Departments of the State Government undertake their usual Plan schemes for development of PUPA. PUAD is only in-charge of filling up the critical gap in the development of the area.

2.2.3 Scope and Methodology of Audit

The Performance Audit of the functioning of Paschimanchal Unnayan Affairs Department for the period of 2012-13 to 2017-18⁸¹ was conducted between February and June 2018. Besides the records of PUAD and PUP, the records of all seven District Magistrates⁸² were also examined. PUAD had taken up 1328 schemes⁸³ through PUP, District Magistrates and Non-Government Organisations (NGOs) during 12th Five Year Plan period *i.e.* 2012-17. Out of these, audit selected 147 schemes under nine sectors⁸⁴, by stratified random

⁸⁰ Gaps to be identified between the local needs and normal development process of the state.
⁸¹ Schemes/projects approved upto March 2017 were selected however; progress of work upto March 2018 was checked as the schemes/projects approved during the year 2017-18 were not completed till audit.
⁸² The seven districts were Birbhum, Bankura, Purulia, Jhargram, Paschim Medinipur, Purba Burdwan and Paschim Burdwan.
⁸³ As per the data made available by PUP.
⁸⁴ Roads and bridges-71, Anganwadi-7, Drinking water-5, Education-16, Irrigation-15, Heath-4, Lac-5, Miscellaneous-1, Others sector-23.

sampling⁸⁵ method for detailed scrutiny. In addition, three schemes⁸⁶ of special importance were also examined.

2.2.4 Audit Objectives

The Performance Audit sought to assess the functioning of PUAD and derive assurance as to whether:

- Proper planning was in place to identify and fill up the *critical gaps* and to ensure integrated development of PUPA.
- Adequate funds were available in time and were utilized judiciously.
- Schemes/projects were implemented efficiently and effectively to achieve the objectives of PUAD.
- Co-ordination with different departments/agencies and monitoring of the schemes/projects were effective.
- The expected outcomes were achieved.

2.2.5 Audit Criteria

Performance was assessed against these criteria by Audit:

- Plans formulated by District Planning Committees;
- Government Orders⁸⁷ constituting PUAD and PUP;
- Departmental⁸⁸ Schedule of Rates;
- Indian Road Congress (IRC) Guidelines (IRC:SP:72-2007, IRC:37-2012);
- Govt. orders, minutes/resolution of different meetings *etc* related to implementation of different schemes/ projects issued by PUAD/PUP;
- West Bengal Financial Rules, Treasury Rules, Budget Manual, Budget Speech *etc*;
- Perspective Development Plan prepared by IIT Kharagpur for PUPA (January 2007) and Annual Action Plans; United Nations' Sustainable Development Goals (UNSDGs) adopted in September 2015.

2.2.6 Outcomes of the working of the department

As per the Perspective Development Plan of 2007 (PDP-2007)⁸⁹, when PUAD was created (2006), PUPA was lagging behind the State population in respect of both the social and economic status as detailed in **Table 2.2.1**.

⁸⁵ All schemes under Irrigation, Education, Roads (Bridges *etc.*) sectors and DM were grouped into two strata. For Roads (Bridges *etc.*) and DM:- Strata-I: schemes costing \geq ₹ five crore and Strata-II: schemes costing $<$ ₹ five crore and for Irrigation and Education:-Strata-I: schemes costing \geq ₹ 25 lakhs, Strata-II: schemes costing $<$ ₹ 25 lakhs.

⁸⁶ Check Dams under Jalatirtha Project, RIDF Schemes and Gitanjali Housing Schemes.

⁸⁷ Notification No. 194- Home (Cons) R2R (Cons)- 10/06. Dated Kolkata 12.07.2006 and Resolution No. 1409/DP/P/JA/17C-1/2000 dated 18.05.2000.

⁸⁸ I&WD and WRIDD.

⁸⁹ In December 2005, PUP entrusted IIT, Kharagpur with the task of preparation of a long term Perspective Development Plan (PDP) for PUPA for 11th and 12th Five Year Plan.

Table 2.2.1: Status of PUPA

Sl No	Parameter	PUPA (in percentage)	West Bengal (in percentage)
1.	Net Cropped Area	55.45	66.03
2.	Marginal Worker	35.70	8.05
3.	Village Electrified	60.90	87.70
4.	BPL (Below Poverty Line) Population	39.29	25.00
5.	SC & ST Population	38.58	28.51
6.	Female Literacy	46.06	59.60

(Source: Perspective Development Plan)

It was, however, observed that PUAD though mandated to look after the development of the people inhabited in the red laterite under privileged area, had not set any goals for the reduction of the regional disparities based on which PUP could take appropriate actions. Audit could not access any impact assessment report of the development works executed since creation of the PUAD. Examination of various reports⁹⁰, however, revealed continuing disparities in terms of the major development indices of this region during the Audit period as shown in **Table 2.2.2**.

Table 2.2.2 : Continuing disparities between PUPA vis-a-vis the State in terms of major development indices (as available).

Sl. No.	Indices	Paschimanchal Unnayan Parshad Area	West Bengal
1.	Sanitation coverage in Rural Areas (July 2018) (3 Districts of PUPA)	60.65% to 74.71%	94.10%
2.	Percentage increase in number of beds in Hospitals/ Health Centres (2011 versus 2015)	8.40% (Growth)	12.66% (Growth)
3.	Number of Secondary and Higher Secondary Schools (2011-12 versus 2014-15)	1.12% to 1.21% (Growth)	2.69% (Growth)
4.	Adult female literacy (2015-16)	48.1% to 66.6%	70.9%
5.	Per Capita Income (per annum) (2011-12 versus 2013-14)	28.77% (Growth)	31.24% (Growth)

(Source: Information furnished by Planning, Statistics & Programme Monitoring Department and Agriculture Department)

- In four⁹¹ districts of PUP area, total area covered under irrigation reduced to 4,90,811 ha in 2016 from 5,19,269 ha in 2013.
- Gross Cropped Area (GCA) of the five districts was reduced from 32,43,652 ha to 32,05,959 ha (1.16 percent decrease) during 2012-13 to 2016-17.

Recommendation-I

It is recommended to evaluate the results achieved by PUAD since its creation to assess whether it has fulfilled the objectives which it was set up with or is likely to fulfill anytime in near future.

⁹⁰ Statistical Abstract West Bengal-2015, State Domestic Product and District Domestic Product 2014-15, Directorate of Agriculture, Unstarred Question of Lok Sabha.

⁹¹ Birbhum, Bankura, Burdwan, Paschim Medinipur.

Continuing disparities owing to the mode of execution/implementation of the development works are detailed in the audit finding below:

Audit Findings

2.2.7 Planning to ensure integrated development of PUPA

2.2.7.1 Identification and addressing of Critical Gaps for integrated development of PUP area

As per Government Orders⁹², PUAD was created for effecting integrated development of PUPA. PUAD was to ensure meeting the *critical gaps* that might be identified in the plans formulated by the District Planning Committees (DPCs) for these areas. It was, however, observed that PUAD was yet to identify the *critical gaps* and prepare any comprehensive and integrated development plan for this area as detailed below:

(a) PUAD works on the basis of Annual Action Plans, drawn up by the District Magistrate (DM) which contains list of works identified by him and local bodies. In December 2005, PUP entrusted IIT, Kharagpur with the task of preparation of a long term Perspective Development Plan (PDP) for PUPA for 11th and 12th Five Year Plan (FYP) on payment of ₹ 10.13 lakh.

Perspective Development Plan was submitted in January 2007, setting out seven objectives for development of PUPA as mentioned below:

- (i) To assess the natural resources and their potential for development;
- (ii) To understand socio-economic status of the population and gauge potential capabilities of the available human material;
- (iii) To assess environmental conditions for securing ecological sustainability in future;
- (iv) To enumerate existing and new technologies to be employed for generation of productive employment with focus on less capable, poor, women and disadvantaged;
- (v) To improve physical infrastructures like roads, power, irrigation systems, marketing nodes *etc.*;
- (vi) To develop social infrastructural facilities like education, health, housing *etc.* with thrust on improvement of quality of life;
- (vii) Finally, to organize and sensitize people for community based participatory development for group activities, both in production and social-service related programmes.

During 11th and 12th FYP periods, a total outlay of ₹ 13972.64 crore was envisaged in the PDP. The sector-wise requirement of allocation of investment in 16 sectors is shown in *Appendix-2.2*. The PDP also emphasized that for implementation of the programmes for PUPA, Detailed Action Plans including activity specific budgeting and mechanism of monitoring were required to be prepared by PUAD.

The Department, however, had not taken any action on PDP as of January 2019. This rendered the amount of ₹ 10.13 lakh incurred on preparation of PDP, wasteful.

⁹² Vide Notification No. 194-Home(Cons) R2R(Cons)-10/06 dated 12.07.2006 read with Resolution No. 1409/DP/P/JA/17C-1/2000 dated 18.05.2000.

The Department had again engaged IIT Khargapur in March 2017, for the preparation of “Vision, Mission, Short Term and Long Term Perspective Plan” against a fee of ₹ 74 lakh. Neither any payment was, however, made nor was the Plan delivered by IIT Kharagpur till date (January 2019).

(b) It was observed that in the absence of any comprehensive plan or Detailed Action Plan, Schemes were identified and executed by two methods *viz.* (i) works selected by DM from the Annual Action Plans (AAPs)⁹³ prepared by incorporating inputs from different Blocks / Panchayat Samities, (ii) request for works received directly from peoples’ representatives, school authorities *etc.*

As such, the planning process for identification of works to be taken up was adhoc. There was also no clear assurance that the works which were taken up filled up the *critical gaps* in the development process.

The Department (December 2018) accepted the Audit observation regarding absence of Detailed Action Plans as recommended in the PDP and stated that it would be taken for future guidance.

PUAD even after 12 years of its creation had, thus, failed to prepare any comprehensive plan identifying the *critical gaps* in development of this area.

Recommendation-II

Install a mechanism to identify the critical gaps to be filled in for uniform development of the area.

2.2.7.2 Annual Action Plans

Scrutiny of Annual Action Plans (AAPs) available for three years (2014-15 to 2016-17) showed that total 2699 schemes were approved at a cost of ₹211.11 crore in three years. Principal Secretary, PUAD while issuing directives for submission of AAPs to DMs at the beginning of each year stipulated that the plan and estimate must be vetted by the appropriate authority/engineer and the site on which the schemes were to be executed should be free from all encumbrances.

Of the test checked 40 cases, in 12 schemes valuing ₹ 1.42 crore, site as well as purpose were changed by the concerned Block Development Officers (BDOs) with the approval of the DMs due to various reasons like land disputes, inappropriate site selection *etc.* These instances indicated that AAPs were approved without verification of the technical feasibility or ground reality.

The directives of PUAD also stipulated that the size of the schemes was to be in the range of ₹ 20-25 lakh or more. It was, however, seen that 87.66 *per cent* of the total approved projects⁹⁴ were less than ₹ 20 lakh. The Department stated (December 2018) that in order to fill the critical gap on urgent basis there was no other alternative but to sanction schemes of lesser amounts. There were, however, no such indications of urgency justified in the records for approving the AAPs.

⁹³ AAP contains the schemes proposed by DM which covers only about 30 per cent of the total schemes estimated during audit period.

⁹⁴ 2366 out of total 2699 projects proposed.

2.2.7.3 Non-convergence of activities of PUAD with other departments

Panchayat & Rural Development Department (P&RDD), GoWB, prepared (July 2014)⁹⁵ a roadmap to ensure effective convergence⁹⁶ between MGNREGS⁹⁷ and other programmes undertaken by various departments which included PUAD along with 17 departments. It was stated that resources from PUAD associated with local area development would be dovetailed with MGNREGS for creation of durable assets.

PUAD in Annual Administrative Reports since 2012-13 identified activities in the following areas for development of PUP area in convergence with MGNREGS:

- (i) Minor Irrigation
- (ii) Making Provision for Drinking water
- (iii) Charging/Re-charging of ground water and conservation thereof
- (iv) Infrastructure development for schools and other educational institutions
- (v) Upgradation of health infrastructure
- (vi) Construction of Rural Roads, small bridges/culverts
- (vii) Construction of Integrated Child Development Scheme (ICDS) buildings (Anganwadi Centre-AWC)
- (viii) Development of Fisheries, Horticulture, Animal Resource Development, Lac cultivation and Afforestation.

It was observed that none of the above activities with the exception of construction of Anganwadi Centres (AWCs) was implemented in convergence with MGNREGS.

The Chief Secretary assigned PUAD with the work of construction of 1937 AWCs in four districts⁹⁸ in convergence with MGNREGS during the period from 2013-14 to 2015-16. Records revealed that PUAD constructed total 1775 AWCs in PUPA during that period. Out of these only 50 AWCs (3 per cent) were constructed (2013-14) by PUAD in convergence with MGNREGS.

In their reply PUAD stated (December 2018) that though they had worked on the convergence, the desired outcomes had not materialised.

2.2.7.4 Sustainable Development Goals (SDGs) for PUP area

To end poverty in all its dimensions and craft an equal, just and secure world by the year 2030, 193 Member States of United Nations adopted 17 Sustainable Development Goals (UNSDGs)⁹⁹. India, as a member of UN General Assembly, is a signatory to said UNSDGs. Every state is required to pay due attention for framing and implementing necessary policies, plans and programmes to achieve the UNSDGs.

⁹⁵ Road map for convergence between MGNREGA and other programmes and convergence Action Plan 2014-15.

⁹⁶ Pooling of resources, sharing of technical expertise, developing common understanding and action plan.

⁹⁷ Mahatma Gandhi National Rural Employment Guarantee Act (Scheme).

⁹⁸ Birbhum, Burdwan, Purulia and Bankura.

⁹⁹ SDGs were adopted at the General Assembly Summit in September 2015 and came into effect on 1 January 2016.

The Department of Planning, Statistics & Programme Monitoring (DPSPM) was to coordinate the preparation of Plan Documents for meeting SDGs in respect of different departments of the State of West Bengal. DPSPM prepared “Sectoral Vision, Mission, Objectives, Key Performance Indicators (KPIs) and UNSDG alignment” and identified the SDGs in synergy with the development activities in PUPA. PUAD was required to provide inputs to DPSPM regarding SDGs applicable in PUPA. It was observed that there were lapses on the part of PUAD in providing necessary inputs to DPSPM for finalisation of Action Plan in line with the objectives of SDGs as detailed below:

- PUAD had not furnished information relating to finalisation of the Plan Documents on UNSDGs sought by DPSPM in February 2017. For submission of requisite information PUAD engaged Indian Institute of Technology, Kharagpur (March 2017) at a cost of ₹ 74 lakh, which was yet to be submitted as of July 2018.
- Further, data needed by DPSPM in respect of 31 KPIs relating to PUAD for finalisation of Action Plan was pending as of July 2018.

In reply PUAD stated (December 2018) that the matter was being taken up with IIT, Kharagpur for submission of requisite information and with the other line departments for extending supports.

Even after 12 years of its creation, the Department was yet to ensure proper planning to identify and fill the *critical gaps* and to ensure integrated development of PUPA. Expenditure incurred for the preparation of the Perspective Development Plan for the department was a wasted exercise as no detailed action plan was made as envisaged to ensure that development goals identified in the PDP were achieved. PUAD failed to respond to the initiative taken by Department of Planning, Statistics & Programme Monitoring for preparation of UNSDGs related to PUPA.

Recommendation-III

Set measurable targets for achievement in terms of human development (income levels, literacy, BPL card holders, net cropped area etc.).

2.2.8 Availability of adequate funds, their timely allocation and judicious utilisation

2.2.8.1 Utilisation of fund vis a vis Allocation

As per the Government Order¹⁰⁰ (GO) constituting PUAD, development schemes and projects operated by different departments in PUP area were to be coordinated by PUAD. PUAD had, however, not maintained any database of investments/ expenditure made by other departments/ agencies in PUP area.

It was observed that GoWB allocated ₹ 1388.70 crore for PUAD during 12th FYP period (2012-13 to 2016-17). In absence of any data base in respect of the expenditure incurred by other departments, PUAD was not in a position to review whether sufficient investments for development of the area had been made.

¹⁰⁰ No. 194- Home (Cons) R2R (Cons)- 10/ 06 dated 12.07.2006.

During the period (2012-18), total funds of ₹ 2080.63 crore was allotted to PUAD, out of which only ₹ 1695.01 crore (81.47 per cent) was utilised. It was observed that factors like non-commencement/non-completion of the schemes attributed to the poor progress of the different projects as detailed in following paragraphs.

2.2.8.2 Unauthorized diversion of funds

- (i) DM, Purba Burdwan included (March 2012) two works¹⁰¹ proposed by Damodar Head works Division (Minor Irrigation), in the AAP of 2012-13. PUAD sanctioned (July 2012) these two works at a total cost of ₹ 4.07 crore¹⁰² and released the amount in two equal instalments (August 2012 and May 2013). Works were completed at a total cost of ₹ 3.32 crore¹⁰³ leaving ₹ 0.75 crore unspent. It was observed that the unspent funds were not subsequently refunded to the sanctioning authorities and were utilised (June 2014 and March 2015) by Damodar Head works Division (Minor Irrigation) in two other schemes¹⁰⁴ without taking concurrence of PUAD. This indicated that PUAD had no financial control and was not monitoring the funds released to the implementing agency as no instructions for refund of unspent funds were included in the sanction orders, resulting in unauthorised diversion of the funds.
- (ii) In another case, PUAD sanctioned and released (October 2012) an amount of ₹ 7.89 lakh for special repairing of Damaged Steel Bridge on Naharkhal in Jhargram block to PUP. The sanction order of PUAD indicated that DM, Paschim Medinipur would be the implementing authority for the work. It was, however, noticed from the correspondence (December 2013) of the concerned Block Development Officer, that the work was not needed to be executed as PUP had already taken up (September 2013) the work of reconstruction of that Bridge as implementing authority under the PUAD's orders (September 2013). PUAD released funds amounting to ₹ 1.27 crore to PUP for this work.

The funds sanctioned for repair work amounting to ₹ 7.89 lakh were, however, not surrendered by DM but utilised for construction of an ICDS centre¹⁰⁵ at Salukgeria without obtaining concurrence of PUAD.

It was evident that PUAD did not have any system in place for keeping track of the approved works owing to which the works of repair and reconstruction of the same bridge was taken up at the same time and allotted to two different

¹⁰¹ (1) Re-sectioning of Durgapur branch canal from ch.0.00 to ch. 268.00 in block Kanksa- ₹ 184.92 lakh (2) Re-sectioning of Durgapur branch canal from ch. 268.65 to ch.757.00 including repairs of existing damaged lining from ch.268.65 to ch.420.00 and construction of precast C.C. lining from ch.565.00 to ch.580.00 in block Kanksa and Ausagram-II- ₹ 221.96 lakh.

¹⁰² ₹1.85 crore and ₹ 2.22 crore.

¹⁰³ ₹ 1.10 crore and ₹ 2.22 crore.

¹⁰⁴ (1) Protection to the eroded both bank of drainage channel at mouza bhaluksonda, Ramprosadpur in Madanpur under Andal (2) Four schemes costing ₹ 13.00 lakh under Salanpur Panchayet Samiti, Burdwan.

¹⁰⁵ Anganwadi Centre under Integrated Child Development Scheme, a centrally sponsored scheme.

agencies. Further, the unauthorised diversion of funds indicated that PUAD did not have control over the actual utilisation of funds.

The Department replied (December 2018) that the matters were being taken up with concerned DMs.

2.2.8.3 Irregularities in tendering process

During the course of audit following irregularities were noticed in the test checked tenders:

(i) Non-observance of e-tendering process

GoWB mandated (May 2012)¹⁰⁶ publication of notice inviting tender on e-tender portal for any work valuing more than ₹ five lakh. It was, however, observed that PUP, did not follow the norms of e-tendering in respect of total 23 schemes valuing ₹ 8.88 crore under four sectors¹⁰⁷ and awarded works through offline open tenders in violation of the orders of the Finance Department. Reasons for non-compliance to the mandate were not found on record.

(ii) Undue benefit to the supplier

Under lac cultivation sector, PUP procured (July 2015) 16080 kg broodlac at the rate of ₹ 430 per kg on payment of ₹ 69.14 lakh from a private agency selected through offline open tender without following the norms of e-tendering.

Scrutiny of detailed estimates prepared (September 2014) by PUP showed that the cost of procurement and supply of broodlac was taken at the rate of ₹ 430 per kg and the agency was paid the price. It was, however, observed that in July 2015, Indian Institute of Natural Resins and Gums, Ranchi intimated PUAD that the then prevailing rate of broodlac was ₹ 250 per kg. At this rate, the purchase could have been made at ₹ 40.20 lakh.

Thus, due to non-observance of financial norms PUP could not avail the benefit of competitive rates which resulted in extra expenditure of ₹ 28.94 lakh¹⁰⁸.

(iii) Payment of cost escalation charges of ₹ 1.40 crore in excess of agreed terms

There was no cost escalation clause in the agreements for construction of Anganwadi Centres (AWC). PUAD sanctioned/ released in September 2014, ₹ 20.56 crore to the DMs of Bankura and Birbhum for construction of 284 units of AWCs. A unit cost of ₹ 7.24 lakh was fixed for 2014-15 after adding five *per cent* to the unit cost of 2013-14 approved by Chief Engineer, PWD. It was, however, observed that, PUAD sanctioned and released (February 2015) additional funds of ₹ 1.40 crore at the rate of ₹ 49,129 per unit towards cost escalation of the materials though not provided in the agreement. No reason/ justification for such payment in excess of the terms of agreement were found on record.

¹⁰⁶ 3739- F(Y) issued by Finance Department, Audit Branch, GoWB.

¹⁰⁷ Agriculture, Health and Education, Drinking Water Sector and Lac cultivation.

¹⁰⁸ Excess paid-₹180 per kg (₹ 430 - ₹ 250), Excess payment - ₹ 28.94 lakh for 16080 kgs.

(iv) Violation of the provisions of SOR and agreement

SOR¹⁰⁹ as well as the conditions of the agreement stipulated that payments for extra rate for earth transportation (if any) was to be made only on the basis of stack measurement and the location of disposal was to be certified by the Engineer in charge. It was, however, noticed that in one pond excavation work¹¹⁰, ₹ 36.41 lakh was made to the agency for transportation of earth without recording any stack measurement or certifying the location of disposal of the carried earth.

Financial irregularities aggregating ₹ 11.47 crore including cases of unauthorized diversion of funds, non-adoption of e-tendering norms and payment of cost escalation charges beyond the scope of agreement observed in Audit indicated non-judicious use of funds.

2.2.9 Efficiency and effectiveness in implementation of schemes to achieve intended objectives

2.2.9.1 Drinking Water Sector

In Drinking Water Sector, out of 18 schemes executed by PUP during 12th FYP period at the approved cost of ₹ 12.21 crore, five schemes were selected for detailed checking. Audit observations were as follows :

(a) Unfruitful expenditure of ₹ 3.86 crore on drinking water schemes in health centres

As per the Reports of the schemes, water being used for drinking at the Block Primary Health Centers (BPHCs) was found to be contaminated with Iron, Totally Dissolved Solids (TDS) and Microbials. PUAD sanctioned (December 2012 and February 2013) ₹ 5.51 crore for installation of treatment plants for purified drinking water in 20 BPHCs in Jhargram and Bankura Districts. The scope of the work was to treat water at these BPHCs by installing iron treatment units and Reverse Osmosis System to reduce the TDS. The works were completed at a final cost of ₹ 5.51 crore by March 2014. It was observed that:

- As per the data provided by PUP (June 2018) only four plants were in running condition and 14 plants were not functioning. Status of the remaining two was not provided to Audit.
- PUAD incurred a total expenditure of ₹ 57.19 lakh on the Annual Maintenance Contract (AMC) for the said 20 plants during August 2014 to January 2016. Even after incurring expenditure on AMC, it was seen that only four out of 20 drinking water plants were functional.
- A joint inspection of five plant sites was conducted with the PUP officials in June 2018. This showed that three were lying in dilapidated condition. In other two plants, water was not being treated for chemical contamination, hence not safe for drinking.

None of the plants were taken over by the concerned BPHCs as of March 2018. It was observed that the contract for installation of drinking water plants did not envisage any provision for default liability or subsequent maintenance. Thus,

¹⁰⁹ SOR of WRIDD of 2010 vide page number 126 item no 2 (a).

¹¹⁰ Re-excavation of Rajbunth at lalgarh in Paschim Medinipur.

due to non-maintenance, benefits of the scheme were not achieved resulting in unfruitful expenditure of ₹ 3.86 crore on installation of 14 non-functional drinking water plants.

The Department stated (December 2018) that they would co-ordinate with the PUP and the BPHCs.

(b) Implementation of potable drinking water facilities in 104 schools without ensuring proper testing of water sample for presence of harmful chemicals

As per a report by Public Health Engineering Department (PHED), 10 blocks¹¹¹ of Bankura were severely affected by Fluoride contamination. Seven other blocks¹¹² of Bankura were moderately affected. DM, Bankura requested (April 2013) PUAD to take up the sinking/re-sinking work of tube-wells or to provide any alternative arrangement of potable drinking water in 704 schools. PUAD, however, sanctioned (May 2013) sinking of only 332 deep tube-wells (₹ 1.44 lakh per tube well) at an estimated cost of ₹ 4.79 crore. PUP was to implement the scheme in different schools within Khatra Sub-Division of Bankura which was, as per PHED's Report, severely affected with fluoride contamination. The scope of the work included provisions for collection of water samples and submission of bacteriological and chemical test reports of the same during sinking and re-sinking of tube-wells.

It was observed that PUP issued work orders to 12 agencies between February and March 2014. Of these 12 agencies, three did not submit the bacteriological and chemical test reports while one agency submitted test report but without any test conducted for presence of fluoride.

PUAD, while sinking 104 tube-wells at a cost of ₹ 1.50 crore, thus, failed to ensure that the water of the tube-wells installed by the four agencies without conducting the required tests, was pure and safe for consumption by school students. The risk of supply of contaminated drinking water to these schools persisted.

The Department stated (December 2018) that they were requesting PUP for specific comments.

2.2.9.2 Roads, Bridges and Culverts (Transport) Sector

During the period, audit was conducted, PUAD had taken up 246 schemes in Roads, Bridges and Culverts at a total cost of ₹ 177.05 crore. Detailed examination of records of selected 71 works¹¹³ at the estimated cost of ₹ 69.06 crore revealed the following deviations/ lapses :

(i) Roads constructed without conducting preliminary investigations

As per Indian Road Congress (IRC) Guidelines¹¹⁴, Preliminary investigation is the process of assimilation of data which are to be utilised in the preparation

¹¹¹ Gangajal Ghati, Raipur, Mejia, Bankura-II, Chatna, Taldangra, Saltora, Simlapal, Hirabandh and Barjora.

¹¹² Bankura-I, Indpur, Indus, Khatra, Onda, Sarenga and Sonamukhi.

¹¹³ Four works each with an estimated cost of ₹5.00 crore and remaining 67 works each with estimated cost below ₹ 5.00 crore.

¹¹⁴ IRC:SP:57-2000 Clause 2.7.2.4 (A).

of the DPR and technical estimates of works. This investigation involves topographical survey, traffic census, soil investigation *etc.* It was observed that in two works¹¹⁵ of estimated cost of ₹ 10.18 crore, roads were constructed without preliminary investigations as the estimates did not contain any report of this effect. As such, the roads were constructed not in conformity with the standards prescribed in IRC guidelines. This raises the risk of premature failure of the roads.

(ii) Approval of a bridge work without conducting feasibility study

BDO, Jamboni submitted to PUP a scheme for the work¹¹⁶ of construction of Reinforcement Cement Concrete (RCC) Box Bridge with an estimated cost of ₹ 28.50 lakh. It was observed that PUP failed to carry out a need assessment of the work, neither sought the preface report from the BDO nor verified the estimates with the site condition to ensure the feasibility of the work before submitting the proposal to PUAD. PUAD approved the scheme and released funds to PUP in May 2015. PUP floated the tender and awarded the work to an agency in September 2015. Thereafter, in October 2015, before taking up the work, the concerned Assistant Engineer along-with Sub-Assistant Engineer of PUP visited the site and found that construction of Box Bridge was not feasible as the designed width of the bridge was not matching with the site. It was noted from the records that PUP requested PUAD for cancellation of the administrative approval and financial sanction. The work was stalled for want of soil testing and preparation of new DPR by PUP.

It was evident projects/works were being approved and funds sanctioned without carrying out any need and feasibility assessments by PUAD thereby exposing itself to incurring expenditure on unnecessary projects and not in filling the real *critical gaps*.

(iii) Extra expenditure incurred on construction of two roads in deviation of IRC guidelines

Indian Roads Congress (IRC) Guidelines¹¹⁷ stipulate thickness and specification of road to be constructed on the basis of strength of sub-grade soil¹¹⁸ which is expressed in terms of California Bearing Ratio¹¹⁹ (CBR) and the projected traffic volume (expressed in ESAL/ *msa*¹²⁰) during the design life¹²¹ of the road. Audit observed deviations from the IRC Guidelines in designing of roads as detailed below:

¹¹⁵ (1) Construction of Metal Road from Kalaikunda towards Salua CRPF campus at Kharagpur-1 in the District Paschim Medinipur (2) Widening of Bituminious road from Binpur to Papatpur Nadi Ghat via Harda & Murgi More, Binpur-I Block 2.

¹¹⁶ Construction of RCC Box Bridge at Dhaniamunder Jamboni Block in the District of Paschim Medinipur.

¹¹⁷ IRC: SP: 72-2007 and IRC:37-2012.

¹¹⁸ The native material underneath a constructed road.

¹¹⁹ The California bearing ratio (CBR) is a penetration test for evaluation of the mechanical strength of natural ground, subgrades and base courses beneath new carriageway construction.

¹²⁰ Equivalent Single Axle Load/ Million Standard Axles.

¹²¹ The design life of a road is defined in terms of years arrived at by considering the cumulative number of standard axles (vehicles) that can be carried.

- PUP awarded (November 2016) a road work¹²² to an agency at the tendered amount of ₹ 5.55 crore to be completed within 200 days. The work was completed in May 2017 with a total expenditure of ₹ 6.94 crore. Scrutiny revealed that based on the sub-soil strength and projected traffic volume of the roads mentioned in the detail estimates¹²³ total thickness required to be provided as per the IRC Guidelines was 385 mm¹²⁴. It was, however, observed that the PUP allowed 500 mm of total thickness of the pavement¹²⁵, in deviation of IRC guidelines. As a result, PUP incurred an extra expenditure of ₹ 1.21 crore¹²⁶.
- In another estimate of a road work¹²⁷ msa was considered as 3.23 instead of 1.83. Due to allowing inflated msa, the specification of the road was increased which was not required as per the traffic load. Laying of extra thickness of bituminous items resulted in an avoidable expenditure of ₹ 1.68 crore.

Excess expenditure of ₹ 2.89 crore was, thus, incurred owing to non-compliance of the IRC guidelines in framing the pavement design and executing the works.

(iv) Blocking of funds

PUAD accorded (February 2016) administrative and financial sanction of ₹ 9.54 crore for construction of a Reinforcement Cement Concrete (RCC) bridge¹²⁸. PUP, in turn, awarded the work to an agency at the tendered cost of ₹ 8.57 crore for completion by February 2018. The agency initially started some preliminary work in June 2017, subsequently the work remained suspended. The agency cited that the required land for approaching the site was not made available and for that reason they had been facing difficulty in transporting machineries and materials. Citing these reasons, the agency sought (March 2018) time extension up to January 2020, which was yet to be approved by PUP. As of May 2018 ₹ two crore was paid (May 2016) to the agency.

It was observed that PUP requested (May 2017) the concerned Block Land & Land Reforms Officer (BL&LRO), after a lapse of nine months, to prepare a proposal for land acquisition in connection with the work. Thus, injudicious decision of PUP in taking up work without ensuring accessibility to the site resulted in blocking of funds of ₹ two crore.

The Department stated (December 2018) that they were taking up the matter with implementing agencies and PUP for specific comments in respect of all the observations made on this sector.

¹²² “Widening & Strengthening of Lalgarh – Dherua Road from 0 kmp to 7 kmp”.

¹²³ CBR value of 2.8 per cent and ESAL 187629.

¹²⁴ Including bituminous treatment with 20 mm premixed carpet and 6 mm seal coat at the top surface.

¹²⁵ Including 75 mm BM and 25 mm SDBC.

¹²⁶ ₹ 0.86 crore on BM and ₹ 0.35 crore on SDBC.

¹²⁷ Construction (Widening & Strengthening) of Road from Asui to Suliapata 11 km in the district of Paschim Medinipur.

¹²⁸ Kantabera of Garafusra GP over Kangsabati river.

2.2.9.3 Irrigation, Water & Land Conservation and Agriculture Sectors

The major portion¹²⁹ of PUP area falls under undulating red lateritic zone and there is limited scope to harness ground water reserves. Due to undulating nature of the land, water flows as run off, resulting in soil erosion. During the period of audit, 52 schemes of pond excavation, construction of Check Dams (CD)¹³⁰ etc. with sanctioned estimated cost of ₹ 25.51 crore were taken up by PUAD. Besides, PUAD had also been entrusted with (June 2014) another 21 irrigation structures under Jalatirtha¹³¹ with project cost of ₹ 16.37 crore.

Audit selected 15 schemes costing ₹ 8.22 crore out of the 52 schemes and all 21 irrigation schemes under Jalatirtha for test-check. The following irregularities and lapses were found in audit :

(i) Re-excavation of ponds

PUAD sanctioned and released ₹ 5.97 crore between January 2014 and February 2017 for implementing three schemes on re-excavation of three ponds¹³². The works were awarded to three different agencies at a total tendered cost of ₹ 4.93 crore. It was observed that:

- As per the norms for the preparation of the DPR for surface minor irrigation schemes under Accelerated Irrigation Benefit Programme, Benefit Cost Ratio (BCR)¹³³ should be calculated in the Detailed Project Report (DPR) for assessing the feasibility of the work. It was observed that in all three works DPR was not submitted to PUAD and as such no BCR was computed for the schemes. Despite this, funds amounting to ₹ 5.97 crore were released. In the absence of any approved DPR, the specifications of the re-excavation work was not known so it could not be assessed whether the work was completed as per specifications and the intended benefits were achieved in terms of the area to be irrigated.
- It was also observed that in two works¹³⁴ the actual cost for disposal of excavated earth from the work site was enhanced abnormally (66 to 100 per cent) from the estimated cost of ₹ 0.76 crore to ₹ 1.85 crore. In the estimates the actual distance of the site for disposal of excavated earth of the ponds was not considered owing to which the cost of the disposal enhanced by ₹ 1.09 crore. This indicated that the sanctioned estimates were not as per the actual site conditions.
- In respect of re-excavation of the pond¹³⁵, it was observed that the pond was owned by three private owners. Despite this, PUP implemented the work at a cost of ₹ 1.98 crore without executing any agreement with the land owners regarding sharing of water of the pond between the owners and the local farmers for irrigation purposes. The use of the water of the private pond developed by PUAD funds for irrigation purposes by the local farmers was, thus, not ensured.

¹²⁹ Bankura, Purulia, Birbhum and major part of Paschim Medinipur.

¹³⁰ A small burrier constructed across waterways for the purpose of control of soil erosion by reducing flow of water.

¹³¹ A minor irrigation scheme mainly consisting of Check Dam and Water Retention Structure taken up by the state in 2014 where WRIDD is the nodal department.

¹³² Rajbandh at Lalgarh, Rajbandh at Ramgarh and a big pond at Kui Mouza.

¹³³ Ratio of cost of the benefits with reference to the cost of the project.

¹³⁴ Rajbandh at Lalgarh, Rajbandh at Ramgarh.

¹³⁵ Rajbandh at Lalgarh in Binpur-II block.

(ii) *Infructuous expenditure on Construction of Check Dam (CD) under Jalatirtha*

PUAD sanctioned and released (August 2015) ₹ 16.37 crore to PUP for construction of 21 CD¹³⁶. DPRs of these schemes envisaged provision of water transmission arrangements with Poly Vinyl Chloride (PVC) pipes and water lifting devices so that water from CD could reach to the fields. DPR also provided for the formation of Water Users Associations (WUAs) among the beneficiary farmers in the command area for maintenance of the water lifting devices after installation.

Out of the allotted funds, as of May 2018, an expenditure of ₹ 10.46 crore was incurred on construction of the structures. The work of water transmission lines was, however, not taken up even in April 2018. Due to non-execution of the water transmission arrangements to the fields, benefit of creation of these assets could not be extended to the beneficiaries. This resulted in the entire expenditure of ₹ 10.46 crore becoming infructuous.

In the concerned records, reasons for not taking up these allied works, attributed by the concerned Executive Engineer of PUP, were huge expenditure beyond the estimated amount and absence of WUA for maintenance of the water lifting devices after installation. The reason of expenditure being beyond the estimated amount was not acceptable as the Department still had ₹ 5.91 crore left for water transmission arrangements. It was further observed that at the time of preparation of the DPRs, the farmers had agreed to form WUAs. This indicated failure on the part of the department in formation of WUAs for effective utilization of the assets.

The Department stated (December 2018) that they were working on an understanding with WUAs for maintenance.

2.2.9.4 *Health Sector*

Audit examined all the four schemes¹³⁷ of health sector implemented by PUAD during the Audit period. The objectives of three schemes, which were not fully achieved are detailed in the following observations:

Benefit of the schemes not fully achieved

(i) Member of Legislative Assembly (MLA), Barjora of Bankura district sent a proposal with estimates to PUAD for sanction of funds for construction of separate wards for mother, children, Out Patient Department OPD clinic *etc.* in Amarkanan Rural Hospital.

PUAD sanctioned ₹ 58.25 lakh in June 2015 to PUP for execution of work. The scheme, *inter alia*, included new operation table, multipara monitor¹³⁸ *etc*¹³⁹. It was seen that PUP issued Notice Inviting Tender (NIT) in August 2015 for

¹³⁶ *Vide no- 772/PM/P/1B-45/14 dated- 10 August 2015.*

¹³⁷ (1) *Construction of separate ward for mother, children, OPD clinic etc. of Amarkanan Rural Hospital, (2) Infrastructure development of Amarkanan Rural Hospital, (3) Construction of two boundary walls of Garhbeta Rural Hospital and (4) Renovation work of Nekre Sub Health Centre under Gerua Gram Panchayat at Balarampur block in the district of Purulia.*

¹³⁸ *Monitors vital parameters like heart rate, respiration etc.*

¹³⁹ *Construction of female ward/labour room, OPD clinic for female patients, repairing work of existing buildings and annex buildings of the hospital, painting and other necessary work of the existing buildings, repairing work of diarrhoea ward/male ward/patient party waiting hall of the hospital and installation of submersible pump and pipeline for water supply of hospital.*

all components except the new operation table and multipara monitor. These machines were required in Sick Newborn Stabilisation Unit/ labour room/ OPD clinic and operation theatre. Their estimated cost was ₹ 10.00 lakh. The work was awarded in November 2015 and completed in October 2016. The agency was paid ₹ 32.58 lakh in February 2017. This left a balance of ₹ 25.67 lakh as unspent funds which were yet to be refunded as of May 2018.

Thus, even though PUAD had released the entire funds for the work, PUP did not take up all the components. There was no recorded reason as to why all the components as sanctioned by PUAD were not procured by PUP. As such, the beneficiaries were deprived from getting the intended benefits of the schemes mainly in respect of Sick New-born Stabilisation Unit (SNSU)/ labour room/ OPD clinic and operation theatre.

(ii) MLA, Garhbeta of Paschim Medinipur district placed a proposal (February 2017) to PUAD for construction of two boundary walls as Part-I and Part-II works of Garhbeta Rural Hospital. PUAD sanctioned and released (March 2017) ₹ 1.08 crore for both the works. But, PUP in May 2017 invited e-NIT for Part-II work only and work order was issued in August 2017. The work was completed in February 2018 and the agency was paid ₹ 66.73 lakh in March 2018. It was observed that even though the PUAD had released the entire fund for both Part-I and Part-II works, PUP took up execution of only the work of Part-II and the balance fund remained unutilised and retained by PUP. Reasons for not taking up the other work were not found on records.

Thus, due to incomplete nature of the work undertaken by PUP, the objective of providing safety and security to the hospital through construction of the boundary walls remained unrealized.

The Department stated (December 2018) that they are requesting PUP for specific comments.

2.2.9.5 Construction of Anganwadi Centres

Chief Secretary, Government of West Bengal intimated (May 2013) PUAD that out of the sanctioned 1,16,390 Anganwadi Centres (AWCs) in West Bengal, more than 70 per cent were running in makeshift hired premises with inadequate space. As such, they lacked facilities like kitchen, storage, toilet, water supply, play area etc. Hence, with the objective of ensuring nutrition and hygiene needs of the children/ lactating mothers, Chief Secretary requested to make budget provisions to construct 1971 AWCs at a total cost of ₹ 142.26 crore in four districts of PUAD¹⁴⁰ by 2015-16.

The following were the observations:

- It was observed that DM, Birbhum proposed in October 2013 to PUAD for construction of 119 AWCs in Birbhum district in convergence with MGNREGS. PUAD however, released the funds without following the model estimate for construction of AWC under MGNREGS. PUAD sanctioned and released (November 2013) ₹ 8.21 crore at the rate ₹ 6.89 lakh per unit based on the estimates prepared by Public Works Department. It was, however, observed that during the same period

¹⁴⁰ Purulia, Bankura, Burwan & Birbhum.

PUAD released funds to DM Bankura for construction of 50 AWCs as per the model estimate approved at the much lower rate of ₹ 4.5 lakh per unit.

Thus, the PUAD sanctioned and released funds to the DM, Birbhum for construction of AWCs, without considering the model estimates in line with the convergence with MGNREGS. This resulted in an extra release and expenditure of ₹ 3.42 crore.

- In Purulia district, as of October 2017, 141 units of AWCs were constructed against the target of 183 units set in the year 2013-14. The reasons for non-completion of 42 units were mainly non-availability of land, land disputes *etc.* This indicated that PUP did not ensure the land free from all encumbrances before taking up the work of construction of AWCs. This resulted in blocking of fund of ₹ 3.49 crore for four years, as of March 2018, apart from the benefits of these AWCs not reaching the intended beneficiaries.

The Department replied (December 2018) that they would follow the guidelines in future.

2.2.9.6 Other Sectors

Audit also scrutinized records of 23 schemes in other sectors. The observations are detailed as below:

(i) Financial assistance to the private society without ensuring other infrastructure support resulted in unfruitful expenditure

The Secretary of a Society¹⁴¹ requested PUP in January 2013 to construct a building in Society premises as soil testing laboratory for the farmers. It was stated in the application of the Society that it was engaged in agro based production and introduction of variety of seeds of paddy, onion, turmeric, sunflower *etc.* Audit, however, did not find any supporting documents on records in support of this.

PUP accordingly submitted to PUAD a proposal with estimates for construction of a two storied building for Soil Testing Laboratory in the premises of the Society in January 2013. PUAD sanctioned and released ₹ 31.12 lakh¹⁴² to PUP. The work was awarded to a contractor in September 2013 and was completed in July 2014 at total cost of ₹ 30.31 lakh.

During a joint site visit conducted in December 2018 with PUP officials, it was observed that the Soil Testing Laboratory was lying unutilized as the required equipment had not been procured by the Society so far.

It was observed that PUP, while accepting the request of the Society and forwarding the proposal for construction of the building has failed to verify the capability of the Society to procure and install the required infrastructure for functioning of the laboratory. Thus, even after lapse of four years since completion of the building the main objective of testing of the soil for the farmers of the surrounding areas was not achieved as of March 2018.

The Department stated (December 2018) that PUP was being requested for specific comments.

¹⁴¹ *Sree Sree Gyananda Saraswati Ashram, Dalpur, Dist- Bankura.*

¹⁴² *Vide No-121/PM(F)/IB-95/2013 dated- 16 May 2013.*

(ii) Eco-Tourism Hut remained un-utilised

PUAD sanctioned¹⁴³ in November 2015, funds of ₹ 50.28 lakh for the work of construction of Eco-Tourism Hut¹⁴⁴ in Paschim Medinipur District. The primary objective of the scheme was to generate extra livelihood through eco-tourism for the local tribals. PUP released the full amount to the DM, Paschim Medinipur in November 2015. The DM, Paschim Medinipur, further, sub-allotted the fund to Sankrail Panchayat Samity in February 2016. The work was completed in February 2017 after incurring expenditure of ₹ 50.28 lakh. Sankrail Panchayat Samity sent (May 2017) Utilisation Certificate (UC) of full amount released to the DM.

Joint Site Inspection conducted with the officials of the concerned BDO office (May 2018) revealed that there was no booking for the cottages due to lack of infrastructure like electricity, canteen facilities and connectivity. As a result, the expenditure of ₹ 50.28 lakh incurred on the scheme was not only rendered infructuous but also the intended objective of generating extra livelihood for the local tribals remained unachieved.

The Department stated (December 2018) that the concerned implementing agency (DM, Paschim Medinipur) was being requested for specific comments.

Recommendation-IV

Institute a mechanism of cooperation with other departments so that an integrated plan can be developed, identifying works to be done by PUAD and those by other line departments.

2.2.10 Monitoring mechanism of PUP and PUAD**2.2.10.1 Absence of Acts/ Rules/ Manuals**

The Department even after 12 years since its creation in July 2006, had not so far framed any Act/ Rules/ Regulations/ Manual to regulate different activities of PUAD/PUP. Records revealed that a Draft Paschimanchal Unnayan Parshad Bill had been approved in December 2015 for its enactment in Legislative Assembly, but it has not been enacted so far. Nothing was on record to show why the bill had not been enacted even as of April 2019.

The Department stated (December 2018) that they are working on it.

2.2.10.2 Absence of database

With a view to managing and monitoring the pace and progress of all developmental activities across the PUP area on real time basis along with provisions for capturing project-wise details of all civil works including financial details, PUP decided (October 2014) to develop a software “Integrated Financial Management/ Monitoring and Accounting System (IFM/MAS)” alongwith Management Information System (MIS). The system would generate reports on performance, fund transactions and analytics. Accordingly, PUP invited (January 2015) an Expression of Interest (EOI) for developing the software. Thereafter no further progress was made in this regard (December 2018).

¹⁴³ Vide order no.1059/PM(F)/P/1B-182/2015 dtd.02.11.2015.

¹⁴⁴ Comprising three cottages at Kodopal of Sankrail Block.

Due to the lackadaisical approach of PUP, the web based IFM/ MAS along with MIS could not materialise even after lapse of three years and eight months from the day PUP took the decision in October 2014. As a result, PUP did not have any comprehensive database (scheme-wise and implementing agency-wise) in respect of total schemes implemented and total expenditure incurred with the funds of PUAD and other departments for development of PUPA.

The Department stated (December 2018) that they are working on it.

2.2.10.3 Weak and deficient monitoring mechanism in PUAD/PUP

As per the draft Perspective Development Plan prepared by IIT, Kharagpur, besides preparation of detailed Action Plans, PUAD/PUP was required to develop a mechanism of monitoring the implementation of the programmes for development of PUPA. It was observed that the existing mechanism of monitoring of PUAD/PUP was very weak and deficient. Deficiencies observed in the monitoring activities of PUP have been indicated in following **Chart 2.2.1**:

Chart 2.2.1: Deficiencies in the monitoring activities of PUP

Functioning of General Body (GB) and Executive Committee (EC) of PUP	<ul style="list-style-type: none"> Neither the terms of business nor the role and responsibilities of the GB and the EC were specified in the Government Orders by means of which they were formed or in any subsequent orders/guidelines.
Activities of General Body (GB)	<ul style="list-style-type: none"> Only four meetings held in 18 years. Besides, confirming the minutes of last meetings, the discussions made in all the four meetings were mainly on progress on works, utilisation of fund, formulation of schemes for the next year, however, no follow up of its decisions conducted.
Activities of Executive Committee (EC)	<ul style="list-style-type: none"> EC conducted only seven meetings in 18 years. The common agenda were(a) Preparation/Approval of Annual Action Plans of Schemes of different districts, (b) Utilisation of fund including collection of UCs and (c) Contractual appointment of staff/officers. All the decisions taken and instructions given remained neglected as of March 2018. EC did not review the matters resolved in these meetings to assess how far the decisions had been complied.
Internal control, monitoring, evaluation and coordination in PUP/PUPA	<ul style="list-style-type: none"> No section/cell for monitoring, plan and workings of different implementing agencies in respect of schemes/ projects implemented by them in PUP areas. No internal audit wing. No periodical monitoring and evaluation report on the progress and achievement of different schemes/projects. No data base or MIS in order to evaluate the progress and achievement and to take necessary remedial action. No independent evaluation. No physical inspection after execution of work.

The Department stated (December 2018) that they are working on it.

2.2.10.4 Adequacy of Human resources

A sound infrastructure including adequate human resources is an integral part for effective planning and implementation of schemes/projects in line with the overall objective of the department.

PUAD/PUP had, however, neither made any assessment of the required strength of officers and staff nor created any separate cell or sections for budgeting, planning, training, monitoring *etc.*, for smooth and effective implementation of different schemes/projects. Audit observed that some key posts¹⁴⁵ were lying vacant for the periods ranging from seven months to six years. PUP decided¹⁴⁶ (August 2016) to propose for enhancement of staff strength, as per necessity, to PUAD for onward transmission to Finance Department for Cabinet approval. It was, however, observed that as of May 2018, the proposal was not prepared as per the decision of the executive committee of PUP.

Scrutiny of the minutes of the review meetings of Minister-in-Charge (MIC) of the Department on the progress of various projects/schemes showed that PUP faced various problems in terms of absence of skilled manpower, required infrastructure while implementing the projects/schemes as detailed below:

- Proposal was made in July 2016 for setting up of a Central Laboratory at Bankura with proper instruments, lab assistants and sufficient number of Sub-Assistant Engineers for proper monitoring and quality control of the schemes. Proposal for at least five surveyors and one Global Positioning System (GPS) machine in the office of PUP were also made. It was, however, observed that as of May 2018, no action had been taken on this issue.
- In the review meeting of October 2017 the issue of absence of Electrical Engineer in PUP offices, which hampered preparation of estimates and execution of electrical works was discussed. No action, however, has been taken so far.

The Department stated (December 2018) that they are working on it.

Weak systems of internal control, monitoring, co-ordination and evaluation impacted PUAD's ability to not only identify and fill the *critical gaps* in overall socio-economic development of PUP area but also in assessing the actual development made so far for PUPA.

Recommendation-V

Strengthen institutional mechanisms like database management, human resource and infrastructure, enabling Acts/ Rules/ Regulations for proper planning and monitoring of schemes.

2.2.11 Conclusion

PUAD, even after a lapse of 12 years from its creation, had failed to identify and address *critical gaps* for integrated development of the PUP area and to ensure convergence with activities of other development departments working in this area.

¹⁴⁵ One Addl. CEO, two Jt. CEOs, one Accounts Officer (Audit), one Forest Officer, surveyor, technician *etc.*

¹⁴⁶ 7th meeting of Executive Committee.

Available funds were not utilised judiciously. Financial controls over implementing agencies were weak as Audit found instances of unauthorized diversion of funds, financial irregularities *etc.* These affected project implementation and service delivery and caused avoidable extra expenditure.

Poor implementation was evident as out of selected 147 schemes about 24 projects implemented at a cost of ₹ 55.25 crore in critical sectors like health, water supply, road construction *etc.*, failed to achieve their intended objectives. This was due to various reasons like poor maintenance of the created assets, non-conducting of feasibility study, failure to ensure availability of land, poor implementation *etc.* This not only led to extra expenditure but also denial of benefits to marginalised area of the state.

Weak systems of internal control, monitoring, co-ordination and evaluation impacted PUAD's ability to identify and fill the *critical gaps* in overall socio-economic development of PUP area and also in assessing the actual development made so far for PUPA.

Chapter 3

Compliance Audit

Chapter 3 : Compliance Audit

AGRICULTURAL MARKETING DEPARTMENT

3.1 Project for providing Cool Chain (composite and integrated cool chain network) - Wasteful expenditure

West Bengal State Agricultural Marketing Board's failure to follow the timelines stipulated in the PIAC (Project Implementation Activity Chart) of the Finance Department in the project for providing Cool Chain (composite and integrated cool chain network) resulted in wasteful expenditure of ₹ 16.87 crore.

With the objective of facilitating the small and marginal farmers to market their agricultural produce and ensure remunerative price, the Finance Department (FD), Government of West Bengal approved (September 2010) a project of composite and integrated cool chain network (Cool Chain) in 30 principal market yards in the State. The project cost of ₹ 55.33 crore¹⁴⁷ was funded with loan assistance from National Bank for Agriculture and Rural Development (NABARD). The project envisaged commodity specific atmospheric conditions to be provided right from the production centre throughout the journey to the consumption centre, through a network of refrigerated transport vehicles. Agricultural Marketing Department (AMD) was the nodal department and West Bengal State Agricultural Marketing Board (WBSAMB) was to monitor and execute the project.

The timelines stipulated by the Project Implementation Activity Chart (PIAC) approved by the FD for two main project components viz. (i) civil & electrical works and (ii) mechanical (refrigeration) work, were:

- (a) tender processing and evaluation in the first month,
- (b) construction during the second to tenth month and
- (c) installation of machineries during the 11th and 12th month.

It was, however, observed that tenders for (i) civil & electrical works and (ii) mechanical (refrigeration) work were awarded on the same day (7 December 2010) to be completed in 75 days. The works were, however, pending after more than eight years from the scheduled date of completion. It was observed that:

- Construction works of Godowns including electrical work in 30 principal market yards were awarded (7 December 2010) to 30 different agencies at the tendered cost of ₹ 33.43 crore for completion by February 2011. As against this time schedule, first godown was completed in November 2011 and 27th godown was completed in April 2014. Remaining three godowns were yet to be completed as of June 2018. Electrical installations at 16 sites were completed between October 2011 and October 2014. It was observed that in one case, electrical installation was stated to be completed

¹⁴⁷ ₹ 52.57 crore loan from NABARD and contribution of ₹ 2.76 crore from State Government.

in October 2011 prior to completion of the civil work in January 2012. As of April 2018, total ₹ 28.37 crore had been paid to the contractors on these components.

- WBSAMB, in deviation of the timeline prescribed in the PIAC of the project, awarded (7 December 2010) the work of supply, erection, testing and commissioning of composite refrigeration system to an agency at a tendered cost of ₹18.39 crore on the same day when the civil work was awarded. As per the work order, the agency was required to complete the work simultaneously with the completion of civil work, within 60-75 days from the date of issue of work order.
- All the machineries for the refrigeration system were delivered to 30 sites by March 2011. These machineries, however, could not be installed due to non-completion of civil and electrical works, lack of availability of power and water. Finally, WBSAMB terminated (April 2015) the mechanical (Refrigeration) contract, after payment of ₹ 16.87 crore.
- WBSAMB, in order to assess the condition of the equipment already supplied at the site, conducted (October 2016) inspection by an expert¹⁴⁸. The report of the expert revealed that most of the supplies and installations were older than five years, had remained non-functional and required replacement.
- On the basis of this report, WBSAMB, invited (December 2016, February and March 2017) Expression of Interest (EOI) from interested agencies to complete the balance work but no bids were received.
- Under these circumstances, WBSAMB decided (March 2017) to complete the balance work by means of “re-build and operate” process. The interested agency was to execute the balance work on ‘as is where is’ basis for supply of machines and related equipment, erection, installation & testing and commissioning with operation. An EOI in this regard was invited (March 2018). However, due to receipt of single tender, the EOI was later cancelled (January 2019).

It was evident from the report of the expert as well as the decision of WBSAMB to terminate the mechanical contract and complete the work by the means of ‘re-build and operate’ process that the machineries purchased earlier required replacement and the expenditure of ₹ 16.87 crore incurred had become wasteful.

By following the timelines set out in the PIAC, failing which, by ensuring staggered supply, erection, testing and commissioning of composite refrigeration system, particularly, when there was delay in the completion of civil and electrical work, WBSAMB could have ensured successful completion of the project avoiding wasteful expenditure.

The Department while accepting (November 2018) that the work of composite cool chain could not be completed, stated that actions were being taken to complete the balance work on ‘as is where is’ basis.

¹⁴⁸ *Indian Institute of Engineering Science and Technology, Shibpur.*

PUBLIC WORKS DEPARTMENT

3.2 Strengthening of road within its Design Life-Unjustified expenditure

Superintending Engineer, in disregard of the IRC Guidelines, had taken up a road improvement work even when the road was in good condition and within its design life without conducting the required tests and traffic survey. This resulted in unjustified expenditure of ₹ 3.05 crore.

Indian Roads Congress (IRC) Guidelines¹⁴⁹ stipulate that road pavements¹⁵⁰ are designed for a particular design life; after this period, the pavement needs to be rebuilt or strengthened. For strengthening of existing pavement, additional layers are laid over the existing road pavement. The requirement of overlays for strengthening of the existing pavement needs to be worked out on the basis of Benklemen Beam Deflection (BBD)¹⁵¹ test.

Audit scrutiny showed that Superintending Engineer (SE), Western Circle No. I, Public Works Department (PWD) had taken up (June 2011) strengthening work of a road¹⁵² at a cost of ₹ 4.38 crore. The work was completed in July 2012 at a cost of ₹4.38 crore. The scope of the work *inter-alia* included (i) 150 mm sand consolidation¹⁵³ (*Granular Sub-Base Course*), (ii) 100 mm stone metal consolidation¹⁵⁴ (*Base Course*), (iii) 50 mm Bituminous Macadam (BM) (*Binder Course*) and (iv) Mix Seal Surfacing (MSS) (*Wearing Course*) (**Fig 3.1**). The estimate of the work provided for design life of five years from the date of completion of the work *i.e.*, upto June 2017.

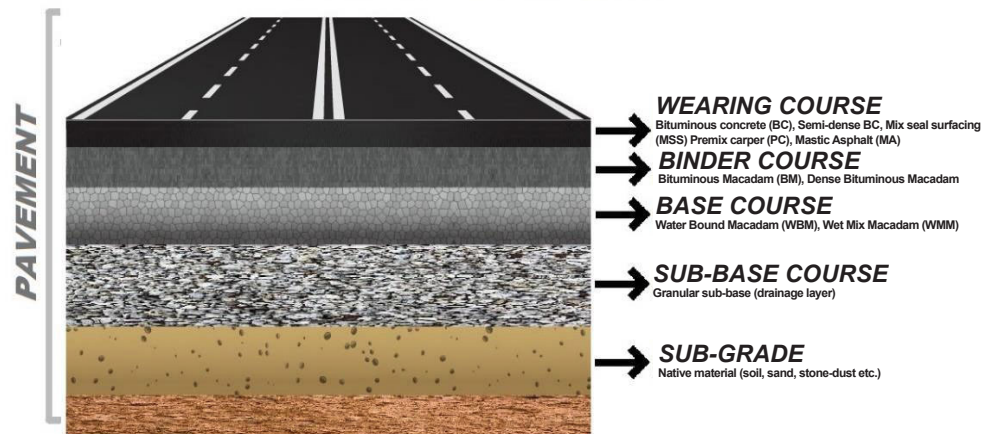


Figure 3.1 : Different layers in a pavement

¹⁴⁹ Para 11.7.2 of IRC:SP:20-2002 and Para 3.3.3.1 of IRC:37-2001.

¹⁵⁰ Pavement means the constructed part of the road.

¹⁵¹ As per IRC:81-1997, BBD test is required to be done to evaluate the requirement of additional bituminous layers in case of strengthening of an existing road.

¹⁵² Strengthening of Sarbari-Tiluri-Panchet Dam road from 0.00 km to 7.30 km.

¹⁵³ Spreading and compacting sand to required thickness in layers.

¹⁵⁴ Spreading and compacting stone metal of specific sizes in requisite thickness.

It was, however, noticed that the Division, in January 2016, had taken up another road improvement work on the same stretch at a tendered cost of ₹ 4.70 crore. The scope of the work *inter alia* included laying of 75 mm BM and 25 mm Semi Dense Bituminous Concrete. The work was completed in May 2016 at a cost of ₹ 4.68 crore.

Scrutiny of the detailed project report revealed that the Division executed this road improvement work anticipating the increasing trend of traffic. Audit, however, found that the Division did not conduct any traffic census for such anticipation. Further, the specifications of the earlier strengthening work were fixed based on a traffic survey conducted in April 2009 with 7.5 per cent annual growth of traffic. Audit also found that the specifications of the work of January 2016 was fixed without conducting BBD test which was required to evaluate the requirement of additional bituminous layers in case of strengthening of an existing road.

In reply, the Chief Engineer stated that there was no noticeable surface failure or cracks on the road and accepted that improvement work was taken up on intuition and experience as a consequence to the unforeseen and unaccounted traffic load. Division, however, could not provide any evidence regarding unforeseen increase in traffic, while specifications of the earlier strengthening work had been fixed by taking into consideration the annual growth of traffic.

Strengthening of the road within its design life without conducting the required tests and traffic survey and when there were no noticeable surface failure or cracks, was unnecessary. This resulted in unjustified expenditure of ₹ 3.05 crore.

The matter was reported (July 2018) to the Department; reply was awaited till date (April 2019).

3.3 Design of Road based on higher volume traffic-Avoidable expenditure

Superintending Engineer, Eastern Highway Circle, Public Works Roads Directorate, Public Works Department designed the pavement of a road considering the Vehicle Damage Factor of another road having higher volume of traffic, in violation of the IRC Guidelines. This resulted in avoidable expenditure of ₹ 2.93 crore.

Para 4.4.4 of Indian Road Congress Guidelines¹⁵⁵ for the design of flexible pavements stipulate that Vehicle Damage Factor (VDF)¹⁵⁶ should be arrived at carefully by carrying out specific Axle Load Survey on the existing roads. Para 4.4.6 of the Guidelines also stipulates that where sufficient information on axle loads is not available and the small size of the project does not warrant an Axle

¹⁵⁵ IRC: 37-2012.

¹⁵⁶ The vehicle damage factor (VDF) is a multiplier for converting the number of commercial vehicles of different axle loads and axle configurations to the number of standard axle-load repetitions. It is defined as equivalent number of standard axles per commercial vehicle.

Load Survey, the default values of vehicle damage factor as given in Table 4.2¹⁵⁷ of the Guidelines may be used.

Superintending Engineer (SE), Eastern Highway Circle, Public Works Roads Directorate, Public Works Department entrusted (February 2016) a Widening and Strengthening work of BPRMK road¹⁵⁸ to an agency at a tendered cost of ₹ 24.76 crore for completion by May 2017. The work was completed in February 2017 at a cost of ₹ 29.37 crore.

Scrutiny of Detailed Project Report (DPR) revealed that the Division in the instant work did not obtain the value of the VDF from the Axle Load Survey of the road. As per the Axle Load Survey of September 2014 which was conducted before the preparation of the detailed cost estimates the volume of commercial vehicles (trucks and buses) on the BPRMK road was only 530. Instead of adopting this VDF value in the estimates the Division, in violation of the IRC Guidelines, adopted the value of VDF obtained through axle load survey conducted in an adjacent Ghoadanga-Sangrampur (GS) Road under the same Division. As per the Axle Load Survey of GS Road conducted in September 2014, number of commercial vehicles per day for both directions of the GS road at two points (ninth and fourth kmp) were 663 and 1684 respectively. It was also observed that the GS road was a border road having high traffic volume of commercial vehicles (trucks and buses) due to trading activities with Bangladesh. Instead of using data of BPRMK road, the division used the data of GS road for designing the road. There was, however, no recorded reason available in the estimates as to why higher VDF value of GS road was considered.

The concerned SE stated (June 2018) that during traffic survey, it was observed that maximum portion of the traffic originating from GS Road which were mostly heavy commercial vehicles were entering BPRMK road. Keeping this in view VDF of GS Road was taken. This was, however, contrary to the fact that the traffic survey which had been conducted in September 2014 of the BPRMK road, had showed no such increase in traffic.

By adopting VDF of 6.51 of the GS Road, the thickness of the instant road provided was 740 mm¹⁵⁹, while it would have been 670 mm¹⁶⁰ if the road had been designed on the basis of indicative VDF of 3.5 as per the IRC Guidelines. As a result, the instant road had an excess thickness involving extra expenditure of ₹ 2.93 crore¹⁶¹ which was avoidable.

The matter was reported (July 2018) to the Department; reply was awaited till date (April 2019).

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Initial traffic volume in terms of commercial vehicles per day	Terrain	
	Rolling/Plain	Hilly
0-150	1.5	0.5
150-1500	3.5	1.5
More than 1500	4.5	2.5

¹⁵⁸ Widening and Strengthening of Bashirhat-Pifa-Raghabpur-Murarisha-Kalinagar (BPRMK) road from 0.00 kmp to 11.00 kmp.

¹⁵⁹ (i) 325 mm Granular Sub Base + (ii) 275 mm Granular Base + (iii) 100 mm Dense Bituminous Macadam (DBM) + (iv) 40 mm Bituminous Concrete (BC).

¹⁶⁰ (i) 335 mm Granular Sub Base + (ii) 250 mm Granular Base + (iii) 60 mm Dense Bituminous Macadam (DBM) + (iv) 25 mm Bituminous Concrete (BC).

¹⁶¹ ₹ 2.38 crore for excess execution of 40 mm DBM + ₹ 0.55 crore for excess execution of 15 mm BC.

3.4 Deviation of sanctioned DPR-Doubtful expenditure

Superintending Engineer, in deviation to the sanctioned Detailed Project Report (DPR), allowed an extra layer of base course during construction of a road without any investigation or authentic data to ensure actual depth of the pavement. This resulted in extra expenditure of ₹ 2.83 crore, execution of which was doubtful.

There was a general tendency on the part of the divisions to revise the estimates by increasing the scope of work and adjusting the excess quantity on account of the revision, from the available savings in the tender. Noting this the Chief Engineer (CE), Public Works Department (PWD) instructed¹⁶² (May 2012) all the Executive Engineers (EEs) to execute works within tendered amount without any deviation as the estimates were prepared on the basis of actual requirement and site conditions.

Audit scrutiny of the records (July 2017) of the EE, Jhargram Highway Division showed that Chief Engineer (CE), Public Works (Roads) Directorate (PWRD) sanctioned (December 2015) a road work¹⁶³ at an estimated cost of ₹ 23.97 crore. Accordingly, the Superintending Engineer (SE), South Western Highway Circle, PWRD, awarded (February 2016) the work to a contractor at a tendered cost of ₹ 18.45 crore (20.69 per cent below the estimate) for completion within 450 days. The work was completed in January 2017 (361 days) at a cost of ₹ 22.09 crore.

As per the DPR approved (December 2015) by the CE, the existing depth of the pavement was 400 mm (comprising of 250 mm sub-base and 150 mm base course). The design thickness of the existing road to be strengthened was fixed at 655 mm in accordance with the Indian Roads Congress Guidelines (IRC:37-2012). The increase of 255 mm (from 400 mm to 655 mm) in the thickness of the strengthened road included laying of 150 mm Wet Mix Macadam (WMM) course, 75 mm Dense Bituminous Macadam (DBM) as base course and 30 mm Bituminous Concrete (BC) as wearing course (150+75+30=255 mm).

It was noticed that during the strengthening work, the concerned EE proposed (March 2016) laying of 250 mm layer of WMM instead of 150 mm. This was because the EE observed that the existing base course was only 75 mm thickness, instead of 150 mm.

In this respect, the following were observed:

- EE's conclusion regarding thickness of the base course being less was not based on any investigation or report. The concerned SE, however, approved (April 2016) the proposal of EE which led to 57.44 per cent¹⁶⁴ increase in work of execution of WMM and involved an extra cost of ₹ 2.83 crore. The excess expenditure was met from the apparent savings in the tender (20.69 per cent below the estimated cost) and approved by the concerned SE.

¹⁶² Memo No. 683/CE/PWD dated 07.05.2012.

¹⁶³ Widening and strengthening of Gopiballavpur-Nayagram Road (between the stretch 0 kmp and 15.00 kmp).

¹⁶⁴ 28831.22 m³ was executed against the original provision of 18313 m³.

- It was also seen that approval of the CE (PWRD), who was the authority to accord technical sanction of the work, was not taken despite the fact that there was a revision in the specification.
- The conclusion of the EE regarding thickness of the base course being less was contrary to the records¹⁶⁵ of the road work¹⁶⁶ taken on the same road stretch which was completed in July 2012. It was observed that in that road work, a layer of 150 mm base course (Water Bound Macadam) was laid in the widened portion overlaid with 50 mm BM and 20 mm Mix Seal Surfacing (MSS). Hence, there was no justification to assume the base course of 150 mm (which was overlaid with 50 mm BM and 20 mm MSS) had reduced to 75 mm in the passage of four years.
- Further, no such lacunae regarding the thickness of the WMM layer were noticed in the DPRs prepared in 2012 and 2016.

As such, laying of additional 100 mm WMM was doubtful. The proposal of the EE regarding increase of thickness raises reasonable doubts as to whether the work was actually executed. The matter needs investigation and action taken against the responsible persons.

In reply, the SE stated (November 2017) that a deficiency of 75 mm in the base course was found in the middle strip¹⁶⁷. Even if it was conceded that there was any deficiency in the middle strip, there was no justification for the whole width of the road to be overlaid with extra 100 mm WMM as was proposed. Further, findings of the EE regarding depth of the pavement during construction were not based on any investigation or authentic data. Also, the reasons for non-obtaining the CE's approval to the changes in specifications were not furnished in the reply.

The matter was reported (June 2018) to the Department; reply was awaited till date (April 2019).

3.5 Inclusion of duplicate items in the tender- Avoidable Expenditure

Superintending Engineer, South Circle, Social Sector, Public Works Directorate, allowed a duplicate item in the tender schedule without any valid reasons. This enhanced the cost of construction of pile foundation¹⁶⁸ resulting in avoidable expenditure of ₹ 1.77 crore.

Reinforced Cement Concrete (RCC) cast *in situ* bored piles¹⁶⁹, which are cast at site, are used for providing support to a structure. As per the applicable Schedule of Rates¹⁷⁰ (SOR), the rate of bored cast *in-situ* concrete piles of

¹⁶⁵ Detailed Project Report and Final Bill of that work.

¹⁶⁶ Widening and strengthening of Gopiballavpur-Nayagram road from 2.5 kmp to 15 kmp.

¹⁶⁷ 3.05 metre i.e. width before taking up the earlier widening and strengthening work in July 2012.

¹⁶⁸ Pile foundations are deep foundations for providing support to a structure.

¹⁶⁹ RCC cast-in-situ piles are those piles which are cast in position inside the ground and made of reinforced cement.

¹⁷⁰ Public Works (Roads) Directorate 2008-09.

different diameters is inclusive of the cost of welding of reinforcement cage¹⁷¹ and steel liner¹⁷² (if any).

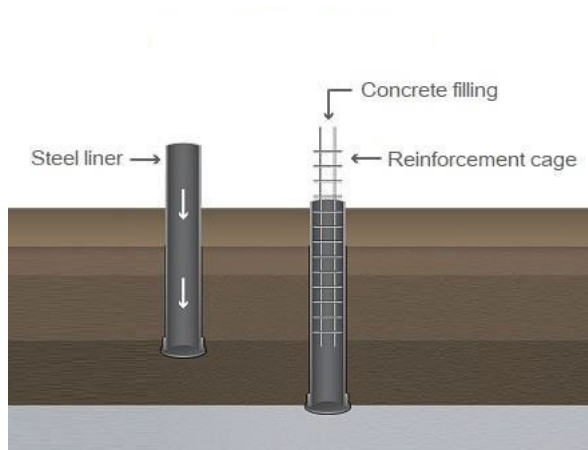


Figure 3.2: In-situ Bored Piling

Scrutiny of records of the Executive Engineer (EE), South 24 Parganas Division, Public Works Directorate, Social Sector (PWSS) revealed that Higher Education Department (HED), Government of West Bengal engaged (December 2012) PWSS for construction of a new building for State aided women's university at Diamond Harbor in South 24 Parganas district. The administrative approval for construction of the university campus¹⁷³ was accorded

(October 2013) by HED at a cost of ₹ 18.19 crore. Subsequently, HED accorded (February 2014) administrative approval of ₹ 15.08 crore for additional work of pile foundation. Accordingly, the Superintending Engineer, South Circle (SE, SC) of PWSS awarded (November 2013 and July 2014) two works¹⁷⁴ under two separate tenders at a total cost of ₹ 22.44 crore for completion by March 2015. The construction of the buildings along with the allied pile foundation work was completed in April 2016 at a total cost of ₹ 22.61 crore.

The scope of the pile foundation work *inter alia* included an item of RCC cast *in situ* bored piles of 600 mm diameter. As per the SOR and tender schedule, the rate of this item was inclusive of the cost of welding of the reinforcement cage to be used in the bored piles. It was, however, observed that a separate item, *viz.*, welding in mild steel structural work was provided in the tender and ₹ 1.77 crore was paid to the contractor on this account. No reasons were found on records as to why this separate item was provided in the tender. Audit observed that inclusion of this item was duplicative as the tender was only for piling work and there was no scope for welding other than the welding of reinforcement cage in bored piles, the cost of which had already been included in the composite rate of the tender.

The concerned SE stated (December 2017) that those were two different items of work and were required in the interest of the said work. The fact, however, was that the SOR as well as the tender schedule provided an integrated rate for bored cast *in-situ* concrete piles including cost of welding of reinforcement cage. The separate payment on this account was, therefore, not admissible.

¹⁷¹ A method of reinforcement of the pile and is lowered into the bore hole.

¹⁷² Once the hole is bored, a lining made of materials including steel may be used to provide support to the bore hole.

¹⁷³ *Inter alia* comprised of two three-storied buildings (i) academic building having 20 class rooms of 750 square feet and (ii) administrative building.

¹⁷⁴ (i) Construction of different buildings for State Aided University for women and (ii) Additional works for pile foundation to provide 10 storied foundations for the academic building of the women university.

The Department, in deviation of the SOR, included duplicate item of welding in mild steel structural work in the tender schedule, without any valid reason. This enhanced the cost of pile foundation, resulting in avoidable expenditure of ₹ 1.77 crore.

The matter was reported (June 2018) to the Department; reply was awaited till date (April 2019).

3.6 Violation of the IRC Guidelines - Excess expenditure

The Division, in violation of the IRC Guidelines, laid two wearing courses, during the construction of the same road. The first layer of the wearing course was overlaid with another type of wearing course, resulting in excess expenditure of ₹ 1.04 crore.

As per Indian Roads Congress (IRC) Guidelines¹⁷⁵, wearing course is the upper layer in pavement. This layer acts as an impermeable layer to prevent the entry of water to lower layers. The most commonly used wearing courses are surface dressing¹⁷⁶, open-graded premix carpet¹⁷⁷, mix seal surfacing¹⁷⁸, semi-dense bituminous concrete¹⁷⁹, bituminous concrete¹⁸⁰ and Mastic Asphalt¹⁸¹. The IRC Guidelines¹⁸² further provide for any one of these type of wearing courses for the flexible pavements¹⁸³, depending on the load bearing capacity of the subgrade soil and traffic load.

Audit scrutiny of the records of the Executive Engineer (EE), Darjeeling Division, PWD revealed that Superintending Engineer, North Bengal Construction Circle-II, Jalpaiguri awarded (December 2015) the work of restoration of a road surface¹⁸⁴ to four contractors. The total tendered cost was ₹ 8.00 crore for completion between March 2016 and April 2016. The works were completed between July 2016 and January 2017 at the total cost of ₹ 7.98 crore.

The scope of the restoration work *inter-alia* included laying of (i) 50 mm Bituminous Macadam (BM) as profile corrective course¹⁸⁵, (ii) 20 mm Open

¹⁷⁵ Annex- VI of IRC:37-2012.

¹⁷⁶ A Surface Dressing is a process of spraying a road surface with bituminous binder and then covering the binder with clean, crushed aggregate or natural gravel. These layers are then rolled in order to press the aggregate into the binder film.

¹⁷⁷ It is an open graded bituminous mix which is widely used as an overlay on urban sections and as a surface course on rural roads in India.

¹⁷⁸ The Mix Seal Surfacing design mix is based on the IRC: SP:78-2008. This is an alternative used for the premix carpet.

¹⁷⁹ Wearing course on roads carrying moderate traffic.

¹⁸⁰ A dense graded mix used as a wearing course.

¹⁸¹ It is an intimate homogenous mixture of selected well graded aggregates, filler and bitumen in such proportions as to yield a plastic and void less mass, which when applied hot can be trowelled and floated to form a very dense impermeable surfacing.

¹⁸² Plates 1 to 8 under para 10.1 of IRC: 37-2012.

¹⁸³ Flexible pavement is composed of a bituminous material surface course and underlying base and sub-base courses.

¹⁸⁴ The restoration work was required to be done at Ghoom-Simana Road (0 kmp to 16.5 kmp) as the road was damaged during laying of optical fibre cable.

¹⁸⁵ Most bituminous overlay works require the construction of a correction course in order to correct the wheel alignment of the existing surface.

Graded Premix Carpet (OGPC) and (iii) 25 mm of Mastic Asphalt. Audit observed that none of the IRC Guidelines had prescribed the use of two wearing courses in construction of a road work. But in violation of the IRC Guidelines¹⁸⁶ two types of wearing courses (OGPC and Mastic Asphalt) were provided for in the same contract. Since the road was situated on hilly area having annual rainfall more than 3000 mm, wearing course of Mastic, which forms a very dense impermeable surfacing, was more suitable compared to OGPC¹⁸⁷. Audit observed that a layer of OGPC was laid on an area of 73985.54 m² over the BM layer and the entire surface of OGPC was then covered with 25 mm Mastic Asphalt¹⁸⁸ at a total cost of ₹ 5.60 crore including the cost of ₹ 1.11 crore on OGPC. Reasons were not recorded in the estimate for laying two types of wearing courses simultaneously on the same road/stretch. It was further observed that the division, for a similar work¹⁸⁹ taken up in February 2016, went in for restoration by means of only 25 mm mastic asphalt over the existing BM.

The decision of the SE to lay two wearing courses, therefore, lacked justification and resulted in excess expenditure of ₹ 1.11 crore on account of laying of OGPC.

The matter was reported (June 2018) to the Department; reply was awaited till date (April 2019).

IRRIGATION & WATERWAYS DEPARTMENT

3.7 Loss of Government revenue - Royalty on extraction of minor minerals

Failure of the Irrigation & Waterways Department to revise rate of royalty on extraction of minor minerals led to loss of revenue and undue advantage to the contractors to the tune of ₹ 3.87 crore.

Commerce & Industries Department (C&ID), Government of West Bengal empowered (January 2014)¹⁹⁰ Executive Engineers and Revenue Officers of the Irrigation & Waterways Department (I&WD) to grant quarry permits for extraction of riverbed materials¹⁹¹ from any specified land. The permits were to be issued by I&WD on pre-payment of royalty at the rates fixed from time to time by C&ID in accordance with the West Bengal Minor Minerals Rules (WBMMR), 2002. Prior to C&ID's notification of January 2014, District Land and Land Reforms Officers (DL&LROs) were issuing such permits.

¹⁸⁶ IRC:37-2012.

¹⁸⁷ As per IRC:37-2012, OGPC is suitable in area on well drained roads having rainfall around 1500 mm.

¹⁸⁸ Over an area of 74986.38 m².

¹⁸⁹ Restoration of road surface by mastic asphalt damaged due to laying of different O.F.C. from 7.00 kmp to 15.00 kmp of Peshoke Road.

¹⁹⁰ Vide notification no.37/CI/O/MIN/MNM/MIS/03/2013 dated 21.01.2014 read in conjunction with amendment No.378/CI/O/MIN/MNM/MIS/03/2013 dated 06.06.2014 issued by C&ID.

¹⁹¹ Boulders, Pebbles, Shingles and Sand. Boulders are big stones; pebbles/ shingles are smaller stones lying in the riverbed.

In December 2011¹⁹², the rate of royalty of minor minerals extracted from rivers/drainage channels/irrigation canals was revised from ₹ 63.00 to ₹ 100.00 per 100 cft¹⁹³. DL&LROs applied the revised rates from the date of revision.

It was observed that I&WD issued (August 2014) a notification¹⁹⁴ along with detailed Guidelines and procedures to be followed for issuance of quarry permits on pre-payment of royalty. The Guidelines clearly stated that the rate of royalty applicable would be as per WBMMR-2002 and subject to further modification by the C&ID. However, the rates revised in December 2011 were not reflected in these Guidelines.

Scrutiny of the records of two¹⁹⁵ Divisions of I&WD revealed that 1170 quarry permits were issued for extraction of 10.48 crore cft of riverbed materials during September 2014 to April 2016¹⁹⁶. These divisions collected royalty at the rate of ₹ 63 per 100 cft instead of the revised rate of ₹ 100 per 100 cft. This resulted in loss of Government revenue of ₹ 3.87 crore. The amount of loss would be higher as Audit could test check the records of only two out of the 25 Divisions involved in issuance of quarry permits.

In reply, I&WD stated (June 2018) that the revised notification for amendment of West Bengal Minor Mineral Rules, 2002 issued in December 2011 was declared (July 2014) ultra vires by the Hon'ble High Court of West Bengal and so the rate was not revised in the notification issued (August 2014) by I&WD.

It was, however, noted that the Hon'ble High Court's order was regarding renewal of lease of existing mining lease holders. It was further verified and observed that DL&LROs kept collecting royalty in their jurisdictional areas, at the revised rate of ₹100 per 100 cft as per the amended notification of December 2011.

TRANSPORT DEPARTMENT

3.8 Undue advantage to the contractors - Allowance of higher rate and Avoidable expenditure - Adoption of costlier technique in piling works

Hooghly River Bridge Commissioners (HRBC), extended undue advantage of ₹ 1.90 crore to the contractors by offering higher rates in the items of piling. Besides, it also made avoidable expenditure of ₹ 0.76 crore due to adoption of costlier techniques in piling works.

Piles are the most common type of deep foundation that safely transfer load from the super structure to the sub-surface strata. Bored cast *in-situ* concrete

¹⁹² Notification No. WB/CPS/Raj-52 (Part-I)/ 2011 dated 5 December 2011 of C&I Department (Mines Branch).

¹⁹³ Cubic feet.

¹⁹⁴ In continuation and partial modification of I&WD's Notification Nos 39-IB dated 09.06.14 and 85-IB dated 25.07.2014.

¹⁹⁵ Alipurduar and North Dinajpur Irrigation Divisions.

¹⁹⁶ As per West Bengal Minor Mineral Rules 2016, notified vide WB/SC-320 dated 29 July 2016, I&WD was no more involved in issuing quarry permits and collection of royalty.

piles are those which are cast at site. Schedule of Rates¹⁹⁷ (SOR) stipulates rates of Reinforcement Cement Concrete (RCC) bored cast *in-situ* concrete piles through various methods *viz.* Direct Mud Circulation (DMC)¹⁹⁸, Hydraulic Piling Rig (HPR)¹⁹⁹ *etc.* DMC method is fairly cheaper in comparison to HPR method as per the SOR.

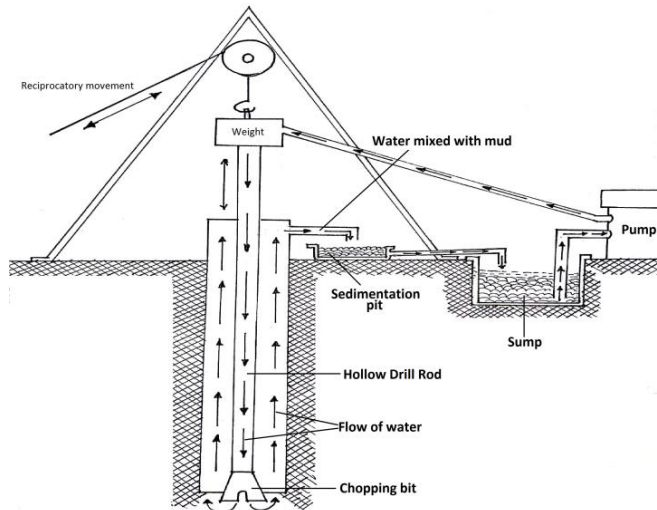


Figure 3.3 : Direct Mud Circulation Method of drilling for piling

Scrutiny of records of the office of the Vice Chairman (VC), Hooghly River Bridge Commissioners (HRBC) revealed that HRBC was engaged (January 2013) by the Health and Family Welfare Department (H&FWD), Government of West Bengal (GoWB) as implementing agency for construction of seven super specialty hospitals in the State. The construction work of these hospitals was taken up by HRBC in January 2014 in two packages²⁰⁰ at a total tendered cost of ₹ 287.72 crore for completion by July 2015. The work for both the packages was stated to be completed as of May 2018 incurring total cost of ₹ 319.44 crore. The buildings were, however, yet to be handed over to the H & FWD and final bill was yet to be paid, pending alteration and additional work as per the requirement of the Department.

The following was observed:

- **Undue advantage of ₹ 1.90 crore to the contractors by offering higher rates in the items of piling**

HRBC engaged (May 2013) two consultants for preparation of architectural planning, detailed design and consultancy services of the packages. The soil testing reports submitted by the consultants between September 2013 and January 2014 mentioned that piles were to be installed by Direct Mud Circulation (DMC) technique. It was observed that the work of 33819.10 metre²⁰¹ (33563.100 metre of 600 mm diameter and 256 metre of 400 mm diameter)

¹⁹⁷ Sixth Corrigenda of the SOR 2008-09 of Public Works (Roads) Department.

¹⁹⁸ It involves the circulation of mud from the pile bore directly to the bentonite pit where the pump reuses the bentonite slurry leaving alone the settled mud.

¹⁹⁹ Machine operated generally used in case of bigger diameter, higher depth boring and construction of bridges.

²⁰⁰ Four hospitals in Birbhum, South 24 Parganas and Murshidabad districts under Package I and three hospitals in Purba and Paschim Medinipur districts under Package II.

²⁰¹ 33563.100 metre of 600 mm dia and 256 metre of 400 mm dia under package I.

of boring was included in the priced Bill of Quantities (BOQs) and the rates for boring were ₹ 3454.75 per metre and ₹ 2471.20 per metre respectively. The method of boring was, however, not stipulated in priced BOQ. As DMC technique was to be adopted, a comparison indicated that the rates mentioned in the priced BOQ by the HRBC were much higher than the rates prescribed in the SOR as shown in **Table 3.1**.

Table 3.1: Different rates mentioned in SOR and priced BOQ

Diameter of boring	Executed Quantity (in metre)	SOR Rate of piling in DMC method (₹ per metre)	Rate allowed (₹ per metre)	Difference (in ₹)	Amount (in ₹)
600 mm	33563.10	2894.74	3454.75	560.01	1,87,95,671.63
400 mm	256.00	1617.00	2471.20	854.20	2,18,675.20
Total	33819.10				1,90,14,346.83

(Source : Divisional records)

Thus, there was no justification for offering higher rates in the priced BOQ in view of the fact that the work was done vide the DMC method. This was tantamount to extending undue favour to contractor of ₹ 1.90 crore.

The Department's reply (August 2018) further confirmed that these two types of boring (600 mm and 400 mm diameter) were done by DMC method.

- **Avoidable expenditure of ₹ 0.76 crore due to adopting costlier techniques in piling works**

It was further observed in respect of 9618 meter of piling work of 550 mm dia under package II, HRBC adopted HPR method in place of recommended DMC method. This enhanced the rate of piling by ₹ 787.01 per meter which resulted in avoidable expenditure of ₹ 0.76 crore²⁰². It was also noticed that there were no recorded reasons for adopting the costlier method.

In reply, the Department stated (August 2018) that the output of hydraulic rig is much faster and to facilitate quicker completion of the work, an extra expenditure of ₹ 0.76 crore was incurred on 550 mm dia boring through HPR. Despite incurring extra expenditure on a costlier technology, HRBC could not ensure timely completion of the works as there was a delay of almost three years in overall completion of the works.

Thus, undue advantage of ₹ 1.90 crore was allowed to the contractors by offering higher rates in the items of piling without any justification. Further, avoidable expenditure of ₹ 0.76 crore was also incurred due to adoption of costlier techniques in piling works.



Figure 3.4 : Hydraulic Piling Rig

²⁰² 9618 metre X ₹ 787.01 = ₹7569462.18.

MICRO, SMALL AND MEDIUM ENTERPRISES & TEXTILES DEPARTMENT

3.9 Undue advantage to enterprises - Disbursement of excess incentives

Micro, Small and Medium Enterprises & Textiles Department, in violation of the West Bengal Incentive Scheme Guidelines, allowed disbursement of excess incentives of ₹ 1.91 crore in favour of two enterprises.

With a view to promote micro and small scale enterprises in the State, the Micro, Small and Medium Enterprises & Textiles Department (MSME&T) approved (June 2007) a new incentive scheme titled 'The West Bengal Incentive Scheme 2007' (WBIS-2007). The scheme was effective from April 2007 to March 2012²⁰³. It was intended to benefit new micro and small-scale enterprises, which commenced commercial production for the first time, or existing enterprises which went for expansion during the validity of the scheme. The scheme *inter alia* provided subsidy on electricity charges at the rate of 30 per cent of such charges paid by the enterprise for a period of five years from the date of commencement of commercial production. Audit observed the following instances of excess disbursement of incentives:

(A) As per WBIS-2007 Guidelines²⁰⁴, a small-scale enterprise is an industrial unit defined by Government of India from time to time. Government of India defined²⁰⁵ (June 2006) a small-scale enterprise as an enterprise with investment in plant and machinery more than ₹ 25 lakh and less than ₹ 5.00 crore. Any new micro/small scale enterprise set up or any existing micro/small enterprise expanding between April 2007 and March 2013 was eligible for incentives under the scheme.

Scrutiny of the balance sheet (2010-11) of one enterprise²⁰⁶ under District Industries Centre (DIC), Howrah revealed that cost of plant and machinery of the enterprise exceeded ₹ 5.00 crore as on March 2011. This made it a medium scale enterprise and thus, ineligible to get any kind of incentive under WBIS-2007 beyond March 2011. It was, however, observed that DIC, Howrah had disbursed (March 2017) subsidy on electricity charges amounting to ₹ 1.19 crore to the enterprise for the period between April 2011 and January 2015. As such, non-compliance of clause 4.1 of the WBIS- 2007 Guidelines resulted in undue benefit of ₹ 1.19 crore to the enterprise.

(B) MSME&T Department issued (May 2010) a clarification²⁰⁷ regarding methodology to be adopted for calculation of energy charges for expansion unit when both the existing and expansion units were operating simultaneously. It stated that the average of last 12 months' electricity charges paid by the enterprise immediately prior to the date of commercial operation of the expansion unit

²⁰³ Extended upto 31 March 2013 vide Notification No. 182-MSET-(III)/15s-01/2012, dated: 01.03.2013.

²⁰⁴ Clause 4.1.

²⁰⁵ As per MSME Act, 2006.

²⁰⁶ M/s Mega Flex Plastic Limited (MFPL).

²⁰⁷ No. 0356/EOSS/MSET/C-III/WBIS/2010 dated 20.05.2010.

would be first assessed. The calculated average amount would then be deducted from the amount of combined energy charges of both the units to assess the amount for consumption of electricity by the expansion unit.

Scrutiny of records of DIC, Purulia revealed that an enterprise²⁰⁸ commenced the commercial production in April 2007 and received incentives towards electricity charges from April 2007 to March 2012 (five years). In the meantime, the enterprise expanded its manufacturing unit and commenced the commercial production in its expanded portion from April 2010, taking electrical connection from the same meter. The enterprise received incentives towards electricity charges for the expanded unit for the period from April 2010 to March 2015.

Scrutiny also revealed that the power supplier²⁰⁹ to the enterprise revised²¹⁰ (August 2015) the rate of energy charges with retrospective effect from April 2013 and sent revised electricity bills of both the existing and expansion units for a period from April 2013 to March 2015 claiming the arrear energy charges. The enterprise paid (August 2015 to August 2016) ₹ 10.89 crore as arrear energy charges. DIC, Purulia disbursed (March 2017) subsidy of ₹ 3.27 crore (30 per cent of ₹ 10.89 crore) to the enterprise.

It was observed that as the enterprise was not eligible to get the incentives for the existing unit from April 2012, DIC, Purulia irregularly disbursed the arrear energy charges of the existing unit from April 2013 to March 2015. The arrear energy charges should have been apportioned between the existing unit and expansion unit in order to calculate the correct arrear energy charges applicable for the expansion unit.

Audit observed that the total arrear energy charges of ₹ 10.89 crore included arrears in respect of both the units (₹ 2.40 crore for existing unit and ₹ 8.49 crore for the expanded unit). Hence, the enterprise was entitled to incentives towards arrear energy charges of ₹ 2.55 crore (30% of ₹ 8.49 crore) only for the expanded unit as detailed in **Appendix-3.1**.

Thus, non-apportionment of the arrear electricity charges resulted in undue advantage of ₹ 0.72 crore (₹ 3.27 crore - ₹ 2.55 crore) to the enterprise.

The matter was reported (June 2018) to the Department; reply was awaited till date (April 2019).

²⁰⁸ M/s AIC Iron Industries Pvt. Ltd.

²⁰⁹ Damodar Valley Corporation.

²¹⁰ August 2016 as per tariff order issued by Hon'ble West Bengal Electricity Regulatory Commission.

NORTH BENGAL DEVELOPMENT DEPARTMENT

3.10 Violation of IRC Guidelines - Extra expenditure

Superintending Engineer, North Bengal Development Department in deviation to the Indian Roads Congress (IRC)²¹¹ Guidelines provided costlier Mastic Asphalt on 45 per cent of the total road stretches of two village roads resulting in extra expenditure of ₹ 1.68 crore. Besides, remaining portion of the road stretches was constructed with lower specification which may cause early damage of the road.

Para 10.1 of Indian Roads Congress (IRC) Guidelines²¹² stipulates thickness and specification of each layer of road to be constructed on the basis of strength of sub-grade soil²¹³ which is expressed in terms of California Bearing Ratio²¹⁴ (CBR) and the projected traffic volume (expressed in *msa*²¹⁵) during the design life²¹⁶ of the road.

Scrutiny showed that Superintending Engineer, North Bengal Development Department awarded (February 2016) the construction of total 14.247 kms of two-village roads²¹⁷ to two agencies at total tendered cost of ₹ 13.74 crore to be completed by September 2016 and August 2016 respectively. The works were completed in December 2017 and February 2018 at a total cost of ₹ 12.94 crore.

Scrutiny revealed that in accordance with IRC Guidelines, based on the sub-soil strength and projected traffic volume of the roads²¹⁸ mentioned in the detailed estimates, a wearing course²¹⁹ of 20 mm Semi Dense Bituminous Concrete (SDBC) was required to be provided. From the detailed estimates, Bill of Quantities (BOQs) and final vouchers of the works it was revealed, however, that in violation of the IRC Guidelines, 20 mm SDBC was neither provided in the tender nor actually executed. Instead of laying SDBC²²⁰, it was observed that on 6.42 km (45 per cent) of the total road stretch, costlier Wearing Course of 50 mm Mastic Asphalt²²¹ was overlaid. The laying of costlier Mastic Asphalt

²¹¹ *The Indian Roads Congress (IRC) is the Apex Body of Highway Engineers in collaboration with Ministry of Road Transport and Highways. It issues guidelines, which are updated annually.*

²¹² *IRC:37-2012.*

²¹³ *The native material underneath a constructed road.*

²¹⁴ *The California bearing ratio (CBR) is a penetration test for evaluation of the mechanical strength of natural ground, subgrades and base courses beneath new carriageway construction.*

²¹⁵ *Million Standard Axles.*

²¹⁶ *The design life of a road is defined in terms of years arrived at by considering the cumulative number of standard axles (vehicles) that can be carried.*

²¹⁷ *'Black top road from Eklahi to Dighirhat via Panusaha more, Ramnagar High Madrasa-8.302 km' (tendered cost ₹ 8.18 crore) and 'Black top road from Babla Banna More to Bishnupur Sankar More via Gouripur Primary School-5.945 km' (tendered cost ₹ 5.56 crore).*

²¹⁸ *CBR value of four per cent and *msa* of two.*

²¹⁹ *Wearing course is the upper layer in pavement which acts as an impermeable layer to prevent the entry of water to lower layers.*

²²⁰ *A wearing course suitable for moderate traffic like this road.*

²²¹ *Costliest wearing course which is applied in junctions and toll plazas.*

resulted in extra expenditure of ₹ 1.68 crore²²². In the remaining 7.827 km stretch, 20 mm Open Graded Premix Carpet and Seal Coat²²³ was overlaid which was of lower specification than that required under IRC Guidelines. Construction of road with lower specifications was likely to cause early damage to the road surface. No justification was, however, found on record for such deviation from IRC Guidelines.

The matter was reported to the Department in (July 2018); reply was awaited till date (April 2019).

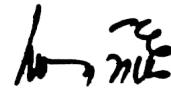


(REENA SAHA)

Principal Accountant General
(Economic & Revenue Sector Audit)
West Bengal

KOLKATA
The 13 DEC 2019

Countersigned



NEW DELHI
The 17 DEC 2019

(RAJIV MEHRISHI)
Comptroller and Auditor General of India

²²² ₹ 2.22 crore (Total expenditure incurred for laying 50 mm Mastic Asphalt) – ₹ 0.54 crore (Expenditure would have been incurred for laying 25 mm SDBC as per IRC specifications).

²²³ Applied on the roads with least traffic.

Appendices

Appendix – 1.1
(Refer paragraph - 1.1, Page - 1)
Statement of list of Departments

Sl. No.	Name of the Department
1.	Agriculture
2.	Agricultural Marketing
3.	Animal Resources Development
4.	Industry, Commerce and Enterprises
5.	Consumer Affairs
6.	Co-operation
7.	Environment
8.	Fisheries, Aqua-culture, Aquatic Resources and Fishing Harbours
9.	Food Processing Industries and Horticulture
10.	Forest
11.	Information Technology & Electronics and e-Governance
12.	Irrigation and Waterways
13.	Land & Land Reforms and Refugee Relief & Rehabilitation
14.	Micro, Small & Medium Enterprises and Textiles
15.	North Bengal Development
16.	Paschimanchal Unnayan Affairs
17.	Power and Non-Conventional Energy Sources
18.	Public Works
19.	Sundarban Affairs
20.	Tourism
21.	Transport
22.	Water Resources Investigation and Development

Appendix – 1.2
(Refer paragraph - 1.3, Page - 2)
Statement of list of Autonomous Bodies

SI No.	Name of the Department	Name of the Autonomous Bodies
1.	Agricultural Marketing	(i) West Bengal State Agricultural Marketing Board
2.	Animal Resources Development	(ii) West Bengal University of Animal and Fishery Science
		(iii) West Bengal Veterinary Council
		(iv) Paschim Banga Go-Sampad Bikash Sanstha
3.	Environment	(v) East Kolkata Wetland Management Authority
		(vi) Institute of Environmental Studies and Wetland Management
		(vii) West Bengal Pollution Control Board
		(viii) West Bengal Bio-Diversity Board
4.	Forest	(ix) Compensatory Afforestation Fund Management and Planning Authority
		(x) West Bengal State Forest Development Agency
5.	Home and Hill Affairs	(xi) Gorkhaland Territorial Administration (GTA)
6.	Micro, Small & Medium Enterprises and Textiles	(xii) West Bengal Khadi and Village Industries Board
		(xiii) West Bengal State Export Promotion Society
7.	Power and Non-Conventional Energy Sources	(xiv) West Bengal Renewable Energy Development Agency
8.	Public Works	(xv) Commissioners for the Rabindra Setu
9.	Tourism	(xvi) Food Craft Institute
10.	Transport	(xvii) Hooghly River Bridge Commissioners

Appendix – 1.3

(Refer paragraph - 1.6.2, Page - 3)

Statement of Pending Replies to Audit paragraphs/reviews

Sl. No.	Name of the Department	Number of paras/reviews involved in reports for the years					
		Upto 1998-99	Upto 2012-13	2013-14	2014-15	2015-16	Total
1.	Agriculture	6	2	1	-	-	9
2.	Agricultural Marketing	-	1	-	-	-	1
3.	Animal Resources Development	-	3	-	-	-	3
4.	Large Industries and Enterprises	-	1	-	-	-	1
5.	Consumer Affairs	-	-	-	2	-	2
6.	Co-operation	-	5	-	-	1	6
7.	Environment	-	-	-	-	1	1
8.	Fisheries, Aqua-culture, Aquatic Resources and Fishing Harbours	-	1	-	1	-	2
9.	Forest	-	3	1	-	1	5
10.	Irrigation and Waterways	27	6	1	-	1	35
11.	Micro, Small & Medium Enterprises and Textiles	-	1	-	-	-	1
12.	Paschimanchal Unnayan Affairs	-	1	-	-	1	2
13.	Public Enterprises and Industrial Reconstruction	-	2	-	-	-	2
14.	Public Works	-	6	1	3	-	10
15.	Public Works (Roads)	-	3	2	1	1	7
16.	Power and Non-Conventional Energy Sources	-	4	-	-	-	4
17.	Transport	-	-	1	2	1	4
18.	Water Resources Investigation and Development	1	1	-	-	-	2
	Total	34	40	7	9	7	97

Appendix – 1.4

(Refer paragraph - 1.6.2, Page - 3)

Statement showing significant recommendations of PAC against which Action Taken Notes were outstanding from Departments

Year of Audit report with para number	PAC report number and year	Name of the departments(s)	Gist of the Audit Para	Recommendation of PAC
4.3.3 of AR 2003-04	48 th PAC Report 2005-06	PWD and PWD (Roads)	Payment of price escalation by the Executive Engineers ignoring contract provision led to inadmissible payment of ₹ 5.47 crore to contractors.	The Department should make due efforts to recover the excess payments on account of price escalation from the contractors as quickly as possible and report to the Committee within six months positively.
4.9 of AR 2000-01 Vol-I	10 th PAC Report 2007-08	Public Works (Roads)	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 ₹ 62.29 lakh to the contractor.	The Committee recommended that the department should investigate the matter thoroughly in order to find out the person/persons responsible for excess payment of ₹ 62.29 lakh and recover the same from the contractor.
4.3.3 of AR 2002-03	15 th PAC Report 2007-08	Public Works (Roads)	Arbitrary recommendation made by the Chief Engineer, Public Works (Roads) Directorate for acceptance of abnormally higher rates than that quoted by the agency in the work of widening and strengthening of Calcutta-Basanti road at 53 KMP to 86 KMP (length 33 kms) of South 24 Parganas district resulted in undue benefit of ₹ 1.53 crore to the agency.	Considering the gravity of the matter, the Committee recommended that the matter be referred without delay to the Vigilance Commissioner for thorough investigation. The Committee also desired that the Commission should be requested to leave no stone unturned to divulge the facts and thereby submit the report within three months.

Year of Audit report with para number	PAC report number and year	Name of the departments(s)	Gist of the Audit Para	Recommendation of PAC
4.3.1 of AR 2006-07	4 th PAC Report 2012-13	Co-operation	The Co-operation department incurred an additional expenditure of ₹ 50.68 crore towards payment of undue subsidy for extra financial benefits extended by BENFED to the millers, transporters <i>etc.</i> , against the procurement orders placed on it by F&S department.	The Committee recommended that the Department may take up the matters of field level verification and admissibility of the claims in respect whereof payments have been made to the BENFED as subsidy, with the Food and Supplies Department and if any over payment is detected, necessary steps may be taken for recovery thereof.
3.2.4.1 of AR 2009-10	9 th PAC Report 2013-14	Transport	The Department's failure to include a suitable clause in the agreement to enhance the consideration amount taking into account the annual growth of traffic is inexplicable. The undue favour thus extended to the toll operator resulted in loss of revenue to the extent of ₹ 12.69 crore till March, 2010.	<p>(i) Acceptance of tender price as offered by the agency at a price far below the reserve prices fixed by both the RITES Ltd and Finance Department without putting in place any mechanism to crosscheck the agencies' own assessment of traffic growth for ascertaining the extent of projected annual traffic growth involved in the offer price meant for the entire period of contract before finalizing the Tender.</p> <p>(ii) Modification of NIT Clause in the Tender Document as regards mode of submission of financial offer without protecting the interest of the Government.</p> <p>(iii) Deficiency in the agreement which did not include any suitable clause for periodic revision of consideration amount on the basis of annual traffic growth.</p>

Year of Audit report with para number	PAC report number and year	Name of the departments(s)	Gist of the Audit Para	Recommendation of PAC
3.4.6 of AR 2010-11	10 th PAC Report 2014-15	Food Processing Industries & Horticulture and Commerce & Industries	Thus, failure of the Corporation in ensuring temporary relocation of vendors, and lack of initiative, coordinated effort and ineffective monitoring on implementation of the project coupled with delay in obtaining clearances from the appropriate authorities resulted in idling of expenditure of ₹ 1.84 crore, while expenditure of ₹ 78.37 lakh became became infructuous. Besides, the State Government incurred a liability of penal interest of ₹ 1.88 crore. The objective of creation of modern export infrastructure facilities for the flower market was not achieved.	The Committee recommended that the Department should take prompt and appropriate administrative and legal steps to find out the reasons behind the cancellation of the Mallickghat flower Market Project under the ASIDE Scheme by the Government of India and to fix up the responsibilities of the officials/functionaries of the Department, WBSFPDCL and other agencies concerned and take suitable disciplinary as well as penal measures against the defaulters so that such incidents may not recur.
3.7 of AR 2013-14	3rd PAC Report 2018-19	Irrigation and Waterways	Teesta Barrage Project (TBP), a major multipurpose project on the river Teesta was taken up by the Department in 1975 with the objective of irrigating 9.22 lakh ha Culturable Command Area (CCA), generation of hydropower of 1000 MW, besides flood moderation and navigation in three phases in different stages and sub-stages. The Sub-Stage-I of TBP was approved (1976) by the Planning Commission at a cost of ₹ 69.71 crore and was due to be completed by 1990. The project estimates were revised several times and	<ol style="list-style-type: none"> 1. The Department should take fresh stock of the situation and take appropriate steps for working out a suitable policy to sort out the problems of land acquisition and also to ensure optimum utilisation of irrigation potential created so far. 2. Before taking up such project in future, the Department should undertake feasibility study including the issue of land acquisition to make sure encumbrance free land so that the progress of work is not stymied under any circumstances.

Year of Audit report with para number	PAC report number and year	Name of the departments(s)	Gist of the Audit Para	Recommendation of PAC
			<p>finally increased to ₹ 8427.12 crore in March 2013. The project completion date was also rescheduled to 2017. Till March 2014, total spending on the project was ₹ 1532.63 crore.</p> <p>Audit examined the progress of the project implementation during the last five years (2009-10 to 2013-14) and the major findings are summarised below:</p> <ul style="list-style-type: none"> • Utilisation of irrigation potential was low (ranging between 22 per cent and 39 per cent) due to non-completion of canals, distributaries and minors, field channels, lack of water availability and change in cropping pattern. • As against the requirement of 144 cumec water for irrigating CCA of 3.42 lakh ha under Sub-Stage-I, availability of water in Teesta has been reduced to 81 cumec during the lean season of the years 2009-14. • Gradual change in land use pattern resulted in non-use of seven distributaries constructed at a cost of ₹ 3.68 crore. The Department did not so far carry out any survey on land use pattern even while preparation of revised estimates. 	<ol style="list-style-type: none"> 3. The Department should consider putting in place a mechanism to monitor the land use pattern by conducting periodical survey. 4. The Department is required to assess availability of water in river Teesta specially in the lean season and requirement of water for irrigation including Boro cultivation in the proposed CCA and restrict the project CCA considering the availability of water in Teesta. 5. The Internal Administrative Mechanism and Monitoring system of the Department should be suitably streamlined to prevent all sorts of incidences of violations of financial rules, norms, codal provisions etc.

Year of Audit report with para number	PAC report number and year	Name of the departments(s)	Gist of the Audit Para	Recommendation of PAC
			<ul style="list-style-type: none"> • High Level Project Monitoring Committee constituted in April 2011 to review and monitor the progress of the project every month met only twice against the requirement of 36 meetings. • In spite of cases of theft and pilferage, physical verification of stores was not conducted as per codal provision. Further, accounting of project materials was also not done. 	

(Source: Relevant PAC Reports)

Appendix – 1.5

(Refer paragraph 1.6.3, Page - 4)

Department-wise Statement of outstanding Inspection Reports and Paragraphs

Name of the Department	Number of IRs/ Paragraphs pending as of 30 November 2018	
	IRs	Paragraphs
Agriculture	223	687
Agricultural Marketing	5	8
Animal Resources Development	49	118
Consumer Affairs	1	1
Co-operation	19	34
Fisheries, Aqua-culture, Aquatic Resources and Fishing Harbours	39	83
Forest	18	64
Irrigation and Waterways	74	190
Land & Land Reforms and Refugee Relief & Rehabilitation	42	109
Micro, Small & Medium Enterprises and Textiles	13	32
North Bengal Development	3	26
Paschimanchal Unnayan Affairs	3	17
Public Works	77	231
Sundarban Affairs	1	3
Water Resources Investigation and Development	42	93
Total	609	1696

Appendix - 2.1

(Refer paragraph - 2.1.6.1, Page - 11)

Statement showing Actual production of Seeds vis-à-vis Target of six crops

Year	Crop	Production Target (in Quintal)	Actual Production (in Quintal)	Excess (+) / shortfall (-) (in Quintal)
2013-14	Lentil	695.00	645.00	-50.00
2014-15	Lentil	500.00	470.00	-30.00
2015-16	Lentil	500.00	360.00	-140.00
2016-17	Lentil	500.00	540.00	40.00
	TOTAL	2195.00	2015.00	-180.00
2013-14	Moong Kharif	805.00	769.00	-36.00
2014-15	Moong Kharif	215.00	173.00	-42.00
2015-16	Moong Kharif	220.00	336.00	116.00
2016-17	Moong Kharif	220.00	246.00	26.00
2013-14	Moong Rabi	0.00	0.00	0.00
2014-15	Moong Rabi	170.00	0.00	-170.00
2015-16	Moong Rabi	160.00	0.00	-160.00
2016-17	Moong Rabi	200.00	100.00	-100.00
	TOTAL	1990.00	1624.00	-366.00
2013-14	Mustard	1900.00	3230.00	1330.00
2014-15	Mustard	1600.00	2770.00	1170.00
2015-16	Mustard	1600.00	1765.00	165.00
2016-17	Mustard	1600.00	2470.00	870.00
	TOTAL	6700.00	10235.00	3535.00
2013-14	Paddy Boro	12000.00	22000.00	10000.00
2014-15	Paddy Boro	12000.00	23650.00	11650.00
2015-16	Paddy Boro	11000.00	24000.00	13000.00
2016-17	Paddy Boro	11000.00	24000.00	13000.00
2013-14	Paddy Kharif	49680.00	48152.00	-1528.00
2014-15	Paddy Kharif	47625.00	34419.00	-13206.00
2015-16	Paddy Kharif	47725.00	31372.00	-16353.00
2016-17	Paddy Kharif	48030.00	33440.00	-14590.00
	TOTAL	239060.00	241033.00	1973.00

Year	Crop	Production Target (in Quintal)	Actual Production (in Quintal)	Excess (+) / shortfall (-) (in Quintal)
2013-14	Sesame Kharif	0.00	368.00	368.00
2014-15	Sesame Kharif	0.00	318.00	318.00
2015-16	Sesame Kharif	0.00	528.00	528.00
2016-17	Sesame Kharif	0.00	354.00	354.00
2013-14	Sesame Rabi	0.00	0.00	0.00
2014-15	Sesame Rabi	180.00	720.00	540.00
2015-16	Sesame Rabi	160.00	0.00	-160.00
2016-17	Sesame Rabi	160.00	360.00	200.00
	TOTAL	500.00	2648.00	2148.00
2013-14	Wheat	3695.00	2275.00	-1420.00
2014-15	Wheat	3300.00	860.00	-2440.00
2015-16	Wheat	3150.00	2960.00	-190.00
2016-17	Wheat	3350.00	1430.00	-1920.00
	TOTAL	13495.00	7525.00	-5970.00

(Source: Compiled from Seed Rolling Plan 2013-14 to 2016-17 and Reports of Zonal Seed Review Meetings, Department of Agriculture, Govt. of West Bengal)

Appendix-2.2

(Refer paragraph No - 2.2.7.1, Page - 39)

Sector-wise requirement of allocation of investment in 16 sectors during 11th and 12th FYP

Sector	Investment required for development of PUPA (₹ in crore)		
	2007-12	2012-17	Total
Agriculture	1287.36	1759.82	3047.18
Irrigation	739.33	1190.68	1930.01
Soil & Water Conservation	665.77	842.26	1508.03
Water Supply	222.61	106.95	329.56
Sanitation	111.12	116.08	227.20
Electrification	502.50	90.84	593.34
Transportation	1538.93	1779.44	3318.37
Forestry	369.29	739.07	1108.36
Animal Resource Development	357.03	452.69	809.72
Fishery	44.02	93.84	137.86
C&CSI	134.12	246.22	380.34
Education	44.52	45.94	90.46
Health	31.87	33.31	65.18
Other Facility	0.16	0.18	0.34
Information Technology	11.73	6.84	18.57
Housing	204.06	204.06	408.12
Total	6264.42	7708.22	13972.64

(Source: Perspective Development Plan 2007 prepared by IIT Kharagpur for PUAD)

Appendix - 3.1

(Refer paragraph - 3.9, Page - 71)

Apportionment of energy charges for expanded portion

Energy charges as per original bill	Average energy charges of existing unit prior to revision	Energy charges for expansion unit prior to revision	Energy charges as per revised bill	Arrear energy charges	Arrear energy charges for expansion unit
(1)	(2)	(3) =(2)-(1)	(4)	(5) =(4)-(1)	(6) =(3)÷(1)×(5)
5200409	1619427	3580982	8320579	3120170	2148537.28
4598100	1619427	2978673	7219325	2621225	1698043.13
4998351	1619427	3378924	9710033	4711682	3185133.54
4438755	1619427	2819328	6922037	2483282	1577286.08
5352031	1619427	3732604	8280481	2928450	2042354.42
8223161	1619427	6603734	12671811	4448650	3572555.77
8883017	1619427	7263590	13706956	4823939	3944506.14
8111278	1619427	6491851	12419151	4307873	3447800.66
7928361	1619427	6308934	13006701	5078340	4041051.09
7522143	1619427	5902716	12407013	4884870	3833216.19
7174701	1619427	5555274	11868391	4693690	3634260.72
7891152	1619427	6271725	13149735	5258583	4179413.41
8392947	1619427	6773520	13556000	5163053	4166837.08
8963910	1619427	7344483	14181304	5217394	4274815.51
7394024	1619427	5774597	11721012	4326988	3379298.19
8950728	1619427	7331301	14058704	5107976	4183806.01
7464066	1619427	5844639	12012424	4548358	3561532.09
7232486	1619427	5613059	11346353	4113867	3192730.44
8539001	1619427	6919574	13487822	4948821	4010273.93
6867567	1619427	5248140	11888466	5020899	3836931.02
8002078	1619427	6382651	13838350	5836272	4655151.74
8511647	1619427	6892220	14737182	6225535	5041063.95
7958772	1619427	6339345	12066525	4107753	3271919.77
8874978	1619427	7255551	13813292	4938314	4037214.41
Total				108915984	84915732.6
Arrear energy charges paid by the DIC = 30 % of ₹ 108915984 = ₹ 32674795.2					
Arrear energy charges required to be paid by the DIC = 30 % of ₹84915732.6 = ₹ 25474719.78					
Excess arrear energy charges paid by the DIC = ₹32674795 - ₹25474719.78 = ₹ 7200075.22					

Glossary

Glossary of abbreviations

Abbreviation	Full Form
AAP	Annual Action Plan
ADA	Assistant Director of Agriculture
AMC	Annual Maintenance Contract
AMD	Agricultural Marketing Department
ATN	Action Taken Note
AWC	Anganwadi Centre
BBD	Benkelman Beam Deflection
BC	Bituminous Concrete
BCR	Benefit Cost Ratio
BDO	Block Development Officer
BL&LRO	Block Land & Land Reforms Officer
BM	Bituminous Macadam
BOQ	Bill of Quantities
BPHC	Block Primary Health Centres
BSF	Block Seed Farm
CAG	Comptroller and Auditor General
C&ID	Commerce & Industries Department
CBR	California Bearing Ratio
CD	Check Dam
CE	Chief Engineer
DAC&FW	Department of Agriculture Cooperation & Farmers Welfare
DBM	Dense Bituminous Macadam
DDA	Deputy Director of Agriculture
DIC	District Industries Centre
DL&LRO	District Land and Land Reforms Officers
DM	District Magistrate
DMC	Direct Mud Circulation
DPC	District Planning Committee
DPR	Detailed Project Report
DPSPM	Department of Planning, Statistics and Programme Monitoring
DSF	District Seed Farm
EC	Executive Committee
EE	Executive Engineer
EoI	Expression of Interest
ESAL	Equivalent Single Axle Load
FCRS	Field Crop Research Station
FD	Finance Department

Abbreviation	Full Form
FYP	Five Year Plan
GB	General Body
GCA	Gross Cropped Area
GO	Government Order
GoWB	Government of West Bengal
GPS	Global Positioning System
GSDP	Gross State Domestic Product
H&FWD	Health and Family Welfare Department
HED	Higher Education Department
HP	Horse Power
HPR	Hydraulic Piling Rig
HRBC	Hooghly River Bridge Commissioners
I&WD	Irrigation & Waterways Department
ICDS	Integrated Child Development Scheme
IFM	Integrated Financial Management
IRC	Indian Roads Congress
JDA	Joint Director of Agriculture
KPI	Key Performance Indicator
LTCPD	Light Tractor cum Power Tiller Driver
MAS	Monitoring and Accounting System
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Act (Scheme)
MIC	Minister-In-Charge
MIS	Management Information System
MLA	Member of Legislative Assembly
MSA	Million Standard Axles
MSME&T	Micro, Small and Medium Enterprises & Textiles
MSS	Mix Seal Surfacing
MT	Metric Ton
NABARD	National Bank for Agriculture and Rural Development
NFSM	National Fruit Security Mission
NGO	Non Government Organisation
NIT	Notice Inviting Tender
NR	Not -Recommended
OGPC	Open Graded Premix Carpet
OPD	Out Patient Department
PAC	Public Accounts Committee
P&RDD	Panchayat & Rural Development Department
PDP	Perspective Development Plan
PHED	Public Health Engineering Department
PIAC	Project Implementation Activity Chart

Abbreviation	Full Form
PORS	Pulses & Oilseed Research Station
PUAD	Paschimanchal Unnayan Affairs Department
PUP	Paschimanchal Unnayan Parshad
PUPA	Paschimanchal Unnayan Parshad Area
PVC	Poly Vinyl Chloride
PWD	Public Works Department
PWRD	Public Works (Roads) Directorate
PWSS	Public Works Directorate, Social Sector
RKVY	Rashtriya Krishi Vikas Yojana
RCC	Reinforcement Cement Concrete
RRS	Rice Research Station
SARF	Sub-Divisional Adaptive Research Farm
SDBC	Semi dense Bituminous Concrete
SE	Superintending Engineer
SNSU	Sick New-born Stabilisation Unit
SOR	Schedule of Rates
TDS	Totally Dissolved Solid
TL	Truthfully Labelled
UC	Utilisation Certificate
UNSDG	United Nations' Sustainable Development Goals
VC	Vice Chairman
VDF	Vehicle Damage Factor
WBIS-2007	West Bengal Incentive Scheme-2007
WBMMR	West Bengal Minor Minerals Rules
WBSAMB	West Bengal State Agricultural Marketing Board
WBSSCL	West Bengal State Seed Corporation Limited
WMM	Wet Mix Macadam
WRIDD	Water Resources Investigation and Development Department
WUA	Water Users Association
ZARS	Zonal Adaptive Research Station
ZP	Zilla Parishad
ZTT	Zero Tillage Technology

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