

## Report of the Comptroller and Auditor General of India on

**General and Social Sector** for the year ended March 2019



Dedicated to Truth in Public Interest



Government of West Bengal Report No. 1 of 2021

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#### **Preface**

This Report on General and Social Sector for the year ended March 2019 has been prepared for submission to the Governor of West Bengal under Article 151 of the Constitution of India for being laid before the Legislative Assembly of West Bengal.

This Report contains significant results of the performance audit and compliance audit of the Departments of the Government of West Bengal under the General and Social Sector including Higher Education, Fire & Emergency Services, Health & Family Welfare, Home & Hill Affairs, Judicial, Panchayats & Rural Development, Personnel & Administrative Reforms and Urban Development & Municipal Affairs.

The instances mentioned in this Report are those, which came to notice in the course of test audit for the period 2018-19 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; instances relating to the period subsequent to 2018-19 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 the General and Social Sector



#### Chapter 1: Overview of the General and Social Sector

#### 1.1 Introduction

This Report covers matters arising out of the audit of State Government Departments and Autonomous Bodies under the General and Social Sector. The primary purpose of this Report is to bring to the notice of the Legislature the important results of audit. 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 of the organisations contributing to better governance.

The Report has been organised in three chapters as under:

- Chapter 1 contains the Profile of the General and Social Sector with a brief analysis of the expenditure of the Departments under the General and Social Sector for the last five years, the authority for audit, audit jurisdiction, planning and conduct of audit, response of the Government to various audit products (Inspection Reports, Compliance Audit Paragraphs/ Performance Audits), follow up action on Audit Reports and Significant Audit Observations included in this Audit Report.
- Chapter 2 of this Report contains observations relating to Performance Audits on General and Social Sector activities. This year, a Performance Audit on 'Outcome of Higher Education in West Bengal' has been included in the Report.
- Chapter 3 of this Report contains significant observations arising out of Compliance Audit of various Departments and their functionaries. Apart from individual paragraphs, this Chapter includes a Detailed Compliance Audit on Management of Fire Services in West Bengal.

#### 1.2 Profile of the General and Social Sector and Audit Universe

As per the Budget Publication, the Government of West Bengal releases 75 grants, of which 54 are active<sup>1</sup>, related to its various departments. The audit universe under General and Social Sector of the office of the Principal Accountant General (General & Social Sector Audit), West Bengal (PAG), comprises 2,429 units of various levels related to 33 Grants. It also includes 123 bodies/ authorities which are either substantially financed from the Consolidated Fund of the State or audit of which has been entrusted by the Government under various sections of the Comptroller & Auditor General's (CAG's) DPC (Duties, Powers and Conditions of Service) Act, 1971. List of the Departments, autonomous bodies and companies under the audit jurisdiction of the office of the Principal Accountant General (General & Social Sector Audit), West Bengal is shown in *Appendix 1.1*.

Trend of expenditure in major Departments under the audit jurisdiction of the office of the Principal Accountant General (General & Social Sector Audit), West Bengal during 2014-19 is shown in **Table 1.1**.

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<sup>&</sup>lt;sup>1</sup> Against the remaining 21 grants there was no budgetary allocation.

Table 1.1: Trend of expenditure of the Departments with annual expenditure exceeding ₹ 100 crore (₹ in crore)

	201115	001516	001615	001= 10	2010 10
Name of the Department	2014-15	2015-16	2016-17	2017-18	2018-19
Backward Classes Welfare	645.44	1,484.31	1,068.11	1,664.12	1,755.41
<b>Correctional Administration</b>	206.38	197.95	232.73	270.66	321.99
Disaster Management and Civil Defence	839.48	1,076.76	1,911.82	1,138.20	1,294.84
Finance	67,013.18	57,860.49	53,899.43	68,868.68	92,973.76
Fire & Emergency Services	199.19	282.25	246.64	259.38	309.23
Food & Supplies	1,288.35	3,958.69	8,156.28	9,316.91	10,971.79
Health & Family Welfare	6,252.44	7,727.98	8,124.24	8,772.55	9,560.69
Higher Education, Science & Technology and Bio-Technology	2,520.95	2,661.69	2,996.61	3,024.43	3,638.28
Home & Hill Affairs	5,757.81	6,160.27	6,639.84	6,789.94	7,994.64
Housing	735.77	765.16	783.29	993.15	175.03
Information & Cultural Affairs	230.19	283.48	318.75	415.25	603.05
Judicial	517.09	533.17	620.01	630.85	818.57
Labour	706.38	652.11	753.50	841.86	820.43
Mass Education Extension & Library Services	224.60	241.25	277.99	249.75	279.85
Minority Affairs & Madrasah Education	1,973.57	1,814.35	1,579.78	2,035.40	2,896.44
Panchayats & Rural Development	13,897.12	16,975.89	14,988.96	21,001.77	19,055.96
Planning, Statistics and Programme Monitoring	348.69	385.38	370.78	395.88	281.53
Public Health Engineering	1,429.32	1,879.02	1,947.16	3,042.55	2,917.92
School Education	16,592.53	16,833.02	18,599.25	20,103.68	23,017.59
Self Help Groups & Self Employment	237.91	455.17	450.15	612.22	505.89
Technical Education, Training & Skill Development	641.51	622.37	699.19	480.54	782.75
Tribal Development	493.94	494.26	588.67	562.96	706.73
Urban Development & Municipal Affairs	5,571.66	6,727.86	7,805.39	9,520.11	9,677.63
Women & Child Development and Social Welfare	3,245.11	3,644.86	3,966.39	4,293.77	6,021.09
Others <sup>2</sup>	454.10	564.90	679.99	746.54	1,751.50
Total	1,32,022.71	1,34,282.64	1,37,704.95	1,66,031.15	1,99,132.59

Source: Sub-Head Accounts and Appropriation Accounts 2014-15 to 2018-19

#### 1.3 Authority for audit

Authority for audit by the CAG is derived from Articles 149 and 151 of the Constitution of India and the CAG's (Duties, Powers & Conditions of Service) Act, 1971 (DPC Act). CAG conducts audit of expenditure of State Government Departments under Section<sup>3</sup> 13 of the CAG's DPC Act. CAG is the sole auditor in respect of Autonomous Bodies, which are audited under sections

<sup>2</sup> Others include Law, Parliamentary Affairs, Governor's Secretariat, Personnel & Administrative Reforms, Legislative Assembly Secretariat, Land & Land Reforms and Refugee Relief & Rehabilitation, Youth Services and Sports, Council of Ministers and Chief Minister's Office.

<sup>&</sup>lt;sup>3</sup> Audit of (i) all expenditure from the Consolidated Fund of State, (ii) all transactions relating to Contingency Funds and Public Accounts and (iii) all trading, manufacturing, profit & loss accounts, balance-sheets & other subsidiary accounts.

19 (2), 19 (3)<sup>4</sup> and 20 (1)<sup>5</sup> of the DPC Act. In addition, CAG also conducts audit of other Autonomous Bodies which are substantially financed by the Government under Section<sup>6</sup> 14 of DPC Act. Principles and methodologies for various audits are prescribed in the Regulations on Audit & Accounts, 2007 and Auditing Standards issued by the Indian Audit & Accounts Department.

#### 1.4 Planning and conduct of Audit

Performance Audits and Compliance Audits are conducted as per the Annual Audit Plan (AAP). Units for Compliance Audit are selected on the basis of risk assessment of the Apex Units, Audit Units and Implementing Agencies involving matters of financial significance, social relevance, internal control systems, past instances of defalcation, misappropriation, embezzlement, *etc.*, as well as findings of previous Audit Reports.

Inspection Reports are issued to the heads of Units after completion of audit. Based on the replies received, audit observations are either settled or further action for compliance is advised. Important audit findings are processed further as Draft Paragraphs for inclusion in the Audit Report.

In case of Performance Audit, objectives and criteria are framed and discussed in entry conference with the concerned organisation. After conducting audit, the draft report is issued to the concerned Department. Observations arising out of audit efforts are also discussed with the Departmental head in the exit conference.

Formal replies furnished by the Department are carefully considered while finalising the materials for inclusion in the Audit Report. Audit Reports are laid before the State Legislature under Article 151 of the Constitution of India.

#### 1.5 Lack of response of Government to Audit

#### Response of the Government to Inspection Reports

Principal Accountant General (General & Social Sector Audit), West Bengal, conducts audit of Government Departments to check for compliance to rules and regulations in transactions and to verify the regularity in maintenance of important accounting and other records as per the prescribed rules and procedures. After these audits, Inspection Reports (IRs) are issued to the Heads of Offices inspected with copies to the next higher authorities. Important irregularities and other points detected during inspection, which are not settled on the spot, find place in IRs. Serious irregularities are brought to the notice of the Government by the Office of the PAG.

<sup>&</sup>lt;sup>4</sup> Audit of the accounts of Corporations (not being Companies) established by or under law made by the State Legislature in accordance with the provisions of the respective legislations or as per request of the Governor of the State in the public interest.

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> Several non-Commercial Autonomous/Semi-Autonomous Bodies, established to implement Schemes for employment generation, poverty alleviation, spread of literacy, health for all and prevention of diseases, environment, etc., and substantially financed by the Government, are audited under Section 14.

As per the Regulations on Audit & Accounts, 2007, the Officer in charge of the auditee entity shall send the reply<sup>7</sup> to an Inspection Report (IR) within four weeks of its receipt. On intimation of any serious irregularity by Audit, the Government shall undertake *prima facie* verification of facts and send a preliminary report to Audit confirming or denying the facts within six weeks of receipt of intimation. Where the fact of major irregularity is not denied by the Government in the preliminary report, the Government shall further send a detailed report to Audit within three months of preliminary report indicating the remedial action taken to prevent recurrence and action taken against those responsible for the lapse.

Besides the above, Finance Department of Government of West Bengal had also issued instructions<sup>8</sup> (June 1982) for prompt response by the executive to IRs issued by the PAG to ensure timely corrective action in compliance with the prescribed rules and procedures and to ensure accountability for the deficiencies, lapses, *etc.*, observed during inspections.

A six monthly report showing the pendency of IRs is sent to the Principal Secretary/ Secretary of the respective department to facilitate monitoring and settlement of outstanding audit observations in the pending IRs.

Inspection Reports issued up to March 2019 relating to 255 offices under four departments <sup>9</sup> showed that 1,360 paragraphs relating to 350 IRs remained outstanding to the end of March 2020. Department-wise and year-wise break-up of the outstanding IRs and Paragraphs are detailed in *Appendix 1.2*.

The unsettled IRs contained 93 paragraphs involving serious irregularities like theft, defalcation, misappropriation, *etc.*, of Government money, loss of revenue and shortages, losses not recovered/ written off amounting ₹ 28.67 crore. The Department-wise and nature-wise analysis of the outstanding paragraphs of serious nature showed the following position:

Table 1.2: Analysis of outstanding paragraphs on serious irregularities (₹ in lakh)

Name of the Department		Cases of theft/ defalcation/ misappropriation		f revenue	Shortage/ losses neither recovered nor written off		Total	
		Amount	Parag raphs	Amount	Parag raphs	Amount	Parag raphs	Amount
Women & Child Development and Social Welfare	11	29.93	14	52.63	8	196.56	33	279.12
Land & Land Reforms and Refugee Relief & Rehabilitation	11	458.65	7	75.13	9	717.84	27	1,251.62
Backward Classes Welfare	2	31.88	6	540.75	9	151.13	17	723.76
Youth Services and Sports			6	275.32	10	337.48	16	612.80
Total	24	520.46	33	943.83	36	1,403.01	93	2,867.30

Source: Inspection Reports

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<sup>&</sup>lt;sup>7</sup> Even if it is not feasible to furnish the final replies to some of the observations in the audit note or inspection report within the aforesaid time limit, the first reply shall not be delayed on that account and an interim reply may be given indicating the likely date by which the final reply shall be furnished.

<sup>8</sup> Vide Memo No. 5703 (72)/FB dated 29 June 1982.
9 Women & Child Development and Social Welfare Department; Land & Land Reforms and Refugee Relief & Rehabilitation Department; Backward Classes Welfare Department and Youth Services & Sports Department.

Audit Committees, comprising of the Principal Secretary/ Secretary of the administrative departments and representatives of the Finance Department and Audit, were formed in 25 out of 29 Departments under the General and Social Sector for expeditious settlement of outstanding Inspection Reports/ Paragraphs. Audit Committees were not formed by the remaining four Departments<sup>10</sup> under the General and Social Sector. Of the 25 Departments where Audit Committees were formed, only two meetings were held by two Departments<sup>11</sup> during April 2018 to March 2019, wherein 33 paragraphs (relating to 20 IRs) were discussed. Of which, 15 paragraphs (relating to five IRs) were settled. Though the remaining 23 Departments had Audit Committees, they did not hold any meeting during this period.

It is recommended that Government should ensure that a procedure is put in place for (i) action against officials failing to send replies to IRs/ paragraphs as per the prescribed time schedule, (ii) recovery of losses/ outstanding advances/ overpayments, *etc.*, in a time-bound manner and (iii) holding at least one meeting of each Audit Committee every quarter.

## 1.6 Response of the Departments to Draft Audit Paragraphs and Performance Audit Report

Regulations on Audit & Accounts, 2007 stipulate that responses to Draft Audit Paragraphs proposed for inclusion in the Report of the Comptroller & Auditor General of India should be sent within six weeks<sup>12</sup>.

Draft Paragraphs and Performance Audit Report are forwarded to the Principal Secretaries/ Secretaries of the concerned Departments drawing attention to the audit findings and requesting them to send their response within prescribed time frame. It is also brought to their personal attention that in view of the likely inclusion of such paragraphs in the Audit Reports of the Comptroller & Auditor General of India which are placed before the Legislature, it would be desirable to include their comments on these audit findings.

Draft Paragraphs and Performance Audit Report proposed for inclusion in this Report were forwarded to the Secretaries of the concerned Departments between May 2020 and October 2020 through Official letters addressed to them by name. The concerned Departments/ Directorate had sent reply to three out of the thirteen Draft Paragraphs/ Performance Audit featured in Audit Report.

The response of the concerned Directorate/ Departments as well as the replies to initial Audit Memos, wherever received, have been suitably incorporated in the Report.

#### 1.7 Follow-up on Audit Reports

Audit Report for the year 2015-16, which was submitted to the Governor in February 2017, was laid on the floor of the State Legislature in March 2018, while the Audit Report for the year 2016-17 was laid in July 2019. The Audit Report for the year 2017-18 is yet to be laid on the floor of the State Legislative

<sup>&</sup>lt;sup>10</sup> Mass Education Extension & Library Services, Fire & Emergency Services, Self-Help Groups & Self Employment and Tribal Development Departments.

<sup>11</sup> Housing and Public Health Engineering Departments.

<sup>&</sup>lt;sup>12</sup> State Government's Finance (Budget) Department, in its order dated June 1982, however, directed all the Departments to submit their responses to proposed Draft Paragraphs within one month.

Assembly (December 2020). A mechanism to ensure promptness in tabling of Audit Reports should be put in place.

After tabling of the Reports of the CAG of India in the State Legislature, the State Government Departments are required to submit *suo motu* replies to the audit observations within one month. Review of outstanding replies on paragraphs included in the CAG's Reports on the General and Social Sector on the Government of West Bengal up to 2016-17 showed that replies on 240 paragraphs pertaining to the period 1981-82 to 2016-17 involving 25 Departments (excluding omnibus paragraphs involving a number of Departments) remained outstanding as of March 2020 (*Appendix 1.3*). Out of 240 paragraphs, 47 paragraphs pertaining to 2005-06 to 2016-17 were selected for discussion by the Public Accounts Committee (PAC), while remaining 193 paragraphs pertaining to the period 1981-82 to 2016-17 have not been selected.

As stipulated in the Rules of Procedure of the PAC, Administrative Departments were required to take suitable action on the recommendations made in the Reports of PAC presented to the State Legislature and submit comments on the action taken or proposed to be taken on those recommendations within three months.

Action Taken Notes on 17 paragraphs contained in 14 Reports<sup>13</sup> of the PAC, presented to the Legislature between 1993-94 and 2018-19, had not been submitted by nine Departments<sup>14</sup> to the Legislative Assembly as of March 2020. These Reports of the PAC had suggested recovery, disciplinary action, *etc*. A significant case is elaborated in *Appendix 1.4*.

Action taken by administrative Departments on the recommendations of the PAC were, however, found to be inadequate and wanting.

#### 1.8 Significant Audit Observations in this Report

The present Report contains one Performance Audit and twelve paragraphs arising out of Compliance Audit, which *inter alia* include one Detailed Compliance Audit Paragraph.

The significant observations contained in this Report are discussed in brief in the following paragraphs.

#### 1.8.1 Performance Audit observations

Outcome of Higher Education in West Bengal

This Performance Audit on Outcome of Higher Education in West Bengal, conducted during November 2019 to January 2020 covering period from

<sup>13</sup> 14<sup>th</sup> PAC Report 1993-94, 36<sup>th</sup> PAC Report 1999-2000, 14<sup>th</sup> PAC Report 2002-03, 18<sup>th</sup> PAC Report 2003-04, 29<sup>th</sup> PAC Report 2004-05, 1<sup>st</sup> PAC Report 2006-07, 4<sup>th</sup> PAC Report 2006-07, 9<sup>th</sup> PAC Report 2009-10, 32<sup>nd</sup> PAC Report 2010-11, 33<sup>rd</sup> PAC Report 2010-11, 2<sup>nd</sup> PAC Report 2012-13, 3<sup>rd</sup> PAC Report 2012-13 and 13<sup>th</sup> PAC Report 2014-15 & 2015-16.

<sup>14 (</sup>i) Refugee, Relief and Rehabilitation (erstwhile Refugee Welfare, currently Land & Land Reforms and Refugee Relief & Rehabilitation); (ii) Panchayats & Rural Development; (iii) Public Health Engineering; (iv) Finance; (v) Home & Hill Affairs; (vi) Urban Development & Municipal Affairs; (vii) School Education; (viii) Health & Family Welfare and (ix) Higher Education, Science & Technology and Bio-Technology Departments.

2014-15 to 2018-19, aimed at analyzing various outcome indicators to assess whether

- 1. The Higher Education system led to increased employability and progress to higher studies for students of higher education institutions.
- 2. The Higher Education system led to betterment of society through effective teaching learning processes and high quality research.
- 3. Equitable Access to Quality Higher Education was ensured for all, and
- **4.** Governance and Management of Higher Education system was adequate and effective.

University of Burdwan and University of North Bengal and 10 *per cent* (13 in number) of colleges affiliated to these two Universities, selected by simple random sampling, were covered.

#### Increase in employability and progression to higher studies:

• Facilitating mechanisms such as placement cell, career counselling cell, alumni association and employability enhancement programmes are important tools for enhancing employability and employment opportunities of graduating students. It was observed that in the test-checked universities and colleges, these mechanisms were either non-existent or functioned inadequately and hence could not contribute much towards enhancing employability of the students. Moreover, owing to lack of maintenance of any employment related data or information by most of the test-checked Higher Education Institutions (HEIs), dependable feedback, crucial for future efforts towards enhancing employability of students, was not available.

### Betterment of society by ensuring high quality teaching-learning and research in higher education institutions:

- With regard to the process of curriculum design and development, though
  the test-checked universities claimed to have followed the laid down
  procedures, there was insufficient evidence to conclude that crucial
  feedback from stakeholders, inputs from expert groups and reference to
  curricula of leading universities were made use of for curriculum
  improvement.
- Barring a few cases, none of the test-checked Higher Educational Institutions (HEIs) made any efforts to introduce value added courses in the curriculum, thereby depriving the students of the opportunity of enhancing and diversifying their knowledge.
- As regards greater academic flexibility and Choice Based Credit System (CBCS), the university level on many such aspects did not sufficiently percolate to the colleges. As a result, a large number of students were denied the chance of holistic development through additional avenues of learning beyond the core subjects.

- Shortage of teachers was another area of concern as it can adversely affect the teaching quality. Student Teacher Ratio was much more than its prescribed limit of 20:1 in Government aided colleges in Arts stream during 2018-19.
- Regarding qualification of faculty, 28 per cent teachers did not possess prescribed NET (National Eligibility Test) qualification in test-checked colleges. Efforts towards professional development of teachers were also insufficient. On an average only 22 per cent teachers attended professional development programmes in Universities.
- Lack of research activities at college level was apparent in test-checked colleges, as only two out of 13 test-checked colleges were involved in minor research works. None of the test-checked HEIs were able to produce any tangible outcomes in the form of patents and consultancies from the research they undertook during the period 2014-19.

#### Access and Equity in Higher Education:

- The Gross Enrollment Ratio (GER) of West Bengal, which ranged between 12.4 and 19.3 during 2010-19, has consistently been lower than national GER (19.4 to 26.3). It is far short of the State Government's own target of 26 to be achieved by 2020-21. Moreover, in terms of GER of SC/ST students, West Bengal consistently lagged behind All India figures during 2014-19.
- West Bengal is at tenth position in terms of number of colleges (1,371 colleges in 2018-19) and at 29th position in terms of college density (13 colleges per lakh population) in 2018-19. The College Population Index of West Bengal (13) was less than half of All India average (28).
- No new Government/ Government aided colleges were established during last five years in five districts where both the College Population Index and the GER were lesser than the State average.
- Regional asymmetry continues to be a matter of concern. Even after lapse of two years after the end of the Twelfth FYP period (2012-17), the urban/rural area wise distribution of colleges (rural: 55 per cent, urban: 45 per cent) falls way short of the desired balance in terms of proportion of population residing in those areas (rural: 73 per cent, urban: 27 per cent).
- Test-checked colleges were not sufficiently equipped with ICT (Information & Communication Technology) facilities. Moreover, dearth of computers in the colleges indicated that IT enabled learning by these HEIs were insufficient.
- Many of the affiliated test-checked colleges did not even fulfill the criteria of essential infrastructure for affiliation, which may compromise the learning atmosphere.

#### Governance and Management

- The main governing bodies that are responsible for ensuring high quality education, were not functioning properly. Issues such as irregularity in conduct of meetings, lack of representation of important stakeholder like students and teachers led to compromise in the elements of consultative administration.
- Further, NAAC accreditation, which was an indicator of quality control, was available only for 22 per cent Government colleges and 57 per cent Government aided colleges in the State. Thus, the quality control activities at all levels of Higher Education remained unmonitored in West Bengal. This assumes significance in view of the fact that only seven per cent of accredited colleges under BU & NBU managed to secure A Grade from NAAC indicating scope for improvement in quality parameters of higher education being imparted in Higher Educational Institutions in the State.
- There remains ample scope for improvement in the functioning of Governing Bodies such as Court, Executive Council, etc. It was observed that the Governing Bodies in the test-checked HEIs did not function with full membership strength and meetings were also held without even the requisite quorum.

(Paragraph 2)

#### 1.8.2 Compliance Audit Observations

#### 1.8.2.1 Management of Fire Services in West Bengal

During audit of Management of Fire Services in West Bengal, several areas of concern relating to operational and management deficiencies were identified, which may potentially affect the level of preparedness and call for attention.

- Serious shortcomings like high risk buildings/ markets running without Fire Safety Certificates and fire safety measures, absence of database of high risk buildings, *etc.*, allowed the fire hazards to loom over the safety of life and property.
- As per assessment made (November 2012) by the Ministry of Home Affairs, GoI based on fire hazard and risk analysis, there was a requirement of 435 fire stations in the State. Against that requirement, the State had only 138 fire stations as of February 2020, indicating a shortage of 68 *per cent*.
- Delays in construction of fire stations and commissioning of newly constructed Fire Stations coupled with shortfall in fire stations affected the quality of delivery of fire services.
- Manpower management also remained a matter of concern, as there was substantial shortage of operational staff. Sensitization of public was found to be inadequate.
- No Fire hazard response and mitigation plan was found to have been prepared for assessing requirements of infrastructure and equipment for the entire State.

- As per norms fixed in SFAC meeting, one Hydraulic Platform/ Turn Table Ladder was required for each district depending upon presence of the high rise buildings. Test check showed that in case of three major cities namely, Howrah, Siliguri and Durgapur, no Bronto Sky Lift and/ or Turn Table Ladder was procured for respective fire divisions.
- On the financial management front, savings under major construction works was a matter of concern, given the fact that a number of under-construction Fire Stations had time overrun. Substantial expenditure incurred by the Government on procurement of fire fighting vehicles did not fructify into strengthening of the fleet.

(Paragraph 3.1)

#### 1.8.2.2 Significant Compliance Audit Observations

West Bengal Medical Services Corporation Limited made an excess payment of ₹ 4.93 crore to three contractors for Integrated Facility Management Services in eight Super Specialty Hospitals during March 2018 to August 2020, as it allowed payment in excess of carpet area in deviation from bid documents.

#### (Paragraph 3.2)

Contractors engaged for Pradhan Mantri Gram Sadak Yojana (PMGSY) road works under Programme Implementation Unit (PIU), Paschim Medinipur were allowed an undue financial benefit of ₹5.19 crore at the cost of State Government revenue by way of short-recovery of royalty (including cess) on excavated earth.

#### (Paragraph 3.6)

A contractor was allowed a payment of ₹ 90.71 lakh against unexecuted lengths of road work and drain work under a PMGSY project in Gopiballavpur-II, Jhargram. While the concerned Programme Implementing Unit failed to discharge its primary responsibilities of diligent monitoring on the works executed by the contractor, inaction of the West Bengal State Rural Development Agency (WBSRDA) in monitoring on the PIU was also evident.

#### (Paragraph 3.7)

Failure of BDO, Kandi, Murshidabad in exercising statutory checks on receipt and accounting of Government receipts led to defalcation of water tax receipt of ₹ 57.73 lakh collected by River Lift Irrigation (RLI) and Deep Tube Well Irrigation (DTW) operators during April 2013 to November 2019.

#### (Paragraph 3.8)

Decision to construct an Auditorium, involving an amount of ₹ 8.98 crore, at the selected area and failure to utilise it for intended purpose, proved to be a burden on the State Exchequer.

(Paragraph 3.9)

Even after establishment of a Sewage Treatment Plant (STP) in the Gayeshpur Municipal Area at a cost of ₹ 146.09 crore, the objective of prevention of discharge of untreated sewage to the river Ganga remained largely unachieved. This was due to non-completion of the work of connecting households of the Municipal Area to the STP.

#### (Paragraph 3.10)

Non-adoption of design specifications of Indian Road Congress for laying block pavement, relating to construction of car-parking space at *Subhas Sarobar* in Salt Lake, Kolkata, resulted in extra expenditure of ₹ 1.31 crore.

#### (Paragraph 3.11)

In an Elevated Road Corridor project under Kolkata Metropolitan Development Authority (KMDA), reversal of normative and approved order of layers in the bituminous wearing coat during execution led to damage of the road within one year of completion of work. KMDA could not invoke the defect liability clause of the contract as the said deviation had been done with full knowledge of KMDA. This led to an additional expenditure of ₹ 3.72 crore on re-laying of the layers.

(Paragraph 3.12)

# Chapter 2 Performance Audit



#### **Chapter 2: Performance Audit**

#### HIGHER EDUCATION DEPARTMENT

2 Outcome of Higher Education in West Bengal

#### 2.1 Introduction

#### 2.1.1 The background

Higher Education in India suffers from two basic concerns, the first being the low Gross Enrolment Ratio (GER)<sup>15</sup>, while the other is the lack of world class higher educational institutions in the country.

The Twelfth Five Year Plan (2012-17) listed out various inadequacies in Indian Higher Education System, namely (i) poor performance of Higher Education Institutions (HEIs) in the area of quality on a relative global scale; (ii) access to Higher Education still being less than the minimum international threshold levels, (iii) distribution of institutions is skewed in terms of regional/ urban/rural balance; (iv) large concentration of conventional disciplines in public universities; (v) unsatisfactory quality of Higher Education as well as research conducted in most universities; (vi) shortage of well-trained faculty; *etc.* Further, the India Skills Report<sup>16</sup> 2020 has found that more than 50 *per cent* of the students graduating from Indian higher educational institutions are unemployable.

In line with this and towards inclusive and equitable quality education and promoting lifelong learning opportunities for all by 2030 as defined in Sustainable Development Goal 4, Government of India <sup>17</sup> has identified following four main focus areas in Higher Education that need attention:

- Access: Expanded availability of Higher Education Institutions
- Equity: Narrowing of group inequalities in access to higher education
- Quality: Improving teaching and research across all institutions and
- Governance: Improvement in educational leadership and governance with the objective of improved learning outcomes at all levels of schooling

#### 2.1.2 The West Bengal scenario

A comparative study based on data available in All India Survey on Higher Education (AISHE) and Reports published by Ministry of Human Resources Development (MHRD) in respect of certain indicators *e.g.* college density, *i.e.*, the number of colleges per lakh eligible population (population in the age-group 18-23 years) and Gross Enrolment Ratio in the years 2010-11 and 2018-19 (*refer* Table 2.1 below) shows that

<sup>&</sup>lt;sup>15</sup> Gross Enrolment Ratio in Higher education in India is calculated as a percentage of the total enrolment in higher education, regardless of age to the eligible official population (18-23 years) in a given school year. GER of India at Higher Education level is around 26.3 per cent which is lower as compared to that of countries like China (44 per cent) and Brazil (50 per cent).

<sup>&</sup>lt;sup>16</sup> India Skills Report is a joint initiative of Wheebox (a global talent-assessment company), People Strong and Confederation of Indian Industry (CII) in collaboration with UNDP, AICTE and AIU.

<sup>&</sup>lt;sup>17</sup> Policy documents such as Strategic Framework of Twelfth Five Year Plan (2012-17) and the Output Outcomes Budget 2018-19 of Government of India.

West Bengal fared poorly amongst all states in India both in terms of college density and GER.

Table 2.1: Comparison of West Bengal with all India average in terms of College density and GER

	Total number of universities		Total number of colleges		College Density GER		College Density GER		College Density GER		Rank of West Bengal amongst
Year	West Bengal (WB)	All India	WB	All India	WB	All India	WB	All India	all states and UTs in respect of GER		
2010-11	26	621	857	32,974	8	23	12.4	19.4	29		
2018-19	45	993	1,371	39,931	13	28	19.3	26.3	27		
Increase	73%	60%	60%	21%	62.5%	22%	56%	36%			

Source: All India Survey on Higher Education Reports

In terms of ranking among all states and Union Territories (UTs) in higher education, West Bengal remained at the lower end of the table, though moving up only marginally from 29 (2010-11) to 27 (2018-19).

Out of the total 45 universities in West Bengal, there are 25 State public Universities, 10 State private Universities, one State Open University seven institutes of national importance and one Central University and one deemed University.

#### 2.1.3 Organizational set-up

The Department of Higher Education (HED) headed by Principal Secretary deals with affairs of Universities and Colleges. The Principal Secretary is assisted by Joint/ Special Secretaries and Director of Public Instruction (DPI). DPI conducts overall work relating to development and expansion of higher education in the State and controls administrative, educational and financial functions, *etc.*, of Government and private colleges.

At the University level, The Vice Chancellor (VC) who is the ex-officio Chairman of Court, Executive Council and Faculty Council, is the principal executive and academic officer of the University. The VC is assisted by Registrar, Finance Officer, Controller of Examination, Heads of departments, *etc*. The Court is the highest governing body of the University and is responsible for making Statutes and passing resolutions on the annual accounts and the financial estimates. The Executive Council (EC) is the Chief Executive body responsible to make, amend and cancel Ordinances. The EC also appoints teaching as well as non-teaching staff and defines their duties, emoluments and conditions of services. Faculty Council frames rules relating to the courses of Post-Graduate Studies and division of subjects in regard thereto. University affiliates both Government and private colleges.

#### 2.1.4 Identification of the outcomes parameters for Higher Education

The outcome of any Government activity represents the measure of fulfilment of the expectations vested on it by the stakeholders. In respect of higher education, the Students, the Society and the Government, all have differing expectations. After extensive interactions with various stakeholders in Higher Education, namely, students, experts like policy makers, accreditation agencies,

regulatory bodies, universities, government education departments, etc., it emerged that:

- The students desired 'employability and higher studies' as the primary outcome of Higher Education;
- The society wanted Higher Education to contribute towards 'creation of new knowledge through research' and 'diffusion of knowledge through effective teaching/ learning processes'; and
- The Government on the other hand aimed to 'create a high quality Higher Education system which is easily accessible to all sections of society'.

These broad outcomes of higher education were linked with various inputs and outputs required in setting-up and managing an effective Higher Education System. It also emerged that a robust and strong governance structure was paramount in achieving these outcomes. Hence, Audit also identified and evaluated various 'parameters required for good governance'.

#### 2.1.5 Audit Objectives

The objectives of Performance Audit of Outcomes in Higher Education in West Bengal were to assess whether:

- 1. The Higher Education system led to increased employability and progress to higher studies for students of higher education institutions;
- 2. The Higher Education system led to betterment of society through effective teaching learning processes and high quality research;
- 3. Equitable Access to Quality Higher Education was ensured for all; and
- **4.** Governance and Management of Higher Education system was adequate and effective.

#### 2.1.6 Audit Criteria

The Performance Audit was conducted against the criteria derived from the following documents:

- Twelfth Five Year Plan;
- Inclusive & Qualitative Expansion of Higher Education-Twelfth Five Year Plan (2012-17);
- Guidelines/ Acts/ Regulations issued by University Grants Commission;
- NITI Aayog's three year action plan;
- Guidelines and Manual issued by National Assessment and Accreditation Council (NAAC);
- Internal Quality Assurance Cell Manual issued by NAAC;
- National Institutional Ranking Framework Manual;
- Rashtriya Uchchatar Shiksha Abhiyan (RUSA) norms;
- Circulars/ orders issued by Department of Higher Education/ DPI, etc.;
- Hand books, circulars and guidelines issued by the selected Universities;
   and
- Acts establishing the selected Universities (Burdwan University and North Bengal University).

#### 2.1.7 Scope of Audit and Audit Methodology

#### 2.1.7.1 Scope of Audit

This performance audit was conducted during November 2019 to January 2020 covering period from 2014-15 to 2018-19 to examine aspects of access, equity, quality and governance of Higher Education in State Universities and in their affiliated colleges. University of Burdwan and University of North Bengal out of 25 State Universities providing education in general streams (Science/ Arts/ Commerce) were selected by simple random sampling method. Thirteen out of 110 affiliated colleges (10 *per cent*) under the jurisdiction of these two Universities were selected by simple random sampling. Further, in order to ensure proportionate audit coverage of affiliated colleges <sup>18</sup>, four Government colleges <sup>19</sup> (two out of five Govt. colleges under BU and two out of five Govt. colleges under NBU) and nine Government-aided colleges <sup>20</sup> (five out of 57 Govt. aided colleges under BU and four out of 39 Government aided colleges and four Private colleges under NBU) were selected. Besides this, records of Higher Education Department (HED) and Directorate of Public Instruction (DPI) were also scrutinized.

#### 2.1.7.2 Audit Methodology

An Entry Conference was held (November 2019) with Secretary, Higher Education Department, Government of West Bengal and Vice-Chancellors of the two selected Universities in which audit objectives, scope of audit, audit methodology and audit criteria for this performance audit were discussed.

The aims of this audit were to assess and evaluate the State's performance in achieving outcomes of higher education. Since neither Government of India nor Government of West Bengal has clearly defined such outcomes and criteria for evaluation and measurement of the outcomes, Audit had to develop its own criteria. The criteria were based on policy documents, processes of accrediting and ranking HEIs and inputs from experts of the Higher Education domain and included provisions of 12th Five Year Plan, assessment indicators adopted by National Assessment and Accreditation Council (NAAC), National Institutional Ranking Framework (NIRF)<sup>21</sup>, and contributions by experts of education sector and National Institute of Public Finance & Planning.

<sup>&</sup>lt;sup>18</sup> Four Government Colleges— Hooghly Mohsin College and Chandannagar College under the jurisdiction of BU. Acharya Profulla Chandra Roy Govt. College and Darjeeling Govt. College under the jurisdiction of NBU.

Nine Government aided colleges – Acharya Sukumar Sen Mahavidyalaya, Dr. Gour Mohan Roy College, Guskara Mahavidyalaya, Kabi Joydeb Mahavidyalaya and Tarakeswar Degree College under the jurisdiction of BU and Moynaguri College, Prasannadeb Women's College, Sonada Degree College and Vivekananda College under the jurisdiction of NBU.

<sup>&</sup>lt;sup>19</sup> Government colleges were fully funded by the Government with all salary and incidentals being borne by the Government. The fees paid by the students were deposited to government account.

<sup>&</sup>lt;sup>20</sup> Government aided colleges are substantially funded by the Government with the salary of the Government appointed teaching and non-teaching staff being paid by the government as grants. The fees paid by the students were retained by the college itself with a certain percentage being paid into Government accounts.

<sup>&</sup>lt;sup>21</sup> NIRF was approved by MHRD and established on 29 September 2015. It outlines a methodology to rank institutions across the country.

In order to assess the performance of higher education system in relation to the outcomes, key outcome indicators (*Appendix 2.1*) as well as input-output indicators (*Appendix 2.2*) were formulated. These indicators help in evaluating the outcomes as well as the steps taken to achieve these outcomes.

On the basis of these outcome indicators and criteria thereon, Audit developed data Annexures, student survey and audit questionnaires. Further, Audit has developed quantitative proxy criteria, based on the scores obtained by 22 Universities graded A++, A+, A, B++, B+, B, C under the NAAC grading system during 2017-18.

Apart from inspection of universities/ colleges and collection of evidences through copies of relevant documents and discussion papers, student's satisfaction survey was also conducted by obtaining feedback from 1,669 students for evaluation of quality of education.

The Audit observations were discussed with the Pr. Secretary, Higher Education Department and Vice Chancellors of both BU and NBU in an Exit Conference (November 2020), in which all the key officials of the Department as well as both the Universities were present. The Department/ Universities also communicated (December 2020) their responses to the Audit observations. The views of the Universities/ Department have been incorporated at appropriate places.

#### 2.1.8 Acknowledgement

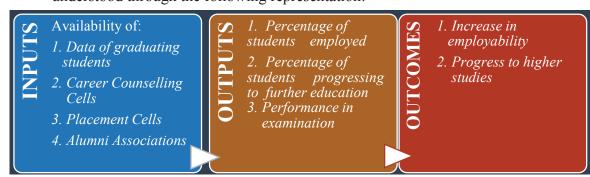
Audit acknowledges the co-operation extended by the Higher Education Department; Directorate of Public Instruction; Vice-Chancellors and concerned officers of University of Burdwan, University of North Bengal and the Principal and staff of the selected colleges in conduct of the Performance Audit.

#### 2.2 Students Progression towards Employment and Higher Studies

This section discusses the most important outcome of higher education that is increasing student progression to employment or higher studies. Various factors and institutional initiatives contribute towards satisfactory achievement of these outcomes. Audit analysis, findings, and recommendations related to this outcome and related contributing factors are discussed in the succeeding paragraphs.

Audit Objective 1: Whether the Higher Education system led to increased employability and progression to higher studies

The relationship between student progression and the various factors, mechanisms and systems contributing towards its achievement can be understood through the following representation:



Increase in employability and progress to higher studies were identified as the most important outcomes that students expect from higher education. Achievement of these outcomes are directly dependent on a number of factors which, besides the quality of education imparted, specifically include availability of career counselling cells, placement cells, alumni associations and proper maintenance of data of graduating students. The existence and effective functioning of such facilitating mechanisms is essential to increase employment opportunities for graduating students.

#### 2.2.1 Students Progression towards Employment and Higher Studies

The International Labour Organisation (ILO) defines Employability as the presence of skills, knowledge and competencies that enhance a worker's ability to secure and retain a job, progress at work and cope with change. According to the ILO, individuals are most employable when they have broad-based education and training, basic and portable high-level skills, including teamwork, problem solving, information and communications technology (ICT) and communication and language skills.

In order to assess these outcomes and evaluate the inputs towards achieving these outcomes, certain indicators have been used which are based on the data relating to the number of graduating students getting job placements, number of students qualifying in competitive employment examinations, number of students progressing to higher studies and number of students graduating successfully. NAAC also considers these factors as key criteria in its process for assessment and accreditation of HEIs.

Audit findings regarding job placements, factors aiding job placements and success rate in competitive exams are discussed below.

#### 2.2.1.1 Placement Cells, Career Counselling Cells, Alumni Associations

Facilitating mechanisms in higher educational institutions, such as Placement Cell, Career Counselling Cell and Alumni Association help the students with appropriate guidance to establish linkages with the world of work and locate career opportunities *vis-à-vis* the realities and job profiles in the context of highly competitive emerging occupational patterns. The gaps in perception about the market demands and individual expectations could be bridged through effective working of such mechanisms<sup>22</sup>.

The NAAC University Manual has stipulated for various Student Support and facilitating mechanisms like well-structured and organized guidance and counseling system, placement cell, grievance redressal cell and welfare measures to support students. Such mechanisms are essential for degree holders of general stream higher education programmes which contribute significantly to the employable talent of this country. As per India Skills Report<sup>23</sup> 2020, at an all India level, BSc, BA and B Com undergraduate programmes have provided,

<sup>&</sup>lt;sup>22</sup> Guidelines for general development assistance to central, deemed and state universities during XI Plan (2007-2012).

<sup>&</sup>lt;sup>23</sup> India Skills Report is a joint initiative by Wheebox and People Strong in collaboration with Confederation of Indian Industry (CII) along with partners like UNDP, AICTE and AIU. This report is a combination of an assessment of 300,000 candidates from 3,500 educational institutes across 28 States and nine Union Territories of India and more than 150 corporates spread across nine Industry sectors. This is the seventh edition of the Report with annual editions being released since 2014.

on an average, 37 per cent, 32 per cent and 32 per cent employable graduates respectively during the period 2014-20.

Information furnished by the test-checked two Universities and 13 colleges and scrutiny of available records during audit inspection showed that there was absence of systematic maintenance of records on these facilitating mechanisms and their effectiveness in terms of placement of students (*further discussed in paragraph 2.2.1.2 later in this report*). However, information as furnished by the HEIs disclosed the following:

- (a) Placement Cell: In respect of existence and functioning of placement cells the audit of test-checked two universities and 13 government/government-aided colleges affiliated with the selected universities revealed the following:
  - (i) In BU and NBU, neither any functional placement cell was in existence, nor were records showing facilitations done by the University for placement of students maintained at the University level.
  - (ii) Among the test-checked colleges, placement records of students were not maintained except in one college, *i.e.*, Tarakeswar Degree College, where out of 2,426 students graduated in five years, 99 students got placement in five years (Army, Police, Banks, *etc.*).

BU stated (December 2020) that a Placement and Students' Welfare Department had been in existence which extended benefits like railway concession, participation in Youth Parliament competition, *etc.* to the students. It was, however, added that details of the student placement were not maintained by that Department, rather it was maintained by the respective academic departments.

The reply vindicated the fact that functioning of the Placement and Students' Welfare Department was not meaningful in terms of facilitating placement of students as the basic data on facilitating activities for placement of students was not maintained by it and there was substantial scope for improvement in its activities.

Thus, non-constitution of placement cells in test-checked HEIs represented a major shortcoming.

(b) Career counselling cell and Alumni Association: Career counselling cell supports students in the development of soft skills and communication ability to meet the rigors of competitive tests, on-job-training, etc. It helps job aspirants in identifying the right job opportunities. Alumni also provide strong support in this endeavor. An active alumni association has the potential to contribute significantly in academic matters, student support as well as mobilization of resources through financial and non-financial means<sup>24</sup>.

University Grant Commission (UGC) in its guidelines has also underscored the importance of well-functioning Career Counselling Cells in addressing the diverse socio-economic handicaps and geographic backgrounds of the heterogeneous population of students coming to the Universities *vis-à-vis* equity of access and placement opportunities through availability of appropriate institutional support information.

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<sup>&</sup>lt;sup>24</sup> NAAC Manual.

Audit of this aspect in the test-checked two universities and 13 government/government-aided colleges affiliated with the selected universities revealed the following:

- (i) In BU and NBU, there was no career counselling cell apart from activities associated with professional courses.
- (ii) Out of 13 colleges, only five test-checked colleges<sup>25</sup> maintained data in respect of students benefitting from guidance for competitive exams and career counselling. It was found that 2,941 students were benefitted from guidance for competitive examinations and career counselling during the period from 2014-19.
- (iii) In BU, the alumni association was found to be almost non-functional, having not met even once during the period under review. However, departmental alumni meetings were held in three departments namely Statistics, Bio technology and Zoology once each during the period. The North Bengal University Alumni Association (NBUAA) was founded on October, 2001 voluntarily by a group of alumni. During 2014-19, 32 Alumni meetings were held.
- (iv) Alumni associations were formed in nine colleges<sup>26</sup> where a total of 116 meetings were held in the last five years. The alumni contributed financially in two while there was contribution in kind (Providing furniture) in one college.

In reply, BU stated (December 2020) that in some professional course career counselling is a part of the routine activity of the department. It also listed out the number of meetings held by the Industry Institute Partnership Cell (IIPC) during 2014-19 and stated that the University was in the process of framing and gathering entire student database.

The reply may be viewed with the fact that development of soft skills and communication abilities through Career Counseling Cell is to be prioritized across all streams including general ones and not merely for professional courses. Mere holding of IIPC meetings for professional courses do not constitute career counselling as envisaged by the UGC.

The absence of Alumni Association activities in BU were borne from the fact that the last AGM was held in 2012 and the claims of disbursing scholarship were also pertaining to the year 2013-14.

The NBU, however, intimated (December 2020) in reply that it had instructed the checked affiliated colleges under NBU to open such Placement and Career Counselling Cell and to organize job fairs as well as to keep regular records of employment.

Thus, the key area of identification of placement opportunities and providing necessary guidance to students through institutionalizing facilitating mechanisms remained largely neglected as evidenced from non-existence/

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<sup>&</sup>lt;sup>25</sup> Maynaguri College, A.S. Sen Mahavidyalaya, Prasannadeb Women's College, APC Roy Govt. College and Tarakeswar Degree College.

<sup>&</sup>lt;sup>26</sup> Vivekananda College, Alipurduar- one, Hooghly Mohsin College- Alumni meetings held but number of meetings not mentioned, Darjeeling Govt. College- 12, Maynaguri College- 25, Tarakeswar Degree College- 10, Sonada Degree College- three, Prasannadeb Women's College- seven, APC Roy Govt. College- one and Chandannagar College- 57.

inadequate functioning of Career Counselling Cells and Alumni Associations coupled with lack of maintenance of key data related to performance of these mechanisms and of the students benefitting from them.

(c) Organization of Job fairs: A job fair is a recruiting event in which employers and recruiters meet with potential employees and where job seekers find more about job openings at potential employers.

Audit scrutiny of two test-checked universities and 13 government/ Government-aided colleges affiliated with the selected universities revealed the following:

In BU, individual Academic Departments like MBA, MBA (HR), Bio-Technology, Microbiology, Physics, Chemistry, M.Tech in Microwave take necessary action and provide financial assistance for organizing placement fairs. BU had held 11 job fairs in which 112 students were placed in jobs. NBU did not organize any job fair during 2014-19.

None of the test-checked colleges organized any job fairs.

Thus, there is ample scope for improvement in the HEIs' efforts in organizing job fair.

(d) Employability enhancement programmes: Employability enhancement programmes for developing traits such as soft skills/ communication skill, spoken English, English writing, etc., are crafted in order to bridge the gap between skills possessed by the prospective employees and the abilities that are looked for by the potential employing organization<sup>27</sup>. The significance of such qualities can be gauged from the findings given in India Skills Reports. It states that, while hiring employees, employers preferred positive attitude, adaptability, learning ability and interpersonal skills in a job seeker. Along with the efforts made by Career Counselling cell which supports the students in the development of soft skills and communication ability, these programmes help job aspirants become job-ready.

Audit scrutiny of the test-checked two universities and 13 government/government-aided colleges affiliated with the selected universities revealed the following:

- (i) Three to six courses <sup>28</sup> have been run by the BU focusing on Employability. The number of students benefitted ranged from 155 to 224 during 2014-19.
- (ii) In NBU it was seen that only three departments, *i.e.*, Law, Mass Communication and Life Long Learning and Extension offered Value added courses like Intra Departmental Client Counselling Programme, Intra Department Moot Court Competition, Intra Departmental Mock Trial Competition, *etc.* A total of 215 students participated in those programmes during 2014-15 to 2018-19.

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<sup>&</sup>lt;sup>27</sup> NAAC Manual.

<sup>&</sup>lt;sup>28</sup> Certificate course in Yoga, Communicative English, Cyber crime and security, PG diploma in Guidance and Counselling, PG diploma in Yoga, PG diploma in Special Education (Mental retardation).

Facilitating mechanisms such as placement cell, career counselling cell, alumni association and employability enhancement programmes are important tools for enhancing employability and employment opportunities of graduating students. It can be concluded from above observations that in most of the test-checked universities and colleges, these mechanisms were either non-existent or functioned inadequately and hence could not have contributed much towards enhancing employability of the students studying in these HEIs. Moreover, owing to lack of maintenance of any employment related data or information by most of the test-checked HEIs, dependable feedback, crucial for future efforts towards enhancing employability of students, was not available.

• Recommendation: In order to facilitate graduating students in getting employment or to progress to higher studies, every higher educational institute should constitute a well-functioning placement cell, a career counselling cell and encourage a vibrant alumni association.

#### 2.2.1.2 Evaluation of Higher Education Institutions through indicators

In this section, the performance of test-checked HEIs in enhancing employability and encouraging progress to higher studies has been assessed by evaluating certain known and acceptable indicators used by accrediting and ranking agencies.

(a) Status of job placement of students: Job placement of students refers to a student getting employment through various efforts made by the institution before the student completes his program. To assess an institution's performance in providing job placements, the average percentage of placement of outgoing students during 2014-19 was used as an indicator (Sl. No. 1 of Appendix 2.2). This indicator is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

During audit, data regarding placement of graduating students was sought from test-checked universities, and colleges. However, out of two universities and 13 government/government-aided colleges<sup>29</sup> affiliated with those universities:

- (i) In BU and NBU, Placement records of students were not maintained.
- (ii) Placement records of students were not maintained except in one college, *i.e.*, Tarakeswar Degree College under BU where 99 students (0.47 *per cent* of students enrolled) got placement in five years (Army, Police, Banks, *etc.*).

The Department (December 2020), in its response, endorsed the reply of the BU that placement records of students had been maintained appropriately. The reply may be viewed with the fact that the University could not provide placement details to Audit at the time of visit. Evidently, the list of placements given by it in December 2020 was collected only after the matter had been flagged by Audit. Moreover, the list contained substantial number of duplicate entries.

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<sup>&</sup>lt;sup>29</sup> Colleges under BU: Two Govt. colleges, i.e., Hooghly Mohsin College and Chandannagar College and five Govt. aided colleges, i.e., Acharya Sukumar Sen Mahavidyalaya, Dr. Gour Mohan Roy College, Guskara Mahavidyalaya, Kabi Joydeb Mahavidyalaya and Tarakeswar Degree College. Colleges under NBU: Two Govt. colleges, i.e., Acharya Profulla Chandra Roy Govt. College and Darjeeling Govt. College and four Govt. aided colleges, i.e., Moynaguri College, Prasannadeb Women's College, Sonada Degree College and Vivekananda College.

BU stated that the University would advise the colleges to maintain the data in connection with employability enhancement programme at UG level.

Though maintenance of crucial data on placement is important for fulfilling the NAAC accreditation requirements, the same was not being maintained at the test-checked universities. Hence, the average percentage of placement of outgoing students during 2014-19 at the overall university level could not be measured and commented upon. Even at the individual college level, only one out of 13 test-checked affiliated colleges maintained such data.

(b) Progress to higher studies: Apart from employment, progress to higher studies for post-graduation, doctorate and post-doctorate studies, etc., is a career option that students aspire to take up. In order to assess how well test-checked universities and colleges did in sending their students for higher studies, percentage of students progressing to higher education during 2018-19 (current year) was used as an outcome indicator. It is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs (maximum score was awarded to institutions where 20 per cent and above students progressed to higher studies).

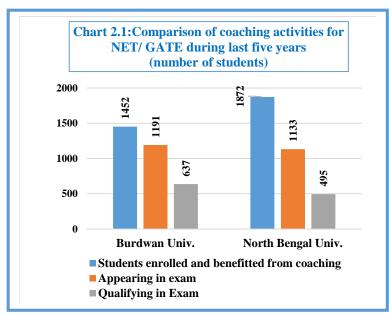
Enquiries made during audit of the test-checked universities and colleges revealed that none of the two test-checked Universities maintained any records regarding student progression (though both these universities got accreditation of NAAC in 2016). Five test-checked colleges maintained some records of the progression of the students. However, it was neither systematic nor complete and hence, inconclusive. Others did not keep any records of student progression to higher education, *i.e.*, from UG to PG courses, PG to M Phil, PG to PhD, M Phil to PhD, PhD to Post-Doctoral, *etc*.

Hence, due to non-maintenance of relevant data, Audit could not assess the performance of the two universities in terms of this indicator. This also indicates failure of Internal Quality Assurance Cell (further details later in this report *vide* paragraph no. 2.5.1.2(ii)) in monitoring the quality parameters/ assessment criteria for NAAC accreditation.

(c) Qualifying in Competitive Examinations: Competitive examinations held at the National and State levels provide immense opportunities for student progression. A number of competitive examinations are held for graduating students to qualify for employment or for progressing to higher studies. Qualification in competitive examinations is an important criteria of NAAC's assessment and accreditation process of higher education institutions.

In order to assess an institution's ability to adequately equip its students for qualifying such examinations, *Average percentage of students qualifying in State/ National/ International level examinations during 2014-19 (NET/SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/ State government examinations vide Sl. No. 2 of Appendix 2.1)* was used as an indicator. It was seen that NAAC awarded maximum score to Universities where the success rate was 30 *per cent* and above.

Enquiries made during audit of the test-checked universities and colleges in this respect revealed the following:



At BU, out of 1,452 students (13 per cent of total students) enrolled benefitted from coaching in five years, 1,191 appeared at the NET/ GATE exams, of whom 637 (44 per cent of students enrolled and benefitted) qualified. At NBU, 1,872 students (27 per cent) were enrolled for and benefitted from coaching, 1,133 students appeared in the examinations, while 495 (26 per cent of enrolled students and benefitted) students passed in NET/ GATE during 2014-15 to

2018-19. The comparative position is shown in **Chart 2.1**. Thus, the success rate in respect of NBU was below 30 *per cent*.

- Separate coaching was not provided for UPSC, SSC, State PSC, CAT examinations. Neither did these Universities maintain any record of students qualifying in Public examinations like UPSC, SSC, State PSC, CAT, etc.
- In five out of thirteen test-checked colleges, students were provided guidance for competitive examinations. The percentage of students receiving guidance ranged<sup>30</sup> from 0.03 to 38 and the number qualified in the examinations ranged from 0.06 *per cent* to 2.69 *per cent*<sup>31</sup>.

In response, BU claimed (December 2020) that 1,194 candidates have qualified in NET/ GATE during 2014-19. The reply was not acceptable as no records could be produced to Audit by BU in support of the claim, though called for by Audit during cross verification of the records of BU.

Thus, despite having been accredited by NAAC earlier, BU and NBU did not maintain competitive exam related data except for NET, which was essential for evaluating a key parameter of the accreditation process. Further, number of students qualifying in State/ National/ International level examinations during 2014-19 was available for only five out of 13 colleges. Even at the college level, data maintenance was non-existent or incomplete, underscoring the lack of monitoring and control by governing bodies. This also indicates failure of Internal Quality Assurance Cell (IQAC) in monitoring the quality parameters/ assessment criteria for NAAC accreditation in test-checked HEIs.

#### 2.2.1.3 Performance of students in examinations

NAAC in its manual<sup>32</sup> states that the real test of the extent to which teaching learning has been effective in a Higher Education Institution is reflected in the

Maynaguri College- 3.54 per cent, Tarakeshwar Degree college- 0.03 per cent, Prasannadeb Women's College- 9.11 per cent, APC Roy Govt. College- 24.59 per cent and Acharya Sukumar Sen Mahavidyalaya- 37.9 per cent for 2018-19 only.

<sup>31</sup> Maynaguri College- 0.06 per cent, Tarakeswar Degree College- 0.49 per cent, Prasannadeb Women's College- 0.24 per cent, APC Roy Govt. College- 2.69 per cent and Acharya Sukumar Sen Mahavidyalaya- 0.07 per cent for 2018-19 only.

<sup>&</sup>lt;sup>32</sup> Para 2.6 NAAC Manual.

student performance in the examinations. NAAC and NIRF in their assessment criteria have identified that effectiveness of a higher education institution is reflected through many student centric aspects including student performance in the examinations, average pass percentage of students, percentage of students graduating with higher divisions, *etc*.

Using *average pass percentage of Students during 2017-18* as an indicator *(Sl. No. 2 of Appendix 2.2)*, test-checked HEIs have been evaluated on the basis of examination results. This indicator is one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

The data relating to average pass percentage of all students who appeared in final year examinations in under graduate and post-graduates programs of Science, Arts and Commerce streams during 2017-18 in test-checked two Universities is given in **Table 2.2** below.

Table 2.2: Performance of students in examinations during 2017-18

	Average pass percentage of all students who appeared in final year examinations  BU NBU						
Under graduate	50.40%	77.65%					
Post graduate	94.78% 89.34%						

Source: Information provided by concerned university

None of the 13 test-checked government colleges and government-aided colleges maintained data regarding division-wise result.

During accreditation of universities, NAAC for the indicator *average pass percentage of Students during 2017-18*, awarded maximum marks to an institution on having average pass percentage of 90 *per cent* and above. Accordingly, both BU and NBU fell short to achieve this standard.

As per the information provided to Audit with respect to one of the basic functions of any HEI, *i.e.*, conducting exams and maintaining results, it was clear that basic data was also not being maintained properly. Moreover, the fact that almost 50 *per cent* students (under BU *vide* **Table 2.2**) could not graduate points to scope for improvement in the quality of higher education at undergraduate level.

## Summary of observations in respect of Increase in employability and progression to higher studies

The findings discussed in the foregoing paragraphs shows that the HEIs fell short in terms of the basic functions that were essential to enhance employability of their students and give them opportunities for higher studies. Facilitating mechanisms such as placement cell, career counselling cell, alumni association and employability enhancement programmes, which are important tools for enhancing employability and employment opportunities of graduating students, were either non-existent or functioned inadequately in both the test-checked universities. Hence, they could not have contributed much towards enhancing employability of the students in the job market. Moreover, owing to lack of maintenance of any employment related data or information by most of the test-checked HEIs, dependable feedback, crucial for future efforts towards enhancing employability of students, was not available.

**Recommendation:** Considering that employability and student progression to higher studies is the most important outcome for students, every higher education institution should put in place a robust system of collecting and maintaining related data for depicting a real and fair position of the quality of education being imparted in the institution.

#### 2.3 Betterment of society by high quality teaching-learning and research

Audit objective 2: Whether the Higher Education system led to betterment of society by ensuring high quality teaching-learning and research in higher education institutions

The expectations of Society from Higher Education can be largely met if the system of Higher Education diffuse knowledge to society through High Quality Teaching/ Learning and produce new knowledge through research as shown in the representation below:

## INPUT

- 1. Design, new/revision of programme/course
- 2. Academic flexibility
- 3. Feedback from stakeholders
- 4. Foolproof process of conducting exams
- 5. Centralised & standardised evaluation
- 6. Availability and qualification of teachers
- 7. Teaching style
- 8. Number of researchers
- 9. Volume of Research Grants

# OUTPUTS

- 1. Well Designed Programmes & Courses
- 2. Syllabus completion
- 3. Advanced teaching methods
- 4. Robust Examination & Evaluation System
- 5. No. of Papers, Publications, Patents, Consultancies & awards

## Higher education leading to betterment of Society by (i) Diffusing knowledge

- (i) Diffusing knowledge to society through High Quality Teaching/ Learning
- (ii) Producing new knowledge through research

## 2.3.1 Betterment of society by imparting knowledge through effective curriculum and teaching processes

#### 2.3.1.1 Curriculum Design, Development and Implementation

Curricular aspects are the mainstay of any educational institution. They include curriculum design, development, enrichment, planning, and implementation. A university has the mandate to visualize appropriate curricula for particular programmes, revise/ update them periodically, ensure that the outcomes of its programmes are defined by its councils/ bodies. An affiliated college, on the other hand, operationalizes the curriculum within the overall framework provided, in one's own way depending on its potential resource, institutional goals, *etc.*, under the overall supervision of the university. An affiliated college depends largely on a university for legitimizing its academic and administrative processes.

#### (A) Process of curriculum designing and development

Board of Studies (BoS) of a University, after taking appropriate need based inputs from expert groups, recommends the curriculum design of higher

education programme <sup>33</sup> to the Faculty Council, which is approved by the Executive Council.

Further, in spite of NAAC recommendation (2016) that the university's BoS should restructure its curriculum by including job oriented/ facilitating contents with the help of members from stakeholders, BU did not take any feedback from the stakeholders.

In NBU, in some industry linked courses (such as Tea Science and MBA), employers' perspective were taken. In other cases, UGC model curriculum was followed; of which, some regional context was added for each programme in relation to UGC model curricula.

#### (B) Referring to curricula of leading universities

NAAC Manual (paral.1.1) observed the Curriculum Design and Development is a complex process and provided that the same should be based on appropriate need-based inputs in consultation with expert groups, as well as feedback from stakeholders. Adoption of good practices and to be in tune with the emerging national and global trends is a key indicator in this matter.

Scrutiny of the minutes of BoS did not show any attempt for improvement in the curriculum following leading universities in the same field of study. Further, it was observed that though the syllabi were designed with the approval of Faculty Council, no supporting document in support of feedback from the local/national/global stakeholders could be made available to Audit.

In reply, BU stated (December 2020) that there was a full-fledged formal and informal mechanism to obtain inputs from important stakeholders relating to curriculum. In some professional courses informal feedback was also obtained from alumni engaged with industries.

However, during verification of records no evidence of feedback from stakeholders during formulation of curricula could be produced before Audit.

Hence, with regard to the process of curriculum design and development, though the test-checked universities claimed to have followed the laid down procedures, there was insufficient evidence to conclude that crucial feedback from stakeholders, inputs from expert groups and reference to curricula of leading universities were made use of for curriculum improvement.

#### (C) Revision of syllabus

Twelfth FYP in paragraph 4.3 envisages that the curricula be revised at least once in every three years and the syllabi be made relevant in tune with job market. Further, NAAC in its accreditation process considers regularity and periodicity of syllabus revision as a key criterion. In line with this, in order to assess the efforts made by the test-checked Universities to regularly revise their syllabi the following outcome indicator was evaluated.

Key Outcome Indicator 3: Percentage of programs where syllabus revision was carried out during 2014-19.

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<sup>&</sup>lt;sup>33</sup>As per NAAC manual programme is a range of learning experiences offered to students in a formal manner over a period of one-to-four years leading to certificates/ diplomas/ degrees, i.e., BA (Economics), B.Sc (Physics).

The data related to programs where syllabus revision was carried out by BU and NBU during 2014-19 is given in **Table 2.3** below.

Table 2.3: Programs where syllabus revision was carried out

Name of University	Total no. of Programs offered in the University during 2014-19	No. of Programs in which syllabus was revised during 2014-19	Percentage
BU	388	80	21
NBU	111	63	57

Source: Information provided by concerned university

During accreditation of universities, NAAC for the *Key Outcome Indicator 3* awarded maximum score to the institutions where syllabus of 50 *per cent* and above programmes were changed during last five years. Hence, as per NAAC benchmarks, BU was not eligible for scoring maximum marks.

In reply, BU stated (December 2020) that for all programmes CBCS syllabus had been introduced during the period thereby leading to almost 100 *per cent* revision.

The reply is not fully acceptable as the objective of revision of syllabus cannot be met by introducing CBCS.

Hence, with regard to timely revision of syllabus, there were shortcomings in BU

## (D) Courses having focus on Employability/ Entrepreneurship/ Skill development

NAAC in its accreditation and assessment process gives due weightage to employability, entrepreneurship and skill development focus in the design of curriculum by universities. In order to assess the efforts made by test-checked Universities towards increasing focus on employability in curriculum, the following outcome indicator was evaluated.

Key Outcome Indicator 4: Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during 2014-19

As per information provided by BU and NBU, the position of courses having focus on employability/ entrepreneurship/ skill development during 2014-19 is given in **Table 2.4** below.

Table 2.4: Courses having focus on employability/ entrepreneurship/ skill development

Name of	N	o. of course	es in all p	rograms		No. of courses having focus on employability / entrepreneurship/ skill development (percentage)				
university	2014-15	2015-16	2016-17	2017-18	2018-19	2014-15	2015-16	2016-17	2017-18	2018-19
BU	429	495	503	552	564	23 (5)	24 (5)	58 (12)	59 (11)	61 (11)
NBU	59	61	62	67	77	35 (59)	33 (54)	37 (60)	39 (58)	46 (60)

Source: Information provided by concerned university

Choice Based Credit System (CBCS) was a mode of learning in higher education which facilitates a student to have some freedom in selecting his/ her own choices, across various disciplines for completing a UG/ PG program. All UG and PG programs, as per UGC, have to implement CBCS. In BU, CBCS was introduced in PG Departments from 2014-17 and in UG, from 2017-18. NBU, however lagged behind and introduced it in PG and UG during 2017-18

and 2018-19 respectively. After introduction of CBCS it was observed that there was no similarity in the way of counting courses in both the Universities. Each of the papers of a subject in BU was designated as a course; thereby increasing the number of courses. CBCS has been discussed later in the report under Academic flexibility {vide para 2.3.1.1. (G)}.

It is observed that though there has been increase in number of employability-focused courses, however, in terms of average percentage of such courses *vis-à-vis* all courses, NBU fared much higher as compared to BU. In BU, only nine *per cent* of total courses focused on employability on an average, while in NBU, it was 58 *per cent*.

It was also observed that none of the courses in test-checked 13 colleges were having focus on employability/ entrepreneurship/ skill development during 2014-19.

During accreditation of universities, NAAC for *Key Outcome Indicator 4* awarded maximum score to the institutions where on an average 50 *per cent* and above courses had focus on employability/ entrepreneurship/ skill development during last five years. Hence, as per NAAC benchmarks, BU was not eligible for scoring maximum marks.

The above position may, however, be viewed with lack of coherence among universities in defining the main characteristics of employability focused courses.

Hence, lack of uniformity in parameters for determining employability focus of courses and relatively low number of courses having employability focus were the major shortcomings observed by Audit.

#### (E) Number of value-added courses and students enrolled

Value added course<sup>34</sup> and activities are those which may not be directly linked with one's discipline of study but contribute to sensitizing students to cross cutting issues such as gender, environment and sustainability, human values and professional ethics.

To assess the efforts made by test-checked Universities in offering value-added courses, 'the number of value-added courses imparting transferable and life skills offered during 2014-19' was used as an indicator (Sl. No. 3 of Appendix 2.2). This indicator is derived from one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

Also in order to assess the efforts made by test-checked universities in encouraging students to enroll for value added courses, the following outcome indicator was evaluated

Key Outcome Indicator 5: Average percentage of students enrolled in value added courses during 2014-19

As already discussed earlier in para 2.2.1.1, information provided by test-checked two universities and 13 selected colleges revealed that in case of BU the number of students enrolled in value added courses ranged from 155 in 2014-15 to 224 in 2018-19, while in case of NBU, total 215 students

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<sup>&</sup>lt;sup>34</sup> Include rural development, acting in theatre and television, spoken English, video blogging, coaching for competitive examination, farm management, etc.

participated in such programmes during 2014-19. In terms of average percentage, only 0.26 *per cent* of students in BU and 3.07 *per cent* in NBU were enrolled in value added courses. No value added course was introduced by any of the test-checked colleges during the period.

During accreditation of universities, NAAC awarded maximum marks where number of value added courses were 50 and above on an average and 10 *per cent* and above students enrolled in these courses during 2014-19. Hence, as per NAAC benchmarks, none of the two Universities were eligible for scoring any marks.

Thus, barring a few cases, none of the test-checked HEIs made any efforts to introduce value added courses in the curriculum. As a result, students were deprived of the opportunity of enhancing and diversifying their knowledge through value added courses.

#### (F) Students undertaking field-projects/internships

Internships are designated activities that carry some credits <sup>35</sup> and involve working in an organization under the guidance of an identified mentor. Field projects that students need to undertake involve conducting surveys outside the college/ university premises and collection of data from designated communities or natural places. Such practical engagement helps the students in applying their knowledge and skills in different settings and inculcating professional dispositions and ethics.

NAAC in its accreditation and assessment process used the key indicator 'the percentage of students undertaking field projects/ internships during 2018-19' (current year) (Sl. No. 4 of Appendix 2.2).

Scrutiny of information provided by two Universities and 13 test-checked government/ government-aided colleges showed that in BU a total of 3061 students took part in field project and 481 students undertook internship in 30 *per cent* courses during the period 2014-19. In NBU, 3627 students took part in field project and internship in 52 *per cent* courses during 2014-19. No field project and internship programme was conducted in any of the test-checked colleges.

#### (G) Academic flexibility

Academic flexibility provides the students with freedom of horizontal mobility and inter-disciplinary options. There are number of ways through which academic flexibility can be facilitated. It includes offering new and relevant courses, introducing CBCS and semester systems, *etc*.

In order to assess the efforts made by test-checked universities in providing academic flexibility through introduction of new courses in the programmes, the following outcome indicator was evaluated.

Key Outcome Indicator 6: Percentage of new Courses introduced out of the total number of courses across all Programs offered during 2014-19 with the focus of employability.

<sup>&</sup>lt;sup>35</sup>A credit system is a systematic way of describing an educational program by attaching credits to its components. UGC defines one credit as one theory period of one hour per week over a semester, one tutorial period of one hour per week over a semester and one practical period of two hour per week over a semester.

#### (I) Introduction of new courses

As per information provided by the two test-checked universities, the position of number of new course introduced during 2014-19 and number of courses having focus with employability is detailed in **Table 2.5** below:

Table 2.5: Number of new courses introduced including courses with

employability focus

Name of University	Number of Courses offered during 2014-19	New Courses introduced during 2014-19	Total courses with focus on employability	
BU	2,543	506	225	
NBU	326	58	190	

Source: Information provided by concerned university

It can be seen from table above that in BU, 506 new courses had been introduced in 33 Departments during 2014-19 out of a total of 2543. NBU had introduced 58 new courses during 2014-19 out of total of 326 in 28 academic departments.

In reply, the Higher Education Department stated (December 2020) that different universities introduced different curriculum considering their vision and geographical and socioeconomic conditions. For these reasons curricula introduced by NBU were not replicated in BU. Department, however, agreed that there is scope for introducing further courses in Universities.

#### (II) Programs having Choice Based Credit System

As per UGC, CBCS<sup>36</sup> allows students higher flexibility in choosing interdisciplinary, intra-disciplinary courses, skill oriented papers and for holistic development.

Further, UGC has prescribed minimum course curriculum for undergraduate courses under CBCS and guidelines for implementing Semester System in higher education institutions. UGC reiterated (August 2018) to implement CBCS in universities and also to revise curriculum.

NAAC, during assessment and accreditation process, used 'the percentage of programs having CBCS during 2018-19 (current year)' as an indicator '(Sl. No. 5 of Appendix 2.2)'.

As per UGC, all UG and PG programs in universities/colleges have to implement CBCS. In BU, CBCS was introduced in PG Departments from 2014-17 and in UG, from 2017-18. NBU, however lagged behind and introduced it in PG and UG during 2017-18 and 2018-19 respectively. The position of number of courses having CBCS in two Universities is given in **Table 2.6** below:

Table 2.6: Courses having CBCS during 2018-19

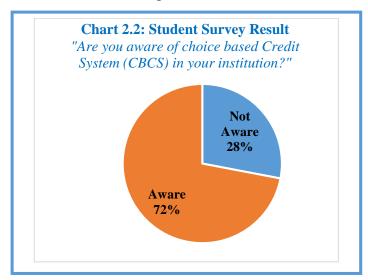
Name of University	No. of Courses offered	No. of Courses in which CBCS or elective course system introduced	Percentage
BU	564	270	48
NBU	77	76	99

Source: Information provided by concerned university

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<sup>&</sup>lt;sup>36</sup> As per UGC guidelines CBCS provides choice for students to select from the prescribed courses (core, elective or minor or soft skill courses) across various disciplines.

It was observed from the records of two test-checked universities and colleges in respect of CBCS that in BU, out of the 564 courses, 233 courses



(41.5 per cent) were intra discipline and 37 (6.5 per cent) courses were inter discipline during 2018-19. In NBU, out of 77 courses, 56 courses (72.27 per cent) were intra discipline and 20 inter discipline (25.9 per cent) during 2018-19.

Though all the test-checked colleges had introduced CBCS in all the courses during 2018-19, however, it transpired from Students survey that 28 *per cent* of the students surveyed were not aware of that flexibility available to them (Chart 2.2).

Thus, due to limited availability of CBCS in BU, a large number of students were denied the chance of holistic development through additional avenues of learning beyond the core subjects.

#### (III) Programs having Semester System

A semester system is an academic term that divides an academic year into two parts that provides an opportunity to the students for continuous learning, assessment and feedback. As per UGC guidelines, the semester system accelerates the teaching-learning process and enables vertical and horizontal mobility in learning.

It was observed that both the test-checked universities had introduced semester system for all post graduate (PG) programmes from the year 2014-15. Semester system in the test-checked colleges under BU and NBU had been introduced from 2016-17 and 2017-18 respectively.

The above observations indicate that there remains substantial scope for improvement in revision/ modernization of syllabi, introduction of employability focused curricula and value-added courses, providing exposures among the students through internships, *etc*. The initiatives taken in the university level on many such aspects did not sufficiently percolate to the colleges.

**Recommendation:** In order to keep the courses more focused on employability/entrepreneurship/skill development, the universities should revise/design curriculum every three years considering the need of industry, local/national market.

#### 2.3.1.2 Effective Teaching Processes

In this section, aspects that are closely connected to advanced teaching methods such as Information and Communication Technology (ICT), Learning Management Systems (LMS), e-resources, faculty related aspects, examinations systems, *etc.*, have been discussed.

#### (A) Use of Information and Communication Technology in teaching

NAAC Manual for Universities, defining the role of ICT, states that technological advancement and innovations in educational transactions have to be undertaken by all HEIs to make a visible impact on academic development as well as administration. Traditional methods of delivering higher education have become less motivating to a large number of students.

NAAC during assessment and accreditation process of HEIs used the following indicator:

Key Outcome Indicator 7: Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources, etc., during 2018-19 (current year)

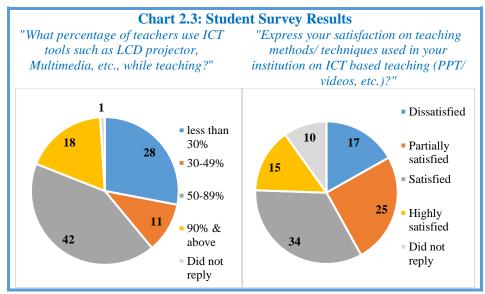
Records of the two test-checked universities regarding the position of number of teachers using ICT during 2018-19 is given in **Table 2.7** below:

Table 2.7: Teachers using ICT for teaching during 2018-19

Name of University	Total number of teachers	No. of teachers using ICT in teaching	Percentage
BU	224	188	84
NBU	194	175	90

Source: Information provided by concerned university.

It was observed from the table above that 84 and 90 *per cent* teachers in BU and NBU respectively used ICT for teaching during 2018-19. Student survey results showed inconclusive position in respect of percentage of teachers using ICT, teaching methods did not fully satisfy 42 *per cent* of students surveyed (*vide* Chart 2.3).



Besides, 42 *per cent* teachers in seven test-checked colleges<sup>37</sup> under BU and 46 *per cent* teachers <sup>38</sup> in six test-checked colleges under NBU used ICT for teaching during 2018-19.

During accreditation of universities, NAAC awarded maximum marks to an institution where on an average

80 per cent and above teachers were using ICT in teaching during 2018-19

<sup>&</sup>lt;sup>37</sup> Hooghly Mohsin College- 30 per cent, Gushkara Mahavidyalaya- 50.12 per cent, Kabi Joydeb Mahavidyalaya- 50 per cent, Tarakeswar Degree College- 30.68 per cent, Dr. Gour Mohan Roy College- 16.67 per cent, A. S. Sen Mahavidyalaya- 100 per cent and Chandannagar Govt. College- 23.27 per cent.

<sup>&</sup>lt;sup>38</sup> Vivekananda College, Alipurduar- 29.13 per cent, Darjeeling Govt. College- 25 per cent, Maynaguri College- 60 per cent, Sonada Degree College- 100 per cent, Prasannadeb Women's College- 12.19 per cent and APC Roy Govt. College- 100 per cent.

(current year). Hence, as per NAAC benchmarks, both the universities were eligible for the marks.

#### (B) Availability and quality of Faculty

Paragraph 7.1.2 of Report on 'Inclusive and Qualitative Expansion of Higher Education' issued under Twelfth FYP stated that shortage of quality faculty coupled with lack of faculty mobility across regions is a major constraint in the development of Indian higher education system.

Though the HED was committed to increase the faculty student ratio, it did not maintain any data regarding the total requirement/ sanctioned strength of teachers. Further, as per the Government order, the number of teachers to be made available in a Government-aided college was based solely on the number of streams available in the college and not on the number of students enrolled. This hampered the goal of reaching the desired ratio as per norms.

To assess the efforts made by HED, WB and by test-checked universities and colleges in ensuring adequate number of teachers, *the availability of teachers* as per the prescribed Student Teacher Ratio (STR) of 20:1 during 2018-19 was used an indicator (Sl. No. 6 of Appendix 2.2). This indicator is derived from the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) norms.

The overall ratio of number of students enrolled and number of teachers posted in both BU and NBU was 14:1. **Table 2.8** shows further analysis under UG and PG programmes in Arts, Science and Commerce stream in two test-checked universities and 13 test-checked Government/ government-aided colleges in 2018-19:

Table 2.8: STR in test-checked Universities and colleges during 2018-19

Name of Type		Total n	umber of st	udents	No. of teachers			Student Teacher Ratio		
university	of data	Arts	Commerce	Science	Arts	Commerce	Science	Arts	Commerce	Science
	A	1,769	149	717	94	23	96	19:1	6:1	7:1
BU	В	4,235	769	1,383	111	15	90	38:1	51:1	15:1
	C	14,579	303	554	66	11	13	221:1	27:1	43:1
	A	1,938	132	735	112	12	70	17:1	11:1	11:1
NBU	В	1,734	63	668	80	6	89	22:1	10:1	8:1
	C	15,213	0	378	90	0	22	169:1	0	17:1

Source: Information provided by test-checked institutions

A: All departments of University, B: Test-checked government colleges (Hooghly Mohsin College, Chandannagar Govt. College, Darjeeling Govt. College and APC Roy Govt. College) and C: Test-checked government-aided colleges (Acharya Sukumar Sen Mahavidyalaya, Dr. Gour Mohan Roy College, Guskara Mahavidyalaya, Kabi Joydeb Mahavidyalaya, Tarakeswar Degree College, Moynaguri College, Prasannadeb Women's College, Sonada Degree College and Vivekananda College)

Thus, individual faculties (Arts, Science and Commerce) of both the test-checked universities had wide variations.

The situation is substantially worse in the Arts stream of the test-checked Government-aided colleges under both the Universities.

As regards availability of faculty *vis-à-vis* sanctioned posts it was observed that in Burdwan University, during 2014-19, against average sanctioned strength of 308 teachers per year, the availability was only 218 (71 *per cent*). Similarly, in NBU, during 2014-19, against average sanctioned strength of 268 teachers per year, availability was only 157 (59 *per cent*).

Such shortage of teachers can adversely affect the teaching quality. Shortage at college level assumes further significance given the sub-optimal percentage of passing at UG level in both the universities as already discussed in Paragraph 2.2.1.3 earlier in the report.

#### (C) Availability of teachers with minimum prescribed qualifications

Paragraph 3.4.4 of UGC (Affiliation of Colleges by University) Regulations, 2009 prescribes that the number of teaching posts, qualification of teaching staff and their recruitment/ promotion procedure as prescribed by UGC and condition of the services shall be in accordance with the Statutes/ Ordinance/ Regulation of the University/ State Government/ UGC.

In this context, UGC prescribes that minimum qualification for the teachers in the various faculties in the colleges affiliated to the Universities should have minimum 55 *per cent* marks in Master's degree and should have cleared National Eligibility Test (NET).

Scrutiny of information provided by test-checked two universities and 13 government/ government-aided colleges revealed the following:

• In the test-checked colleges about 72 *per cent* of teachers (including part time teachers and guest faculty) had the minimum qualification at the time of recruitment. However, Audit noted shortfall in following colleges (all Government-aided), as detailed in **Table 2.9** below:

Table 2.9: Colleges with substantial percentage of teachers (permanent and temporary) not having basic minimum qualification as per UGC norms

Name of the College	Percentage of teachers not having minimum qualification
Vivekananda College, Alipurduar	64.29 per cent
Kabi Joydeb Mahavidyalaya	27.27 per cent
AS Sen Mahavidyalaya,	73.68 <i>per cent</i>
Sonada Degree College	26.32 per cent
Prasannadeb Women's College	41.25 per cent

Source: Information collected from test-checked colleges

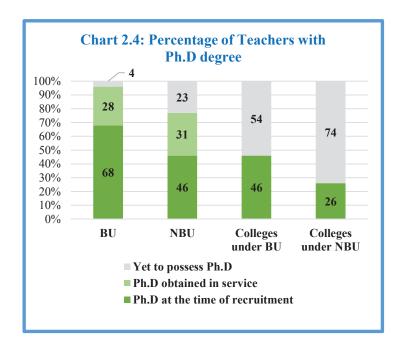
In their reply, both the Universities stated (December 2020) that in the test-checked colleges, all the faculty members appointed against substantive post have prescribed qualifications as per norms.

The reply, however, did not address the core issue that many teachers teaching in colleges (especially temporary teachers who were not recruited against substantive posts) are not having minimum qualifications.

In some of the test-checked Government-aided colleges, significant percentage of teachers are not having the basic minimum qualification. This indicates failure in compliance to UGC norms and calls for attention as it can potentially affect the quality of teaching adversely.

#### (D) Full time teachers with Ph. D degree

To assess the efforts of test-checked HEIs in recruiting full time teachers with Ph.D degrees, *the average percentage of full time teachers with Ph.D. during 2014-19* was used as an indicator (*Sl. No. 7 of Appendix 2.2*). This indicator is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs.



Scrutiny of the information provided by selected two Universities showed that:

In **BU**, out of 213 fulltime teachers during 2018-19, 146 possessed Ph.D degree at the time of recruitment, 59 obtained it during service, while eight do not possess Ph.D degree.

Similarly, in **NBU**, out of 194 fulltime teachers during 2018-19, 90 teachers possessed Ph.D degree at the time of recruitment and 59 acquired it in service while 45 had no Ph.D degree.

In seven test-checked colleges <sup>39</sup> under BU about 46 per cent of teachers had Ph.D degree.

Similarly, **six test-checked colleges**<sup>40</sup> **under NBU** showed that only 26 *per cent* of teachers had Ph. D degree.

During accreditation of universities, NAAC awarded maximum score to the institution where on an average 70 *per cent* and above teachers were having PhD during 2014-19. Hence, as per NAAC benchmark, both BU and NBU were eligible for scoring maximum marks with respect to this indicator, while none of the test-checked colleges were eligible to score any marks.

#### (E) Full time teachers who received awards, recognition, fellowships

Since recognition of teachers at State, National and International levels is a marker of their teaching quality, the percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognized bodies during 2014-19 was used as an indicator (Sl. No. 8 of Appendix 2.2) for assessing quality of teaching staff in HEIs. This indicator is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

Complete and consolidated information regarding number of full time teachers who received awards, recognition, fellowships, *etc.*, at State, National, International level from Government or recognized bodies was not provided to Audit by BU. However, in reply, BU intimated (December 2020) that 17 faculty members of BU have received awards/ recognition in 2018-19.

As per information furnished by NBU, out of total 194 teachers, 34 received awards and recognitions.

40 Vivekananda College - 40 per cent, Darjeeling Govt. College- 7.46 per cent, Maynaguri College- 20 per cent, Sonada Degree College- 39.71 per cent, Prasannadeb Women's College- 58.54 per cent and APC Roy Govt. College- 19.55 per cent.

<sup>&</sup>lt;sup>39</sup> Hooghly Mohsin College- three per cent, Gushkara Mahavidyalaya- 52.94 per cent, Kabi Joydeb Mahavidyalaya- 25 per cent, Tarakeswar Degree College- 78.26 per cent, Dr. Gour Mohan Roy College- 67.66 per cent, AS Sen Mahavidyalaya- 20 per cent and Chandannagar College- 71.55 per cent.

In the test-checked colleges only eight (1.59 per cent) teachers (belonging to seven colleges out of test-checked 13) had received awards/recognition.

During accreditation of universities, NAAC for this indicator, awarded maximum score to the institution where 10 *per cent* and above full time teachers received awards, recognition and fellowship, *etc.*, during 2014-19. Hence, as per NAAC benchmarks, NBU is eligible for scoring full marks. Position of BU could not be ascertained in absence of information.

#### (F) Teachers provided with financial support to attend conferences/ workshops

To assess the level of facilitation in continuous professional development and exposure to its teachers, the average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during 2014-19 was used as an indicator (Sl. No. 9 of Appendix 2.2). During accreditation of universities, NAAC awarded maximum marks to an institution where institution was providing financial support to 50 per cent and above teachers to attend conferences/ workshops and towards membership fee of professional bodies during last five years.

It was observed that BU provided 111 teachers with financial support to attend National conferences/ workshops and 25 teachers for attending international workshops (total 12 *per cent* of teachers in position on an average) during 2014-19. In NBU, 63 teachers (eight *per cent*) received financial support to attend conferences/ workshops during this period.

Only six teachers in two colleges (three each from AS Sen Mahavidyalaya and Maynaguri College) received financial support for attending workshops.

Hence, as per NAAC benchmark, neither of the test-checked universities were eligible for scoring any mark with respect to this indicator.

Thus, the level of assistance provided by the Universities for facilitating continuous professional development and exposure of teachers through participation in conference/ workshops remained sub-optimal in both the test-checked universities and in most of the test-checked colleges. As these conference/ workshops are likely to keep teachers abreast with latest innovations and advances in their professions, lack of priority in this aspect may adversely impact the contemporariness and relevance of their expertise.

#### (G) Professional Development Training of faculty

Paragraph 7.1.3 of Report on 'Inclusive and Qualitative Expansion of Higher Education' issued under Twelfth FYP states that faculty development initiatives could include areas like entry level orientation, curriculum development, teaching and learning, research and innovation, engagement with social concerns and leadership development. Customized faculty development programs may also be developed on a large scale. Further, as per Para 2.4 of NAAC Manual, teachers need to take initiative to learn and keep themselves abreast with the latest development, to improve, continuously seek improvement in their work and strive for individual and institutional excellence.

The relevant indicator used by NAAC during assessment and accreditation process of HEIs was 'the average percentage of teachers attending

professional development programmes viz., Orientation Programme, Refresher Course, Short Term Course and Faculty Development Programme during 2014-19 (Sl. No. 10 of Appendix 2.2)'.

As per information provided by two test-checked universities, the position of teachers attending professional development programs during 2014-19 is given in **Table 2.10** below:

Table 2.10: Teachers attending professional development programs during 2014-19

Name of university							No. of teachers attending professional development programmes during the year (percentage)				
university	2014-15	2014-15 2015-16 2016-17 2017-18 2018-19					2015-16	2016-17	2017-18	2018-19	Average
BU	221	217	230	208	213	72	26	60	15	66	48 (22)
NBU	153	148	139	149	194	35	27	28	37	43	34 (22)

Source: Information provided by concerned university

It is seen from the table above that on an average only 22 *per cent* of the total number of full time teachers in BU and NBU attended professional development programmes during the period 2014-19.

During accreditation of the universities, NAAC for this indicator awarded maximum marks to an institution where on an average 40 *per cent* and above of its teachers attended training programs during 2014-19. Hence, as per NAAC benchmarks, none of the test-checked universities was eligible for scoring the maximum marks

#### (H) Robust examination and evaluation system

As per NAAC manual, the effectiveness of examination system of a HEI depends on regularity in conducting examinations, quality of questions, how well it actually tests the programme specific outcomes and course outcomes, *etc*.

NBU had automated the pre-examination processes like online registration for students, uploading online examination forms, allocation of centre to the students as per direction of the university, generation of roll no. and uploading of admit cards, *etc*. It had also automated the post-examination jobs such as data entry of the code-slips of the examinees, preparation of master database of examiners, use of computer based application to track delivery and receipt of used answer books to and from the examiners, arrange online payment of examiners, collection of practical marks online, uploading results on the web, printing of mark sheets and certificates, processing and verification of review forms online, publication of review results online and printing of mark sheets and submitting copies of examination data to the university. However BU had yet to take up automation in a big way except printing of admit cards of the examinees.

#### (I) Delays in declaration of examination results

Timely declaration of results is extremely important, especially for graduating students as many of their post-study opportunities such as employment, further studies, enrolment in competitive exams, *etc.*, are dependent upon their performance in the examinations. Any delay in declaration has the potential to cause great damage to the future of such students.

Scrutiny of information received from the two test-checked universities revealed the following:

- In BU, declaration of results was delayed especially at the UG level. It ranged between 80 160 days after the conduct of exams. At the PG level declaration of results were within time.
- In NBU, conduct of examination and declaration of result was as per the scheduled time.

#### (J) Revaluation process

Revaluation in an examination system refers to the submission of answer books back to the university by students who believe that the result they obtained is not commensurate with their own expectations.

NAAC during assessment and accreditation process of HEIs used the key indicator 'the average percentage of applications for revaluation leading to change in marks during 2014-19 (Sl. No. 13 of Appendix 2.2)'. A summary of information on revaluation of answer books in BU and NBU during 2014-19 is given in Table 2.11 below:

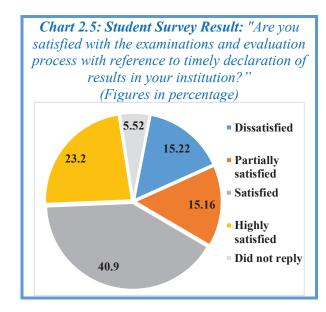
**Table 2.11: Position of revaluation of answer books (Number of students)** 

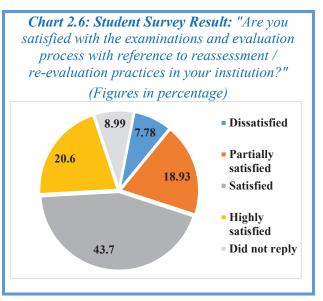
		I	Burdwan Univers	ity	North Bengal University*			
Category	Period	Appeared for examination	Applied for revaluation (percent)	Marks changed after revaluation (percent)	Appeared for examination	Applied for revaluation (percent)	Marks changed after revaluation (percent)	
UG	2014-19	2,18,071	45,399 (21)	31,528 (69)	6,99,409	1,72,532 (25)	96,181 (56)	
PG	2014-18	7,556	372 (5)	333 (90)	4,269	607 (14)	476 (78)	
Total		2,25,627	45,771 (20)	31,861 (70)	7,03,678	1,73,139 (25)	96,657 (56)	

Source: Information provided by concerned university

- It was seen that during 2014-19, a large number of students (20 *per cent* in BU and 25 *per cent* in NBU) were dissatisfied with the evaluation of their examination papers and applied for revaluation of marks. It was a matter of concern that in substantial number of cases (70 *per cent* in BU and 56 *per cent* in NBU) applying for revaluation, marks were changed.
- Students Survey result (*vide* Charts 2.5 and 2.6) revealed that 27-30 *per cent* of students expressed their full or partial dissatisfaction in these aspects.

<sup>\*</sup>NBU, UG included student data of all 1st Yr, 2nd Yr and 3rd Yr, number of final Year student are not available separately.





Thus, high percentage of changes in the answer books during revaluation, suggests that the evaluation systems of the two test-checked universities need a re-look from view point of operational and monitoring deficiencies.

There was less use of ICT teaching tools by the teachers in the test-checked colleges. Student Teacher Ratio was much more than its prescribed limit of 20:1 in Government-aided colleges in Arts stream during 2018-19. Regarding qualification of faculty, 28 per cent teachers did not possess prescribed qualification in test-checked colleges. Efforts towards professional development of teachers were also insufficient. On an average only 22 per cent teachers attended professional development programmes in Universities. Regarding evaluation of examination answer sheets, marks of 70 per cent of students in BU, 56 per cent of students in NBU who applied for revaluation were changed after revaluation. This indicates operational and monitoring inadequacies in evaluation system in these universities.

#### Recommendations:

- In order to ensure quality education the State Government and universities should maintain prescribed Student Faculty Ratio in colleges either by recruiting qualified regular teachers or by rationalizing posting.
- The test-checked universities should ensure all the teachers employed in colleges possess the minimum qualification prescribed by regulatory bodies.
- The universities should develop centralized evaluation system of answer books so as to avoid operational and monitoring inadequacies.
- For improvement and continuous development in the work of teachers for individual and institutional excellence, the State Government and universities should conduct relevant professional development programmes regularly and should ensure that all targeted teachers are provided training in these programmes.

### 2.3.2 Betterment of Society by creating new knowledge through effective Research

Quality in research leads to improvement in quality of teaching and learning in the classrooms, thereby benefitting the students, the society and the country. The promotion of research in a huge and diverse country like India will help the nation evolve as a knowledge reservoir in the international arena.

Paragraph 7.1 of Report on 'Inclusive and Qualitative Expansion of Higher Education' issued under Twelfth FYP recommends that research capacities need to be consciously developed in the colleges. Colleges and their teachers should be encouraged and supported in taking up research including generation of innovative teaching-learning material. Further, paragraph 3.1 of NAAC Manual states that HEIs have to be actively engaged in promotion of research by evolving appropriate policies and practices, making adequate resources available and encouraging active involvement of teachers and scholars in research.

The audit findings concerning research in HEIs and results of evaluation of identified indicators related to these areas for the test-checked universities and its affiliated government/ government-aided colleges are given in succeeding paragraphs.

#### 2.3.2.1 Research Inputs

Volume of Research grant/fund received by Higher Education Institutions:

Paragraphs 7.1 and 7.1.19 (a) of Report on 'Inclusive and Qualitative Expansion of Higher Education' issued under the Twelfth FYP states that adequate funding and initiatives need to be developed for research activities in HEIs. For this purpose, every university should earmark a certain proportion of their annual budget for research and innovation.

In this context, the position of grants received for research activities from government and non-government sources and utilization thereof in test-checked universities during 2014-19 is given in **Table 2.12** below:

Table 2.12: Position of receipt and utilization of grants for research activities during 2014-19 (₹ in lakh)

Name of University	Grants received from Govt. during 2014-19	Grants utilised during 2014-19 (percentage)	No. of research projects undertaken during 2014-19	No of research projects completed
BU	1,279.38	1,218.92 (95.27)	224	155
NBU	2,009.93	1,971.35 (98.08)	178	58

Source: Information provided by concerned university

Scrutiny of information provided by the two selected universities and 13 test-checked colleges revealed the following:

**BU, Bardhaman:** A total of 224 research projects<sup>41</sup> were undertaken between 2014-19, out of which 155 were completed and 69 were in progress. About

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<sup>&</sup>lt;sup>41</sup> Some of the research projects were 1) Development of rare earth doped nanocrystalline ceria materials for electronic and optical applications; 2) Generation of middle infrared coherent radiation by cascaded singly resonant optical parametric oscillation technique; 3) Characterization, Dynamics and Management of Gully Erosion in the Lateritic Badlands of Northern Birbhum District, West Bengal; 4) Fluoride geochemistry and influence of high fluoride environmental background on crops and human health in Birbhum district, WB and 5) Preparation of People's Biodiversity Register of Burdwan district, West Bengal.

95 *per cent* of the grants from Government sources were utilized. There was no receipt of grants from non-government sources.

• **Test-checked colleges under BU:** Only eighteen minor research projects had been conducted in six colleges, *viz.*, seven in Chandannagar Govt. College, five in Gushkara Mahavidyalaya, three in Tarakeswar Degree College, one each in Kabi Joydeb Mahavidyalaya, Hooghly Mohsin College and Gour Mohan Roy College during the last five years. None of the teachers in colleges registered any research scholar under them.

**NBU, Siliguri:** At NBU, out of 178 Research projects undertaken 58 projects were completed and the rest were continuing. About 98 *per cent* of the grants from Government sources were utilized. There was no receipt of grants from non-government sources

• **Test-checked colleges under NBU:** Twenty minor research projects were conducted at Darjeeling Government College. In Moynaguri College, 11 staff are actively engaged in research.

Hence, research activities at college level remained limited to minor research works.

#### 2.3.2.2 Research Outcomes

NAAC suggests that quality research outcome is beneficial for the discipline, society, industry, region and nation. Research outcomes of HEIs include research papers and publications, patents awarded, consultancies given externally, *etc*. Audit assessed these outcomes for the test-checked HEIs, results of which are discussed below.

(i) Patents, Consultancy and Researchers undertaking research: NAAC considers number of patents published/awarded to an institution, consultancy projects undertaken by faculty, etc., during accreditation of the institution and used 'the number of patents awarded to the institution during 2014-19 (Sl. No. 14 of Appendix 2.2)' as an indicator.

The details of number of patents awarded, revenue generated from consultancy, and number of researchers doing research in the test-checked universities during 2014-19 are given in **Table 2.13** below:

Table 2.13: No. of patents awarded/ revenue generated from consultancy in test-checked universities during 2014-19

	m test enected universities during 2011 17										
Name of University	Number of res	earch projects	Mannet	Number of JRFs,	Number of consultancies	Amount of revenue generated from consultancies in the					
	Undertaken	Completed	of patents awarded	SRFs, Post-Doctoral fellows enrolled	given by the university	university (₹ lakh)					
BU	224	155	0*	664	1	0.2					
NBU	178	58	0	NA	4	10.07					

Source: Information provided by concerned university

Scrutiny of records disclosed that research was mainly conducted on the initiative of individual teachers who manage to bring projects from funding bodies like UGC, DST, *etc.* Only 81 faculties (out of 213) at BU were involved in research; whereas at NBU, only 69 (out of 194) faculties were involved.

<sup>\*</sup> During 2014-19, two patents were published and two patents were applied for during the period from 2014-15 to 2018-19. However, the above two published patents were not granted by the Controller General of Patents, Design & Trade as of November 2020.

The total number of students enrolling for Ph.Ds were also low (664 in the last five years in BU) considering that each Professor, Associate Professor and Assistant Professor could guide eight, six and four students for Ph.D. respectively.

During accreditation process, NAAC awarded maximum score to an institution where 20 and above patents were awarded during last five years. Hence, as per NAAC benchmark none of the test-checked universities and government/government-aided colleges were eligible for any score with respect to this indicator.

Thus, none of the test-checked HEIs were able to produce any tangible outcomes in the form of patents and consultancies from the research they undertook during the period 2014-19.

(ii) Teachers' contributions to Research in HEIs: The strategic framework of Twelfth FYP seeks to bring excellence in higher education by building synergies between teaching and research to promote excellence in both.

Further, the fact that NAAC during accreditation of an institution considers number of research papers per teacher published in UGC notified Journals and number of books and chapters in edited volumes/ books published per teacher, underscores the significance of teachers' contribution to research in enhancing the quality of HEIs.

(A) Number of research papers published per teacher: NAAC during assessment and accreditation process of HEIs used the key indicator 'the number of research papers per teacher in the Journals notified on UGC website during 2014-19 (Sl. No. 15 of Appendix 2.2)'.

The details of number of research papers published in UGC notified Journals and number of books and chapters published in edited volumes/ books for BU and NBU is given in Table 2.14 below:

Table 2.14: Number of research papers published and number of books and chapters in edited volumes/ books published

Name of university num teacl duri	Average number of full No. of teachers, who were		Papers published in UGC notified journals during 2014-19		Books & chapters in edited volumes/ published, and papers in national/ international conference proceedings		
	time teachers during 2014-19	time given seed money for research during	Total number of papers published	Number of paper published per teacher	Total number Books & chapters in edited volumes/ published	Number of Books & chapters in edited volumes/ published per teacher	
1	2	3	4	5 (Col 4/ Col 2)	6	7 (Col 6/ Col 2)	
BU	218	25	2,488	11.42	645	2.96	
NBU	157	80	886	5.66	383	2.45	

Source: Information provided by concerned university

Seed money as encouragement to teachers for undertaking research was not provided in any of the test-checked colleges. Even in BU only 11 *per cent* teachers were provided seed money.

• Test-checked colleges under BU: A total of 306 research papers (Hooghly Mohsin College-149, Gushkara Mahavidyalaya-74, Kabi Joydeb Mahavidyalaya-10, Tarakeswar Degree College-31 and A.S. Sen Mahavidyalaya-42) were published in UGC notified journals by the

teachers of the test-checked colleges. Another 174 books, chapters were published in edited journals by the teachers of the test-checked colleges (Hooghly Mohsin College-29, Gushkara Mahavidyalaya-74, Tarakeswar Degree College-30 and A.S. Sen Mahavidyalaya-41).

• Test-checked colleges under NBU: A total of 64 research papers (Vivekananda College-two, Maynaguri College-22, Sonada Degree College-three and APC Roy Govt. College-37) were published in UGC notified journals by the teachers of the test-checked colleges. Another 103 books, chapters were published in edited journals by the teachers of the test-checked colleges (Vivekananda College-57, Maynaguri College-16, Sonada Degree College-nine and APC Roy Govt. College-21).

During accreditation of universities, NAAC for the indicator awarded maximum score to the institutions where publications per teacher were on an average 10 and more during 2014-19. Hence, as per NAAC benchmarks, BU was eligible for scoring full marks.

Regarding research outcomes in the form of publication of research papers, chapters, books, *etc.*, the teachers of test-checked colleges had not made substantial contributions. This calls for further prioritization by the Universities on the aspect of providing encouragement through seed money to its teachers for research works.

(B) Number of teachers awarded international fellowship: NAAC during assessment and accreditation process of HEIs used the key indicator 'number of teachers awarded international fellowship for advanced studies/ research during 2014-19 (Sl. No. 16 of Appendix 2.2)'.

Scrutiny of the records showed that one faculty from BU was selected as a Raman Fellow<sup>42</sup> and one faculty from NBU was selected as an International Fellow. Besides, 12 faculties from BU, two teacher from Gushkara Mahavidyalaya under BU and eight teachers from Prasannadeb Women's College under NBU were awarded international fellowship.

During accreditation of universities, NAAC for the indicator prescribed maximum score to universities where on an average 40 *per cent* and more teachers were awarded international fellowship for advanced studies/ research during 2014-19. Hence, as per NAAC benchmarks, none of the Universities were eligible for scoring any marks.

Such small number of teachers from the test-checked HEIs being awarded international fellowships for advanced studies/ research may be viewed with the deficient initiatives of the universities in patronizing research works or in encouraging exposure to international research projects. This may lead to lack of motivation not only among teachers, but also among students under their tutelage.

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<sup>&</sup>lt;sup>42</sup> "Raman Fellowship for Post-Doctoral Research for Indian Scholars in United States of America: The Fellow will be entitled to fellowship amount of US \$ 3000 per month." The minimum period of the fellowship would be six months and maximum period of fellowship would be 12 months. These awards will provide an excellent opportunity to young Indian researchers (permanent faculty), under the age of 40 years to interact with the American academic/scientific community and get first hand information of the developments taking place at the international level.

#### 2.3.3 Collaborative and Extension Activities

#### 2.3.3.1 Collaborative Activity: Industry-academia connect

Academia and Industry share a symbiotic relationship. Engagement between universities and industries carry the idea of mutuality and sharing of knowledge and expertise.

Further, as per paragraph 3.7 of NAAC Manual, the HEIs can maintain a closer contact with the work field through collaboration. It helps to keep the academic activities in the HEI in a more realistic perspective and also expand the scope of learning experiences for students. Collaboration can be sought with academic institutions or industry or other agencies of professional and social relevance. The range of activities could include training, student exchange, faculty exchange, research and resource sharing, among others. For making collaborative endeavor impactful, it is necessary that there is a formal agreement or understanding between the institution and other HEIs or agencies for such activities.

To assess encouragement given by the test-checked institutions for industry-academia connect, number of functional MoUs executed with institutions of national/international importance, other Universities, industries, etc., during 2014-19 was used as an indicator (Sl. No. 8 of Appendix 2.1).

It was observed in audit that BU signed four MoUs (National level) (two by the Physics dept. and one each by Environmental Science and Geography dept.) (during 2014-15 to 2016-17). No MOU was signed during 2017-18 to 2018-19. NBU signed two national MoUs (by Department of Botany (2018-19) and Chemistry (2018-19)). None of the test-checked colleges signed any MoU with other institutions.

During accreditation of universities, against this indicator NAAC awarded maximum marks to an institution where 30 and above functional MoUs were executed with industries, institutions of national/international importance, *etc.*, during 2014-19 (last five years) and one mark for executing nine such MoUs. Hence, as per NAAC benchmarks, neither of the test-checked universities were eligible for scoring any marks.

Hence, as none of the test-checked HEIs (apart from four MOUs of BU and two by NBU) collaborated with industries during 2014-19, thereby leaving the objective of deriving benefits like refinement of course curriculum, funding for relevant research work, assistance towards student internships and placements, *etc.*, remaining unachieved. On the other hand, reciprocal opportunities for the industry to take advantage of faculty expertise through consultancy and R&D activities, *etc.*, could not materialise.

### 2.3.3.2 Extension activities in collaboration with industry, community, etc., and student participation

As per paragraph 3.6 of NAAC Manual, learning activities have a visible element for developing sensitivities towards community issues, gender disparities, social inequity, *etc.*, and in inculcating values and commitment to society. Affiliation and interaction with groups or individuals who have an interest in the activities of the institution and the ability to influence the actions, decisions, policies, practices or goals of the organization leads to mutual benefit

to both. The processes and strategies inherent in such activities sensitize students to the social issues and contexts.

In order to assess the efforts made by test-checked universities in encouraging extension and outreach programs conducted in collaboration with industry, community and NGOs (NCC/ NSS/ Red Cross, *etc.*), the following outcome indicator was evaluated.

Key Outcome Indicator 9: What is the extent to which industry has been consulted or has provided sponsorship and funding, in a collaborative environment?

To assess the encouragement given by test-checked universities to students for participating in extension activities, *Average percentage of students participating in extension activities GOs, NGOs and Programmes like Swachh Bharat, Aids Awareness, Gender Issues, etc., during 2014-19* was used as an indicator (Sl. No. 17 of Appendix 2.2). This indicator is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

Scrutiny of records disclosed the following:

NSS Unit of both the test-checked universities conducted some extension activities in neighbourhood community for sensitising students to social issues and holistic development. Both the universities conducted various awareness programmes, orientation programmes, workshops, observance of various special days, *etc*.

- During 2014-19, the BU conducted 66 nos. of Extension and Outreach programmes in which 4303 students participated and NBU conducted 260 nos. Extension and Outreach programmes in which 8619 students participated.
- In addition to the above, in NBU, Centre of Floriculture and Agri-Business Management (COFAM) under Department of Biotechnology, organized 42 extension/outreach program during 2014-19 in collaboration with State Government, GOI, NGOs, NSS to sensitize and bring awareness among local farmers and youth in organic farming, Swachh Bharat and high-remunerative crops for livelihood generation.
- A total of 8833 students of the test-checked colleges under BU<sup>43</sup> took part in various extension and outreach programmes during 2014-19. Similarly, total of 40634 students of the test-checked colleges under NBU <sup>44</sup>took part in various extension and outreach programmes during 2014-19.
- During accreditation of universities, NAAC for the indicator awarded maximum marks to an institution where on an average 30 per cent and above students participated in extension activities during 2014-19 (last five years). Hence, as per NAAC benchmarks, both the Universities (BU 37 per cent and NBU 100 per cent) were eligible for scoring full marks.

44 Maynaguri College- 39,690 and Prasannadeb Women's College- 944.

<sup>&</sup>lt;sup>43</sup> Gushkara Mahavidyalaya- 4,140, Kabi Joydeb Mahavidyalaya- 446, Tarakeswar Degree College- 3,145, Dr. Gour Mohan Roy College- 50 and A.S. Sen Mahavidyalaya- 1,052.

#### Summary of observations in respect of Betterment of society by ensuring high quality teaching-learning and research in higher education institutions:

With regard to the process of curriculum design and development, though the test-checked universities claimed to have followed the laid down procedures, there was insufficient evidence to conclude that crucial feedback from stakeholders, inputs from expert groups and reference to curricula of leading universities were made use of for curriculum improvement.

Barring a few cases, none of the test-checked HEIs made any efforts to introduce value added courses in the curriculum, thereby depriving the students of the opportunity of enhancing and diversifying their knowledge.

As regards greater academic flexibility and Choice based Credit System (CBCS), the university level on many such aspects did not sufficiently percolate to the colleges. As a result, a good number of students were denied the chance of holistic development through additional avenues of learning beyond the core subjects.

Shortage of teachers was another area of concern as it can adversely affect the teaching quality. Student Teacher Ratio was, much more than its prescribed limit of 20:1 in Government-aided colleges in Arts stream during 2018-19.

Regarding qualification of faculty, 28 *per cent* teachers did not possess prescribed NET qualification in test-checked colleges. Efforts towards professional development of teachers were also insufficient. On an average only 22 *per cent* teachers attended professional development programmes in Universities.

Lack of research activities at college level was apparent in test-check colleges, as only two out of 13 test-checked colleges were involved in minor research works. None of the test-checked HEIs were able to produce any tangible outcomes in the form of patents and consultancies from the research they undertook during the period 2014-19.

The aspect of facilitating continuous professional development and exposure of teachers through attending conference/ workshops remained largely ignored in the BU and in most of the test-checked colleges. As these conference/ workshops are likely to keep teachers abreast with latest innovations and advances in their professions, lack of priority in this aspect may adversely impact the contemporariness and relevance of their expertise.

Apart from a few MOUs, collaboration with industries during 2014-19 was sub-optimal thereby leaving the objective of deriving benefits like refinement of course curriculum, funding for relevant research work, assistance towards student internships and placements, *etc.*, remaining unachieved. On the other hand, reciprocal opportunities for the industry to take advantage of faculty expertise through consultancy and R&D activities, *etc.*, could not materialise.

#### Recommendations:

• In order to keep the courses more focused on employability/ entrepreneurship/ skill development, the universities should revise/ design curriculum every three years considering the need of industry, local/national market.

- In order to ensure quality education the State Government and universities should maintain prescribed Student Faculty Ratio in colleges either by recruiting qualified regular teachers or by rationalizing posting.
- The test-checked universities should ensure all the teachers employed in colleges possess the minimum qualification prescribed by regulatory bodies.
- The universities should develop centralized evaluation system of answer books so as to avoid operational and monitoring inadequacies.
- For improvement and continuous development in the work of teachers for individual and institutional excellence, the State Government and universities should conduct relevant professional development programmes regularly and should ensure that all targeted teachers are provided training in these programmes.

#### 2.4 Access and Equity in Higher Education

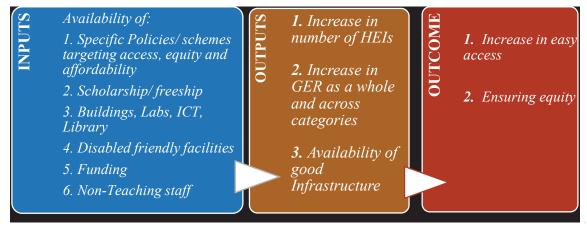
Access to and Equity in higher education have been widely regarded as the basic and key responsibilities of any government. Creating a high quality Higher Education system which is easily accessible to all sections of society is thus one of the main higher education outcomes that a government seeks to achieve on account of its many efforts and initiatives in this regard.

Doubling of enrolment would be essential which would have to include increased opportunities and access for students from socio-economically disadvantaged sections.

In order to assess the performance of HEIs and GoWB towards achieving the goal of creating a high quality Higher Education system which is easily accessible to all sections of society, the following audit objective was framed.

## 2.4.1 Audit Objective 3: Whether Equitable Access to Quality Higher Education was ensured to all

The equity and access related outcomes and their relationship with the contributing factors can be understood from the representation below.



To ensure progress towards achievement of these outcomes, specific policies and schemes targeted towards easy access, broad based equity and affordability

have to be designed. Appropriate funding should be made available for developing infrastructure such as institution buildings, laboratories, libraries, ICT facilities, *etc*. Moreover, scholarships/ freeships and disabled friendly facilities must be ensured especially for the benefit of socio-economically backward and the disadvantaged sections of the society.

As per RUSA guidelines para 4.2, each state must undertake a Baseline Survey followed by the preparation of State Higher Education Plans, which would be further broken down into annual plans. While carrying out the audit of Higher Education Department, GoWB, it was observed that the HED did not prepare any baseline survey to determine the intake capacity of the HEI, neither did it collect information about the number of students enrolled in the HEIs. In the absence of complete information, Audit examined AISHE data and data/information received from two universities, *i.e.*, BU and NBU. Further, it was observed that the data uploaded by the test-checked HEIs did not tally with those found by Audit as per records during scrutiny as detailed in *Appendix 2.3*. Hence, the AISHE data that the HED was relying on for formulating policy, was not completely reliable.

#### 2.4.1.1 Easy access to higher education

Twelfth FYP in paragraph 21.187 envisages that focus should be towards achieving higher access through better utilization of the existing infrastructure, upgradation of the infrastructure and creation of new institutions primarily to meet the objective of regional equity. Moreover, GoI's output outcomes frameworks<sup>45</sup> and GoWB's Budgets<sup>46</sup> over the last few years have also laid emphasis on increasing access to higher education through establishment of new HEIs and increasing the capacities of existing HEIs.

*Number of Higher Education Institutions in West Bengal:* MHRD has been conducting an annual web-based All India Survey on Higher Education (AISHE) of all the Institutions in the country engaged in imparting higher education, since 2010-11. As per AISHE Reports, the number of all types of universities, colleges, college density<sup>47</sup> and average enrolment per college in West Bengal during 2010-19 are as shown in **Table 2.15** below:

Table 2.15: Number of all types of HEIs in West Bengal

Year	Number of all types of universities	Number of all types of colleges	College density	Average enrolment per college
2010-11	22	857	8	1,655
2011-12	26	899	8	1,439
2012-13	26	955	9	1,498
2013-14	27	985	9	1,487
2014-15	31	1,051	10	1,455
2015-16	34	1,082	10	1,427
2016-17	41	1,208	11	1,323
2017-18	43	1,341	12	1,170
2018-19	45	1,371	13	1,170

Source: AISHE Reports

<sup>47</sup> Number of colleges per lakh eligible population.

<sup>&</sup>lt;sup>45</sup> Under Grant No. 58 of GoI's output outcomes framework 2017-18 onwards.

<sup>&</sup>lt;sup>46</sup> Grants are being provided under budget head 4202 for construction of college buildings.

West Bengal lagged way behind the all India average college density of 28. As there is no benchmark in College Population Index<sup>48</sup>, comparison of College Population Index of the State with three best performing States and all India average is shown in **Table 2.16** below:

Table 2.16: Comparison of College Population Index of West Bengal with All India average, best performing State and two other comparable States

	2014-15	2015-16	2016-17	2017-18	2018-19
West Bengal	10	10	11	12	13
Karnataka (best)	49	50	53	51	53
Tamil Nadu (comparable state in population)	33	32	33	35	35
Andhra Pradesh (comparable state in Human Development Index ranking) <sup>49</sup>	47	45	48	48	49
All India	27	28	28	28	28

Source: AISHE Report 2018-19

It is seen from the above that there is huge gap of College Population Index with the states of Karnataka, Andhra Pradesh and Tamil Nadu. The College Population Index of West Bengal (13) during 2018-19, was less than half of the All India average (28).

This indicates that West Bengal is still lagging substantially from All India average. Moreover, the desired outcome of increase in access was adversely affected by rural/ urban imbalances and low GER as would be evident from the succeeding paragraphs.

#### 2.4.1.2 Regional imbalances in Accessibility

*Imbalance between urban and rural areas:* The Twelfth FYP (2012-17) states that the aim should be at correcting the regional imbalances in the distribution of institutions. Audit sought to assess the status of accessibility to higher education in West Bengal by comparing inter se availability of HEIs in urban and rural areas.

Urban/ rural area-wise distribution of general degree government/government-aided colleges *vis-à-vis* projected population of persons of age group 18-23 years during 2014-19 on the basis of Census 2011 is given in **Table 2.17** below:

<sup>49</sup> In terms of Human Development Report 2018 brought out by UNDP, West Bengal has an HDI of 0.641 and Andhra Pradesh has an HDI of 0.650, while All India HDI is 0.647.

<sup>&</sup>lt;sup>48</sup> College Population Index –College per lakh population in 18-23 years age.

Table 2.17: Urban/ rural area-wise distribution of general degree colleges

vis-à-vis population of age group of 18-23 years

	Number of general degree colleges			Projected population of person of age group of 18-23 years as per census 2011			
Year	Total college	Colleges in urban area (percentage)	Colleges in rural area (percentage)	Total population (in lakh)	Percentage of population residing in urban area	Percentage of population residing in rural area	
2014-15	440	218 (49.55)	222 (50.45)	109.25	29	71	
2015-16	460	219 (47.61)	241 (52.39)	109.09	29	71	
2016-17	486	225 (46.30)	261 (53.70)	108.91	28	72	
2017-18	500	222 (44.40)	278 (55.60)	108.73	28	72	
2018-19	506	226 (44.66)	280 (55.34)	108.53	27	73	

Sources: Information provided by Dy. DPI, West Bengal

Though 34 new colleges (Government college: 27 and Government aided colleges: seven) have been established in the State during last five years, no college was established in eight<sup>50</sup> districts, of which five districts where proportion of people belonging to backward classes is relatively higher (more than 25 per cent SC and ST population).

Comparison of the College Population Index (Number of colleges per lakh student in the district) and the GER of the district against the State average revealed that in eleven<sup>51</sup> out of 19 districts both the College Population Index and the GER were lesser than the State figures. It was observed that no colleges were established during 2014-15 to 2018-19 in five (Birbhum. Howrah, Cooch behar, South 24 Parganas and Uttar Dinajpur) out of these 11 districts. This called for concerted action from the HED in addressing the regional imbalances in terms of access to Higher Education.

The Higher Education Department had conducted a Geographic Information System (GIS) mapping of the HEIs in the State. However, HED was not guided by the GIS mapping when deciding about the location of new colleges.

It can be observed from the above table that regional asymmetry continues to be a matter of concern. Even after lapse of two years after the end of the Twelfth FYP period (2012-17), the urban/rural area-wise distribution of colleges (rural: 55 *per cent*, urban: 45 *per cent*) falls way short of the desired balance in terms of proportion of population residing in those areas (rural: 73 *per cent*, urban: 27 *per cent*).

#### 2.4.1.3 Gross Enrolment Ratio

Gross Enrolment Ratio (GER) in Higher education is expressed as a percentage of the total enrolment in higher education, regardless of age to the eligible official population (18-23 years) in a given year. It is the responsibility of both

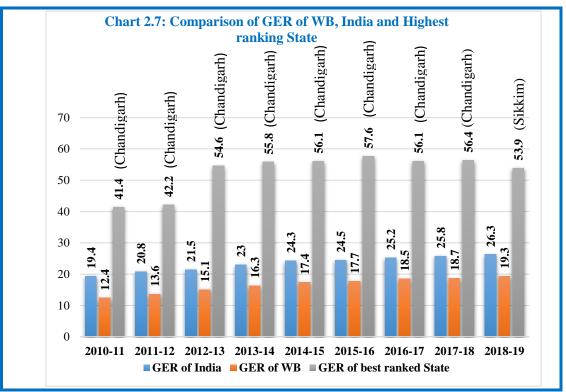
<sup>50</sup> Birbhum: SC- 29.51 per cent and ST- 6.74 per cent; Howrah: SC- 15.42 per cent and ST- 0.45 per cent; Hooghli: SC- 23.58 per cent and ST- 4.21 per cent; North 24 Parganas: SC- 20.60 per cent and ST- 2.23 per cent; Coochbehar: SC- 50.11 per cent and ST- 0.57 per cent; Murshidabad: SC- 12.00 per cent and ST- 1.29 per cent; South 24 Parganas: SC- 32.12 per cent and ST- 1.23 per cent and Uttar Dinajpur: SC- 27.71 per cent and ST- 5.11 per cent.

51 Bankura, Birbhum, Howrah, Jalpaiguri, Cooch Behar, Maldah, Paschim Medinipur, Purba Medinipur, Puruliya, South 24 Parganas and Uttar Dinajpur. Central and State governments to put in place strategies and implement them so that the aim of enhanced equitable access to quality higher education is achieved.

Ministry of Human Resource Development (MHRD), GoI had declared its aim to expand the Higher Education sector in all its modes of delivery to increase the GER from 15 per cent in 2011-12 to 25.2 per cent by 2017-18 and 30 per cent by the year 2021-22. Further, in the 'State Higher Education Plan 2018' of the State Government target was also fixed to increase GER in Higher Education to 26 per cent by end of FY 2021 and subsequently to 30 by end of FY 2025.

In this context and to assess the efforts of GoWB in this regard, *Increase in Gross Enrolment Ratio with respect to its target during 2010-19* was used as an indicator (Sl. No. 18 of Appendix 2.2).

Trend of GER in HE in West Bengal compared to other States: It was observed that State Government did not maintain any data regarding GER, and enrolment of students in all HEIs. GoWB depended on data published in AISHE reports. It is seen that in terms of GER at Higher Education level, rank of West Bengal among the States and UTs hovered between 27 and 29 during 2010-11 to 2018-19. The following Chart shows the same in details:



Source: AISHE reports

It may be seen that GER of West Bengal has consistently been lower than national GER in all the years. It is far short of its own target of 26 to be achieved by 2020-21.

In this respect, the following was further observed:

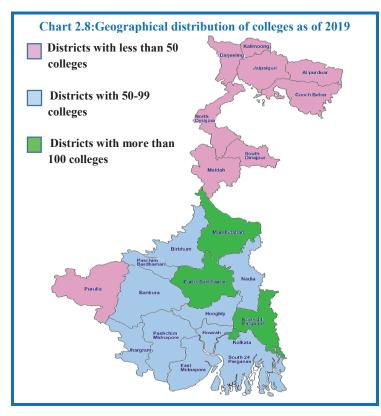
• As per AISHE reports, West Bengal is at tenth position in terms of number of colleges (1,371 colleges in 2018-19) and at 29th position in terms of college density (13 colleges per lakh population) in 2018-19.

• Data of district-wise distribution of colleges taken from AISHE report 2018-19 shows the following position, which would be indicative of skewed distribution of colleges among the districts.

Table 2.18: Distribution of colleges among districts

	2014-15		2018-1	Students per Instt.		
	College	Students	College	Students	14-15	18-19
Four districts with more than 100 colleges	<b>500</b> (75 to 171 per district)	6,10,952	<b>593</b> (122 to 179 per district)	6,47,375	1,031 to 1,301	766 to 1,282
Eight districts with 50 to 99 colleges	403 (40 to 78 per district)	5,86,024	564 (50 to 92 per district)	6,34,511	1,042 to 1,857	808 to 1,360
Seven districts with less than 50 colleges	161 (9 to 36 per district)	3,17,678	230 (21 to 45 per district)	3,27,694	1,125 to 3,667	1,017 to 2,290

Sources: Information provided by Dy. DPI, West Bengal



Thus, the fact that during 2018-19 West Bengal had higher rank in terms of number of colleges (tenth), but given its large population it slips back to 29 in terms of college density. Lower rank in terms of GER (27<sup>th</sup> rank) could be attributed to the skewed availability of colleges across different regions/ districts of West Bengal. The whole of North Bengal along with the western district of Purulia had less than 50 colleges per district while the rest of the State had over 50/100 colleges per district.

• Recommendation: In order to achieve overall GER of 30 per cent by 2025 as targeted under the 'State Higher Education Plan 2018' of West Bengal, the State Government may prioritise providing access to higher education in rural areas.

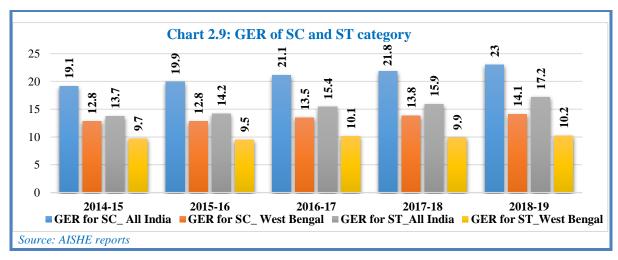
#### 2.4.2 Ensuring Equity in Higher Education

Twelfth FYP in paragraph 21.239 envisaged that a targeted approach focusing on Scheduled Caste (SC) and Scheduled Tribes (ST) dominated regions and convergence of various equity schemes in a composite manner would be critical to address the educational needs of the disadvantaged sections including the Other Backwards Classes (OBCs) and to enhance their inclusion in the mainstream of higher education. Further, as per paragraph 2.2.2 (a) of Report on 'Inclusive and Qualitative Expansion of Higher Education', 12<sup>th</sup> Five Year Plan, 2012-17 shall aim at complete elimination of gap between men and women in access to higher education.

*GER of disadvantaged groups:* SCs, STs, OBCs, disabled, and women have generally been considered as the disadvantaged sections of the society and many policies and schemes target their enhanced enrolment in higher education.

To assess efforts of the State Government in this regard, *Increase in Category-wise Gross Enrolment Ratio with respect to All India Ratios/targets during 2014-19* was used an indicator (*Sl. No. 19 of Appendix 2.2*).

Data with respect to GER of OBCs, minorities and disabled categories was neither available nor maintained at any of the levels of GoWB and HEIs. In the absence of complete data, Audit could only analyse the GER of SC/ST categories. It is seen that representations of SC and ST students in Higher Education (17.87 and 3.20 per cent respectively) were not commensurate with the corresponding overall percentages of SC and ST population (23.5 and 5.8 per cent respectively). Moreover, in terms of GER of SC/ST students, West Bengal consistently lagged behind All India figures during 2014-19 as shown below:



As regards Gender Parity Index<sup>52</sup> also, West Bengal fell short of the All India Index every year.

In order to achieve targeted overall GER, planned efforts for enhancing GER across all categories need to be undertaken and sustained over a long period of time.

#### 2.4.2.1 Institutional mechanisms to assist disadvantaged groups

Apex planning and regulatory institutions (UGC and NAAC) have emphasized the importance of setting-up and strengthening institutional mechanisms such as SC/ST/OBC Cells, Community Education Development Cell (CEDC)<sup>53</sup>, *etc.* UGC in its directions issued (September 2009) to universities stated that Equal Opportunities Cell (SC/ST Cell) should be set-up to improve the infrastructure and basic facilities so as to help SCs, STs, OBCs (non-creamy layer) and minorities to achieve at least the threshold level and to promote enhancement of quality.

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<sup>&</sup>lt;sup>52</sup> It is calculated as the quotient of number of females by number of males enrolled in higher education institutions.

<sup>&</sup>lt;sup>53</sup>As per Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under 12th FYP, CEDC should monitor the intake of students, performance, capacity building efforts, along with intake in faculty and administrative staff from deprived social groups, including minorities.

Information provided by two test-checked universities and 13 selected colleges disclosed the following:

- (i) University of Burdwan (BU) and its test-checked colleges: The University constituted an SC/ST Cell. However, they did not provide data about organization of any seminar or courses. The CEDC was not constituted in the University. SC/ST Cell was constituted in three out of seven test-checked colleges under BU whereas CEDC was constituted only in Acharya Sukumar Sen Mahavidyalaya, Gotan out of seven test-checked colleges.
- (ii) University of North Bengal (NBU) and its test-checked colleges: The University constituted an SC/ ST Cell and conducted special coaching for the SC/ ST students for NET/ SET and other competitive examinations. However, CEDC Cell was not constituted in the University. SC/ ST Cell was constituted in three out of six test-checked colleges under NBU but CEDC was not constituted in any of the test-checked colleges.

Thus, to a large extent, due to non-constitution of CEDC the students belonging to disadvantaged sections in all the test-checked universities and colleges were not proactively made aware of all the initiatives and programmes in place to put them on an equal footing.

#### 2.4.2.2 Gender equity promotional programmes and gender sensitive facilities

During accreditation of a higher education institution, NAAC evaluates the performance of an institution on promotion of gender equity and sensitivity and considers it as a key indicator of 'Institutional Values'. The HEI's initiatives in terms of the number of gender equity promotional programmes<sup>54</sup> organized and gender sensitivity facilities (safety and security, counseling and common room, *etc.*) being provided are assessed.

Scrutiny of information provided by test-checked universities and colleges disclosed that:

- University of Burdwan and its test-checked colleges: During 2014-19 one such program was organized by Women Studies Department of the University wherein 50 students participated. In five out of seven test-checked colleges, on an average six gender equity programmes were held in which on average 82 students participated during 2014-19.
- University of North Bengal and its test-checked colleges: Thirty-six such programmes were organized wherein 54 papers were presented and 1,283 students participated during 2014-19 in the University. In four out of six test-checked colleges on average five gender equity promotional programmes were organized in which average 437 students participated during 2014-19.

Thus, North Bengal University took greater efforts in organizing gender sensitization programmes as compared to Burdwan University. However, it was a matter of concern that four test-checked colleges (two each under BU and NBU) did not hold any promotional programme during five years covered.

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<sup>54</sup> Sexual harassment and violence against women, women's right and access to criminal justice, legal awareness about women related laws, etc.

#### 2.4.3 Affordability

Affordability is an important enabler for equitable and easy access to higher education. Regulated fee structure, comparable fees in government, government-aided and private colleges, attractive student loan schemes and ample opportunities for availing scholarships/ free-ships are some of the factors that contribute towards making higher education affordable.

#### 2.4.3.1 Uniformity in fee structure

As per UGC (Affiliation of Colleges by University) Regulation, 2009 fees to be charged from each student should be approved by the affiliating university based on the norms of the UGC from time to time.

It was observed that in spite of specific provision, none of the test-checked universities was involved in approval of fees structure for its affiliated colleges. Fees structure was decided by test-checked government-aided colleges on their own. GoWB also did not prescribe uniform fee structure for government-aided colleges as well as government colleges.

**Comparison of college fees:** The details of course-wise annual fee charged by 13 test-checked government colleges and government-aided colleges during 2018-19 are given in **Table 2.19** below:

Table 2.19: Annual fee charged by 13 test-checked colleges

Name of courses	Range of annual fee charged in four test-checked government colleges (Amount in ₹)	Range of annual fee charged in nine test-checked government-aided colleges (Amount in ₹)
B.A.	659-2,430	1,590-5250
B.Com	789-1,185	2,080-2,440
B.Sc.	1,049-2,880	2,330-9,110
M.A.	1,634-1,945	None of the test-checked Govt. aided
M.Sc.	2,099-2,420	colleges offers any Master Level courses

Source: As per information collected from concerned test-checked affiliated colleges.

It was observed that test-checked four government colleges charged annual fees ranging from ₹ 659 to ₹ 2,880 for above mentioned UG courses while nine test-checked government-aided colleges charged annual fees ranging from ₹ 1,590 to ₹ 9,110 for the same courses during 2018-19. Thus, in the absence of adoption of any mechanism for monitoring the fee structure, government-aided colleges charged significantly higher fees as compared to government colleges.

#### 2.4.3.2 Scholarship/freeship

Scholarship/ freeship<sup>55</sup> schemes, as a facilitative mechanism, have been widely used by governments to not only encourage meritorious students but also to enhance equitability in access to higher education. In para 6.1.2 (c) of Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under 12<sup>th</sup> FYP, it is advised that for enhancing participation of SC/ ST/ Minorities, scholarships and fellowships for students of SC/ ST/ OBC/ Minorities may be enhanced at all levels.

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<sup>&</sup>lt;sup>55</sup> Scholarship means a sum of money/ other aid granted to a student, because of merit, need, etc., to help him/ her pursue studies. Freeship means that tuition fee is paid by the sponsoring or aiding authority.

The position of students benefitted by scholarship by government at test-checked institutions is discussed below:

At institution level: During accreditation of an institution, under the key indicator of 'Student Support and Progression', NAAC assesses average percentage of students benefited by scholarships and freeships by government schemes during last five years.

Therefore, to assess the efforts made by test-checked institutions in encouraging students to avail benefit of scholarship and freeship schemes of government and in implementing these schemes, average percentage of students benefited by scholarships and freeship by the Government during 2014-19 was used as an indicator (Sl. Nos. 20 and 21 of Appendix 2.2).

Scrutiny of information provided by two test-checked universities and 13 test-checked government/ government-aided colleges revealed the following:

- (i) Burdwan University and its test-checked colleges: It was observed that an average of 68.34 *per cent* and 48.06 *per cent* students were benefited from scholarship and freeships respectively during 2014-19. Similarly, 62.93 *per cent* students were benefited by scholarship/ freeships in seven test-checked colleges during 2014-19.
- (ii) North Bengal University and its test-checked colleges: It was observed that an average of 63.56 per cent and 16.19 per cent students were benefited from scholarships and freeships respectively during 2014-19. On average 56.56 per cent students were benefited by scholarships and freeships in five out of six test-checked colleges during 2014-19.

During accreditation of universities, NAAC awarded maximum score to the institutions where on average 40 *per cent* and above students are benefited by scholarships and freeships in the institution. Hence, as per NAAC benchmarks, both the universities and nine out of 13 test-checked colleges were eligible for scoring maximum marks. However, three out of 13 test-checked colleges could not score the maximum marks. Information in respect of one college under NBU (Sonada Degree College) was not available.

#### Recommendation:

• In order to make higher education affordable the State Government and the affiliating universities may regulate fee structure of government-aided colleges particularly in areas where State Government is not in position to open Government College.

#### 2.4.4 Infrastructure

Adequacy of physical infrastructure and facilities with basic hygienic requirements is crucial in creating a conducive learning environments in HEIs. Apart from basic amenities like safe drinking water and functioning toilets, well designed campus with pleasant classrooms with adequate furniture; materials and infrastructure to support differently abled students; computers and computer rooms, internet connectivity, and institutional e-mail; science laboratories; vocational education spaces; materials for arts/ crafts, *etc.*, aids the learning atmosphere.

Some of these aspects were assessed during audit and the related observations are discussed below:

#### 2.4.4.1 Availability of ICT facilities

To assess the efforts made by test-checked institutions to encourage advanced teaching methods through the use of ICT, (i) percentage of classrooms/seminar halls with ICT- enabled facilities such as smart class, Learning Management System, etc., during 2018-19 (current year) and (ii) Student Computer ratio during 2018-19 (current year) were used as indicators (Sl. Nos. 22 and 23 of Appendix 2.2). These are also the key indicators used by NAAC during assessment and accreditation process of HEIs.

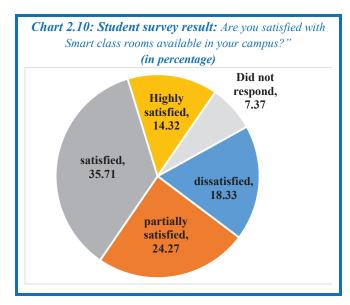
Paragraph 21.265 of Twelfth FYP inputs focus on use of ICT in higher education by providing smart classrooms and setting-up classrooms with interactive video-conferencing facilities. Further, the State Government also provides grants to government colleges for setting-up of smart rooms.

The position of percentage of ICT enabled classrooms and Student Computer Ratio in BU, NBU and test-checked colleges during 2018-19 are given in **Table 2.20** below:

Table 2.20: Percentage of ICT enabled classrooms and Student Computer Ratio in test-checked Universities and colleges during 2018-19

	Percentage of ICT enabled classrooms			Student Computer Ratio		
Name of university	Total number of classrooms	No. of classrooms with ICT	Percentage	Total number of students enrolled	No. of computers in working conditions	Student Computer Ratio
Burdwan University	133	58	43.61	2,868	597	5:1
Seven colleges under BU	300	53	17.67	18,448	368	50:1
North Bengal University	92	48	52.17	1,448	337	4:1
Six colleges under NBU	170	23	13.53	12,201	176	69:1

Source: Information provided by concerned universities and colleges.



**ICT** enabled classrooms: During accreditation of universities. NAAC awarded maximum score to the institutions where up to 80 per cent classrooms/ seminar halls are ICT enabled. Hence, as per NAAC benchmark, both the universities were not eligible for scoring marks with respect to this indicator. In response to a student survey on level of satisfaction on smart classroom facilities in campus, almost 43 per cent of students expressed full or partial dissatisfaction.

**Student Computer Ratio:** During accreditation of universities, NAAC awarded maximum marks to an institution on having Student Computer Ratio 10:1 and

below. Thus, as per NAAC benchmark, though both the Universities were eligible for scoring maximum marks while none of the test-checked colleges was eligible for scoring any mark with respect to this indicator.

Thus, unlike the Universities, none of the colleges test-checked was sufficiently equipped with ICT facilities which indicate that advanced teaching methods were used only to a limited extent. Moreover, dearth of computers in the colleges indicates that IT enabled learning by these HEIs were insufficient.

## 2.4.4.2 Availability of buildings, laboratory, library, etc.

Buildings, classrooms, laboratories, and equipment are crucial elements of learning environment in universities and colleges. Sufficiency of infrastructure was evaluated in audit on the basis of norms fixed by UGC. Each University should have a well stacked, comprehensive, automated and digitized Central Library. As such, efforts may be made by the University to not only enrich the Central Library, but also to make it fully computerized. The UGC norms specifies requirements of buildings (lecture/ seminar rooms with a minimum 15 sq. ft per student, library, and laboratories with 20 sq. ft per student). Scrutiny of records of the infrastructure disclosed the following:

**Infrastructure of the BU:** Though the total area<sup>56</sup> of academic buildings, Library and Laboratories, auditorium, sports facilities in BU was adequate for the University as a whole, yet 11 out of 33 departments<sup>57</sup> did not have adequate classrooms, while five departments<sup>58</sup> did not have sufficient laboratory space.

- The Central Library of BU having all the facilities was housed in a two-storied building in the Campus. It had a carpet area of about 6,844 m<sup>2</sup>.
  - Computerized library activities and networking of the Central Library had been undertaken under INFLIBNET programme of the UGC.
     Online Public Access Catalogue (OPAC) services was extended to all the departments through local area network.
  - The work of Radio Frequency Identification Device (RFID) was not implemented in the Central Library of the University till date. The accessioning and time cataloguing of the books purchased at the Central Library were done at regular basis with the incorporation of proper bar coding.
  - At the Central Library of BU, there were 8,000 rare books, 2,500 manuscripts, 1,983 reports for library enrichment.
  - The Central Library of the University was well connected through *e-shodhshindhu*<sup>59</sup> and *shodhganga*<sup>60</sup>. E-journals were subscribed by the university under UGC-Infonet programme.

<sup>&</sup>lt;sup>56</sup> Requirement: In case of Classroom/ seminar rooms minimum of 15 sq ft/ student and in case of library/ laboratory minimum of 20 sq ft/ student to be provided. The total area of BU Arts buildings – 20,718 sqm (2,23,008 sq ft), Library – 6,844 sqm (73,668 sq ft), Science buildings (Class rooms) – 14,032 sqm (1,51,040 sq ft) and Laboratories-7,016 sqm (75,520 sq ft).

<sup>&</sup>lt;sup>57</sup> Departments not having adequate classroom space were Physics, History, Statistics, Bio-Technology, Microbiology, Political Science, Chemistry, Philosophy, Mathematics, Sanskrit and Zoology. For example Physics department had 14 sq ft/ student and Biotechnology department had 12 sq ft/ student classroom space.

<sup>&</sup>lt;sup>58</sup> Departments not having adequate laboratory space were Botany, Chemistry, Statistics, Mathematics and Zoology.

<sup>&</sup>lt;sup>59</sup> Based on the recommendation of an Expert Committee, the MHRD has formed e-shodhsindhu which is to provide access to more than 15,000 core and peer-reviewed journals and a number of bibliographic, citation and factual databases in different disciplines.

<sup>&</sup>lt;sup>60</sup> shodhganga is a digital repository of Indian Electronic Theses and Dissertation accessible to all institutions and universities.

#### **Infrastructure of the NBU:**

Scrutiny of infrastructure disclosed the following:

- Though the total area of NBU was 330 acres, infrastructure in respect of classrooms and laboratory was inadequate. Eight out of 40 classrooms, were as per UGC norms. Further, five out of 31 laboratories possessed required size as per UGC norms, *i.e.*, 20 sq ft per student.
- The University Library had a separate 3,108 m<sup>2</sup> fully automated premises equipped with Integrated Library Management System.
  - The work of Radio frequency Identification Device RFID was not implemented in the Central Library of the University till date. The accessioning and time cataloguing of the books purchased at the Central Library were done at regular basis with the incorporation of proper bar coding.
  - o In the Library there were 652 rare books<sup>61</sup> and 1,794 reports.
  - The IP based system in the Central Library of NBU was yet to be operational.

Though BU had sufficient infrastructure in place as per UGC norms, NBU was lacking in e-library infrastructure.

**Physical infrastructures in affiliated colleges:** The position of availability of these facilities in the test-checked colleges is given in **Table 2.21** below:

Table 2.21: Availability of facilities in affiliated colleges

Name of University	Status of colleges	Total no. of test-check affiliated colleges	No. of colleges having sufficient administrative and academic building	No. of colleges having lab* facilities	No. of colleges having sufficient library facility	No. of colleges having sufficient furniture	No. of colleges having disabled friendly facilities
DII	Govt.	2	1	2	1	1	1
BU	Govtaided	5	2	2	4	3	1
NIDI	Govt.	2	2	2	2	2	1
NBU	Govtaided	4	2	2	2	3	2
Total	Govt.	4 (31%)	3 (75%)	4 (100%)	3 (75%)	3 (75%)	2 (50%)
	Govtaided	9 (69%)	4 (44%)	4 (44%)	6 (67%)	6 (67%)	3 (33%)

Source- Information provided by concerned test-checked affiliated colleges \*Laboratory for Science and Geography subjects

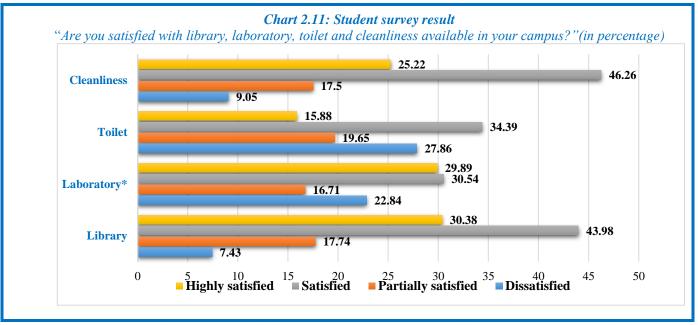
Physical inspection, scrutiny of records and information depicted in above table revealed the following:

• Out of nine test-checked Government-aided colleges, only four had sufficient administrative and academic building, only four had laboratory facilities, six had sufficient libraries and had sufficient furniture and only three were found to have disabled friendly facilities<sup>62</sup> as prescribed in the 2009 regulations and Persons with Disability Act 1995.

<sup>61</sup> 1. History of the British Empire in India, Author- Thornton, Edward, 2. Rise of the Dutch Republic, Author- Motley, John Lothrop, 3. Bramho-Samajer Itibritto, Author- Indian Mirar Yantra and 4. Annals of Rural Bengal, Author- Hunter, WW and 5. Purana, Markandeya Author-Dutta, Manmathanath.

<sup>&</sup>lt;sup>62</sup> Section 46 of Person with Disability Act 1995 read with NAAC manual envisages disabled friendly facilities including lifts, ramps, braille software, restrooms, scribes for examinations, special skill development for disabled students.

• Similarly, out of four Government test-checked colleges, only three had sufficient administrative and academic buildings, three had sufficient library facilities and had sufficient furniture and two of them were found to have disabled friendly facilities.



\*For the purpose of calculating percentage in respect of laboratory, opinion of students (1,077 in number) belonging to streams necessitating laboratory facilities have only been considered

Survey conducted among 1,669 students of two universities and 13 test-checked colleges in respect of facilities of toilet, cleanliness, laboratory and library revealed that 28 *per cent* students were dissatisfied on toilet, 23 *per cent* students were dissatisfied on laboratory. It transpired that satisfaction level (fully or partially) was highest in respect of library facilities.

Thus, many of the test-checked colleges (especially the Government-aided ones) did not fulfill all the essential infrastructure criteria for affiliation, which may compromise the learning atmosphere.

#### 2.4.4.3 Funding for infrastructure

MHRD provides funds through Rashtriya Uchchatar Shiksha Abhiyan (RUSA) <sup>63</sup> for filling critical infrastructure gaps in higher education by augmenting and supporting the efforts of the State Governments. It provides infrastructure grants to universities and colleges for upgrading the existing infrastructure by way of new construction, renovation or purchase of equipment. State Government also provides funds to colleges for improvement of their existing college buildings, smart classes and purchases of computers.

To assess efforts of the test-checked universities in this regard, Average percentage of budget allocation, excluding salary for infrastructure augmentation during 2014-19 was used as an indicator (Sl. No. 24 of Appendix 2.2). This indicator is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

<sup>&</sup>lt;sup>63</sup> RUSA is the Hindi for "National Higher Education Mission". It is a holistic scheme of development for higher education in India initiated in 2013 by the Ministry of Human Resource Development, Government of India.

The position of total budget allocation, expenditure on infrastructure, *etc.*, in NBU and BU during 2014-19 is given in **Table 2.22** below:

**Table 2.22: Budget allocation on infrastructure and total expenditure on infrastructure** (₹ in crore)

ini	(₹ in crore)				
		Budget	allocation		Percentage of expenditure
Name of university	Year	Budget allocation excluding salary	Budget allocation on infrastructure	Expenditure on infrastructure	on infrastructure with respect to budget allocation on infrastructure
	2014-15	106.31	31.52	10.14	32.18
D 1	2015-16	91.49	21.83	7.51	34.42
Burdwan University	2016-17	83.54	21.21	13.19	62.18
Oniversity	2017-18	80.35	16.72	7.03	42.05
	2018-19	76.09	8.75	7.30	83.39
			Average		50.84
	2014-15	97.65	67.77	3.86	5.69
N. a. b.	2015-16	111.20	92.95	16.16	17.39
North Bengal University	2016-17	98.20	74.40	35.26	47.39
Oniversity	2017-18	65.13	41.25	5.08	12.31
	2018-19	85.11	49.77	9.90	19.89
	20.53				

Source: Information provided by concerned universities

Scrutiny of information provided by two test-checked universities revealed that for BU, expenditure on infrastructure with respect to budget allocation on infrastructure was 50.84 *per cent* on average during 2014-19 and 20.53 *per cent* for NBU.

#### 2.4.4.4 Non-teaching staff

It was observed that as against the orders and sanctions issued from time to time by the State government/ Universities defining norms for recruitment and deployment of non-teaching staff in universities and colleges, a number of non-teachings posts was lying vacant (up to 50 per cent) in almost all offices/departments of both the Universities during the year 2014-19 (Appendix 2.4). Vacancy was increasing every year due to retirement of staff and no step was taken to fill up vacant posts over the years. Instead, contractual and casual staffs were engaged against those vacancies.

# Summary of observations in respect of Access and Equity in Higher Education

West Bengal is lagging substantially from All India average in terms of setting-up of new colleges.

Regional asymmetry continues to be a matter of concern. Even after lapse of two years after the end of the Twelfth FYP period (2012-17), the urban/rural area-wise distribution of colleges (rural: 55 per cent, urban: 45 per cent) falls way short of the desired balance in terms of proportion of population residing in those areas (rural: 73 per cent, urban: 27 per cent).

Test-checked colleges were not sufficiently equipped with ICT facilities. Moreover, dearth of computers in the colleges indicates that IT enabled learning by these HEIs were insufficient.

Many of the affiliated test-checked colleges did not even fulfill the criteria of essential infrastructure for affiliation, which may compromise the learning atmosphere.

Due to non-constitution of institutionalized mechanism like Community Education Development Cell, the students belonging to disadvantaged sections in all the test-checked universities and colleges were not proactively made aware of all the initiatives and programmes in place to put them on an equal footing.

#### Recommendations:

- In order to achieve overall GER of 30 per cent by 2025 as targeted under the 'State Higher Education Plan 2018' of West Bengal, the State Government may prioritise providing access to higher education in rural areas and undertake the planned efforts to enhance GER across all categories.
- In order to make higher education affordable the State Government and the affiliating universities may regulate fee structure of government-aided colleges particularly in areas where State Government is not in position to open Government College.
- In order to provide an atmosphere congenial to quality education in colleges, the State Government and affiliating Universities should provide prescribed basic infrastructure in government/government-aided colleges.

## 2.5 Governance and Management

Leadership and Governance deeply influence all aspects of Higher Education Institutions (HEIs). Though good governance and management are not the outcomes that are to be achieved in higher education, but they are crucial in determining the effectiveness of all the efforts aimed at achieving such outcomes.

In order to assess the status of governance and management in HEIs through various elements and mechanisms of HEI governance and the extent to which they have been effectively implemented in the selected HEIs, the following audit objective was framed.

# Audit objective 4: Whether Governance and Management of Higher Education system was adequate and effective.

Various factors contribute to ensure that governance and management of an HEI is envisioned and carried out in a manner that effectively oversees the efforts towards achievement of higher education outcomes. Affiliation of colleges, load of affiliation on universities, encouragement given towards autonomy, quality assurance and adequate funding acquire significance for HEIs to progress towards its goals. The relationship between the aims of adequate and effective governance and management in HEIs and factors, mechanisms and systems contributing towards achieving these aims can be understood through the following representation:

1. Strong Governing Bodies 2. Following the affiliation norms 3. Assessment for granting autonomy to colleges 4. Existence of Quality Assurance Mechanism 5. Adequate Funding	OUTPUT	1. Affiliation as per norms 2. Granting of autonomy to well performing colleges 3. Quality assurance	OUTCOMES	1. Good Governance 2. Accreditation and Ranking of HEIs 3. Effective Financial Management
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Effectiveness of governance and management structures of an HEI is reflected in the results of its evaluation through accreditation, ranking methodologies and in the prudence of financial management.

#### 2.5.1 Governance

Effective governance structures and process are essential to ensure accountability and transparency in an HEI, sound systems and policies, aid in efficient and effective working of institutions. The existence and functioning of governance structures at state level and at institutional level have been discussed in this section.

## 2.5.1.1 State level Governance

Institutional mechanisms for governance, at the state level include setting up of State Higher Education Council and State Level Quality Assurance Cell.

# (i) State Higher Education Council

Paragraph 21.308 of Twelfth FYP document states that it would be desirable for each State to set-up a State Higher Education Council (SHEC)<sup>64</sup> to lead the planned and coordinated development of higher education in the State.

• The State Government had reconstituted the SHEC<sup>65</sup> in 2015 keeping in view the guidelines of the UGC repealing the West Bengal State Higher Education Council (1994) through a legislation.

#### (ii) State Level Quality Assurance Cell

Every accredited institution should establish an Internal Quality Assurance Cell (IQAC) as a post-accreditation quality sustenance measure to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions. As per the guidelines issued by UGC, the State Level Quality Assurance Cell (SLQAC) shall monitor the functioning of IQAC in the colleges under their jurisdiction. The objective of SLQAC is to work towards quality improvement of colleges in the state, to draw up state-level action plan in consultation with NAAC and to act as nodal agency between the respective state HEIs and NAAC.

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<sup>&</sup>lt;sup>64</sup> SHEC has a mandate to enhance the performance of the HEIs of the state, and strengthen the planning and coordination of education so as to fulfill the rising needs of society, undertake planned expansion, channelize Higher Education in the right direction considering the socio economic needs and act as an advisory body, a policy think tank on any matter related to Higher Education.

<sup>65</sup> State Council of Higher Education in West Bengal was established in 1994. It was reconstituted mainly for implementation of the reservation policy of the State Government in terms of the West Bengal State Higher Educational Institutions (Reservation in Admissions) Acts, 2013.

NAAC in its accreditation process also gives importance to existence and functioning of SLQAC.

Scrutiny of information provided revealed the following:

- The HED did not lay down any quality benchmark, neither did it form the SLQAC.
- HED did not maintain any data regarding number of government/ government-aided/ private colleges which had constituted IQAC nor developed any mechanism to monitor whether government/ government-aided/ private colleges constituted IQAC or not.

SLQAC was envisioned as a cell that would work towards quality improvement of colleges. Due to non-formation of such cell HED failed to deliver on these aspects.

#### 2.5.1.2 Institutional level Governance

Governance at the level of universities is to be carried out through an elaborate mechanism consisting of Governing Bodies (Court, Executive Council, *etc.*), quality assurance mechanism (IQAC), affiliation process (Inspector of Colleges, Council for Under graduate Studies CUGS), *etc.* 

#### (i) Governing Bodies

Provisions relating to constitution and functioning of Senate/ Court, Syndicate/ Executive Council, Academic/ Faculty Council, Board of Study, Board of Inspections, faculty committees, college development council was as per respective governing act/ handbook of universities and other documents.

**The Court:** The Court<sup>66</sup> of the University is the highest level of Governing Body which consists of a number of Ex-Officio Members and Elected Members. In the test-checked Universities:

• In BU, during the last five years the composition of the Court (reconstituted in 2012 and 2016) was not complete with only 60 and 56 members out of the mandated 78 in position respectively. The ex-officio members (one) and the elected members (none) were not in position as shown in **Table 2.23** below:

Table-2.23 Composition of the Court in BU

Member	Number as	Person-in-position			
Wellider	per Act	Constituted in 2012	Constituted in 2016		
Ex-officio	16	15	16		
HOD	33	25	33		
Nominated by VC	15	15	7		
Elected	8	0	0		
Nominated by Chancellor	5	5	0		
Invitee	1	0	0		
Total	78	60	56		

Source: BU Act 1981 and the notifications of the constitution of the Court constituted in 2012 and 2016 respectively

The functions of the C

<sup>&</sup>lt;sup>66</sup> The functions of the Court include inter alia, to create Departments, to create teaching posts and Officer posts, to institute degrees, diplomas. Fellowships, scholarships, to confer degree titles and also to withdraw them, to consider the annual statement of accounts and annual report and other reports, to consider and advise on proposal from the EC to enter into any agreement with any body or authority, for taking up the management of any college or institute, co-operation with other institutions, to suggest measures for the improvement of the finances and administration and to make rules for the conduct of itself.

Similarly in NBU, the Court had a sanctioned strength of 73 members from various fields of society, against which the actual strength of members remained 60 throughout the period of audit.

As per respective Acts of both the test-checked Universities, the Court was to meet at least thrice in a financial year, other than for convocation. In BU, there were 12 meetings in five years, of which there were only one meeting in 2015-16, and two each in the next two years. The average attendance in these twelve meetings of the court was 28. During these meetings, the Court had mainly approved the Budgets of the respective years and had taken decisions to set-up four new Departments. This was only a small fraction of the powers and functions of the Court as per the Act. The Court decided to open four new departments namely, Deptt. of Physical Education, Deptt. of Nutrition, Deptt. of Geospatial Science, and Deptt. of Cyber Security & Criminology, in the meetings held on 22.05.15, 22.06.17, and 22.01.19.

In NBU only one meeting was held in 2016-17. Average attendance in the meetings of the Court was as low as 29 out of 60 members. It was also seen that in two instances<sup>67</sup>two meetings were held on a single day which mainly dealt with issues of routine nature like leave of teachers, date of holding Annual convocation, approval of budget estimates, selection of a nominee for appointment to the Committee for selection of VC, *etc*. This was also a small fraction of the powers and functions of the Court as per the Act.

*The Executive Council (EC):* The  $EC^{68}$  of the University is composed of some *Ex-Officio* members and some elected members and one/two nominated members. It was seen that-

- In BU, none of the 12 elected members were in position in the EC reconstituted in May 2012. The actual strength of the EC remained 18 throughout the period of audit against the prescribed strength of 32 members, whereas no elected member was in position. The EC never met as per the mandated frequency (twice a month); only 71 against the mandated 120 meetings were held during the years 2014-19 and 23 meetings were held without the quorum.
- In NBU, The actual strength of the EC remained 15 throughout the period of audit against the prescribed strength of 30 members. In NBU, one-third of the total number of members of the Executive Council *i.e.* 10 members would make a quorum for a meeting of the Executive Council. However, nine out of total 35 EC meetings were held without quorum during 2014-19.

<sup>&</sup>lt;sup>67</sup> 23 November 2015 and 24 November 2017.

<sup>68</sup> The powers of EC inter alia include to initiate proposals for the making of Statutes and Ordinances, to recommend to the Court for establishment of University Departments/ institutions/ centres/ libraries/ laboratories/ museums for study and research, to maintain University Departments/ Institutions, etc.; to create, with the approval of the State Government, or to recommend to the Court for creation of posts of Officers, Teachers and other Employees of the University; to appoint Teachers, Officers and Employees of the University and to fix their emoluments and define their duties and other terms and conditions of service; to pass appropriate orders regarding affiliation of or withdrawal of affiliation or recognition of a college or an institution, etc.

There were only nominated members and no elected members in both the Court and EC due to non-conduct of elections. Moreover, representatives of important stakeholders like teachers and students were also not present in the ECs.

In reply, the Registrar NBU agreed with Audit that shortfalls against prescribed strength in the authorities of the University impeded enriched decision making process.

The Registrar, NBU stated that in spite of receiving invitation, majority of Court members were absent from the meeting as attendance was not mandatory.

In reply, BU stated (December 2020) that the quorum of the meeting had been considered taking the number of existing members in position in the respective body. The reply is not acceptable as the University's interpretation of the quorum for a meeting is not supported by the provision of the Act.

#### Other Governance mechanisms:

- It was also observed that the Acts of both Universities provided for constitution of Council for Undergraduate Studies (CUGS) in Arts, Science, Commerce and Law under the Chairmanship of the VC. The Council shall, *inter alia*, recommend to the EC for the affiliation of a college, exercise general supervision over the colleges, ensure that the standard of teaching is maintained and the syllabi are completed within the academic year, *etc*. It was noticed that CUGS did not hold any meeting since May 2011 in any of the test-checked Universities.
- As per UGC Guidelines University should form College Development Council (CDC) to facilitate channelizing of the UGC schemes to Colleges. CDC is to invite proposals from its affiliated colleges for UGC grants and recommend to UGC. CDC was not formed in any of the test-checked universities.

The authorities of both test-checked universities did not furnish any reply.

Thus, the main governing bodies that are responsible for ensuring high quality education, were not functioning properly. The Universities were envisaged to function factoring in ideas arising out of consultation with different stakeholders. The University statutes envisaged representation of such stakeholders in the composition of the court and executive council. Insufficient representation of stakeholders in governing bodies compounded by holding of meetings without quorum, therefore, resulted in dilution of the idea of consultative governance.

#### (ii) Internal Quality Assurance Cell

Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under Twelfth FYP states that in order to internalize quality inputs all universities, government colleges and government-aided colleges are to be strengthened with full-fledged Internal Quality Assurance Cell (IQAC) as part of UGC-supported scheme.

Scrutiny of records of test-checked two universities and 13 government/government-aided colleges revealed the following:

- At NBU, IQAC takes feedback from the students only, analyses feedback of the students and submits the same to departments. No feedback was taken from parents, employers, other stake holders, though it was a part of the mandate of IQAC. In contrast, IQAC at BU claimed to have initiated action for taking uniform student feedback, guardian feedback and for introducing e-governance. However, none of these were documented.
- At NBU, IQAC had developed quality benchmark/ parameters for academic departments, central library and offices and sent them for self-evaluation by offices and departments. No such effort was done at BU.
- At NBU, IQAC prepared and submitted Annual Quality Assurance Report (AQAR) to NAAC upto 2017-18. Preparation of AQAR for 2018-19 was in process. In BU, AQAR report was submitted to NAAC and uploaded in the University Website upto the year 2018-19.
- Though IQAC was found to be constituted in all the test-checked Government colleges and seven out of nine test-checked government-aided colleges, details of meetings held and work done by IQAC were not made available.

Thus, in two test-checked universities, though IQACs were constituted but there remains ample scope for improvement in their functioning. Further, IQAC was not constituted in two test-checked government-aided colleges<sup>69</sup>. Even where constituted, details of its functioning were not provided to audit. Hence the objective of IQAC to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution was not fulfilled. The measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices were not achieved.

#### (iii) College Affiliation

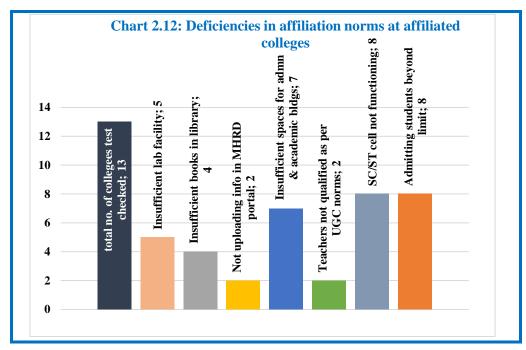
UGC (Affiliation of Colleges by University) Regulation, 2009 defines affiliation of a college as its recognition by, association with, and admission to, the privileges of the affiliating university. At the time of inspection by affiliating university, the concerned college (seeking affiliation) either run by State Government or private body, shall satisfy pre-defined requirements in relation to college buildings<sup>70</sup>.

Details of test-checked colleges affiliated to two selected universities in West Bengal related to adherence to affiliation norms are given in *Appendix 2.5*. An analysis of the *Appendix 2.5* is shown below graphically.

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<sup>&</sup>lt;sup>69</sup> Dr. Gour Mohan Roy College, Monteswar and Vivekananda College, Alipurduar.

<sup>70</sup> lecture/ seminar rooms and library with a minimum 15 sq ft per student, and laboratories with 20 sq ft per student, library with 1,000 number of books, fully equipped laboratories, etc., as specified in the Regulation.



As per the Act of BU and NBU, affiliation of colleges was to be examined in terms of 'Statues relating to affiliation of colleges' and UGC (Affiliation of colleges by universities) Regulations, 2009 and its subsequent amendments. However, in actual practice the HED decides the location for setting-up, selection of subjects, intake of students, staffing, *etc.*, in respect of the new colleges. It only instructs the VC of the University to inspect the colleges for affiliation.

It was clear from the Reports of the Inspector of Colleges of BU that the colleges neither had the required infrastructure nor the manpower for the subjects for which affiliation was proposed. Though the affiliation was provisionally given on the fulfillment of certain conditions, however the deficiencies found during inspection were not checked before grant/extension of affiliation.

Further, 20 to 62 *per cent* of the test-checked colleges did not meet six out of the nine affiliation norms. Thirty-eight *per cent* colleges<sup>71</sup> did not have sufficient laboratories while 32 *per cent*<sup>72</sup> did not have sufficient library books, 20 *per cent*<sup>73</sup> colleges did not upload information in Know your College portal, 62 *per cent* colleges admitted students beyond their approved intake capacity<sup>74</sup>, did not have sufficient administrative and academic buildings<sup>75</sup> and did not constitute SC/ST cell<sup>76</sup>.

74 Hooghly Mohsin College; Gushkara Mahavidyalaya; Kabi Joydeb Mahavidyalaya; Tarakeswar Degree College; Dr. Gour Mohan Roy College; Darjeeling Government College; Maynaguri College and Prasannadeb Women's College.

<sup>&</sup>lt;sup>71</sup>Kabi Joydeb Mahavidyalaya; Acharya Sukumar Sen Mahavidyala; Dr. Gour Mohan Roy College; Vivekananda College, Alipurduar and Sonada Degree College.

<sup>&</sup>lt;sup>72</sup>Hooghly Mohsin College; Acharya Sukumar Sen Mahavidyala; Vivekananda College, Alipurduar and Sonada Degree College.

<sup>&</sup>lt;sup>73</sup> Hooghly Mohsin College and Darjeeling Government College.

<sup>&</sup>lt;sup>75</sup> Hooghly Mohsin College; Kabi Joydeb Mahavidyalaya; Dr. Gour Mohan Roy College; Acharya Sukumar Sen Mahavidyala; Vivekananda College, Alipurduar; Maynaguri College; Sonada Degree College and Prasannadeb Women's College.

<sup>&</sup>lt;sup>76</sup>Hooghly Mohsin College; Gushkara Mahavidyalaya; Kabi Joydeb Mahavidyalaya; Chandannagar Govt. College; Maynaguri College; Sonada Degree College; Prasannadeb Women's College and Acharya Prafulla Chandra Roy Govt. College.

Thus, inspection of colleges was a mere formality by the university before affiliation. The views of the HED always prevailed.

#### 2.5.2 Autonomy of Higher Education Institutions

Draft NEP 2019 observed that HEIs in India that have been given autonomy with strong self-governance and have had good leadership, have grown into world-class institutions. Further, providing State universities and affiliated colleges greater autonomy and operational flexibility through enhanced resource support, has also been given priority during Twelfth FYP based on the commitment of the state governments.

As outlined in the National Policy on Education (1986-92), an autonomous college would have the freedom to

- Determine and prescribe its own courses of study and syllabi, and restructure and redesign the courses to suit local needs and prescribe rules for admission in consonance with the reservation policy of the state government;
- Evolve methods of assessment of students' performance, the conduct of examinations and notification of results; and
- Use modern tools of educational technology to achieve higher standards and greater creativity.

It was observed that the concept of autonomous colleges was started in the Eighth FYP whose target at that time was to grant autonomous status to 10 *per cent* of the total colleges. However, after completion of the Twelfth FYP, only seven colleges in West Bengal were awarded autonomous status.

During Exit Conference, Pr. Secretary, Higher Education Department intimated (November 2020) that granting autonomy has been started in some other Universities in the State.

## 2.5.3 Accreditation and ranking of higher education institutions

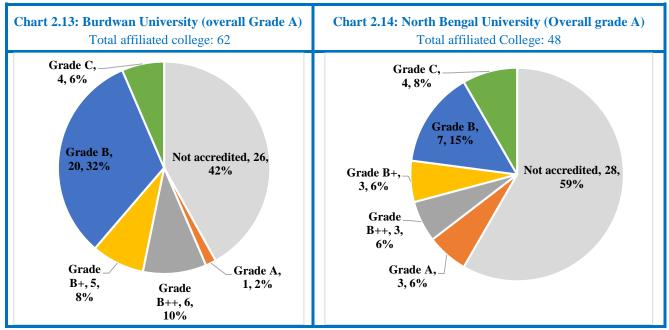
As per paragraph 3.3.3 (a) of Report on 'Inclusive and qualitative Expansion in Higher Education' prepared by UGC as a part of Twelfth FYP, the rapid expansion in the number of institutions of higher education and their intake capacity has not been able to ensure simultaneous sustenance of quality.

Further, Higher Education Institutions (HEIs), which have completed six years since their establishment and have had at least two batches of students graduated, are eligible to apply for the process of Assessment and Accreditation of NAAC.

Further as per UGC Regulations, no Higher Educational Institution shall be eligible for financial assistance without having undergone assessment and accreditation.

It was observed that out of the total 65 Government colleges (includes eight Government Engineering Colleges) in the State, 14 (22 *per cent*) had been accredited by NAAC and out of 450 Government-aided colleges, 256 (57 *per cent*) were accredited.

The following charts show the number of colleges awarded with various Grades<sup>77</sup> under these two Universities<sup>78</sup>:



It may be seen that only a miniscule percentage of colleges under BU (two *per cent* of total) and NBU (six *per cent*) managed to obtain Grade A, indicating substantial scope for improvement in performance. However, among the accredited colleges of these two universities, seven *per cent* got Grade A.

Moreover, it is a matter of more serious concern that 42 *per cent* of colleges under BU and 59 *per cent* of colleges under NBU are yet to get NAAC accreditation. This signifies that not only their performances remain unmonitored and unassessed, but also they are debarred from getting any financial assistance from UGC.

#### 2.5.4 Financial Management

HED provides funds from state budget to State Universities as grant-in-aid for salary of teaching and non-teaching staffers and to Government colleges for meeting their expenditure. Apart from State budget, State Universities and Government and Government-aided Colleges receive assistance from MHRD and University Grant Commission (UGC) under Rashtriya Uchchatar Shiksha Abhiyan (RUSA).

#### 2.5.4.1 Funds under State budget

Position of year-wise funds provided to state Universities and Government colleges during 2014-19 from the State budget is shown in **Table 2.24** below:

 $<sup>^{77}</sup>$  A++: 3.51-4.00; A+: 3.26-3.50; A: 3.01-3.25; B++: 2.76-3.00; B+: 2.51-2.75; B: 2.01-2.50; C: 1.51-2.00; D: <=1.50.

<sup>&</sup>lt;sup>78</sup> BU had been accredited by NAAC as "A" and this was valid upto 2021. 36 colleges out of 62 under the BU had been accredited by NAAC (Grade A: one, Grade B++: six, Grade B+: five, Grade B: 20 and Grade C: four). NBU had been accredited by NAAC as "A" and this was valid upto 2021. 20 out of 48 colleges under NBU had been accredited by NAAC (Grade 'A': three, Grade B++: three, Grade B+: three, Grade B: seven and Grade C: four).

Table 2.24: Funds from State budget

(₹in crore)

		Dorgontogo		Short				
Year	Budget allocation	Percentage to State Budget	To State Universities	To Govt. colleges	To Govt aided colleges	Other releases <sup>79</sup>	Total funds released to higher education	release in percentage
1	2	3	4	5	6	7	8 (4+5+6+7)	9
2014-15	2,602.51	1.50	979.72	161.06	1,108.91	246.78	2,496.47	4.07
2015-16	2,827.62	1.47	950.91	181.13	1,234.30	265.55	2,631.89	6.92
2016-17	3,091.55	1.46	1,053.19	219.00	1,335.87	424.41	3,032.47	1.91
2017-18	3,769.05	1.57	1,107.59	227.72	1,429.70	382.73	3,147.74	16.48
2018-19	3,694.51	1.54	1,216.06	223.84	1,664.04	509.83	3,613.78	2.19

Sources: Budget documents/information provided by State Government

It can be seen from the table that the State Government did not release entire amount of budget allocation to higher education. Further, the budgetary allocation for higher education remained constant as a percentage of the State Budget (below two *per cent*).

#### 2.5.4.2 Funds under RUSA

RUSA scheme, started in 2013, aims to improve the quality of state universities and colleges and enhance their existing capacities so that they become dynamic, demand-driven, quality conscious, efficient and forward looking and responsive to rapid economic and technological developments. The scheme covers only the government and government-aided state higher education institutions excluding open universities and institutions offering Medical, Agriculture, Veterinary, *etc.* Centre-State funding for this scheme in case of West Bengal is in the ratio of 60:40.

During 2014-19 the HED released ₹ 320.712 crore (Central share (CS): ₹ 192.157 crore plus State share(SS): ₹ 128.528 crore) out of received amount of ₹ 322.841 crore (CS: ₹ 193.436 crore plus SS ₹ 129.405 crore) under RUSA-1.0 80 and only ₹ 248.713 crore (CS: ₹ 149.23 crore plus SS: ₹ 99.49 crore) out of received amount of ₹ 251.61 crore (CS: ₹ 150.97 crore plus SS: ₹ 100.65 crore) under RUSA-2.081 as on February 2020.

BU had received an amount of ₹20.00 crore under RUSA of which it had utilized an amount of ₹17.53 crore. The amount had been spent on:

• New equipment/ facilities (₹ 5.98 crore);

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<sup>79</sup> Teachers Training, Scholarships, Institutes of Higher Learning, Special Component Plan for Scheduled Castes, Tribal Areas Sub-Plan, Language Development, etc.

<sup>80</sup> The salient objectives (RUSA 1.0) were to 1. improve the overall quality of existing state institutions; 2. usher transformative reforms in the state higher education system; 3. ensure academic and examination reforms in the higher educational institutions. 4. enable conversion of some of the universities into research Universities; 5. create opportunities for states to undertake reforms in the affiliation system; 6. ensure adequate availability of quality faculty in all higher educational institutions; 7. create an enabling atmosphere in the higher educational institutions to devote themselves to research and innovations; 8. expand the institutional base in order to achieve enrolment targets; 9. correct regional imbalances in access to higher education and 10. improve equity in higher education.

<sup>81</sup> RUSA 2.0, started in 2018, targets to 1.increase the spending of States on higher education as a percentage of GSDP to 2% or above; 2. Ensure all the State Institutions are NAAC Accredited by the end of March 2020 as a part of mandatory quality assurance framework; 3. reduce the student teacher ratio to 15:1 in Institutions by the end of March 2020; 4. increase the National GER to 32% by March 2022; 5. ensure growth of GER with more inclusion of disadvantaged groups (SC/ST/Women); 6. Ensure that all the States participate in AISHE and data pertaining to all State institutions is furnished and 7. ensure that the number of colleges affiliated to State Universities reduce to 200.

- Renovation/upgradation of existing facility (Auditorium at Golapbag) (₹ 6.98 crore); and
- Creation of new facility (International students hostel) (₹ 4.56 crore).

The expenditure on new equipment/ facilities had been spent mainly on purchase of desktop, laptop, LED projectors, UPS, Smart class room (three numbers), language laboratory, purchase of furniture including LAN and electrical connections, purchase of books and subscription of e-journals.

NBU received ₹ 20.00 crore during 2015-16 to 2018-19 under RUSA. Out of ₹ 20.00 crore, ₹ 13.91 crore was incurred during this period. The expenditure was incurred mainly for

- Purchase of books, journals and e-resources (₹ 3.40 crore);
- Smart Class Room (₹ 1.87 crore);
- Construction of Lab of Physics, Chemistry & Geography (₹ 1.90 crore);
- High Performance Computing System (₹ 2.60 crore);
- LAN WiFi with CCTV System (₹ 1.41 crore); and
- Upgradation and renovation of laboratories (₹ 2.08 crore), etc.

The NBU authority sent utilisation certificates of ₹13.91 crore to Higher Education Department.

# 2.5.4.3 Other findings relating to maintenance of Accounts and Internal Audit

*Maintenance of annual accounts:* Both the Universities maintained separate accounts for receipts/ expenditure of each grant/ scheme. Accounts in both the Universities were maintained on cash basis.

Due to this, outstanding liabilities, unearned income, claims/ refunds, payables/ receivables, stock/ inventory and provisions for the employees benefit scheme, *etc.*, and income and expenditure under various heads were neither ascertained nor accounted for/ reported in annual accounts.

The dates for submission of accounts to the Government were as follows

Table 2.25: Submission of accounts by the test-checked universities

Year	Date of submission by NBU	Date of submission by BU
2014-15	02.07.2018	18.07.2018
2015-16	06.07.2018	18.07.2018
2016-17	12.11.2018	18.07.2018
2017-18	07.06.2019	31.10.2019
2018-19	Not yet submitted	Not yet submitted

Source: Information furnished by the respective Universities

It can be seen from the table that the universities were not submitting their annual accounts to the Government in time.

#### Summary of observations on Governance and Management

State Level Quality Assurance Cell (SLQAC) was supposed to monitor the functioning of Internal Quality Assurance Committee (IQAC) in monitoring the quality parameters/ assessment criteria for NAAC accreditation. SLQAC was not formed in the State. Though IQACs were constituted in both the test-checked universities, there remains ample scope for improvement in their functioning.

The main governing bodies that are responsible for ensuring high quality education were not functioning properly. Issues such as lack of representation of important stakeholder like students and teachers compounded by conduct of meetings without quorum, led to dilution of the idea of consultative administration.

It was observed that the concept of autonomous colleges was started in the Eighth FYP whose target at that time was to grant autonomous status to 10 *per cent* of the total colleges. However, as of date, only seven colleges in the State have been awarded autonomous status.

Further, NAAC accreditation, which was an indicator of quality control, was available only for 22 *per cent* government colleges and 57 *per cent* government-aided colleges in the State. Thus, the quality control activities at all levels of Higher Education remained unmonitored in West Bengal.

This assumes significance in view of the fact that only seven *per cent* of accredited colleges under BU & NBU managed to secure A Grade from NAAC indicating scope for improvement in quality parameters of higher education being imparted in HEIs in the State.

There remains ample scope for improvement in the functioning of Governing Bodies such as Court, EC, *etc*. It was observed that the Government Bodies in the test-checked HEIs did not function with full membership strength and meetings were also held without even the requisite quorum.

#### Recommendations:

- In order to increase the number of NAAC accredited institutions, State Level Quality Assurance Cell should be formed and effectively monitor functioning of Internal Quality Assurance Cell of colleges and HEIs should also strengthen their Internal Quality Assurance Cell.
- Universities should ensure constitution of all governing bodies and convene their prescribed meetings so that the governance structure works in its full potential towards enhancing quality, equity and access in HEIs.
- Test-checked universities should strengthen their affiliation process so that the shortcomings noticed in the inspections of the colleges carried out by the university were rectified before granting permanent affiliation.

#### 2.6 Conclusion

The higher education scenario in West Bengal is marked by qualitative asymmetry as in terms of College density and Gross Enrollment Ratio, West Bengal remained at the lower end of the ranking table of States and Union Territories (UTs).

Important facilitating mechanism for enhancing employability and employment opportunities of graduating students such as placement cell, career counselling cell, alumni association and employability enhancement programmes were either non-existent or functioned inadequately in most of the test-checked universities and colleges. This was compounded by lack of maintenance of any employment related data or information by most of the test-checked Higher Education Institutions and dependable feedback.

There was insufficient evidence to show whether crucial feedback from stakeholders, inputs from expert groups and reference to curricula of leading universities had been made use of for curriculum improvement. Barring a few cases, none of the test-checked HEIs made any efforts to introduce value added courses in the curriculum, thereby depriving the students of the opportunity of enhancing and diversifying their knowledge. As regards greater academic flexibility and Choice Based Credit System (CBCS), the university level on many such aspects did not sufficiently percolate to the colleges.

Shortage of teachers including non-availability of prescribed qualification among teachers in colleges was another area of concern. Student Teacher Ratio was much more than its prescribed limit of 20:1 in Government aided colleges in Arts stream during 2018-19. Twenty eight *per cent* of teachers in test-checked colleges did not possess prescribed NET (National Eligibility Test) qualification. Efforts towards professional development of teachers was also insufficient as only 22 *per cent* teachers on an average attended professional development programmes in Universities.

As regards quality of research and consultancy, none of the test-checked HEIs were able to produce any tangible outcomes in the form of patents and consultancies during the period 2014-19.

West Bengal is lagging substantially from All India average in terms of setting up of new colleges. Regional asymmetry continues to be a matter of concern. Even after lapse of two years after the end of the Twelfth FYP period (2012-17), the urban/ rural area wise distribution of colleges (rural: 55 per cent, urban: 45 per cent) falls way short of the desired balance in terms of proportion of population residing in those areas (rural: 73 per cent, urban: 27 per cent) indicating regional asymmetry.

Unlike the Universities, test-checked colleges, with dearth of computers, were not sufficiently equipped with ICT (Information & Communication Technology) facilities. Many of the affiliated test-checked colleges did not even fulfill the criteria of essential infrastructure for affiliation, which may compromise the learning atmosphere.

NAAC accreditation, which was an indicator of quality control, was available only for 22 per cent Government colleges and 57 per cent Government aided colleges in the State. Though Internal Quality Assurance Committee (IQAC), which was to monitor the quality parameters/ assessment criteria for NAAC accreditation, were in existence in both the test-checked universities, State Level Quality Assurance Cell (SLQAC), mandated to monitor the functioning of IQACs, was not formed. Thus, the quality control activities at all levels of Higher Education remained unmonitored in West Bengal.

This was compounded by deficiencies in functioning of main governing bodies such as Court, EC, *etc.* of the Universities that are responsible for ensuring high quality education. While there was lack of representation of important stakeholders in those bodies, instances of conduct of meetings without quorum were also observed. Elements of consultative administration was, thus, compromised to that extent.

The aspect of quality control and monitoring calls for attention of the Government/ Universities as only seven *per cent* of accredited colleges under BU and NBU managed to secure A Grade from NAAC.

# Chapter 3 Compliance Audit



# **Chapter 3: Compliance Audit**

## FIRE & EMERGENCY SERVICES DEPARTMENT

## 3.1 Management of Fire Services in West Bengal

#### 3.1.1 Introduction

To provide protection against fire and ensure fire safety in the State, the West Bengal Fire Services (WBFS) was constituted under the West Bengal Fire Services Act 1950 (Act), enacted (March 1950) by the Government of West Bengal (GoWB). Subsequently, in June 2005, it was renamed as West Bengal Fire and Emergency Services (WBFES). WBFES functions under the aegis of 'Fire and Emergency Services Department' (FES), GoWB. Activities of the department *inter alia* included:

- All matters connected with development, utilisation and control of fire prevention, fire protection and fire fighting;
- Administration of the West Bengal Fire Services Act 1950; and
- Issue of fire licences.

This apart, its activities include mitigating other types of disasters like house collapse, accidents, human and animal rescue from wells, *etc*.

Of a total of 11,037 fire incidents in the Country, involving death of 10,915 persons and injuries to 441 persons, there were 591 fire incidents in the State, involving death of 528 persons and injuries to 12 persons. In terms of the All India Statistics<sup>82</sup> on Accidental Fire (excluding fire in Forest/ Open space), for the year 2019, the State of West Bengal was ninth highest amongst all States.

In December 2005, the Government of India (GoI) enacted the Disaster Management Act, which envisaged the creation of National Disaster Management Authority (NDMA) to spearhead and implement a holistic and integrated approach to Disaster Management in India. NDMA, being the apex body, is mandated to lay down the policies, plans and guidelines for Disaster Management to ensure timely and effective response to disasters. The National Disaster Management Guidelines- NDMG (April 2012), relating to fire services, stipulate that the planning and working out of requirement of urban and rural area of the State are to be based on the local vulnerabilities and norms laid down by the Standing Fire Advisory Council (SFAC)<sup>83</sup>.

Director General (DG), WBFES (Directorate), is the Executive-in-Charge of WBFES functioning under the administrative control of Principal Secretary/Additional Chief Secretary, FES. WBFES has a Protection and Prevention Wing and one Institute for Fire Services-IFS (for Training). WBFES has a network of 138 fire stations under 23 Fire divisions. Each division is being controlled by a Divisional Fire Officer and each fire station is headed by a Station Officer.

The audit of 'Management of Fire Services in West Bengal' was conducted in two phases, *i.e.*, from June to August 2019 and from November 2019 to

<sup>82</sup> Data sourced from National Crime Records Bureau, Ministry of Home Affairs. The statistics only included fire incidents for which First Information Report (FIR) was lodged.

<sup>&</sup>lt;sup>83</sup> SFAC constituted in 1955 by the Ministry of Home Affairs, GoI makes recommendations in the technical problems in delivering Fire Services. All State Governments, Union Territories and other Central Ministries are the members of SFAC.

February 2020 covering the period from 2014-15 to 2018-19. During 2014-2019, a total<sup>84</sup> of 62,909 fire and other incidents, were attended to by the WBFES. Records of the FES, Directorate and 10 out of 23 fire divisions<sup>85</sup> along-with 71 out of 138 fire stations were scrutinised in the course of audit. Selection was made on the basis of Simple Random Sampling without Replacement. The FES is focusing on the recommendations of SFAC as the goal for delivering the Fire Services in the State, hence, the operational efficiency of FES was evaluated by Audit on the basis of SFAC norms. Deficiencies noticed in delivery of fire services as well as measures undertaken towards prevention of fire are discussed in the succeeding paragraphs.

## **Audit findings**

#### 3.1.2 Fire-fighting infrastructure

Major infrastructural benchmarks in fire-fighting preparedness include adequacy of number of fire stations compared to coverage area with availability of fire tenders, equipment and safety appliances in fire stations.

## 3.1.2.1 Availability of fire stations

As per the risk management strategy formulated (November 2013) by SFAC, one fire station per 10 sq km in urban area and 50 sq km in rural area is required to be set-up to limit the response time to seven minutes and 20 minutes respectively. On the other hand, one engine (pump) was required for each 50,000 population.

For revamping the fire services in the Country, fire hazard and risk analysis was conducted (November 2012) by Ministry of Home Affairs, GoI. The risk analysis report disclosed that there was a requirement of 435 fire stations in the State. Against that requirement, the State had 138 fire stations, as of February 2020, indicating a shortage of 297 fire stations (68 *per cent*).

The position in respect of the 71 fire stations in 10 test-checked divisions was as under:

Table 3.1: Projections of requirement of fire stations in the test-checked fire divisions

Division	No. of fire incidents responded to	Area covered (sq km)	Population covered (in lakh)	Fire Stations required	Existing Fire Stations	Shortage of Fire Stations (%)
Kolkata (North & South)	9,813	205	44.96	20	15	5 (25)
Howrah	3,133	1,467	48.50	22	6	16 (72)
North 24 Parganas	8,340	4,094	100.10	47	17	30 (64)
Jalpaiguri	3,361	3,044	38.70	14	9	5 (36)
Darjeeling	2,570	2,092	18.46	10	8	2 (20)
Malda	965	3,733	39.98	17	3	14 (82)
Murshidabad	1,334	5,324	71.02	29	5	24 (83)
Paschim Barddhaman	2,795	1,603	28.82	15	4	11 (73)
Paschim Medinipur	1,481	9,295	59.43	36	4	32 (89)
Total	33,792	30,857	449.97	210	71	139 (66)

Source: SFAC guidance and records of test-checked Divisional Offices

84 2014: 12,763 nos.; 2015: 9,838 nos.; 2016: 8,812 nos.; 2017: 12,755 nos.; 2018: 9,576 nos. and 2019: 9,165 nos.

<sup>85</sup> North 24 Parganas (17), North Kolkata (six), South Kolkata (four), Howrah (six), Jalpaiguri (nine), Darjeeling (eight), Malda (three) Murshidabad (five), Paschim Barddhaman (four) and Paschim Medinipur (four). Figures in brackets represent fire stations.

The situation is alarming in Paschim Medinipur, Murshidabad, Malda, Paschim Barddhaman, Howrah and North 24 Parganas. When compared to fire incidents<sup>86</sup> responded to, the shortage was especially alarming in the district of North 24 Parganas.

Keeping in view the huge gap between normative requirements and the number of existing fire stations in the State, DG, WBFES requested (December 2018) the FES to formulate a policy for prioritization. In view of the resource constraints, DG, WBFES proposed to Secretary, FES to take up one fire station in each Legislative Assembly segment <sup>87</sup>. However, no such policy was formulated as of February 2020. Deficiency in number of fire stations was bound to adversely affect the fire-fighting preparedness and cause longer response time in case of fire incidents.

DG, WBFES stated (September 2020) that with 11 new ongoing projects for setting up of new fire stations and a proposal for setting up 60 new ones, it was expected that norms of the SFAC, would be fulfilled in years to come. The reply neither indicated the details of new ongoing/ proposed fire stations, nor spelt out any specific timelines for setting up the same.

DG further added that based on Audit observations, the matter was being taken up with the Government, to secure the operational efficiency of the WBFES, in keeping with the SFAC norms, by way of framing of Act and Rule.

#### 3.1.2.2 Delay in construction of fire stations

The Report of the C&AG of India for the year ended March 2010 (Civil) flagged that inordinate delay in construction of fire stations (Public Works divisions being the executing agencies) was an area of concern which called for special attention of the Department. The Department in its reply (July 2010 and February 2011), accepted the fact and intimated that due action would be taken. It was however observed in Audit that there has been no/ marginal improvement in the scenario even after 10 years as discussed below.

FES sanctioned construction of 42 fire stations <sup>88</sup> on the basis of proposals received from the District Magistrates. According to the guidelines, the fire stations (FSs) were to be constructed by Public Works Department within 15 months. Details of construction of fire stations are shown in *Appendix 3.1*. It would be evident from the *Appendix 3.1* that construction of as many as 11 FSs were not completed as of February 2020, even after availability of sufficient funds. Of the completed 31 FSs, construction of 16 FSs was delayed by more than one year. It is a matter of serious concern that the following three FSs were incomplete even after lapse of one year or more from the scheduled dates of completion.

<sup>&</sup>lt;sup>86</sup> Fire incident may be termed as the situation where movement of fire tenders occur in response to a fire call. It may be classified as small, medium and serious/major.

<sup>87</sup> Jalpaiguri: seven, Darjeeling: six, Malda: 12, Murshidabad: 22, North 24 Parganas: 33, Kolkata: 11, Howrah: 16, Paschim Medinipur: 15 and Paschim Barddhaman: 11.

<sup>88 32</sup> fire stations during February 2014 to October 2018; two fire stations in August 2011; while dates of sanction of eight fire stations taken up prior to 2014-15 were not available from records.

Table 3.2: Status of incomplete fire stations sanctioned during 2014-15 to 2018-19

Sl. No.	Name of the Fire station	Date of Administrative approval	Schedule date of completion	Status of completion	Delay (in months)
1	Panskura, Purba Medinipur	15.12.16	March 2018	Ongoing	23
2	Joygaon, Alipurduar	02.03.17	June 2018	Ongoing	20
3	Rajarhat, North 24 Parganas	16.11.17	February 2019	Ongoing	12

Source: Records of FES

Such delays were mainly attributable to the following:

- Preparation of estimates for fire stations without any survey and soil test leading to subsequent revision of estimates owing to inappropriate soil condition and consequent execution of additional works with time and cost overrun.
- Slow processing of inter-departmental transfer of land.

In reply, the FES stated (February 2020) that several communications have been made with the executing agency (Public Works Department authority) for early completion of the fire stations, but the delay could not be avoided.

Thus, persistent delay in construction of FSs continued to be an area of concern even after almost 10 years after the same was flagged by Audit in 2010.

# 3.1.2.3 Delay in commissioning of newly constructed fire stations

Above-mentioned time overrun in construction of FSs was further compounded by inordinate delays (ranging between 10 and 19 months) in operationalization of the following six newly constructed FSs even after their inauguration:

Table 3.3: Statement showing details of delayed commissioning of newly constructed fire stations

constructed in c stations							
Name of fire station	Date of completion	Date of inauguration	Date of commissioning	Delay			
(1)	(2)	(3)	(4)	(5) (Col 3 – Col 4)			
Pandua, Hooghly	Not Available	01.06.2017	08.01.2019	Over 19 months			
Chakda, Nadia	31.03.2017	13.02.2018	07.01.2019	Over 10 months			
Bethuadhari, Nadia	31.03.2017	13.02.2018	07.01.2019	Over 10 months			
Tehatta, Nadia	31.03.2017	13.02.2018	07.01.2019	Over 10 months			
Domkal, Murshidabad	Not Available	19.02.2018	02.03.2019	Over 12 months			
Ashok Nagar, North 24 Parganas	Not Available	27.02.2018	08.01.2019	Over 10 months			

Source: Records of FES

Reasons for such delays were not forthcoming from records, though all these fire stations were suffering from dearth of manpower, while in case of Domkal fire station, it was being operated through deployment of staff from other fire stations as stand-by. There has been instance of delayed commissioning of FS leading to mobilisation of fire tenders from another FS, located afar from the spot of fire incident, as is evident from the following incident.

• Domkal FS<sup>89</sup> was inaugurated in February 2018, but was commissioned only in March 2019. In March 2018, there was a fire incident in its proximity (15 km). As Domkal FS was not commissioned at that point of time, Fire tenders had to be mobilised from Berhampore FS, which was 62 km away. As per norms the FS was to be within an area of 10 sq km, from the spot of the incident.

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<sup>89</sup> comes under Urban Area.

# 3.1.2.4 Failure of Modernization of Control Room and Fleet Management project

With a view to improve the role of fire and emergency services in managing the distress calls at the control room, by effectively communicating with their fire units, M/s WEBFIL Ltd. (a State Public Sector Undertaking) initiated (January 2012) a proposal for Modernization of Control Room and Fleet Management System. It consisted of three major components, namely

- Vehicle Tracking System (VTS) facilitates tracing Current position and status of the vehicle;
- Navigation System guides the driver to reach the destination in emergency through shortest route; and
- Computer Aided Dispatch (CAD) system helps to locate the point of distress on the map and find the shortest distance between the point of distress and the location of the vehicle.

The system would provide a fully functional 'Dial 101' distress call response management system. The ultimate objective of the project could only be achieved if all the three major components were to operate at the optimum level.

Execution of the project was entrusted (March 2012) to M/s WEBFIL Ltd. at a cost of ₹ 6.07 crore. The administrative approval and financial sanction to the project was accorded for ₹ 2.40 crore and ₹ 3.67 crore in September 2012 and March 2013 respectively. An agreement was executed (December 2013) between Directorate, WBFES and M/s WEBFIL Ltd. to that effect. The project was scheduled to be completed by August 2014. The total value of the entire project was ₹ 6.07 crore (Supply: ₹ 4.24 crore and Execution: ₹ 1.83 crore) respectively, against which a payment of ₹ 5.46 crore was made to M/s WEBFIL Ltd.

It was observed from records that the components of Vehicle Tracking (VT) and Navigation System were not working properly. The problem areas were: (1) Identification of caller location and the place of incident, (2) Navigation to the point of distress using on-board navigator, (3) Finding an optimized route from the fire station to point of distress with overlays of traffic congestion points, (4) Implementation of the provision for real time vehicle tracking and playback using trail, (5) Monitoring response times, *etc.* It was decided in a meeting held in February 2019 that the inactive Global Positioning System (GPS) tracking system was to be replaced with modern standards. Subsequently, the Chief Mobilizing Officer, M/s WEBFIL Ltd. stated (May 2019) that VT connections of service provider (Airtel) at all stations of the vehicles were also not functional.

Thus, the project could neither be completed nor operationalized as of August 2019. Final bill<sup>90</sup> was also not submitted by M/s WEBFIL Ltd. There was nothing in record to indicate that the Directorate, WBFES had ever made any communication with the M/s WEBFIL Ltd. pursuing completion of the project.

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<sup>90</sup> As per agreement, the balance amount was ₹ 0.61 crore, which was not paid by WBFES, for non-completion of work.

Hence, the objective of Modernization of Control Room and Fleet Management System remained unachieved due to failure of VT application and Navigation System even after incurring an expenditure of ₹ 5.46 crore.

## 3.1.2.5 Partially Functional Communication System

Communication between Fire Station and fire personnel plays a crucial role to combat any fire incidence. Every fire station and fire vehicle, thus, should be provided with communication devices. SFAC specified the requirement of one Static Wireless Set for each fire station together-with one Mobile Wireless Set and one Walkie-Talkie for each vehicle. One Radio Technician for maintenance of every five pieces radio equipment and one Leading Fireman (equivalent to Radio Mechanic) for every twenty five pieces of such equipment should also be deployed.

In order to strengthen the communication system in the fire service, FES purchased (March 2012) 140 numbers of Handheld Walkie-Talkie set and 60 numbers of Static Walkie-Talkie set at a cost of ₹ 52.60 lakh. FES subsequently purchased (April 2015) another 200 numbers of Handheld Walkie-Talkie set at a cost of ₹ 57.48 lakh. DG, WBFES issued such Walkie-Talkie sets to different fire stations and divisional control rooms for its optimum use.

Scrutiny revealed that a total of 252 Walkie-Talkie sets were issued in favour of the test-checked divisions. Information submitted by the respective fire stations disclosed that only 190 Walkie-Talkie were accounted for against the total issue of 252 sets leaving an unexplained shortage of 62 sets.

Out of the available 190 Walkie-Talkie sets with the test-checked divisions, 97 sets (51 *per cent*)<sup>91</sup> were non-functional. Date from which such sets became non-functional couldn't be ascertained due to non-recording of periodical functional status of Walkie-Talkie sets, by the concerned fire stations. No action<sup>92</sup> was also taken to make the Walkie-Talkie sets functional. Moreover, communication between the fire station and fire personnel was being established by personal cell-phones as these Walkie-Talkie sets remained non-functional.

DG, WBFES was paying Airtime Charges for all procured sets (400 sets) without confirming their availability, functional status and effective communication range and consequently the State Government had spent ₹ 2.09 crore 93 towards the dedicated communication system, which was not functioning as per the desired objective.

Recommendations: WBFES should prepare a suitable Plan of Action to ensure

• Availability of Fire Stations in consonance with norms of SFAC regarding response time and revamping of fire services in the State and

<sup>91 23</sup> in North 24 Parganas, five in North Kolkata, 23 in Howrah, 18 in South Kolkata, six in Jalpaiguri, three in Darjeeling, six in Murshidabad, six in Paschim Barddhaman and seven in Paschim Medinipur.

<sup>&</sup>lt;sup>92</sup> in respect of Annual Maintenance Contract and deployment of fire personnel for maintenance of Walkie-Talkie sets.

<sup>93 ₹ 52.60</sup> lakh and ₹ 57.48 lakh for procurement of Walkie-Talkie sets together-with ₹ 99.14 lakh for payment of Airtime Charges for the period from April 2013 to March 2019.

Establishment of new fire stations and commissioning of newly constructed fire stations on an expeditious basis.

## 3.1.3 Human Resource Management and Training

# 3.1.3.1 Huge shortage under Operational category of manpower

Fire personnel are classified mainly into two categories, i.e., Operational and Non-Operational category in terms of nature of their role in fire-fighting. The operational level staff of a Fire Brigade included Station Officer, Sub-Officer, Fire Engine Operator-cum-Driver (FEOD), Leader and Fire Operators. Scrutiny of the records disclosed that for the State as a whole there was huge shortfall of operational level staff in those categories as of April 2019, as shown in the table below:

Table 3.4: Sanctioned strength vis-à-vis Staff-in-position under the

**Operational category of Fire personnel** 

Sl. No	. Name of the Post	Sanctioned strength	Men-in-position	Shortfall in MIP compared to sanctioned strength
1	Station Officer	270	171	99 (37%)
2	Station Sub-Officer	517	145	372 (72%)
3	Fire Engine Operator- <i>cum</i> -Driver (FEOD)	1,352	848	504 (37%)
4	Leader	1,336	975	361 (27 %)
5	Fire Operator	5,441	1,396	4,045 (74 %)

Source: Records of Directorate, WBFES and FES

Vacancies were being created due to regular retirement on superannuation and creation of new fire stations. Fire Operator was the entry cadre of the department, which was to be filled only by direct recruitment. Other vacancies were to be filled-up through regular promotion and direct recruitment in specified percentage. This apart, against the sanctioned strength of 22 for the post of Divisional Fire Officer, the actual strength was 15 (as on 01 May 2019), leaving a vacancy of seven. Of these seven vacancies, three vacancies were to be filled-up through recruitment.

Appendix 3.2 shows the position of actual vacancies, proposal for recruitments initiated by the WBFES, proposal forwarded by the Department to West Bengal Public Service Commission (PSC)/ West Bengal Staff Selection Commission (WBSSC) and actual recruitment done by PSC/ WBSSC. It may be seen that WBFES initiated proposal for recruitment in respect of only a part of the existing vacancies. There were also delays on the part of the Department to forward the proposals to the PSC/ WBSSC. Vacancies in following cadres -Divisional Officer (seven), Station Officer (99), Sub-Officer (372), FEOD (504), Leader (361) and Fire Operator (4,045), as of April 2019, remained a matter of concern, especially in view of a probable scenario of fire incidents occurring simultaneously in area of coverage of a fire station and its neighbouring fire station. Moreover, lack of fresh recruitment also resulted in increasing percentage (37 per cent) of over-aged firefighting personnel potentially jeopardizing the fitness and fire fighting capability as discussed in paragraph 3.1.3.3.

## 3.1.3.2 **Training**

IFS was responsible for conducting training of fire-fighting personnel. It was observed that there was no system of familiarisation with the operation of modern equipment having new technology. Nothing was forthcoming from records of the FES/ Directorate WBFES/ IFS to indicate that cadre-wise targets were set to impart training among the fire-fighting personnel. As of March, 2019, only 359 (18 per cent) out of total 1,993 fire-fighting personnel of test-checked divisions received training during the period covered under audit. Even Station Officers emphasised on the need of training for improving the services. This indicated that there was an urgent need to address the important issue of imparting training to the fire-fighting personnel.

# 3.1.3.3 Non-conduct of Physical Assessment tests and engagement of fire-fighting personnel above 45 years of age

Standing Fire Advisory Council (SFAC) mentioned in its recommendation that 45 years should be the upper limit of firemen who are involved in actual fire-fighting and rescue operation. The said council further recommended that physical assessment tests are to be held every six months to ensure fire-fighting personnel remain fit for the duties. However, no physical assessment test was conducted by the FES during the period covered under audit. Moreover, 742 (37 per cent) out of 1,993 number of fire-fighting personnel<sup>94</sup> were above 45 years of age in the test-checked divisions<sup>95</sup>. Divisions also never conducted any physical assessment tests to ascertain their fire-fighting capabilities.

#### **Recommendations:**

- Recruitment of fire-fighting personnel needs to be prioritized to ensure higher level of preparedness in fire-fighting.
- State Government needs to frame suitable policies on imparting training to the fire-fighting personnel and monitoring the physical fitness of the Firemen.

## 3.1.4 Use of Fire-fighting vehicles and apparatus

## 3.1.4.1 Sub-optimal use of fire tenders

In the test-checked ten divisions, there was a total of 499 fire tenders with only 478 FEODs in position (against sanctioned strength of 841 FEODs) to run them as of April 2019. Considering three shift duty arrangement and stipulated leave and reserve duty factor, available FEODs per shift works out to 107 only for those 499 fire tenders indicating availability of less than one FEOD for every four fire tenders.

As the availability of FEOD, was disproportionately lower as compared to availability of fire tenders, engagement of FEODs and fire tenders of other fire stations was frequently done, in case of combating fire incidents, despite having sufficient number of fire tenders with the responding fire station.

<sup>&</sup>lt;sup>94</sup> All operational staff including Station Officer, Sub-Officer, Leader, FEOD and Fire Operator.

<sup>95 37</sup> out of 173 fire personnel; in case of Howrah, 33 out of 67 fire personnel; in case of Malda, 142 out of 332 fire personnel; in case of Kolkata (South), 66 out of 178 fire personnel; in case of Jalpaiguri, 29 out of 86 fire personnel; in case of Murshidabad, 86 out of 168 fire personnel; in case of Darjeeling, 86 out of 255 fire personnel; in case of Kolkata (North), 141 out of 481 fire personnel; in case of North 24 Parganas, 84 out of 146 fire personnel; in case of Paschim Barddhaman and 38 out of 107 fire personnel in case of Paschim Medinipur.

# 3.1.4.2 Non-utilisation of 25 fire-fighting vehicles worth ₹3.88 crore due to excessive delay in fabrication

In accordance with the approved action plan of 13<sup>th</sup> Finance Commission for the year 2014-15, Directorate, WBFES purchased (November 2015) 25 Cowl Chassis<sup>96</sup> at a cost of ₹ 3.88 crore for fabricating those into Water Bowsers (Fire Tenders).

Directorate, WBFES, invited (February 2015) e-Tender for fabrication of these 25 chassis into water bowsers, which are meant to supply water to front runner fire-fighting fleet or extinguish fire on its own. Technical Committee selected a private agency as lowest bidder, as it quoted the lowest rate (₹ 4,67,92,500 for 25 at the rate of ₹ 18,71,700 each) for fabrication. FES issued (July 2016) Administrative Approval and Financial Sanction (AA&FS) for ₹ 4.68 crore in favour of the Joint Director (Accounts) of the Directorate, WBFES. Subsequently, the Directorate issued (November 2016) work order to the private agency after execution of an agreement between the agency and Director General, WBFES. As per the agreement, the date of completion of the entire work was September 2017.

It was observed (February 2020) that the agency failed to deliver all fabricated Water Bowsers within the stipulated timeline. In October 2018, the agency returned 13 un-fabricated chassis by expressing their inability to fabricate, along with delivery of seven completely fabricated and five partially fabricated water bowsers, to the Directorate, WBFES. No payment was released to the agency.

Physical inspection and endurance test (April 2019) on 12 water bowsers and 13 chassis showed that these vehicles had become un-serviceable and that extensive repair work was required to be carried out to make them serviceable. However, the FES/ Directorate, WBFES, neither took any action to turn the 12 water bowsers and 13 chassis serviceable nor initiated any penal action against the agency.

Thus, the FES/ Directorate, WBFES, failed to utilise the service of 25 vehicle chassis worth ₹ 3.88 crore even after a period of 3.5 years since procurement, rendering them un-serviceable. Consequently, the intended objective of utilising these vehicles as water bowsers, failed to materialise.

### 3.1.4.3 Failure in registration of 21 BS-III Cargo Mini Water Tenders



Pic 3.1: Mini Water Tender

To spray water and foam mix, Mini Water Tenders (MWT) were required to combat chemical fires in narrow approach roads. DG, WBFES purchased<sup>97</sup> (September 2011 and April 2014) 36 BS – III Cargo Cabin Chassis at a cost of ₹ 159.12 lakh<sup>98</sup>. Such chassis were handed over (December 2014) to a private agency for fabricating and converting to MWT at a cost of ₹ 139.90 lakh. All the fabricated MWTs were duly received (March 2015) back by the Central Store.

<sup>&</sup>lt;sup>96</sup> A chassis with front fenders and hood as well as the instrument panel. It is used for organisations who want their own custom body and cab.

<sup>&</sup>lt;sup>97</sup> Received six vehicles on 21 September 2011 and 30 vehicles on 09 April 2014.

 $<sup>^{98}</sup>$  at the rate of ₹4.51 lakh each for 30 and ₹3.97 each for six respectively.

All the 36 vehicles were distributed (April – May 2015) among 27 fire stations without registration. Of these vehicles, only 15 vehicles were registered by the Divisional Fire Officers with the respective Regional Transport Officer under their jurisdiction. The remaining 21 vehicles had not yet been registered as of October 2020, reasons for which were not clarified to Audit, though called for. As such all the remaining 21 vehicles were lying unutilised, which resulted in wasteful expenditure of ₹ 1.74 crore. Further, one of the MWTs was out of commission and lying off-road at Bolpur fire station since May 2015.

# 3.1.4.4 Deficiency in apparatus for rescue operation

In terms of 35<sup>th</sup> SFAC meeting, one Hydraulic Platform/ Turn Table Ladder was required for each district depending upon presence of the high rise buildings (more than 15 mt height). To protect lives and property from fire, conduct of rescue operation in case of emergency, the FES procured (between April 2001 and November 2014) four Bronto Sky Lifts and two Turn Table Ladders <sup>99</sup>. These were supplied to Bidhan Nagar Fire Station (two Bronto Sky Lift), Behala fire station (one Bronto Sky Lift), and Head Quarters Fire Station (one Bronto Sky Lift and two Turn Table Ladder) under the North 24 Parganas Fire Division, South 24 Parganas Fire Division and Kolkata South Fire Division respectively. It was observed that two Bronto Sky Lifts were non-functional since July 2019 at Bidhannagar fire station and Behala fire station, due to mechanical fault. Also the cage of one Turn Table Ladder was broken since August 2011, as a result of which it could be used for fire-fighting only and not for rescue purposes.







Pic 3.3: Turn Table Ladder

There are high rise buildings in Howrah, Siliguri and Durgapur Township, located under the ambit of Howrah Fire Division, Darjeeling Fire Division and Paschim Bardhhaman Fire Division, respectively. So, there was need of such equipment. No Bronto Sky Lift and/ or Turn Table Ladder was procured for Howrah, Darjeeling and Paschim Bardhaman fire divisions for initiating rescue operations. It was noticed that in the following case, in Darjeeling, civilian life was lost in fire in absence of such apparatus.

• A serious fire incident took place in Siliguri. It was a G+4 storied *pucca* building occupying 25 boarders. The Siliguri fire station had a normal ladder of 35 ft with a reach upto 2<sup>nd</sup> floor level. Owing to which, the fire-fighting arrangements of Siliguri fire station could not reach the third floor of the building. Consequently two charred bodies were found on the staircase of the 3<sup>rd</sup> floor.

<sup>&</sup>lt;sup>99</sup> Bronto Sky Lift has a moveable boom which can bend over roofs or other obstructions providing it greater flexibility whereas Turn Table Ladder has a longer reach and higher vertical capability and is faster to set-up for operations. Bronto Sky Lift and Turn Table Ladder were used to fight against fire and to initiate rescue operation in case of fire on the higher floor of a high-rise building.

Had the fire station been equipped with Turn Table Ladder and Bronto Sky Lift, an attempt could have been made to save the victims.

Recommendation: FES needs to enter into Annual Maintenance Contracts for all high value equipment/ apparatus to ensure that repairs/ maintenance of such equipment/ apparatus are prioritised, and these do not remain non-functional and as a consequence adversely affect delivery of fire services.

# 3.1.4.5 Missing equipment worth ₹0.60 crore

Records of DG, WBFES disclosed that 17 number of ASKA light <sup>100</sup> and six number of trolley mounted Foam Drum (50 lt) had been issued <sup>101</sup> in favour of North 24 Parganas division for onward distribution to the concerned fire stations.







Pic 3.5: Trolley mounted Foam
Drum

Both these items of equipment along with consumables had not been entered in the stock register of the division. As a result, stock worth ₹ 60.60 lakh<sup>102</sup> was found short in North 24 Parganas division. In response to an Audit query, the concerned Divisional Officer failed to explain the whereabouts of the 17 ASKA lights or the six trolley mounted Foam Drums (50 lt) in question. Despite the fact that over four years have passed since these items were issued to North 24 Paraganas division, there is no evidence of the items being entered into the stock register of the division or its units. There was also no attempt on behalf of the Department to pinpoint the recipient to whom these items were issued or to locate the missing items.

Recommendation: Steps need to be taken by the Department for fixation of responsibility for the said loss of equipment.

#### 3.1.5 Response Time

As per the risk management strategy formulated (November 2013) by the SFAC, the first fire engine should reach the place of fire incidence within seven minutes and 20 minutes from the time of receipt of information for urban and rural area respectively. In this regard, it was observed in audit that there was no system either at the fire stations or at the Divisional level to record the arrival

 $<sup>^{100}</sup>$  ASKA light is used to illuminate the surrounding for fire-fighting and rescue operations at night.  $^{101}$  Vide Indent No. 06576 dated 11 March 2016.

<sup>102 17</sup> ASKA light at the rate of ₹ 1.92 lakh each and six Trolley Mounted Foam Drum at the rate of ₹4.66 lakh each.

time of the Brigade at the fire spot, though the Fire Reports of commercial fire <sup>103</sup> incidents recorded the Response Time.

An attempt in audit was undertaken to assess the time taken by the fire engines to reach the furthest points of the territory of an individual fire station *vis-à-vis* timelines prescribed. It showed that 56 (84 *per cent*) out of 67 fire stations <sup>104</sup> failed to ensure compliance to the prescribed response time *(Appendix 3.3)*, as response time to reach the furthest points ranged between 8 and 90 minutes in urban areas, while it was between 21 and 180 minutes in rural areas. The test-checked fire stations had to cover a maximum distance of 40 km and 95 km in respect of an Urban and Rural fire station respectively. The issue of speeding up Response Time needs to be duly prioritised. In the following two cases (detailed in **Table 3.5**) of major fire incidents, shorter response time could have arrested the extent of loss of life and properties.

Table 3.5: Statement showing some significant cases of fire incidents with delayed response time

Date and time of fire	Responding fire station	Distance of fire incidence/ response time	Brief description of the incidence	Impact of the incidence
06.05.2015 at 10.00 pm	Kharagpur (Rural)	46 km/ 90 min	A cracker factory at Bamunbar under Pingla Police Station containing huge quantity of fire crackers with finished and unfinished crackers and raw materials along-with one Pick-up Van in standing position involved in fire. The Brigade extinguished the fire around 2.45 am of the next day by using two jets.	Twelve charred bodies were retrieved by the Brigade. In addition, three (one female and two male) persons received burn injuries and were admitted to the local hospital.
28.03.2019 at 6.36 am	Uluberia (Rural)	24 km/ 64 min	The premises contained mattress manufacturing raw material like foam, clothes, <i>etc.</i> , was on fire.	The fire claimed the life of a worker and property valuing ₹ 90 lakh

Source: Records of concerned fire station

**Appendix 3.4** captures some more fire incidents accounting for substantial loss of lives and property where the fire tenders had to travel long distances to reach the fire site and in some cases even before arrival of fire tenders, the fire was doused by local people.

Thus, it would emerge from above that the WBFES was unable to maintain the prescribed response time both in urban and rural areas, which was a matter of concern for the safety of the people.

Recommendation: Necessary measures need to be taken to improve response time to bring it within the norms as recommended by the Standing Fire Advisory Council.

#### 3.1.6 Preventive measures

The West Bengal Fire Service Act (WBFSA), 1950 and the SFAC norms laid down various fire prevention measures for ensuring safety of life and property

<sup>&</sup>lt;sup>103</sup> In case of commercial fire, insurance claim was made for the loss of property due to fire incidence. Fire Report was prepared for the purpose and duly issued to the party against payment of specific fees. <sup>104</sup> Four fire stations (out of the test-checked 71 fire stations) did not furnish the information.

in case of fire related hazards. Measures, *inter alia*, included, issuance of 'Fire Safety Certificates (FSCs)' to high-risk buildings, ensuring that buildings storing hazardous substances had fire licences, engaging Licensed agencies for ensuring fire prevention measures were duly put in place in high-risk buildings, conducting physical tests for firemen, analysis of response time, *etc*. Shortcomings noticed in this regard are discussed below.

#### 3.1.6.1 Issuance of Fire Safety Certificates

In terms of Section 11 C of the West Bengal Fire Services Act, 1950, a Fire Safety Certificate (FSC) is required to be obtained from the DG, FES, by the owner or occupier of a high-risk building for providing fire prevention and fire safety measures.

Applications were received at the Fire divisions both for fresh issue and renewal of FSCs. In this regard, the Directorate followed a practice of issuing Fire Safety Recommendations (FSRs) on the basis of application for fresh issue of FSCs. Fresh FSCs were to be issued only after compliance of recommendations to FSRs. Inspections were held in case of renewal of FSCs and FSCs were renewed on satisfactory maintenance of fire safety system in the building. Position of FSCs (fresh and renewal cases) and position of FSRs issued between April 2014 and March 2019, is detailed below:

Table 3.6: Statement showing a profile of no. of FSRs, fresh FSCs and Renewal FSCs issued

Sl. No.	Name of the fire division	No. of applications	No. of FSRs issued	No. of FSCs issued	
110.		received	Issueu	Fresh	Renewal
1.	North 24 Parganas	2,546	864	373	322
2.	North & South Kolkata <sup>105</sup>	22,851	14,138	1,904	3,780
3.	Howrah	1,535	874	356	283
4.	Jalpaiguri	1,392	321	192	398
5.	Darjeeling	4,541	1,179	561	2,731
6.	Malda	579	231	48	190
7.	Murshidabad	739	218	115	32
8.	Paschim Barddhaman	3,470	1,677	702	787
9.	Paschim Medinipur	772	329	75	41
	Total	38,425	19,831	4,326	8,564

Source: records of the Directorate and Divisional Offices.

It would be evident from the above table that

- In the test-checked divisions 25,525 (66 *per cent*) high risk premises were functioning without valid FSCs.
- Only 4,326 fresh FSCs (22 *per cent*) were issued against 19,831 FSRs issued. As seen in course of audit scrutiny, FSRs remained un-issued on account of non-deposition of requisite fees by applicants.

There was no system at the Directorate/ Divisional Offices to monitor the status of un-issued FSRs/ compliance status of FSRs/ premises running without FSCs.

<sup>&</sup>lt;sup>105</sup> Only for the online period from July 2017 to March 2019, number of application received during March 2014 to June 2017 (offline period) was not available.

# 3.1.6.2 Markets/Industrial Zones/ Educational Institutions/ Lodge/ Hotels/ Government Hospitals operating without FSC

It was found during Audit that there were large scale departure from the statutory norms of mandatory Fire Safety Certificate and fire-fighting arrangements at Government Hospitals, market complexes and other commercial/ industrial places as detailed below, which did not even apply for the FSC.

- i) Under Kolkata (North) Division, all the 18 Markets (*Appendix 3.5*) operated without FSC. Hence, notices were issued (May 2019) u/s 35 of the Act *ibid*. Under the Kolkata (South) Division also, there were no fire and life safety measures in 24 Markets (100 *per cent*) (*Appendix 3.6*).
- ii) Several Educational Institutions/ Lodge/ Hotels, *etc.*, also being operated in Kolkata without FSC, as per *Appendix 3.7*. Notices were also issued to the defaulters u/s 35 of the Act. However, the compliance of the same was not ensured.
- iii) There were five Micro, Small & Medium Enterprises <sup>106</sup> (MSME) Industrial zones containing about 2,000 industrial units in the Madhyamgram–Sodepur–Nilganj area in North 24 Parganas district. None of the industries in these zones had even applied for FSCs though there were incidents of devastating fires <sup>107</sup>, which resulted in five deaths.
- iv) Hospital building <sup>108</sup> comes under Institutional Group of Occupancy as per National Building Code (India) Part-4. Considering the fire hazards, it was of paramount importance to provide in-built fire protection system in hospitals. The need for fire safety in hospitals was to be ensured through FES directives issued in February 2015. It was observed in audit that of the 116 Government Hospitals (with 100 beds or more), only one Government Hospital namely SSKM Hospital had the FSC.
- v) Murshidabad Medical College and hospital (MMCH, a Government Hospital), that operated without an FSC, had four incidents of fire (between August 2016 and March 2019), in which 12 people died and 29 people were injured in stampede. Even MMCH, did not respond, as of January 2020, to the FSR issued in February 2014 for installing fire safety measures. In the intervening period, an inspection was carried out (September 2018) by the Directorate, WBFES. Barring the inspection by its Directorate, no other action was taken by the FES.

It would thus be evident that there was lack of monitoring over installation of fire safety measures in high risk buildings and such buildings continued to function without FSCs. This indicated lack of adequacy in implementing fire prevention measures. Absence of adequate fire prevention measures exposes people to injury and loss of life and also to loss of assets, due to fire incidents in these premises, as has been discussed in this paragraph. Divisional Fire Officer, North 24 Parganas, accepted (January 2020) this contention and

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<sup>106</sup> Ganganagar, Badu, Bodai, Jugberia and Ruiya.

<sup>107</sup> Sharma Complex (Ganganagar), Bentwood Seating System Pvt. Ltd., Digberia Essence Stick Factory and Hosiery-cum-Dying factory at Bodai.

<sup>&</sup>lt;sup>108</sup> Hospital Building is categorised as high risk area as good number of ambulatory and non-ambulatory patients stay in hospital for treatment purpose, extra care should be taken for life and safety. Considering the life safety from fire, it is of paramount importance to provide in-built fire protection systems in hospitals as per National Building Code (India) Part-4.

attributed the same to lack of co-ordination between WBFES and concerned Municipal Authorities/ Rural Local Bodies.

Some instances of major fire incidents at high risk buildings without valid FSCs would further vindicate the concern:

Table 3.7: A brief profile of some fire incidents in Kolkata (two cases) and

in North 24 Parganas (one case)

In North 24 Parganas (one case)									
Date and time of fire	Place of fire	Responding fire stations and duration of fire fighting	Loss of life/ property	FSC status and deficiencies noticed					
16.09.18 at 2.35 am	Bagree Market, Kolkata	Central Avenue and 13 others 11 days	Huge quantity of food items, imitation jewellery, perfume, medicine & drugs, toys, office accessories and leather items. Valuation: ₹ 20.00 crore.	<ul> <li>The installed fire-fighting system was found defunct.</li> <li>There was no valid Fire Safety Certificate for the building, only a Conditional FSC for six months was issued subsequently only in April 2019.</li> </ul>					
11.02.19 at 12.02 pm	Bentwood Seating System Pvt. Ltd. Talbanda Industrial Estate, Sodepur, Ghola	Madhyamgram and eight others; Five days	Life of five workers with huge quantity of finished and unfinished chair, raw materials like iron, foam, wire and chemical paints.	<ul> <li>The entity was running with serious fire and life safety threats.</li> <li>There was no Fire Safety Certificate for the building.</li> </ul>					
13.07.19 at 3.00 am	Nandaram Market, Kolkata	Central Avenue and 10 others; 11 hours	One garment shop containing huge valuable dress materials.	<ul> <li>The installed fire fighting system was found defunct.</li> <li>There was no Fire Safety Certificate for the building</li> </ul>					

Source: Records of the Directorate, WBFES

Similarly, an analysis of Fire Reports relating to incidents of fire (in commercial/mercantile/ office premises) in the test-checked divisions has been depicted in *Appendix 3.8*. It showed that 43 out of 53 owners/ occupiers of premises where fire incidents took place failed to obtain any FSC.

FES needs to identify all premises without FSCs, where incidents of fire occurred, and also identify the Responsibility Centres and in accordance fix responsibility for all such cases, including those highlighted in this Report.

## 3.1.6.3 Fire audit of high risk buildings

It was observed that no database of high-risk buildings was maintained either by Fire Stations or Divisional Offices for their respective territories. No system of regular inspections and monitoring was done by the FES to ascertain the status of in-built fire safety measure in high-risk buildings.

Fire audit was introduced (January 2019) by the FES in 24 fire stations under Kolkata (North & South), South 24 Parganas and North 24 Parganas divisions along-with related stakeholders like Police, Electricity and Municipal authority. Subsequently, it was introduced in the remaining Fire divisions w.e.f. August 2019. It was to be conducted in the High Risk and High Rise buildings including Malls, Hospitals, Markets, Big Housing Complex, Big Industries, *etc.*, at least once in every year.

In absence of any database, it was not ascertained how FES identified high risk buildings for fire audit. The inspection status of test-checked divisions is shown below:

Table 3.8: Statement of inspection status of test-checked divisions under Fire Audit

Sl. No.	Fire Division	No. of inspection	Period of inspection	Premises without having FSC	Discrepancies found (no/ defunct/ inadequate in-built fire safety measure)	Notice issued u/s 35 of WBFS Act 1950 to take fire safety measures	
1	North 24 Parganas	500	March'19 to Oct'19	244	285	285	
2	Kolkata North	294	Jan'19 to June'19	206	266	238	
3	Kolkata South	319	Jan'19 to Aug'19	178	187	187	
4	Howrah	16	Aug'19 to Dec'19	7	7	0	
5	Jalpaiguri	30	Aug'19 to Nov'19	13	13	7	
6	Darjeeling	47	Aug'19 to Nov'19	25	22	17	
7	Malda	11	Aug'19 to Dec'19	02	02	0	
8	Murshidabad	44	Aug'19 to Dec'19	14	12	02	
9	Paschim Barddhaman		Inspections not started				
10	Paschim Medinipur	41	Aug'19 to Dec'19	Nil	Nil	Nil	
Total		1,302		689 (53%)	794 ( 61% )	736 (57 %)	

Source: Records of the Divisional Offices

#### It would thus be evident that

- Fire audit was not started by the Paschim Barddhaman Fire Division, though it had industrial zone within its territory.
- It was also observed that 53 *per cent* of the inspected high-risk buildings did not possess FSC.
- There was non-existent/ defunct/ inadequate in-built fire safety measure in 61 *per cent* of the inspected premises.

Notices were duly served to the respective owner/occupier against non-compliance to the Act *ibid*. There was, however, no system to monitor the compliance status of such notices. In spite of having enabling provisions under Section 11J of the West Bengal Fire Services Act 1950 (imprisonment for a term of three years, extendable up to five years or with fine of  $\stackrel{?}{\sim} 20,000$  which may extend to  $\stackrel{?}{\sim} 5$  lakh or with both), no penal action was initiated against the defaulters.

#### 3.1.6.4 Non- engagement of Licensed Agencies for fire safety measures

In terms of Section 11F (1) of the West Bengal Fire Services Act, 1950, the Director may grant any person or association of persons a licence to act as licensed agency in accordance with such qualifications, experience or other matter in this behalf as may be prescribed in respect of such classes of buildings. Section 11G of the Act also specified that no person, other than a licensed agency, shall carry out the work of providing fire prevention and fire safety measures required to be carried out in any high-risk building under this Act. Rule 14 (2) (c) of The West Bengal Fire Services (Fire Prevention and Fire Safety) Rules 2003, provides that licensed agencies were to take the responsibility for renewal of Fire Safety Certificates (FSCs) in the high-risk buildings and bring cases of failure to renew FSCs to the notice of the Director General, WBFES.

As already discussed in the earlier para, there was no information with the FES about the number of high-rise/ high-risk buildings situated under the territory of any particular municipal /panchayat area. As regards engagement of Licensed

Good practices followed in Maharashtra

In this matter good practices followed in Maharashtra may be referred to. It was observed that, as of December 2019, the Directorate of Maharashtra Fire Services approved 540 Licensed Agencies in accordance with Section 9 of "Maharashtra Fire Prevention and Life Safety Measures Act, 2006". Responsibilities of such approved licensed agencies were explained through Rule 4(1) and 4(2) of "Maharashtra Fire Prevention and Life Safety Measures Rule, 2009".

Agency also, the Director General, WBF&ES failed to introduce the system of appointment /engagement of Agencies contravention to the Act ibid. Hence, owner or occupier of high-risk building installed fire prevention and fire safety measures through unapproved agencies absence of any Licensed Agency.

In the absence of any Licensed Agency to verify

the fire safety measures installed in high-risk buildings, the Directorate resorted to the practice of issuing Fire Safety Recommendations (FSRs), though there was no provision for the same in the Act. On satisfactory compliance to these FSRs, FSCs were to be issued. Moreover, validity of the FSC in respect of an individual high risk building was to be monitored by the Licensed Agency. In the absence of such agencies, there was no monitoring on the compliance status of recommendations by the owner or occupier of a high-risk building. As a result, high risk buildings with expired FSCs were noticed.

It would thus be evident that the State failed to put in place a regular surveillance system of inbuilt fire safety measures of high-risk buildings and its operational status. Had the system of engagement of Licensed Agency been introduced, much higher assurance would have been available on the efficacy of the fire-safety measures built in the high-risk premises.

#### 3.1.6.5 Establishments storing hazardous substances running without FSC

Under Section 12 of the Act, storing or processing of hazardous substances in houses/ godowns was allowed subject to grant of fire licences by the collector appointed by the department. Issue of fire licence should be made against application by the owner of the premises along-with a copy of FSC duly endorsed u/s 11C of the Act. However, test-check revealed that fire licences were issued in favour of the eight establishments in Kolkata without ensuring availability of FSC for the premises.

Such serious systemic deficiencies as listed from paragraphs 3.1.6.1 to 3.1.6.5 need to be addressed to arrest incidents of fire.

Recommendation: A database of high-risk buildings needs to be prepared and a thorough review of all high-risk buildings need to be undertaken on a priority basis to identify shortcomings and remedial measures to ensure fire safety and prevention measures in high-risk buildings.

#### 3.1.7 Sensitization of public

Chapter 24 of the norms prescribed by the SFAC provide that regular fire prevention exhibition through posters, educational films, *etc.*, would be conducted in all fire hazardous premises including high-rise residential clusters, educational institutes, cinema houses, *etc.*, for instilling a sense of fire consciousness among the public. In addition, the services of All India Radio (AIR) should also be taken for broadcasting of fire prevention programmes so that the expert opinion could reach a larger audience.

Scrutiny in audit revealed that

- No comprehensive plan was prepared by the FES for fire safety awareness during the years 2014-19.
- FES had only once broadcast fire prevention awareness programme in AIR. However, no exhibition was conducted through slides and films in cinema houses during the period covered in audit.
- FES had spent a sum of ₹ 5.88 crore (60 per cent of allotment) against the allotment of ₹ 9.85 crore out of plan budget for fire safety awareness during the period 2014-15 to 2018-19. This was mainly on account of awareness drive during the *Durga Puja* (for seven days) by displaying banners in *Puja Mandap* (where the Puja is held) indicating fire safety measures, largely around Kolkata. Thus, the awareness drive remained only as a seasonal campaigning.
- Fire awareness programmes were conducted <sup>110</sup> (1,237 nos.) during 2014-19 by the test-checked nine Fire divisions (excepting North 24 Parganas). Of these divisions, Howrah Division conducted a minimum of 27 programme and Jalpaiguri Division a maximum of 269 programme. Nothing, however, emerged from available documentation at the FES or divisions to indicate that any target was set in this regard. Available documentation, though, showed that a total of

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<sup>&</sup>lt;sup>109</sup> At present, Addl. Secretary, WBFES Department is the collector for fire licence.

<sup>110</sup> Residential Buildings (61 nos.), Schools/Colleges (257 nos.), Govt. Offices/Banks/Pvt. Hospitals (301 nos.), Industrial Undertakings (131 nos.), Markets/Public Places (487 nos.), etc.

13,105 fire incidents occurred during 2014-19 in the test-checked fire divisions, as detailed below:

Table 3.9: Fire Statistics showing Division-wise incidence of fire during 2014-19

Sl.	E. D	Res	idential Buildin premises		Electrical	T I I	Vehicl	Commercial	Open	Garbage	
No.	Fire Division	LPG	Electrical Appliances	Househol d items	Supply Line		es	Areas	Area	/ Waste Material	Total
1	North 24 Parganas	128	232	301	0	69	78	153	536	0	1,497
2	North Kolkata	54	126	97	72	125	39		186	0	699
3	Howrah	85	40	175	216	131	148	176	341	0	1,312
4	South Kolkata	184	291	452	900	35	173	455	1,009	0	3,499
5	Jalpaiguri	51	17	401	110	31	89	174	358	30	1,261
6	Darjeeling	159	50	336	201	17	112	161	293	127	1,456
7	Malda	10	5	181	8	9	39	72	42	16	382
8	Murshidab ad	146	34	344	85	3	59	137	265	91	1,164
9	Paschim Bardhaman	54	21	137	69	42	62	86	293	73	837
10	Paschim Medinipur	61	21	221	32	16	128	101	262	156	998
	Total	932	837	2,645	1,693	478	927	1,515	3,585	493	13,105

Source: Records of Fire divisions

Recommendation: Given the spate of fire incidents in almost all categories as shown above, it is imminent that this area of awareness campaign needs to be prioritised on an urgent basis. The prioritisation could be through laying down Comprehensive Plan, setting up targets for no. of awareness programme for each category of user, preparing user friendly awareness programme for due adoption of fire safety by user, carrying out impact assessment of such programme and consequently improving the approach path through lessons learnt, etc.

#### 3.1.8 Financial Management & Planning

#### 3.1.8.1 Financial Management

The details of budgetary allocation of fund *vis-à-vis* expenditure incurred by FES during the period covered under audit is shown below:

Table 3.10: Budgetary allocation vis-à-vis expenditure incurred

Year		Budgetary Allocation (₹ in Crore)		Expenditure (₹ in Crore)		Percentage of Utilisation (%)	
	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	
2014-15	215.46	83.70	185.08	14.16	86	17	
2015-16	213.74	92.10	183.13	99.34	86	108	
2016-17	235.76	103.85	197.13	52.87	84	51	
2017-18	229.41	101.89	203.27	63.62	89	62	
2018-19	462	.15	315.74		68		
Total (2014-15 to 2017-18)	894.37	381.54	768.61	229.99	86	60	
Grand Total		1,738.06 1,314.34		76			

Source: VLC database

It is seen from the above that the FES could utilise only 60 *per cent* of the Plan funds during the period 2014-18. In 2018-19, of the total budgetary allocation, expenditure incurred by FES was 68 *per cent*. Analysis undertaken in this regard disclosed the following:

- Under the Object Heads<sup>111</sup> during 2014-19, the Department expended only ₹ 306.09 crore against the budgetary allocation of ₹ 567 crore. In reply to an audit query, the FES stated (February 2020) that the plan fund allotted towards construction of fire stations could not be utilized entirely by the State Public Works Department, despite repeated request for early utilisation of the same.
- Further, 13<sup>th</sup> Finance Commission's approved allocation of ₹ 37.50 crore meant for bridging the gap of infrastructure and equipment lapsed due to non-submission of utilization certificate in timely manner.

Under-utilisation of funds meant for infrastructure assumes significance in view of non-completion of 11 new Fire Stations as was discussed in *paragraph 3.1.2.2*.

#### 3.1.8.2 **Planning**

In terms of Chapter 5 of the NDMG, fire hazard response and mitigation plan (Plan) was to be prepared for revamping and strengthening of fire services. The NDMG envisages comprehensive planning for fire hazard response and mitigation which *inter alia*, included city review covering parameters such as population, density, land use, type of buildings, roads and accessibility (to assess the response time) and collection of historical hazard information (both natural and man-made). The NDMG also envisaged that the requirements of infrastructure and equipment for the entire State should be assessed in a planned manner as per the norms laid down by the SFAC. From the scrutiny of records of the Directorate, WBFES it was not apparent as to whether any such Plan was prepared in line with the guidance referred *ibid*. An audit query issued (February 2020) in this regard, failed to elicit any reply. Shortcomings as deliberated in preceding paragraphs would highlight the absence of a concerted approach to address the serious issue of fire hazard, which pose a threat to the safety of the people.

#### 3.1.9 Conclusion

In course of audit of Management of Fire Services in West Bengal, several areas of concern relating to operational and management deficiencies were identified, which may potentially affect the level of preparedness and call for attention. Serious shortcomings like high risk buildings/ markets running without Fire Safety Certificates and fire safety measures, absence of database of high risk buildings, *etc.*, allowed the fire hazards to loom over the safety of life and property. Delays in construction of fire stations and commissioning of newly constructed fire stations coupled with shortfall in fire stations affected the quality of delivery of fire services. Manpower management also remained a matter of concern, as there was substantial shortage of operational staff. Sensitization of public was found to be inadequate.

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<sup>111 52 -</sup> Machinery and Equipment and 53 - Major Works

No Fire hazard response and mitigation plan was found to have been prepared for assessing requirements of infrastructure and equipment for the entire State. On the financial management front, savings under major construction works was a matter of concern, given the fact that a number of under-construction fire stations had time overrun. Substantial expenditure incurred by the Government on procurement of fire fighting vehicles did not fructify into strengthening of the fleet.

The matters were referred to the Government in May 2020; replies were, however, awaited (November 2020).

#### HEALTH & FAMILY WELFARE DEPARTMENT

#### WEST BENGAL MEDICAL SERVICES CORPORATION LIMITED

3.2 Excess payment to contractors on Integrated Facility Management Services at eight Super Specialty Hospitals

West Bengal Medical Services Corporation Limited made an excess payment of ₹4.93 crore to three contractors for Integrated Facility Management Services in eight Super Specialty Hospitals during March 2018 to August 2020, as it allowed payment in excess of carpet area in deviation from bid documents.

The Health & Family Welfare (H&FW) Department set-up (between October 2016 and July 2019) 42 Multi/ Super Specialty Hospitals (SSHs) in 15 districts of West Bengal, each with a capacity of 300/500 beds. West Bengal Medical Services Corporation Ltd. (WBMSCL), a State Government Corporation, has been entrusted to manage security, housekeeping and patient support services in these hospitals. WBMSCL decided (November 2017) to outsource the entire job (formally referred as Integrated Facility Management Services) by engaging private agencies.

WBMSCL invited bids in November 2017 and January 2018 and awarded contracts in February 2018 to three agencies selected for providing the services<sup>112</sup> in 42 hospitals for an initial period of three years.

WBMSCL, in the bidding document, had *inter alia* indicated hospital-wise tentative super-built areas (80,000 sq ft for 300 bedded G+4 buildings and 160,000 sq ft for 500 bedded G+9 buildings) and stipulated that financial bid would be quoted by the bidder on per square foot of carpet area per month basis. In accordance, rates were finalised on per square foot of carpet area per month basis.

Scrutiny of records of WBMSCL (March-April 2019 and September 2020) pertaining to the period from March 2018 to August 2020 showed that ₹ 39.53 crore was paid to three agencies against services provided to eight hospitals. Further scrutiny showed that the service providers claimed bills for areas in excess of carpet area and in most cases, based on the built-up areas. WBMSCL, however, accepted the claims and released payment accordingly as detailed in *Appendix 3.9*.

Services are broadly classified into three types of services, viz. Security Services, Housekeeping Services (including Pest Control and Horticulture Services) and Patient Support Services.

As a result, against a total carpet area of 6,04,397 sq ft in those eight hospitals, payment was released for 6,89,238 to 6,89,250 sq ft per month for various periods <sup>113</sup> starting from March 2018 (in six hospitals), January 2019 (one hospital) and April 2019 (one hospital). This practice was continuing as of August 2020 leading to excess payment of ₹ 4.93 crore against an aggregate excess area of 24,35,266 sq ft (adding all months).

It was not clear to Audit how the authority paid for Integrated Facility Management Services to the contractors on the basis of area in excess of carpet area and in most cases on built-up area instead of carpet area in violation of its own terms of contract.

The issue being pointed out by Audit, the Corporation stated (March 2020) that the matter would be looked into.

The matter was referred to the Government in October 2020; reply was, however, awaited (November 2020).

#### WEST BENGAL STATE HEALTH & FAMILY WELFARE SAMITI

#### 3.3 Avoidable expenditure

Payment of employees' contribution to the Employees Provident Fund Organisation without actual realization led to an avoidable outgo of ₹ 1.32 crore.

Employees' Provident Funds and Miscellaneous Provisions (EPF & MP) Act 1952, aims to provide social security in the form of Employees' Provident Fund (EPF), Pension and Insurance to all employees who are employed for wages, in or in connection with the work of an establishment. Employees Provident Fund Organisation (EPFO), functioning under the aegis of the Ministry of Labour and Employment (MLE), Government of India (GoI), is entrusted to administer the EPF & MP Act. Under the EPFO, the Central Board of Trustees, is responsible for administering the Funds vested with it, which include the Employees' Provident Funds Scheme 1952, Employees' Pension Scheme, 1995 and Employees' Deposit-Linked Insurance Scheme, 1976. The referred Schemes, comprised contributions (at applicable rates as fixed from time to time by the MLE, GoI) payable by the employer of any establishment, in respect of Wages<sup>114</sup> payable to each employee. The employees' contribution<sup>115</sup>, applicable only for the Employees' Provident Funds Scheme 1952, was to be recovered by means of deduction from the wages of the employee and not otherwise.

During examination (August 2018 to December 2018) of records 116 of the West Bengal State Health & Family Welfare Samiti<sup>117</sup> (Samiti) it was observed

<sup>&</sup>lt;sup>113</sup> As the coverage area gradually increased during the initial months of operation of the hospitals, calculation of excess payment has been made on a conservative way by considering only the period when the coverage area shown in bills surpassed the total carpet area and even reached built-up area.

<sup>114 &</sup>quot;Basic wages + dearness allowance (including cash value of any food concession) + retaining allowance"

<sup>&</sup>lt;sup>115</sup> Employee contribution: 12 per cent of the wages.

<sup>&</sup>lt;sup>116</sup> Pertaining to the Accounts of fiscal 2016-17.

<sup>117</sup> West Bengal State Health & Family Welfare Samiti, functions under the Health & Family Welfare Department, Government of West Bengal.

that the Ministry of Labour and Employment (MLE), GoI had exempted 118 establishments like Societies, funded by Central State Governments, registered under the Societies Registration Act, 1860, from the applicability of the EPF & MP Act for a period up to 31 March 2015. Subsequently, it was seen from a communication 119 (March 2016) of the Ministry of Health & Family Welfare (MHFW), to the State Governments, that the MLE had conveyed clarification to the MHFW that exemption to the Societies like State/ District Health Societies was not extended beyond 31 March 2015 and these Societies were included (from 01 April 2015) under the purview of the EPF & MP Act. MHFW had also requested the State Governments to complete the necessary formalities for registration and compliance of these Societies under the EPF & MP Act. Accordingly, under a special drive (January 2017), EPFO completed the enrolment process and 10.041 employees of the *Samiti* were allotted the Universal Account Numbers (UANs). Under the special drive, Employees' contribution for the period from April 2015 to December 2016, was waived.

During audit, while analysing the payments made towards employees' and employer's contribution by the *Samiti*, it was noticed that the *Samiti* paid ₹ 1.32 crore towards employees' contribution for the month of January 2017, but, it did not recover the amount from the concerned employees.

On this being pointed out, the *Samiti* stated (December 2018) that generation of UAN of huge number of employees took place within a very short time and frequent server problem led to this situation as there were no separate wing or expertise to manage it efficiently.

The matter was referred to the Government in June 2020. In reply, the Director of Finance, State Financial Management Group, National Health Mission, Health & Family Welfare Department, Government of West Bengal, intimated (October 2020) that steps were being taken, with the approval of the Appropriate Authority<sup>120</sup>, to recover the employees' contribution (Employees Provident Fund) for the month of January 2017 from the employees of the *Samiti*. The reply was endorsed (November 2020) by the Secretary, Health and Family Welfare Department.

#### **HOME & HILL AFFAIRS DEPARTMENT**

3.4 Avoidable expenditure owing to delayed payment of Spectrum Charges

Failure on the part of the Government of West Bengal to ensure timely payment of spectrum charges resulted in an avoidable expenditure of ₹ 1.09 crore towards late fees.

Wireless Planning and Co-ordination Wing (WPCW) of the Ministry of Communication and IT (MCIT), Government of India (GoI) is the National Radio Regulatory Authority, responsible for frequency spectrum management including licensing and caters to needs of all wireless users<sup>121</sup> against payment of spectrum charges (Licence Fee and Royalty). Use of spectrum in

<sup>119</sup> Order No. G 27034-8/2015-NHM (F) dated 10 March 2016.

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<sup>&</sup>lt;sup>118</sup> Vide notification no. S.O. 1431 dated 14 May 2010.

<sup>&</sup>lt;sup>120</sup> Executive Director, West Bengal State Health & Family Welfare Samiti.

<sup>121</sup> Within the country, Government or Private.

West Bengal, was for the Police Communication Network, which was related to the maintenance of public order. In the instant case, the establishment of the Director General and Inspector General of Police, Telecommunication, West Bengal, functioning under the aegis of Home & Hill Affairs Department (erstwhile Home Department), is the concerned establishment responsible for management of spectrum needs of the Police Communication Network.

In January 2008, the Ministry of Home Affairs (MHA) informed the State Government that, as conveyed by the WPCW of the MCIT, spectrum charges<sup>122</sup> of ₹ 5.00 crore were to be levied on ad-hoc basis on the State of West Bengal. Thereafter, from a communication (addressed to the State Government) of the WPCW, issued in November 2008, it was noticed that despite persistent persuasion, the Home & Hill Affairs Department neither reconciled nor cleared the spectrum dues (since June 2004). Government of West Bengal (GoWB) did not make payment of spectrum charges, as it was of the opinion that spectrum charges should be exempt considering the fact that the usage of spectrum in the State was solely for maintenance of public order. It was, however, observed that there was no such directive existent in this regard.

From a letter of the MHA issued in May 2016, it was further observed that keeping in view the efficient utilisation of natural resources, State Police Organisations could not be exempted from paying spectrum charges. The waiver of late payment fee on delayed payments, was under consideration. Subsequently, from a letter dated 18 June 2018 it was seen that GoI withdrew the late fee component upto June 2018 (on reconciled spectrum networks existing prior to 01.06.2004) and advised that any delay in annual advance payment of spectrum charges shall attract late fee beyond June 2018. It further advised the State Government, as its reconciliation process in respect of the networks referred *ibid* was yet to be completed, to make an ad-hoc payment (as per their own assessment) of spectrum charges by June 2018 to avoid applicable late fees thereon beyond June 2018.

GoWB, released ₹ 5.00 crore towards ad-hoc payment of spectrum charges to GoI only in August 2018. Subsequently, WPCW, raised (December 2018) a claim of reconciled spectrum charges of ₹ 41.20 crore (after adjustment of ₹ 5.00 crore) for the period from June 2004 to March 2019. The same was released by the State Government in March 2019. After necessary reconciliation (considering the period from April 2019 to March 2020 also), a further payment <sup>123</sup> of ₹ 0.53 crore was made (November 2019) by the State Government. In the entire process, the GoWB paid a late fee of ₹ 1.09 crore for the period July 2018 to November 2019.

Superintendent of Police, Telecommunication, O/o Director General and Inspector General of Police, Telecommunication, West Bengal, had communicated (March 2020) that as waiver of late fees were applicable upto June 2018, hence spectrum charges were to attract late fees beyond June 2018. Further, he also stated that the State of West Bengal was supposed to complete the reconciliation process of the network and make an ad-hoc payment by June 2018 to avoid applicable late fees.

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<sup>122</sup> Included Royalty Charges and License Fees.

<sup>&</sup>lt;sup>123</sup> Leaving an unpaid amount of ₹93,152 upto March 2020.

It was evident from the above that the State Government failed to ensure timely payment of spectrum charges and such an action resulted in an avoidable expenditure of ₹ 1.09 crore towards late fees on account of delayed payment of spectrum charges from the exchequer of the GoWB.

The matter was referred to the Government in May 2020; reply was, however, awaited (November 2020).

#### JUDICIAL DEPARTMENT

#### 3.5 Defalcation of money

Lack of control over financial transactions in the functioning of District Legal Services Authority, Kolkata, resulted in a defalcation of ₹ 2.45 lakh by way of overwriting of sub-vouchers, in contravention of stipulation of the West Bengal Financial Rules.

In terms of Sections 6 (1) and 9 (1) of The Legal Services Authorities Act 1987, the State Legal Services Authority (SLSA) and District Legal Service Authority (DLSA), are constituted. DLSA aims to organise *Lok Adalats* within the District and perform such functions within the District, which the SLSA may delegate to it from time to time like free, competent, effective and comprehensive legal services by organising Legal Literacy and Awareness Camps.

District Legal Services Authority, Kolkata (DLSA), was established in July 1998. In terms of West Bengal Legal Services Authority Regulations 1998 (WBLSAR<sup>124</sup>), the management of the DLSA was vested upon a board, headed by a Chairman. The Chief Judge, City Civil and Sessions Court, Kolkata held the post of Chairman<sup>125</sup> of the DLSA. Secretary, DLSA, Kolkata, functioned under the Chairman, DLSA and the post of Secretary, DLSA, Kolkata, was held by a Judicial Officer of the West Bengal State Judicial Service. DLSA, Kolkata, received funds<sup>126</sup> from different sources and such funds were kept in the current account<sup>127</sup> maintained with the State Bank of India, which the Secretary, DLSA, was authorised to operate.

West Bengal Financial Rules-WBFR (Rule 49) specifies that erasures and overwriting in any bill are absolutely forbidden and shall be avoided. If any correction becomes necessary, the incorrect entry shall be cancelled neatly in red ink and the correction shall be entered. Each such correction or alteration or addition shall be authenticated by the Head of the Office with his dated initials.

Scrutiny of vouchers<sup>128</sup> (including sub-vouchers) and Cash Books of DLSA, Kolkata for the period from 1998-99 (Inception) to 2018-19 revealed that there were instances of excess payments, by way of overwriting of sub-vouchers, which led to defalcation of ₹ 2.45 lakh as detailed below:

<sup>&</sup>lt;sup>124</sup> In exercise of power conferred by Section 29A of the Legal Services Authorities Act 1987, the West Bengal State Legal Services Authority made the West Bengal Legal Services Authority Regulations, 1998.

<sup>125</sup> As per regulation no. 19 of WBLSAR.

<sup>&</sup>lt;sup>126</sup> DLSA, Kolkata received funds from Government of West Bengal, Government of India, fines in respect of Motor Vehicles Act, donations, etc.

<sup>&</sup>lt;sup>127</sup> Account no. 37660108136, Specialized Institutional Banking Branch, State Bank of India, Kolkata.

<sup>&</sup>lt;sup>128</sup> Undertaken between 30 July 2019 and 30 August 2019.

- In respect of seven vouchers<sup>129</sup> (24 sub-vouchers) related to purchase of items <sup>130</sup> (specified as Administrative expenses), it was seen that the connected sub-vouchers were altered by way of over-writing in contravention of codal provision referred *ibid*, just to inflate the expenditure. This resulted in actual expenditure of ₹ 0.33 lakh being shown as ₹ 2.78 lakh, leading to a defalcation of ₹ 2.45 lakh.
- It was further observed that none of the vouchers/ sub-vouchers were authenticated by the Chairman/ Secretary.

On this being pointed out the DLSA responded (August 2019) that sufficient time would be required to look into the matter and appropriate steps taken after careful scrutiny.

The matter was referred to the Government in May-June 2020; reply was, however, awaited (November 2020).

#### PANCHAYATS & RURAL DEVELOPMENT DEPARTMENT

3.6 Undue benefit to contractors on PMGSY road works by way of short realisation of royalty

Contractors engaged for PMGSY road works under Programme Implementation Unit (PIU), Paschim Medinipur were allowed an undue financial benefit of ₹ 5.19 crore at the cost of State Government revenue by way of short-recovery of royalty (including cess) on excavated earth.

West Bengal State Rural Development Agency (WBSRDA), an autonomous body under the Panchayats & Rural Development (P&RD) Department, is the nodal agency for implementation of Pradhan Mantri Gram Sadak Yojana (PMGSY), a Centrally Sponsored Scheme <sup>131</sup>, in West Bengal. WBSRDA implements the projects through Programme Implementation Units (PIUs) functioning under it at various districts/ sub-divisions.

National Projects Construction Corporation Limited (NPCC), a Central Government PSU, was engaged (April 2014) as a PIU to execute PMGSY road works in Paschim Medinipur through an agreement. As per the agreement, NPCC, as the PIU, would be primarily responsible for selection of contractors, monitoring the execution, processing of contractors' bills and final payment thereof. WBSRDA was to release funds (by way of bank authorisation) to NPCC as per its requisition (based on progress of works) for final disbursement to the contractors. Under this agreement, WBSRDA was empowered to monitor implementation of the projects by calling for specific data/ information from NPCC as and when required.

One item of road works under PMGSY is 'Construction of Embankment/ Shoulder with materials obtained from Borrow pits', *i.e.* construction of road side space/ embankment using earth collected by digging pit at another location. Such excavation of natural resource (earth) involves payment of royalty and cess to the State Government under the West Bengal Minor Mineral Rules<sup>132</sup>,

<sup>131</sup> Initially a cent per cent Government of India funded scheme, subsequently revised (November 2015) to 60:40 ratio between the Government of India and the State Government.

<sup>&</sup>lt;sup>129</sup> Voucher Nos. 772 of January 2017, 634-636 of March 2019 and 671-673 of March 2019.

<sup>&</sup>lt;sup>130</sup> Sweets, water bottles, food, xerox items, office stationery, handloom items, etc.

<sup>&</sup>lt;sup>132</sup> These Rules were repealed after introduction of West Bengal Minor Mineral Concession Rules 2016.

2002. The rates <sup>133</sup> of royalty were notified by the Industry, Commerce & Enterprises Department (erstwhile Commerce and Industries Department) from time to time. As per the Schedule of Rates of WBSRDA, which is applicable for PMGSY road works, the rates for construction of embankment/ shoulder included royalty against earth extracted for earthwork (volume being measured in finished work). The same was, therefore, to be recovered from the contractors' bills and deposited to State Government accounts. In the instant arrangement, NPCC, being the PIU, was responsible for such recovery and remittance of Government dues.

Scrutiny (February 2020) of records of PIU in respect of 208 finished project works completed between February 2016 and December 2019 in Paschim Medinipur showed that in terms of the total quantum of the earthwork (in finished work) recorded in the bills, total royalty charge (including cess) works out to ₹ 9.42 crore. Hence, the same stood recoverable from the contractors' bills. Against ₹ 9.42 crore, NPCC deducted only ₹ 4.23 crore and deposited the same in the Government account. Such short-recovery of ₹ 5.19 crore towards Government dues from Contractors' bills was tantamount to an undue benefit extended to the contractors at the cost of Government revenue and represented failure of NPCC in discharging its responsibilities as PIU. Lack of monitoring of the WBSRDA was also evident as it did not exercise check on the amounts requisitioned by the NPCC.

Neither the NPCC nor the WBSRDA explained the reasons for such short-recovery to Audit, though called for. Moreover, NPCC made final payments to the contractors against these projects, leaving remote prospect of recovery of the above-mentioned short-realised amount.

Thus, contractors engaged for PMGSY road works under PIU, Paschim Medinipur were allowed an undue financial benefit of ₹ 5.19 crore at the cost of State Government revenue by way of short-recovery of royalty charge and cess on excavated earth. Though the primary responsibility lies on the concerned PIU (*i.e.*, NPCC), the same was facilitated by deficient monitoring by WBSRDA.

The matter was referred to the Government in May 2020; reply was, however, awaited (November 2020).

#### 3.7 Payment to contractor for non-executed works

Contractor allowed a payment of ₹ 90.71 lakh against unexecuted length of road/ drain work under a PMGSY project in Gopiballavpur-II, Jhargram.

West Bengal State Rural Development Agency (WBSRDA), an autonomous body under the Panchayats & Rural Development (P&RD) Department, is the nodal agency for implementation of Pradhan Mantri Gram Sadak Yojana (PMGSY), a Centrally Sponsored Scheme <sup>134</sup>, in West Bengal. WBSRDA implements the PMGSY projects through Programme

<sup>133</sup> Rates of royalty (with cess) per cubic metre of finished work were ₹ 19.47 from January 2012, ₹ 23.30 from December 2015 and ₹34.30 from December 2016.

<sup>&</sup>lt;sup>134</sup> Initially a cent per cent Government of India funded scheme, subsequently revised (November 2015) to 60:40 ratio between the Government of India and the State Government.

Implementation Units (PIUs) functioning under it at various districts/sub-divisions.

National Projects Construction Corporation Limited (NPCC), a Central Government Public Sector Undertaking (PSU), was engaged as a PIU to execute PMGSY road works in Bankura, Purulia and Paschim Medinipur districts through an agreement (April 2014). As per the agreement, NPCC, as the PIU, would be primarily responsible for selection of contractors, monitoring the execution, processing of contractors' bills and final payment thereof. WBSRDA was to release funds to NPCC as per its requisition (based on progress of works) for final disbursement to the contractors. The agreement empowered WBSRDA to inspect any record of NPCC or ask for any report relating to execution of PMGSY works. Moreover, NPCC had to allow State Quality Monitor <sup>135</sup> (SQM), the 2<sup>nd</sup> tier of quality control as per PMGSY guidelines, to inspect the quality of works during execution of works.

It was observed that the construction of PMGSY road from Borojansol to Dangarbilla<sup>136</sup> in Gopiballavpur-II block (under Jhargram district, which was earlier a part of Paschim Medinipur) was one such project executed under NPCC. The work started in October 2014 and was completed in February 2017 and a sum of ₹ 388.69 lakh was paid to the contractor in 11 Running Account (RA) bills between February 2015 and January 2018.

Examination of records, in this regard, showed that there were substantial deviations in the quantum of work shown in the bills as actually executed and measured *vis-à-vis* that approved under the Detailed Project Report (DPR). In view of such deviations and anomaly in the quantum of works, a joint physical inspection of the work was done by Audit in January 2020 along with the Engineering official of NPCC. As per measurements made by the NPCC Officials in presence of Audit during inspection, it was observed that the actual length of work in respect of certain items was substantially less than quantum paid for by the WBSRDA.

Table 3.11: Comparison of length of various items of road works approved, paid for and found in subsequent measurement and payment made for short-executed length of work

Item of work		Length as approved in DPR Length paid for as per final RA bill Length measured by NPCC Engineer in presence of Audit during joint physical inspection  Distances in metres  Length measured by NPCC Engineer in presence of Audit as compared to length paid for				Payment made for short-executed length of work (₹ in lakh)	
			Di				
	A	В	C	D	E = C minus D	F	
	Cement Concrete pavement	890	890	232	658	29.22	
Road	Flexible pavement	5,328	5,918	5,918	Nil	Payment was made for actually executed length of 5,918 metres	
	Total length	6,218	6,808	6,150	658	-	
Drain alongside the road		6,700	4,720	93	4,627	61.49	

Source: Records of WBSRDA and joint physical inspection

136 Package No. WB20 452 (Borojansol to Dangarbilla).

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<sup>&</sup>lt;sup>135</sup> State Quality Monitor (SQM) is set-up/engaged by the State Government to oversee the Quality in the programme Districts. SQM is independent of the Executing agency.

From the table it can be seen that:

- (i) Short length of Cement Concrete pavement of 658 metres: Quantum of payment made to the contractor against such short-executed length of 658 metres of Cement Concrete pavement work stood at ₹ 29.22 lakh.
- (ii) Excess length of road with flexible pavement of 590 metres (5,918 metres *minus* 5,328 metres): The contractor was also paid for the excess executed length of 590 metres.
- (iii) Short length of drain alongside road of 4,627 metres: For the short executed length of drain alongside road, ₹ 61.49 lakh was paid to the contractor.

Thus, there was a total payment of ₹ 90.71 lakh (₹ 29.22 lakh *plus* ₹ 61.49 lakh) on account of the unexecuted length of road and the drain.

The photos of different stretches of the road, taken (March 2019) during SQM of maintenance work, showed no trace of drain alongside the road.



Pic 3.6 to 3.9 (clockwise from above): Photographs of various stretches of Borojansol to Dangarbilla Road; Source: PMGSY Website (www.pmgsy.nic.in)

Such short execution was indicative of failure on the part of the NPCC, to discharge its functions, as per the agreement, referred above.

Even the WBSRDA did not give cognizance to the SQM Reports, which did not show existence of any drain. Had this matter been pursued by the WBSRDA by accessing into the records of construction at NPCC's end, such un-executed/ short-executed quantum of drain would have been detected. Evidently, there were deficiencies in monitoring by WBSRDA on the PIU, as it kept on releasing funds to NPCC in a routine manner based on its requisitions for making onward payments to the contractor. This facilitated payment against short-executed/ non-executed works.

The Zonal Manager of NPCC also confirmed (January 2020) the measurements made by the engineering staff during the joint physical inspection. Neither WBSRDA nor P&RD Department, however, furnished any reply in this regard, as of October 2020.

Thus, the contractor was allowed an undue payment of ₹ 90.71 lakh against unexecuted lengths of road work and drain work under PMGSY. While the PIU failed to discharge its primary responsibilities of diligent monitoring and measurement of the executed works, inaction of the WBSRDA in monitoring on the PIU was also evident. Such monitoring deficiencies facilitated payment against fictitious work.

The matter was referred to the Government in October 2020; reply was, however, awaited (November 2020).

#### 3.8 Misappropriation of Government receipts

Out of ₹ 59.02 lakh collected as water tax by the River Lift Irrigation (RLI) and Deep Tube Well Irrigation (DTW) operators, only ₹ 1.29 lakh was remitted into Government account.

West Bengal Treasury Rules<sup>137</sup> (WBTR) prescribe that all moneys received by or tendered to a Government employee on account of revenue of the State should, without undue delay, be remitted in full into Government Account. For remitting amounts into Government account, challans are prepared in quadruplicate and initialled as a token of verification by the Drawing & Disbursing Officer (DDO). All copies of challans are produced to the bank while depositing the money, of which the original one is returned to the depositor with acknowledgement. In terms of Government Order 12155-F dated 04 December 1990, issued by the Finance Department, collector of such money on the behalf of the Government should issue Duplicate Carbon Receipt (DCR) against such collection and deposit the amount so collected with the Cashier. Cashier is to enter the amount in the receipt side of the Cash Book. It is the responsibility of the DDO to check and attest the corresponding entries in the Cash Book with reference to the acknowledged copy of the challan/counterfoil of Duplicate Carbon Receipt (DCR) which are retained as documentary support against the remittance into treasury/ receipt by the DDO. At the end of each month, DDO has to verify all such remittances made in the Cash Book with treasury receipt schedules.

River Lift Irrigation (RLI) and Deep Tube Well Irrigation (DTW) operators under the Block Development Officer (BDO) collect water tax from cultivators/ users under RLI and DTW schemes. Water tax so collected is first remitted by the collectors to the respective cashiers of the Block Development Offices. The Cashier in turn remits the collected amount in to banks on behalf of the BDO following the above procedure.

Mentions were made in the C&AG's Reports on the General & Social Sector for the years ended March 2015 and March 2016 that laxity on the part of

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<sup>&</sup>lt;sup>137</sup> Rule 3.01 of West Bengal Treasury Rules, 2005 read with Rule 3.06 sub-rule (2).

five BDOs<sup>138</sup> facilitated defalcation of water tax of ₹ 1.38 crore. It was also mentioned in the para (included in C&AG's Report on the General & Social Sector for the year ended March 2016) that as the said observation had arisen only out of some of the sampled BDOs, Government should take necessary steps (including sensitising the BDOs) to ensure similar malpractice was not happening elsewhere.

During test-check (December 2019) of Cash Books of the office of the BDO, Kandi it was seen that, during September 2011 to November 2019, there was no entry on account of collection of water tax either in the receipt side of the Cash Book or any particulars for deposition through treasury challans in the payment side of the Cash Book except for an amount of ₹ 1.29 lakh (two entries for ₹ 78,851 and ₹ 50,419 both on 26.02.2014) in February 2014.

Office of the BDO, Kandi did not furnish DCR books and stock register of DCR books for entire period of audit, though called for. However, from the registers maintained <sup>139</sup> by RLI and DTW operators, it was observed that during the period <sup>140</sup> 2013-14 to 2019-20 (till November 2019), the RLI and DTW operators collected ₹ 59.02 lakh on account of water tax, which was also certified by the BDO, Kandi. In contravention of the provisions of WBTR, referred *ibid*, an amount of ₹ 57.73 lakh (₹ 59.02 lakh *minus* ₹ 1.29 lakh) collected as water tax was not entered in the Cash Book of the BDO, Kandi. Moreover, BDO could not furnish treasury challans in support of deposit of this amount to Government account.

Monthly treasury receipt schedules of Kandi Treasury, collected by Audit in respect of remittance of water tax, also showed that there was no remittance (other than ₹ 1.29 lakh in February 2014) from the BDO, Kandi during the above period.

Thus, failure on the part of the BDO in exercising statutory checks on receipt and accounting of Government receipts facilitated defalcation of Government receipts of ₹ 57.73 lakh<sup>141</sup>, spread over a period of more than six years.

BDO Office did not furnish any response to the audit memo issued in this regard.

It is reiterated that such persisting instances call for serious attention of the Department including appropriate actions against the delinquent officials.

The matter was referred to the Government in October 2020; reply was, however, awaited (November 2020).

<sup>138</sup> Ghatal (Paschim Medinipur district), Gangarampur (Dakshin Dinajpur district), Patrasayer (Bankura district), Gopiballavpur-II (Paschim Medinipur district-(currently Jhargram district) and Beldanga-I (Murshidabad district).

<sup>139</sup> RLI and DTW operators maintain register of collection showing the amount of water tax collected from the users and deposited with the cashier periodically. Collection Register for collection of DTW water tax from 2016-17 onwards was not produced before Audit.

<sup>140</sup> Collection for the period from September 2011 to March 2013 and its corresponding deposition to the BDO Office could not be ascertained as RLI and DTW operators did not produce any record pertaining to this period.

<sup>&</sup>lt;sup>141</sup> ₹59.02 lakh minus ₹1.29 lakh.

#### PERSONNEL & ADMINISTRATIVE REFORMS DEPARTMENT

#### 3.9 Non-Utilisation of an Auditorium

Decision to construct an Auditorium, involving an amount of ₹8.98 crore, at the selected area and failure to utilise it for intended purpose, proved to be a burden on the State Exchequer.

Government of West Bengal decided (February 2006) to shift the District Headquarters <sup>142</sup> of South 24-Paragana from Alipore (in Kolkata Municipal Corporation Area) to Baruipur (in the district of South 24-Paragana). Personnel & Administrative Reforms and e-Governance Department <sup>143</sup> (Department) was to function as the Administrative Department in-charge of the project. Kolkata Metropolitan Development Authority (KMDA) was to act as the executing agency.

During 2008-10 (February 2009 and March 2010), the Department released a sum of ₹ 19.49 crore in favour of KMDA for acquiring 130 *acres* of land and site development, for implementing the project. From the minutes of a meeting <sup>144</sup> (19 March 2013) held in the context of implementation of the project, it emerged that an Auditorium <sup>145</sup> in Baruipur was to be constructed, in keeping with the Developmental Plan of the proposed District Headquarters. Regarding actual implementation of the project of shifting of District Headquarters, it was observed that the progress was restricted only to acquisition of 130 *acres* of land. Further progress regarding actual implementation of the project, was not evident from records of the Department and KMDA.

Subsequently, the Department accorded (May 2013) Administrative Approval for the construction of the Auditorium at Baruipur, at an estimated cost of ₹ 4.99 crore, which was again revised (February 2015) to ₹ 8.98 crore<sup>146</sup>. From the records of the Department and KMDA, there was no indication as to whether any Feasibility Study/ Detailed Analysis was conducted prior to construction of the Auditorium to assess i) the need to construct an Auditorium prior to completion of the shifting process of District Headquarters, ii) locational suitability and availability of connectivity to the location, iii) sources from which the operational and maintenance expenses were to be funded, iv) expertise required to handle and operate the equipment and machinery to be installed therein, *etc.* During 2013-2016, ₹ 8.53 crore was released to KMDA for this purpose, against which it utilised ₹ 8.05 crore, as of January 2017. In May 2017, the residual amount of ₹ 0.45 crore (₹ 8.98 crore *minus* ₹ 8.53 crore) was released to KMDA. KMDA had drawn and spent the entire amount of ₹ 8.98 crore.

On completion<sup>147</sup> of the work of construction of the Auditorium, the KMDA submitted the Completion Report to the Department in September 2016. The Auditorium named as *'Karmashree'* was handed over (December 2017) to

<sup>&</sup>lt;sup>142</sup> The scheme of shifting of District Headquarters was to be treated as a State Government project.

<sup>143</sup> Erstwhile Personnel & Administrative Reforms Department.

<sup>&</sup>lt;sup>144</sup> Chaired by the Secretary of the Department.

<sup>&</sup>lt;sup>145</sup> Located in an outskirt area, around six km from the Office of the Sub-Divisional Officer, Baruipur.

<sup>&</sup>lt;sup>146</sup> Civil works: ₹6.61 crore; Electrical works: ₹ 1.88 crore; Consultancy fees: ₹0.06 crore and Agency charges: ₹ 0.43 crore.

<sup>&</sup>lt;sup>147</sup> Date of completion was not ascertainable from records of KMDA.

Sub-Divisional Officer (SDO), Baruipur. As regards utilisation of the Auditorium, the SDO stated (September 2019) that the Auditorium had so far been used only during 'Training, Segregation, First Level Checking of EVMs and Safe keeping of EVMs in connection with the Parliamentary General Election 2019' and never been hired by any Private Party due to its location in an outskirt area, adjacent area being underdeveloped and lack of other facilities available around that area to organise large programme. It was also observed from the reply of the SDO that though the Department handed over the Auditorium to the SDO in December 2017, no funds were released by the Department or any other Department of the Government of West Bengal for maintenance of the same.

A joint inspection<sup>148</sup> on 02 September 2019 undertaken by Audit along with officials of the SDO office, to see the condition of the Auditorium, disclosed that there was deterioration in the condition of the building as a) the plaster on the outside wall of the Auditorium was badly damaged, b) water seepage from the roof, c) water seepage in the chamber of the District Magistrate (located in the first floor of the Auditorium) which was damaging the furniture placed therein as well and d) wood works inside the Auditorium were termite affected. Photographic evidence is given below.



Pic 3.10: Dilapidated condition of false ceiling of the Auditorium



Pic 3.11: Ceiling of corridor at 1st Floor leading to DM's chamber



Pic 3.12: Collapsed false ceiling of the Electrical Unit at ground floor of the Auditorium

Joint Secretary of the Department stated (August 2019) that after acquiring the land, the project of shifting of District Headquarters of South-24 Parganas did not materialise due to unsettled technical, financial, political and social issues and as the resolution of shifting was still pending, the decision of construction of Auditorium for the sake of local people was not imprudent. The reply needs to be viewed in the light of the fact that the Auditorium was not utilised, excepting for use during Parliamentary Elections 2019. Further, since handing over of the auditorium, no funds were placed for operation and maintenance by the Government of West Bengal, leading to damages within two years of handing over.

Thus, construction of an Auditorium, involving an amount of ₹ 8.98 crore, in a remote, underdeveloped area without facilities led to its non-utilisation and

<sup>&</sup>lt;sup>148</sup> Along with the Junior Engineer (Civil) and Head Clerk of the Office of the SDO, Baruipur.

proved to be a burden on the State Exchequer. Government of West Bengal needs to explore alternative avenues to put this asset to use.

The matter was referred to the Government in June 2020; reply was, however, awaited (November 2020).

#### URBAN DEVELOPMENT & MUNICIPAL AFFAIRS DEPARTMENT

#### 3.10 Intended objective of a Sewage Treatment Plant remaining unachieved

Even after establishment of a Sewage Treatment Plant (STP) in the Gayeshpur Municipal Area at a cost of ₹ 146.09 crore, the objective of prevention of discharge of untreated sewage to the river Ganga remained largely unachieved. This was due to non-completion of the work of connecting households of the Municipal Area to the STP.

To reduce pollution load at priority locations on the river Ganga, Government of India (GoI) decided to finance infrastructure investments 149 under the National Ganga River Basin Authority (NGRBA) programme. With this objective, a Detailed Project Report (DPR) for construction of a Sewage Treatment Plant (STP) with a capacity of 8.33 Million Litres per Day (mld), for the Gayeshpur Municipal Area 150, was sanctioned (February 2011) for ₹ 168.67 crore. The work was to be completed by February 2014.

While the DPR was only for construction of a STP, the sanction also emphasised on a plan of action to connect all the households in the area to sewer network by February 2014. However, the authority which was to ensure the household connections, was not clearly spelt out in the Sanction. Also no fund was allocated for this purpose. From response of the Kolkata Metropolitan Development Authority (KMDA) (June 2017) it was, however, seen that the household connections were the responsibility of the Gayeshpur Municipality. This was also acceded to by the Gayeshpur Municipality. As per the Sanction, a suitable provision was also to be made in the bye-laws of Gayeshpur Municipality to enforce compulsory sewer connection and user charges on the beneficiaries.

As per the DPR, waste water generated from the Municipal Area, was to be taken to the STP for necessary treatment. Thereafter, the treated waste water was to be disposed to the Kulia-Beel<sup>151</sup>, for final disposal into the river Ganga. As per the sanction, the work was to be completed by February 2014, however, the work order for establishment of the STP and laying of sewer network (for carrying waste water to the STP) was issued in favour of a contractor only in October 2013, with the scheduled date of completion being October 2016.

The work of construction of the STP was completed (January 2017) at a cost of ₹ 146.09 crore. However, the house connection work was yet to be taken up by the Municipality. The operation and maintenance 152 of the STP was also awarded (September 2017) to the same contractor for five years. The project

<sup>151</sup> A lake with static water.

<sup>&</sup>lt;sup>149</sup> The investments were aimed at preventing discharge of untreated sewage into the river Ganga and thus aiding abatement of river water pollution and improvement in water quality.

<sup>150</sup> Ward No. one to eighteen.

<sup>&</sup>lt;sup>152</sup> As of May 2020, an expenditure of ₹2.35 crore was incurred on account of operation and maintenance of the STP.

was put on trial run<sup>153</sup> for six months (from March 2017 to August 2017) with sullage<sup>154</sup> to maintain the flow through the inlet network. During the trial run the STP treated less than one mld due to non-completion of house connection work and consequent shortage of sewage inflow.

On the request of Gayeshpur Municipality, in November 2017, the Urban Development & Municipal Affairs Department in the Government of West Bengal decided to release funds for individual house connections, and sanctioned (November 2017) ₹ 17.53 crore<sup>155</sup>. Out of ₹ 7.30 crore placed at the disposal of the Chairman, Gayeshpur municipality for the purpose, ₹ 6.35 crore had been utilised, as of May 2020. The Municipality issued a total of 19 work orders (April 2018 to September 2018) for construction of 11,342 numbers of house connection (65 *per cent* of the total of 17,423 houses) with the stipulation to complete the work within six months. As of May 2020, only 6,100 (35 *per cent* of total houses) numbers of house connection were completed.

The delay in completion of work was mainly attributable to lack of awareness among the residents of the municipality towards switching over from existing systems to modern sewerage systems as well as delay in handing over of sites to the contractors. In September 2020, the Municipality admitted that, awareness campaign were to be organized to motivate the residents of the Municipality. However, as no bye-laws were framed by the State Government, compulsory sewer connections could not be enforced. This indicated that as of October 2020, there was no certainty, as to when, the balance of household connections would be completed.

The average outflow of treated water from the STP, in 2018-19 was 0.670 mld and 2.346 mld in 2019-20, against the rated capacity of 8.33 mld. Hence, the plant remained operational with only 8 to 28 *per cent* of its rated capacity during 2018-19 and 2019-20 respectively, as a consequence, untreated sewage continued to be discharged through *Kulia-Beel* into the river Ganga. A physical verification undertaken (June 2020) by Audit, in presence of i) Assistant Engineer, Kolkata Metropolitan Development Authority and ii) Project Manager, contractor, also brought the issue of inadequate supply of influents, due to lesser number of household connections.





Pic 3.13 & 3.14: Drain carries waste into Kulia-Beel

<sup>153</sup> Trial run is meant to see whether the plant is capable of handling the designed capacity efficiently and if there is any deficiency in its operation, it has to be rectified before starting the Operation & Maintenance.

<sup>&</sup>lt;sup>154</sup> Sewage collected from the upper layer of the surface drain.

<sup>&</sup>lt;sup>155</sup> This was to cover around 15,000 households of the Municipality, of the total of 17,423 houses.

Thus, even after establishment of a STP in the Gayeshpur Municipal Area at a cost of ₹ 146.09 crore, the objective of prevention of discharge of untreated sewage to the river Ganga remained largely unachieved. This was due to non-completion of the work of connecting households to the STP and lack of synchronisation between the construction work of the STP and that of connecting households to the STP. Moreover, the prospect of future functioning of the STP at its optimal capacity, seems bleak due to uncertainty in completion of the residual works.

The matter was referred to the Government in June 2020; reply was, however, awaited (November 2020).

#### KOLKATA METROPOLITAN DEVELOPMENT AUTHORITY

#### 3.11 Extra expenditure on construction of a car-parking

Non-adoption of design specifications of Indian Road Congress for laying block pavement, relating to construction of car-parking space at *Subhas Sarobar* in Salt Lake, Kolkata, resulted in extra expenditure of ₹ 1.31 crore.

For the U-17 FIFA World Cup, Urban Development & Municipal Affairs (UD&MA) Department accorded (August 2017) Administrative Approval<sup>156</sup> to Kolkata Metropolitan Development Authority (KMDA) for execution of Parking Places, Lighting and other associated works<sup>157</sup> at *Subhas Sarobar*<sup>158</sup>, at an estimated cost of ₹ 11.70 crore. KMDA awarded (September 2017) the work of construction of car parking space to two contractors at a total tendered value of ₹ 4.51 crore.

The execution of the work was to be carried out as per latest WBPWD<sup>159</sup> Schedule of Rates<sup>160</sup>-SOR, prepared considering the specifications of Indian Road Congress (IRC)<sup>161</sup>, which envisaged the following design and drawing parameters for laying block pavement required for construction of car parking:

- 1. For lightly trafficked pavements like car parks, *etc.*, the pavement should consist of blocks 60 millimetres (mm) thick laid over sand bedding 20-30 mm and a base course <sup>162</sup> 200 mm thick over compacted earth. The base course could be in WBM<sup>163</sup>/ WMM<sup>164</sup>/ crushed stone/ soil-cement.
- 2. The sub-grade soil having a CBR<sup>165</sup> of not less than five would suffice for this purpose.

<sup>&</sup>lt;sup>156</sup> The Housing sector (erstwhile Kolkata Improvement Trust (KIT)) of KMDA was the implementing sector.

<sup>157</sup> Construction of footpath and painting blocks of Kolkata Improvement Trust Housing Scheme adjacent to Subhas Sarobar, providing drinking water kiosks, providing security personnel and sweeper during U-17 FIFA World Cup, etc.

<sup>&</sup>lt;sup>158</sup> It is a lake near to the stadium where the U-17 FIFA World Cup was organised.

<sup>&</sup>lt;sup>159</sup> West Bengal Public Works Department.

<sup>&</sup>lt;sup>160</sup> SOR 2015 and also considering the 7<sup>th</sup> corrigendum of SOR 2015 (published on 28 June 2017)

<sup>&</sup>lt;sup>161</sup> IRC SP 063-2004.

<sup>&</sup>lt;sup>162</sup> Base course is the bottom layer of material and down in the construction of a pavement.

<sup>&</sup>lt;sup>163</sup> Water Bound Macadam.

<sup>164</sup> Wet Mix Macadam.

<sup>&</sup>lt;sup>165</sup> California Bearing Ratio (CBR) is meant for the evaluation of sub-grade strength of soil and derived through penetration test. The results obtained by these tests are used to determine the thickness of pavement and its component layers.

While awarding the work and subsequently while executing the work, the KMDA did not adhere to these specifications and as a consequence, 11,913.26 cubic metre (cu mt) of materials were laid in excess which resulted in an excess expenditure of ₹ 1.31 crore from the Government exchequer as detailed below:

Table 3.12: Execution of works in non-adherence to stipulations of SOR and IRC

1 66 %	Te citz: Execution o	1 WOTES III HOII da	iter entee to stip	diations of SOR and IRC		
Sl. No.	Description of items	Requirement as per SOR/ IRC	Actually Executed	Impact		
1	Compacted sand laid over compacted earth	Not required as the CBR value of sub grade soil was seven		Excess laying of 5,361.03 cu mt of compacted sand worth ₹ 40.61 lakh.		
2	Thickness of WBM base layer	200 mm	Executed 300-360 mm	Excess execution of thickness resulted in excess execution of 2,197.41 cu mt of WBM layer worth ₹ 39.57 lakh.		
3	Stone dust layer above WBM Base layer to obtain desired density/ CBR	No stabilisation required for sub-grade soil as the CBR value of soil was seven, which was more than five.	2,405.06 cu mt as extra	Execution of 2,405.06 cu mt of stone dust layer in contravention of codal provision led to excess expenditure of ₹ 38.27 lakh.		
4	Thickness of Sand bed under paver block	20-30 mm	Executed 150 mm	Excess provision of thickness resulted in excess execution of 1,949.76 cu mt sand layer worth ₹ 12.80 lakh under paver block.		

Source: Records of KMDA

Reasons for execution of the works by way of non-adherence to the SOR/IRC specifications were not on record, except for the extra item of work (Serial No. 3 of the table) which KMDA attributed to heavy rain and urgency of work for the upcoming U-17 FIFA World Cup 2017 event. It was, however, noticed that the extra item of work, as per methodology of construction adopted by the KMDA, involved laying of stone dust layer above WBM. IRC specifications referred above, stipulates that sub-grade soil having a CBR of more than five, would suffice for the purpose. As in the instant case, the stone dust layer was laid above WBM layer and the sub-grade soil also had a CBR of more than five, this extra work violated the IRC specifications.

Thus, non-adoption of design specifications of IRC, as was included in the Schedule of Rates of the West Bengal Public Works Department, by KMDA for laying block pavement, relating to construction of car-parking space at *Subhas Sarobar* in Salt Lake, Kolkata, resulted in extra expenditure of ₹ 1.31 crore.

The matter was referred to the Government in May 2020; reply was, however, awaited (November 2020).

#### 3.12 Deviation from work specifications leading to additional expenditure

In an Elevated Road Corridor project under Kolkata Metropolitan Development Authority (KMDA), reversal of normative and approved order of layers in the bituminous wearing coat during execution led to damage of the road within one year of completion of work. KMDA could not invoke the defect liability clause of the contract as the said deviation had been done with full knowledge of KMDA. This led to an additional expenditure of  $\gtrsim 3.72$  crore on re-laying of the layers.

Kolkata Metropolitan Development Authority (KMDA) had taken up the construction of an Elevated Road Corridor (ERC) from Park Circus to Eastern Metropolitan Bye-pass near Parama Island. The work, which commenced in December 2009, was executed by a private contractor and was opened to traffic in October 2015. The work contract *inter alia*, envisaged that the contractor was to operate and maintain the work for a period of 24 months from the date of completion of work and was to stand guarantor for the works for a period of 36 months from the date of completion of construction and defects, if any, was to be made good by the contractor at his own cost.

Besides, in terms of bid document, the construction work was to be executed in conformity with specifications of the Ministry of Road Transport and Highways (MORTH).

Section 2702.1 of the MORTH specification for Roads and Bridge Works provided that 25 mm thick Mastic Asphalt (MA) layer was to be laid over 40 mm thick layer of Bituminous Concrete (BC) to make a 65 mm thick Bituminous Wearing Coat (BWC). The same was also adopted in the detailed drawing of the road.

Though the work was executed under the supervision of KMDA, it was observed in audit that during execution, the normative sequence of the BC and MA layers (*i.e.* MA layer to be laid above the BC layer) was reversed by the contractor without any recorded justification and 40 mm thick BC was laid over the 25 mm MA.

Records showed that within a year of opening of traffic (*i.e.* within the defect liability period), the elevated road corridor developed surface defects at a few locations. From responses given (January 2019 and February 2019) by the Superintending Engineer (SE), KMDA, to Audit, it was evident that the reversal of layer sequence (laying of BC over MA), done in deviation from MORTH specifications and detailed drawing, had been done under the aegis of KMDA authorities. He, however, opined that laying of MA over BC would have provided an impervious topping to prevent surface defect on account of heavy rainfall.

Further scrutiny showed that KMDA had in fact pointed out (August 2016) the issue of surface defects on the flyover to the contractor and also raised the issue of deviation from the desired specification. The contractor, however, refused (August 2016) to accept any fault on its part citing that the entire work of bituminous had been carried out under strict supervision of Engineers of KMDA meeting all the quality parameters. Contractor further referred to the undue haste shown by KMDA to make this flyover ready by October 2015 forcing it to execute bituminous work in rainy season.

No further communications to the contractor were forthcoming from the records of KMDA on the above issue, though there were enabling clauses of defect liability in the contract and clear deviation from prescribed order of laying of layers.

Consequently, KMDA spent ₹ 3.72 crore for removing the 25 mm thickness of the existing surface of Bituminous Concrete and re-laying the surface topping with a layer of 25 mm Mastic Asphalt by engaging two other contractors during November 2016 to May 2017.

The matter was referred to the Government in June 2020; reply was, however, awaited (November 2020).

Kolkata

The 31 March, 2021

(SARAT CHATURVEDI)
Principal Accountant General (Audit-I)
West Bengal

Countersigned

New Delhi The 1 3 APR 2021 (GIRISH CHANDRA MURMU)
Comptroller and Auditor General of India

# **Appendices**



#### Appendix 1.1

(Refer Paragraph 1.2, page 1)

## **Audit jurisdiction of Principal Accountant General (General and Social Sector Audit), West Bengal**

	Departments	Autonomous Bodies <sup>166</sup>
1	Backward Classes Welfare	Under Section 19 (2)
2	Correctional Administration	West Bengal Human Rights Commission
3	Disaster Management and Civil Defence	State Legal Services Authority, West Bengal
4	Food & Supplies	19 District Legal Services Authorities
5	Finance	West Bengal Building and Other Construction Workers'
6	Fire & Emergency Services	Welfare Board
7	Health & Family Welfare	Under section 19 (3)
8	Higher Education, Science & Technology and Bio-Technology	West Bengal Comprehensive Area Development Corporation
9	Home & Hill Affairs	West Bengal Commission for Women
10	Housing	West Bengal Heritage Commission
11	Information & Cultural Affairs	West Bengal Commission for Backward Classes
12	Judicial	West Bengal Housing Board
13	Labour	Kolkata Metropolitan Development Authority
		West Bengal Unorganised Sector workers' Welfare Board
14	Law	Under section 20 (1)
15	Land & Land Reforms and Refugee Relief	Siliguri Jalpaiguri Development Authority
	& Rehabilitation	Shriniketan Santiniketan Development Authority
16	Mass Education Extension & Library Services	Asansol Durgapur Development Authority
17	Minorities Affairs & Madrasah Education	Digha Shankarpur Development Authority
18	Panchayats & Rural Development	Haldia Development Authority
19	Parliamentary Affairs	Jaigaon Development Authority
20	Personnel & Administrative Reforms	Burdwan Development Authority
		Bhangore Rajarhat Development Authority
21	Planning, Statistics and Programme Monitoring	New Town Kolkata Development Authority
22	Public Health Engineering	Midnapur Kharagpur Development Authority
23	School Education	West Bengal State Council of Technical Education
24	Self Help Group & Self Employment	West Bengal NGRBA Programme Management Group
25	Technical Education, Training & Skill	West Bengal Central School Service Commission
	Development	West Bengal Regional School Service Commission (Eastern)
26	Tribal Development	West Bengal Regional School Service Commission
27	Urban Development & Municipal Affairs	(Western)
28	Women & Child Development and Social	West Bengal Regional School Service Commission
	Welfare	(Northern)
29	Youth Services and Sports	West Bengal Regional School Service Commission (Southern)
		West Bengal Regional School Service Commission (South Eastern)

Besides above, Principal Accountant General (General and Social Sector Audit), West Bengal is also responsible for audit of Chief Minister's Office, Legislative Assembly Secretariat and Governor's Secretariat, *etc*.

7.

<sup>&</sup>lt;sup>166</sup> Excluding 63 bodies/ authorities substantially financed by the State Government and audited under Section 14.

### Appendix 1.1 (Contd.)

## **Audit jurisdiction of Principal Accountant General (General and Social Sector Audit), West Bengal**

1	West Bengal Police Housing & Infrastructure Development Corporation Limited <sup>167</sup> (under section 19(1))
2	West Bengal Essential Commodities Supply Corporation Limited (under section 19(1))
3	West Bengal Film Development Corporation Limited (under section 19(1))
4	West Bengal Women Development Undertaking (under section 19(1))
5	West Bengal Housing Infrastructure Development Corporation Limited (under section 19(1))
6	West Bengal Medical Services Corporation Limited (under section 19(1))
7	Basumati Corporation Limited (under section 19(1))
8	West Bengal Swarojgar Corporation Limited (under section 19(1))
9	The Electro Medical and Allied Industries Limited (under section 19(1))
10	West Bengal Minority Development and Finance Corporation (under section 19(3))
11	West Bengal Scheduled Castes and Scheduled Tribes Development and Finance Corporation (under section 19(3))
12	West Bengal Backward Classes Development and Finance Corporation (under section 19(3))
13	West Bengal State Warehousing Corporation (under section 19(3))

Since Kolkata State Police Housing Corporation Limited merged with West Bengal Police Housing & Infrastructure Development Corporation Limited with effect from 01 April 2015.

Appendix 1.2 (Refer Paragraph 1.5, page 4)

## Statement showing Department-wise and Year-wise list of outstanding **Inspection Reports (IRs) and Paragraphs**

Year	Women and Child Development & Social Welfare Department		Land & Land Reforms and Refugee Relief & Rehabilitation Department		Backward Classes Welfare Department		Youth Services and Sports Department		Total	
	IRs	Paras	IRs	Paras	IRs	Paras	IRs	Paras	IRs	Paras
1991-92	1	1	0	0	0	0	0	0	1	1
1992-93	0	0	0	0	0	0	0	0	0	0
1993-94	1	1	0	0	0	0	0	0	1	1
1994-95	0	0	0	0	0	0	0	0	0	0
1995-96	0	0	0	0	0	0	0	0	0	0
1996-97	0	0	1	1	0	0	0	0	1	1
1997-98	0	0	0	0	0	0	0	0	0	0
1998-99	0	0	0	0	0	0	0	0	0	0
1999-2000	0	0	0	0	0	0	0	0	0	0
2000-01	0	0	0	0	0	0	0	0	0	0
2001-02	0	0	0	0	0	0	0	0	0	0
2002-03	0	0	1	1	0	0	0	0	1	1
2003-04	2	2	1	1	0	0	0	0	3	3
2004-05	0	0	1	1	0	0	0	0	1	1
2005-06	2	6	3	7	0	0	0	0	5	13
2006-07	1	1	2	3	0	0	0	0	3	4
2007-08	0	0	4	4	0	0	0	0	4	4
2008-09	0	0	2	2	0	0	0	0	2	2
2009-10	4	8	0	0	0	0	0	0	4	8
2010-11	1	1	4	15	0	0	0	0	5	16
2011-12	2	3	7	24	1	1	0	0	10	28
2012-13	0	0	3	3	1	1	0	0	4	4
2013-14	7	14	11	29	0	0	2	3	20	46
2014-15	22	61	11	27	1	1	4	22	38	111
2015-16	23	60	10	26	4	4	0	0	37	90
2016-17	22	93	20	109	7	15	1	5	50	222
2017-18	44	189	24	167	17	41	7	24	92	421
2018-19	26	112	22	184	9	44	11	43	68	383
Total	158	552	127	604	40	107	25	97	350	1,360

Source: Inspection Reports

#### Appendix 1.3

(Refer Paragraph 1.7, page 6)

## Departments which did not submit *suo-motu* replies with number of paragraphs/ reviews involved

Sl.	Name of the Department	Number of Pa	ras/ reviews	involved in	reports for	the years	
No.	Name of the Department	Upto 1997-98	1998-2014	2014-15	2015-16	2016-17	Total
1	Backward Classes Welfare	01	03	-	02\$	-	06
2	Correctional Administration	-	-	-	-	-	-
3	Disaster Management and Civil Defence	-	02*	01	-	-	03
4	Finance	04	04	03 <sup>£</sup>	-	-	11
5	Fire & Emergency Services	-	01	-	-	-	01
6	Food & Supplies	-	02	01	-	01	04
7	Health & Family Welfare	26	29*#	03	03	03	64
8	Higher Education, Science and Technology &	-	-	01 <sup>¥</sup>	-	-	02
	Biotechnology						
9	Home & Hill Affairs	-	20	-	-	-	20
10	Housing	-	06	-	01	-	07
11	Information & Cultural Affairs	-	06	-	-	-	06
12	Labour	-	05	01	-	-	06
13	Land & Land Reforms and Refugee Relief & Rehabilitation	-	01	-	-	-	01
14	Mass Education Extension & Library Services	-	02 <b>*</b>	-	-	-	02
15	Minority Affairs and Madrasah Education	-	02	-	01	-	03
16	North Bengal Development	-	-	01	-	-	01
17	Panchayats and Rural Development	04	11#•	02	-	-	17
18	Planning, Statistics and Programme Monitoring (erstwhile Planning)	-	01	-	-	-	01
19	Public Health Engineering	-	06	01	-	01	08
20	School Education	-	09#	-	01	01	11
21	Technical Education, Training & Skill Development	-	02	-	-	-	02
22	Tribal Development	-	-	-	-	-	-
23	Urban Development & Municipal Affairs	14	26 <sup>β#</sup>	04	-	06	50
24	Women & Child Development and Social Welfare	02	05	-	01	02	10
25	Youth Services and Sports	-	03	01	-	-	04
	Total	51	147	19	09	14	240

- ♣ Includes observations relating to Home (Police) (now Home & Hill Affairs); Civil Defence (now Disaster Management & Civil Defence); Health & Family Welfare; Irrigation & Waterways and Public Health Engineering Departments also.
- £ Includes observations on Public Health Engineering; Health & Family Welfare and Agriculture Marketing Departments also.
- \* Includes Paragraph No. 2.1 of Civil Audit Report No. 2 of 2010-11 on District Centric Audit of Dakshin Dinajpur involving Health & Family Welfare; School Education; Development & Planning (now Planning, Statistics and Programme Monitoring); Women & Child Development and Social Welfare; Panchayats & Rural Development; Public Health Engineering; Irrigation & Waterways; Power (now Power and Non-Conventional Energy Sources) and Urban Development (Urban Development & Municipal Affairs) Departments.
- # Includes Paragraph No. 4.1, 4.2, 5.3, 5.5, 5.6 & 6.2 of the Audit Report on Malda district for the year 2011-12.
- ¥ Includes observations on Urban Development (now Urban Development & Municipal Affairs)
  Department also.
- ▲ Includes observations on Library Services (now Mass Education Extension & Library Services) and Municipal Affairs (now Urban Development & Municipal Affairs) Departments also.
- ♦ Includes observations on Municipal Affairs (now Urban Development & Municipal Affairs) and Finance Departments also.
- β Includes observations on Land & Land Reforms (now Land & Land Reforms and Refugee Relief & Rehabilitation); Transport and Irrigation & Waterways Departments also.
- $\epsilon$  Includes observations on School Education and Health & Family Welfare Departments also.
- \$ Includes observations on Tribal Development and Minority Affairs & Madrasah Education Departments also.

Appendix 1.4 (Refer Paragraph 1.7, page 6)

### Statement showing significant recommendation of PAC against which **Action Taken Note was outstanding from Department**

Year of Audit Report with para number	PAC Report number and year	Name of the department	Gist of the Audit Para	Recommendations of PAC
3.4.2 of AR 2009-2010	Report	Health and Family Welfare	Medical equipment lying idle	The Committee <i>inter alia</i> recommended the following: Purchase of highly sophisticated medical equipment should be made only after proper and thorough assessment of requirements and availability of requisite infrastructure and trained manpower both at the doctors' and technician level.  The department should take prompt and appropriate administrative/ disciplinary actions against the defaulting officials after fixation of responsibilities for occurrence of incidents of procurement of sophisticated medical equipment at the Burdwan Medical College and Hospital without arranging for requisite infrastructure and manpower. Necessary steps may also be taken to ensure non-recurrence of such incidents.

Source: PAC Report

Appendix 2.1 (Refer Paragraphs 2.1.7.2, 2.2.1.2 (c) and 2.3.3.1, page 17, 23 and 45)

### **List of Key Outcome Indicators of Audit of Outcome of Higher Education**

Indicator Number	Key Indicator	Numerator of indicator	Denominator of indicator	Formula
1.	Increase in percentage of student progression to higher study (previous graduating batch) during 2018-19 (current year)	outgoing students progressing to Higher		
2.	Average percentage of students qualifying in State/National/ International level examinations during 2014-19 (NET/SLET/GATE/GMAT/CAT/GRE/TOEFL/Civil Services/State government examinations)	qualified in Public	Total number of students enrolled in that year	
3.	Percentage of programs where syllabus revision was carried out during 2014-19			
4.	Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during 2014-19	Employability or Entrepreneurship or	Number of courses in all Programme	Average percentage = (Sum of percentage of 5 years)/ 5
5.	Average percentage of students enrolled in value added courses during 2014-19	enrolled in the value		0
6.	Percentage of new courses introduced out of the total number of courses across all programmes offered during 2014-19 with the focus of employability	introduced during	Number of courses offered during 2014-19	
7.	Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources, etc., during 2018-19 (current year)		Total number of teachers during 2018-19	
8.	What is the extent of industry-academia connect?	Number of functional MoUs with institutions of national/international importance, other Univ., industries, <i>etc.</i> , during 2014-19	<del></del>	

Indicator Number	Key Indicator	Numerator of indicator	Denominator of indicator	Formula
9.	What is the extent to which	Number of extension and	<b></b>	
	industry has been consulted	outreach programmes		
	or has provided sponsorship	conducted in		
	and funding, in a	collaboration with		
	collaborative environment	industry, community,		
	during 2014-19?	NGOs (NCC/ NSS/ Red		
		Cross, etc.) during last		
		five years.		

Source: Developed by Indian Audit & Accounts Department based on NAAC methods

#### Appendix 2.2

(Refer Paragraphs 2.1.7.2, 2.2.1.2 (a), 2.2.1.3, 2.3.1.1 (E), (F), (G) (II), 2.3.1.2 (B), (D), (E), (F), (G), (J), 2.3.2.2 (i), 2.3.2.2 (ii) (A), 2.3.2.2 (ii) (B), 2.3.3.2, 2.4.1.3, 2.4.2, 2.4.3.2, 2.4.4.1 and 2.4.4.3, page 17, 22, 25, 29, 30, 31, 34, 35, 36, 37, 38, 39, 42, 43, 44, 46, 52, 54, 57, 58 and 61)

#### List of Input-Output Indicators of Audit of Outcome of Higher Education

Indicator Number	Name of Indicator	Numerator of indicator	Denominator of indicator	Formula
1.	Average percentage of placement of outgoing students during 2014-19	Number of Outgoing students placed in a year	No of outgoing students in that year	Average percentage = (Sum of percentage of 5 years)/5
2.	Average pass percentage of Students during 2017-18	Total No. of final year students who passed in the University Examination	Total no. of final year students who appeared	-
3.	Number of value-added courses imparting transferable and life skills offered during 2014-19	Number of value-added courses imparting transferable and life skills offered during 2014-19	-	-
4.	Percentage of students undertaking field projects/ internships during 2018-19 (current year)	Number of students undertaking field projects or internships during 2018-19	Total number of students enrolled in the institution during 2018-19	-
5.	Percentage of programs in which CBCS has been implemented during 2018-19 (current year)	Number of programmes in which CBCS implemented during 2018-19	Total number of programmes offered during 2018-19	-
6.	Availability of teachers as per prescribed Student Teacher Ratio during 2018-19 (current year)	Number of students enrolled in a particular programme during 2018- 19	Number of teachers available (including part time teachers) for that particular during 2018-19	-
7	Average percentage of full time teachers with Ph.D. during 2014-19	Number of full time teachers with Ph. D in a year	Number of full time teachers in that year	Average percentage = (Sum of percentage of 5 years)/5
8.	Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during 2014-19	Number of full time teachers from receiving awards from state/National/Internation al levels during last five years	Average no. of full time teachers during last 5 years	-

Indicator Number	Name of Indicator	Numerator of indicator	Denominator of indicator	Formula
9.	Average percentage of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during 2014-19	Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during a year	Number of full time teachers in that year	Average percentage = (Sum of percentage of 5 years)/5
10.	Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during 2014-19	No of teaching staff attending such Programmes in a year	No of full time teachers in that year	Average percentage = (Sum of percentage of 5 years)/5
11.	Percentage of questions of last 10 years' examinations which have been repeated in 2018-19 (current year).	No. of questions repeated in current year	Total number of questions in current year	-
12.	Percentage of courses in which open book examinations were conducted in 2018-19 (current year)	No. of courses which conducted open book examinations	Total number of courses	
13.	Average percentage of applications for revaluation leading to change in marks during 2014-19	Number of Revaluation cases where marks changed in a year	No. of Revaluation applications received in that year	Average percentage = (Sum of percentage of 5 years)/5
14.	Number of patents awarded to an institution during 2014-19	Number of patents awarded to an institution during 2014-19	-	-
15.	Number of research papers per teacher in the Journals notified on UGC website during 2014-19	Number of publication in UGC notified journals during 2014-19	Average number of full time teachers during 2014-19	-
16.	Number of teachers awarded international fellowship for advanced studies/ research during 2014-19	Number of teachers awarded international fellowship for advanced studies/ research during 2014-19	-	-
17.	Average percentage of students participating in extension activities GOs, NGOs and Programmes like Swachh Bharat, Aids Awareness, Gender Issues, etc., during 2014-19	Number of students participating in such activities in a particular year	Total number of students enrolled in that year	Average percentage = (Sum of percentage of 5 years)/5

Indicator Number	Name of Indicator	Numerator of indicator	Denominator of indicator	Formula
18.	Increase in Gross Enrolment Ratio with respect to target during 2010-19	Total number of students admitted in all types of HEIs in the state a particular year	Population of 18-23 years of age of the state during the year	-
19.	Increase in category wise Gross Enrolment Ratio with respect to All India ratios/targets during 2014- 19	Category wise number of students admitted in all types of HEIs in a particular year	Population of 18-23 years of age of the particular category during the year	-
20.	Average percentage of students benefited by scholarships by the Government during 2014-19	No. of students benefited by scholarships by Government in a particular year	total number of students enrolled in that year	Average percentage = (Sum of percentage of 5 years)/5
21.	Average percentage of students benefited by free ships/tuition waiver provided by the Government during the last five years	No. of students benefited by free ships by Government in a particular year	total number of students enrolled in that year	Average percentage = (Sum of percentage of 5 years)/5
22.	Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc., during 2018-19 (current year)	No. of Classrooms and seminar halls with ICT facilities	Total No. of Classrooms and Seminar halls in the Institution	-
23.	Student - Computer Ratio during 2018-19 (current year)	Total number of students	No of computers in working conditions	-
24.	Average percentage of budget allocation, excluding salary for infrastructure augmentation during 2014-19	Budget allocation for infrastructure augmentation excluding salary in a year	Total expenditure excluding salary in that year	Average percentage = (Sum of percentage of 5 years)/5

Source: Developed by Indian Audit & Accounts Department based on NAAC methods

Appendix 2.3
(Refer Paragraph 2.4.1, page 49)

Mismatch between AISHE data and figures submitted by test-checked colleges/ Universities to Audit

	Number of seats in 2014-15	oer of seats in 2014-15	Number of sea	Number of seats in 2018-19	Number of enr	Number of enrolled students in 2014-15	Number of enrolled students in 2018-19	lled students in -19
Name of the College	College data	AISHE data	College data	AISHE data	College data	AISHE data	College data	AISHE data
Acharya Prafulla Chandra Roy Govt. College	208	208	352	288	394	179	530	201
Acharya Sukumar Sen Mahavidyala	150	150	451	576	72	35	467	237
Chandannagar College	1,166	1,151	1,375	1,151	936	1,184	786	1,557
Darjeeling Government College	1,457	1,541	1,826	1,556	2,678	1,313	2,105	1,108
Dr. Gour Mohan Roy College	1,553	0	2,094	158	2,730	390	3,106	509
Gushkara Mahavidyalaya	2,546	2,548	2,821	3,011	3,991	1,691	3,200	1,447
Hooghly Mohsin College	1,371	1,789	1,674	1,826	2,735	1,212	3,505	1,187
Kabi Joydeb Mahavidyalaya	529	428	1,228	877	1,221	693	1,278	726
Maynaguri College	2,759	2,763	3,302	3,302	5,241	2,718	5,152	2,953
Prasannadeb Women's College	1,510	1,604	1,824	1,964	3,512	1,562	3,215	1,635
Sonada Degree College	322	996	322	996	410	198	157	76
Tarakeswar Degree College	1,642	4,776	2,039	6,159	4,594	5,243	4,224	2,776
Vivekananda College Alipurduar	1,600	6,139	1,600	1,617	1,600	4,187	962	974

College data data data         AISHE data data         College data           ges         16,813         24,063         20,908           2,998         NA         3,424	N Second St. Co. 10 second St.	Number of seats in 2014-15	of seats in 1-15	Number of seats in 2018-19	ats in 2018-19	Number of en 20	Number of enrolled students in 2014-15	Number of enrolled students in 2018-19	led students in 19
16,813 24,063 20,908 2,998 NA 3,424	Name of the Conege	College data	AISHE data	College data	AISHE data	College data	AISHE data	College data	AISHE data
2,998 NA	otal of test-checked colleges	16,813	24,063	20,908	23,451	30,114	20,605	28,888	15,386
	urdwan University	2,998	NA	3,424	NA	2,011	17,408	2,868	14,272
North Bengal University 1,703 NA 1,876	orth Bengal University	1,703	NA	1,876	NA	2,579	5,917	3,035	3,817

Source: AISHE data and those supplied by the test-checked Universities and colleges

### Appendix 2.4

(Refer paragraph 2.4.4.4, page 62)

### A. Men-in-Position against sanctioned post of non-teaching staff in BU

Year	Sanctioned	Existing	Vacant
2014-15	1,305	855	450 (34%)
2015-16	1,305	799	506 (39%)
2016-17	1,305	761	544 (42%)
2017-18	1,305	714	591 (45%)
2018-19	1,305	676	629 (48%)

Source: Information furnished by Burdwan University

Note: Figures for contractual and casual staff at BU was not available.

### B. Men-in-Position against sanctioned post of non-teaching staff, NBU

Year (as on)	Sanctioned	Existing	Vacant	Contractual	Casual
2014-15 (31.7.14)	623	379	244 (39%)	Not Avail	able
2015-16 (1.8.15)	618	364	254 (41%)	Not Avail	able
2016-17 (1.7.16)	617	359	258 (42%)	44	308
2017-18 (1.8.17)	617	342	275 (45%)	43	307
2018-19 (21.8.18)	615	333	282 (46%)	69	333

Source: Information furnished by North Bengal University

(Refer Paragraph 2.5.1.2 (iii), page 68) Adherence to affiliation norms by test-checked affiliated colleges

				0					
Names of test-checked affiliated Colleges	Sufficient lab facility	Sufficient books in library	Having own website	Uploading information on Know your College Portal (MHRD)	Uploading information in AISHE portal	Admission of Students within limits	Sufficient administrative and academic building	Teachers qualified as per UGC norms	SC/ST Cell constituted and functioning properly
				Colleges under BU	_		D		
Hooghly Mohsin College	Y	Z	Y	Z	Y	Z	Z	Y	Z
Gushkara Mahavidyalaya	Y	Y	Y	Y	Y	Z	Y	Y	Z
Kabi Joydeb Mahavidyalaya	Z	Y	Y	Y	Y	Z	Z	Y	Z
Tarakeswar Degree College	Y	Y	Y	Y	Y	Z	Y	Y	Y
Dr. Gour Mohan Roy College	Z	Y	Y	Y	Y	Z	Z	Did not reply	Y
Acharya Sukumar Sen Mahavidvala	Z	Z	Y	Y	Y	Y	Z	Y	Y
Chandannagar Govt. College	Y	Y	Y	Y	Y	Y	Y	Y	Z
				Colleges under NBU	VBU				
Vivekananda College Alipurduar	Z	¥	Y	Did not reply	Y	Y	Z	X	Y
Darjeeling Government College	Y	Y	Y	Z	Y	Z	Y	Y	Y
Maynaguri College	Y	Y	Y	Y	Y	Z	Z	Did not reply	Z
Sonada Degree College	z	Z	Y	Y	Y	Y	*2	Y	Z
Prasannadeb Women's College	Y	Z	Y	Did not reply	Y	Z	Z	Y	Z
Acharya Prafulla Chandra Roy Govt. College	X	X	Y	Did not reply	Y	Y	Y	7	Z
No. and percentage of colleges	5/13=	4/13=	0/13=0	2/10=	0/13=	8/13=	8/12=	0/11=	8/13=
which did not fulfil the specific affiliation norms	38%	31%	%	20%	%0	62%	62%	%0	62%

Source: Data furnished by test-checked Colleges; \*Partly

Appendix 3.1 (Refer Paragraph 3.1.2.2, page 79)

## Status of completed/sanctioned fire stations during 2014-15 to 2018-19

~-		Project	Date of	aned in a state.	Actual date	Delay	Cost of
Sl.	Name of the Fire	Cost	Administrative	Schedule date of	of	(in	completion
No.	station	(₹ in crore)	approval	completion	Completion	months)	(₹ in crore)
1	Nakshalbari	1.83	23.03.15	June 2016	31.03.17	9	Not
							Available
2	Boxirhat	3.16	17.03.17	June 2018	2019-20	>10	Not
	T-1-44-	2.02	24.02.15	Mass 2016	21.02.17	10	Available
3	Tehatta	2.03	24.02.15	May 2016	31.03.17	10	2.89
4	Buniadpur	2.03	24.02.15	May 2016	2018-19	>23	3.33 2.61
5	Bethuaduhari Pandua	2.00 2.00	16.09.14 26.12.14	December 2015	31.03.17 2017-18	15 >13	2.70
6 7		2.00	·	March 2016		>13	2.70
8	Madhyamgram Chakdah	2.00	26.12.14 17.09.14	March 2015 December 2015	2016-17 31.03.17	)13 15	2.71
9	Sitalkuchi	2.00	17.09.14	December 2015	31.03.17	15	3.26
***************************************		2.00	Before 2014-15	Not Available	26.02.15	Not	Not
10	Barovisha	_	Deluie 2014-13	Not Available	20.02.13	Available	Available
11	Jhalda	_	03.08.11	November 2012	2015-16	>29	Not
-11	onaiua		05.00.11	110 (0111001 2012	2013-10	- 41	Available
12	Khatra	-	Before 2014-15	Not Available	2015-16	NA	Not
			201.10				Available
13	Pragotimaidan	2.00	20.02.14	May 2015	2015-16	No delay	2.70
14	Bansdroni	2.00	20.02.14	May 2015	2015-16	No delay	2.69
15	Lalbag	2.00	20.02.14	May 2015	2015-16	No delay	2.71
16	Ramnagar	1.73	03.08.11	November 2012	2015-16	>29	1.72
17	Canning	2.00	20.02.14	May 2015	2015-16	No delay	2.71
18	Panskura	3.59	15.12.16	March 2018	Ongoing	23	
19	Kakdwip	2.00	20.02.14	May 2015	2016-17	>11	3.78
20	<b>Dankuni</b>	2.00	20.02.14	May 2015	2016-17	>11	2.73
21	Joagaon	3.95	02.03.17	June 2018	Ongoing	20	
22	Joynagar-	3.53	21.07.16	October 2017	2019-20	>18	Not
	Masilpur						Available
23	Sainthia	3.05	23.08.16	November 2017	2019-20	>17	3.05
24	Memari	2.00	20.02.14	May 2015	31.03.17	22	2.75
25	Mirik	-	Before 2014-15	Not Available	15.03.17	>12	Not Available
26	Sonarpur	2.00	20.02.14	May 2015	2017-18	>23	3.60
27	Birpara	2.47	09.10.18	January 2020	Ongoing	1	
28	New	4.69	19.12.17	March 2019	Ongoing	11	
	Barrackpore			2019		_	
29	Gangasagar	6.13	15.03.18	June 2019	Ongoing	8	
30	Goalpokher	4.81	19.09.17	December 2018	2019-20	>4	Not
	Ť						Available
31	Galsi-I	3.78	09.10.18	January 2020	Ongoing	1	
32	Purbasthali	3.43	13.10.18	January 2020	Ongoing	1	
33	Fulbari	3.54	02.08.18	November 2019	Ongoing	3	
34	Beldanga	3.44	05.06.18	September 2019	Ongoing	5	
35	Ashokenagar	3.01	Before 2014-15	Not Available	2018-19	>12	Not Available
36	Rabindra Nagar	_	Before 2014-15	Not Available	2018-19	>12	Not
			201010 2011 13	1 tot 1 vanable	2010 17		Available
37	Dabgram	2.66	07.06.16	September 2017	2018-19	>7	2.66
				•			

Sl. No.	Name of the Fire station	Project Cost (₹ in crore)	Date of Administrative approval	Schedule date of completion	Actual date of Completion	Delay (in months)	Cost of completion (₹ in crore)
38	Domkol	2.54	Before 2014-15	Not Available	Not Available	NA	Not Available
39	Egra	Not Available	Before 2014-15	Not Available	Not Available	NA	Not Available
40	Nishiganj	3.74	26.06.18	September 2019	Ongoing	5	
41	Budge Budge	Not Available	Before 14-15	Not Available	2019-20	>12	Not Available
42	Rajarhat	29.01	16.11. 17	February 2019	Ongoing	12	

Source: Records of WBF&ES Department

Appendix 3.2 (Refer Paragraph 3.1.3.1, page 83)

**Statement showing delay in Recruitment Process** 

Name of Post	Vacancy forwarded by DG, WBFES, with date	Vacancy Proposal forwarded to PSC,WB/ SSC, WB by Department with date	Month of Advertisement by PSC,WB/ SSC,WB	Month of Forwarding the list of selected candidates by PSC, WB/ SSC, WB	Number of candidate selected by PSC,WB/ SSC,WB	Appointment letter issued by the Department	Vacancy (as of May 2019)
Divisional Fire Officers	03 (November 2013), against actual vacancy of 7	03 (December 2014)	July 2017	No eligib	ele candidate wa	as available	07
Station Sub-Officers	264 ( December 2015) against actual vacancy of 295	51 (February 2016)	August 2016	July 2018	44	July 2019 & September 2019	372
FEOD	300 (April 2013) against actual vacancy of 419	185 (March 2014), after approval of State Cabinet	January 2015	December 2015	161	March 2016 to July 2019	504
	275 (April 2015)	154 (July 2015), after approval of State Cabinet		February 2016 April 2018	04 157		

Source: Records of Directorate, WBF&ES

Appendix 3.3 (Refer Paragraph 3.1.5, page 88)

### Statement showing details of response time in fire incidents in test-checked divisions

	T .	uivisions				F			
Name of the fire	Location	Easteri	·		ern side		rn side	<u> </u>	rn side
station	type	Furthest distance	Response time	Furthest distance	Response time	Furthest distance	Response time	Furthest distance	Response time
(A) North 24	Parganas 1		<u>:</u> time	uistance	<u>tille</u>	uistance	unic	uistance	tillie
Bidhannagar	Urban	15 Km.	35 min.	12 Km.	30 min.	16 Km.	30 min.	20 Km.	35 min.
Barasat	Rural	25 Km.	30 min.	10 Km.	20 min.	3 Km.	5 min.	20 Km.	30 min.
North Barrackpore	Urban	10 Km.	20 min.	6 Km.	15 min.	3 Km.	6 min.	7 Km.	25 min.
Basirhat	Rural	2 Km.	10 min.	25 Km.	40 min.	48 Km.	75 min.	40 Km.	60 min.
Madhyamgram	Mixed	30 Km.	60 min.	6 Km.	10 min.	5 Km.	6 min.	2 Km.	4 min.
Dum Dum	Urban	25 Km.	45 min.	10 Km.	20 min.	10 Km.	20 min.	20 Km.	30 min.
Kamarhati	Urban	11 Km.	30 min.	3 Km.	10 min.	4 Km.	10 min.	1 Km.	2 min.
Gobardanga	Rural	40 Km.	130 min.	8 Km.	12 min.	32 Km.	120 min.	15 Km.	25 min.
Habra	Rural	10 Km.	10 min.	2 Km.	10 min.	10 Km.	10 min.	10 Km.	10 min.
Baranagar	Urban	10 Km.	12 min.	4 Km.	5 min.	5 Km.	6 min.	2 Km.	3 min.
Panihati	Urban	8 Km.	7 min.	1 Km.	2 min.	2 Km.	2 min.	6 Km.	4 min.
Bongaon	Rural	20 Km.	30 min.	25 Km.	20 min.	20 Km.	25 min.	40 Km.	35 min.
Kankinara	Mixed	15 Km.	20 min.	01 Km.	2 min.	10 Km.	12 min.	5 Km.	8 min.
	(North) Div				***************************************	•		•	·····
Maniktala	Urban	12 Km.	15 min.	3 Km.	5 min.	6 Km.	10 min.	5 Km.	10 min.
Canal West	Urban	2 Km.	3 min.	4 Km.	3 min.	3 Km.	3 min.	4 Km.	3 min.
Central Avenue	Urban	2 Km.	3 min.	2.5 Km.	3 min.	2 Km.	3 min.	3 Km.	3 min.
Nimtala	Urban	2 Km.	20 min.	0.3 Km.	5 min.	2 Km.	20 min.	2 Km.	25 min.
Cossipore	Urban	6 Km.	15 min.	2 Km.	10 min.	4 Km.	10 min.	6 Km.	20 min.
Lalbazar	Urban	1 Km.	3 min.	2.5 Km.	3 min.	3 Km.	3 min.	2 Km.	2 min.
	(South) Div			4 5 47	······		·····		
Head Quarter	Urban	12 Km.	13 min.	4.5 Km.	8 min.	2.5 Km.	7 min.	2 Km.	5 min.
Garden Reach	Urban	8 Km.	30 min.	8 Km.	30 min.	10 Km.	30 min.	4 Km.	10 min.
Kalighat	Urban	2.5 Km.	12 min.	4.5 Km.	17 min.	4 Km.	15 min.	2.5 Km.	12 min.
Gariahat BaishnabghataPatuli	Urban Urban	4.4 Km. 1 Km.	8 min. 3 min.	2.1 Km. 1.2 Km.	4 min. 4 min.	3.2 Km. 1 Km.	6 min. 3 min.	2.6 Km. 6 Km.	5 min. 6 min.
Tollygunj	Urban	2 Km.	5 min.	4 Km.	4 IIIII. 12 min.	3 Km.	7 min.	6 Km.	20 min.
Alifnagar	Urban	2 Km.	5 min.	4 Km.	20 min.	18 Km.	30 min.	12 Km.	20 min.
MasterdaSuryasen	Urban	6 Km.	8 min.	4 Km.	7 min.	6 Km.	8 min.	2 Km.	5 min.
PragatiMaidan	Urban	5 Km.	5 min.	3 Km.	3 min.	3.5 Km.	4 min.	4 Km.	5 min.
······		J 11111.		3 11111.	<u> </u>	<u> </u>	<u> </u>	1 11111.	
(D) Howrah l		2 W	7:	1.5 W	20	7 V	20 :	0 1/	20
Howrah	Urban	3 Km.	7 min.	15 Km.	30 min. 40 min.	7 Km.	20 min.	8 Km.	20 min.
Liluah Shibpur	Mixed Urban	1 Km. 2.5 Km.	5 min. 7 min.	24 Km. 10 Km.	40 min. 25 min.	4 Km. 1 Km.	8 min. 15 min.	1 Km. 2 Km.	5 min.
Bally	Urban	4 Km.	/ 111111. 15 min.	10 Km.	60 min.	2.5 Km.	15 min.	4 Km.	6 min. 20 min.
Alampur	Rural	7 Km.	10 min.	40 Km.	60 min.	6 Km.	10 min.	8 Km.	20 min.
Uluberia	Rural	20 Km.	25 min.	30 Km.	40 min.	50 Km.	90 min.	47 Km.	90 min.
(E) Jalpaigur		20 Km.	23 11111.	30 Km.	40 IIIII.		1		, , , , , , , , , , , , , , , , , , ,
Jalpaiguri	Rural	14 Km	14 min	35 Km	35 min	25 Km	25 min	30 Km	30 min
Maynaguri	Rural	18 Km.	20 min.	8 Km.	10 min.	20 Km.	23 min.	23 Km.	28 min.
Mal	Rural	35 Km.	35 min.	30 Km.	30 min.	30 Km.	30 min.	35 Km.	35 min.
Dhupguri	Rural	10 Km.	10 min.	25 Km.	25 min.	10 Km.	10 min.	35 Km.	35 min.
Dabgram	Rural	12 Km	25-30	07 Km	10-15 min.	06 Km	20-25	18 Km	30-35
- 44 8-44-1			min				Min		min
Hasimara	Rural	30 Km	30 min.	40 Km	40 min.	21 Km	21 min.	30 Km	30 min.
Alipurduar	Mixed	40 Km	01 Hour	20 Km	30 min.	12 Km	20 min.	15 Km	20 min.
Falakata	Rural	15-20 Km	25 min.	15-20 Km	25 min.	15-18 Km	24 min.	15-25 Km	30 min.
Barobisha	Mixed	12 Km	12 min.	24 Km	24 min.	14 Km	14 min.	35 Km	35 min.
(F) Darjeeling	g Division								
Siliguri	Urban	15 Km	23 min	10 Km	15 min	25 Km	37 min	07 Km	11 min
Matigara	Rural	14 Km.	30 min.	45 Km.	88 min.	45 Km.	88 min.	28 Km.	60 min.
Darjeeling	Rural	14 Km.	35 min.	50 Km.	180 min.	13 Km.	25 min.	12 Km.	25 min.
Kurseng	Rural	18 Km.	60 min.	20 Km.	75 min.	32 Km.	90 min.	24 Km.	60 min.
Bijonbari	Rural	12 Km.	60 min.	35 Km.	180 min.	12 Km.	60 min.	16 Km.	80 min.
Mirik	Rural	15 Km	32 min.	16 Km	42 min.	27 Km	61 min.	14 Km	34 min.
Naxalbari	Rural	14 Km	20 min.	23.5 Km	35 min.	18.3 Km	30 min.	20 Km	45 min.
Kalimpong	Rural	4 Km	25 min.	26 Km	75 min.	45 Km	110 min.	80 Km	150 min.

Na 64b . 6	T4	Easter	n side	Weste	ern side	Southe	rn side	Northe	rn side
Name of the fire station	Location type	Furthest distance	Response time	Furthest distance	Response time	Furthest distance	Response time	Furthest distance	Response time
(G) Malda Di	vision								
English Bazar	Mixed	60 Km	90 min	60 Km	90 min	45 Km	60 min	45 Km	60 min
Chanchol	Rural	25 Km.	35 min.	35 Km.	45 min.	35 Km.	45 min.	25 Km.	35 min.
Harishchandrapur	Rural	15 Km.	37 min.	20 Km.	55 min.	30 Km.	90 min.	10 Km.	20 min.
(H) Murshida	abad Divisio	n							
Berhampore	Mixed	60 Km	90 min	30 Km	40 min	40 Km	75 min	05 Km	12 min
Dhulian	Rural	55 Km.	80 min.	20 Km.	25 min.	25 Km.	35 min.	22 Km.	30 min.
Kandi	Rural	37 Km.	40 min.	50 Km.	50 min.	60 Km.	60 min.	24 Km.	25 min.
Lalbag	Rural	35 Km.	50 min.	50 Km.	80 min.	8 Km.	15 min.	45 Km.	65 min.
Domkal	Rural	25 Km.	35 min.	10 Km.	15 min.	25 Km.	35 min.	25 Km.	30 min.
(I) Paschim B	arddhaman	Division							
Durgapur	Urban	24 Km	20 min	30 Km	30 min	40 Km	60 min	40 Km	50 min
Asansol	Urban	15 Km.	30 min.	25 Km.	50 min.	19 Km.	45 min.	40 Km.	90 min.
Raniganj	Urban	18 Km.	28 min.	14 Km.	24 min.	22 Km.	42 min.	38 Km.	70 min.
Panagarh	Rural	32 Km.	45 min.	14 Km.	25 min.	7 Km.	10 min.	55 Km.	75 min.
(J) Paschim N	Aedinipur D	ivision							
Medinipur	Rural	40 Km	60 min	10 Km	25 min	30 Km	45 min	60 Km	75 min
Kharagpur	Mixed	45 Km.	60 min.	22 Km.	30 min.	83 Km.	105 min.	12 Km.	20 min.
Ghatal	Rural	35 Km.	45 min.	35 Km.	45 min.	25 Km.	30 min.	45 Km.	55 min.
Jhargram	Rural	42 Km	70 min.	85 Km.	150 min.	95 Km.	165 min.	40 Km.	60 min.

Source: Records of test-checked divisions

## Appendix 3.4

(Refer Paragraph 3.1.5, page 88)

Illustrative cases of fire incidents claiming lives and property where fire tenders had to travel long distances (more than  $20 \ km$ )

	tena		avel long distances (more than 20 km	<u> </u>
Date and time of fire	Responding fire station	Distance of fire incidence/ response time	Brief description of the incidence	Impact of the incidence
15.07.2016 at 9:15 am	Medinipur	25 km/ NA	Four nos. of dwelling houses (two nos. double & two nos. single storied) involved in fire at Ekaria, Garbeta. Fire spot was approximately 65 km away from the Medinipur fire station. But, fire tender was deployed at 9.15 am from the standby unit at Chandrakona Road as first turnout, which was 25 km away from the fire spot. Fire out by the Brigade using two jets.	One male charred body was found on the spot.
29.08.2014 at 7:35 am	Medinipur	25 km/ NA	A room containing huge quantity of papers for <i>Khata</i> binding with raw materials of Paraffin and raw materials of incense sticks involved in fire at Anandapur, Lepsa Bridge under Keshpur Police Station. Fire out by the Brigade using two jets.	One Charred body was found in the fire spot.
16.01.2019 at 6:25 pm	Uluberia	50 km/ NA	A domestic fire broke out in Ghoshpara, Jagatballavpur, Howrah, which was extinguished by local people before arrival of the brigade.	A charred female body aged 45 years was recovered from the fire ravaged house.
18.09.2017 at 5.10 am	Siliguri	27 km/ 25 min.	Two loaded trucks were collided face- to-face on Ghoshpukur Fullbari by-pass canal Road under Phansidewa block and one of them caught fire. The brigade extinguished the fire by using two jets.	The driver of the ablaze truck could not be rescued alive by the Brigade
12.02.2017 at 5:08 pm	Matigara	38 km/ NA	A few passengers loaded bus suddenly caught fire at Muraliganj under Phansedewa while proceeding towards Purulia from Siliguri. The brigade used one jet to fire out.	One charred body was found therein.
25.4.2016 at 12:35 pm	English Bazar	50 km/ NA	A major fire broke out at Bangitala, Kaliachak, Malda. Fire was extinguished by the brigade using 11 number of jets over a period of more than three days.	Approximately 200 number of village huts were involved in fire.
07.12.2016 at 8:55 am	English Bazar	30 km/ NA	A domestic fire broke out at Gopalpur, Dakshin Hukumattola, Sahabadtola, Manickchak, Malda. Fire out by local people before arrival of the brigade.	One charred body of a child was recovered from the house.
17.03.2017 at 10:50 pm	Chanchal	30 km/ NA	A fire broke out in 47 rooms at village Gobindapur, Post Office- Fatepur under Police Station-Ratua, Malda. Fire was extinguished by the brigade after using one jet.	35 domestic animals were burnt in the fire incidents besides loss of approximately 20 quintals jute stack.
11.11.18 at 10:15 am	Berhampore	25 km/ NA	Another residential fire broke out at Village & Post Office- Satui under	A girl aged about 17 years received burn

Date and time of fire	Responding fire station	Distance of fire incidence/ response time	Brief description of the incidence	Impact of the incidence
			Berhampore Police Station, Murshidabad. A kitchen on the first floor of a two storied building was involved in fire by LPG cylinder. Fire out before arrival of the Brigade.	injuries. The girl was rescued in an unconscious state and removed to Berhampore Police Station before arrival of the Brigade.
08.03.2018 at 9:40 am	Berhampore	62 km/ NA	Another LPG cylinder blasted which ablazed four dwelling houses at Village & Post Office-Kuchiamore, Police Station-Domkal, Murshidabad. Fire out before arrival of the Brigade.	Four persons were injured by fire and referred to Domkal Sadar Hospital. Besides, a lot of household articles, viz., one hand tractor, cultivator pump, five ceiling fans, four by-cycles were badly damaged by fire.
08.12.2017 at 11:33 am	Dhulian	36 km/ NA	One 14 wheelers Lorry collided face to face with an Ambulance on NH 34 at Village Talaimore, Post Office-Barala, Police Station-Raghunathganj. Fire broke out on collision, which was extinguished by the Brigade.	The Brigade failed to save the life of four (two male and two female) passengers of the affected ambulance.
29.03.2019 at 1:21 am	Dhulian	36 km/ NA	A fire broke out at Raghunathganj Bus Stand. Three public buses were involved therein. Fire out by the Brigade.	One charred body was found inside one of the affected buses.

Source: Records of test-checked divisions, WBF&ES

### Appendix 3.5

(*Refer Paragraph 3.1.6.2(i*), page 90)

# Name of the Markets under Kolkata (North) jurisdiction operating without having FSC

Bilas Rai Katra Market, Hogg (New) Market, Bowbazar Market, Lebutala Bazar, Amiya Babur Bazar Kalyan Samiti, Bagbazar Babosayee Kalyan Samiti, Natun Bazar, Lohia Market, Shyam Deo Gopi Ram Katra Market, Chattu Babu Bazar, Sarkar Bazar, Maniktala Bazar, Rashmoni Bazar, Ultadanga Municipal Market, Tiretta Bazar, Baithakkhana Bazar, College Street Municipal Market and Sir Charles Allen Market.

Source: Records of Directorate, WBF&ES

### Appendix 3.6

(*Refer Paragraph .3.1.6.2(i), page 90*)

# Name of the Markets under Kolkata (South) jurisdiction operating without having Fire & Life Safety measure

Karunamoyee Market, Lalar Math Market, Manton Super Market, New Alipore Market, Park Circus Municipal Market, Baghajatin Market (Units I, II, III & IV), Sir Gurudas Market, Bansdroni Kalitala Market, Akra Fatak Hawkers Market, Bakultala Market, S.N. Roy Road Market, Gobra Market, Sunilnagar Market, Regent Park Market, Sakher Bazar Super Market, Ramlal Bazar Municipal Market, Behala Bazar, Purba Putiyari Market, Santoshpur Municiapal Market, Deshbandhu (Bhowanipur) Market and Bansdroni Market.

Source: Records of Directorate, WBF&ES

Appendix 3.7 (Refer Paragraph 3.1.6.2 (ii), page 90)

List of Establishments functioning without FSC

Sl.	Name & Address	Address	Date Of	Remark/ Action
No.			Inspection	
1	Sealdah Bigbazar	1, Beliaghat Road, Kolkata-700014	28-01-2019	No FSC
2	Presidency University	86/1, College Street, Kolkata-700073	13-02-2019	Notice U/S 35 Issued
3	Directorate Of State Archives	6, Bhabani Dutta Lane, Kolkata-700073	13-02-2019	No FSC
4	Mahajati Sadan	166, C R Avenue, Kolkata-700007	20-02-2019	No FSC
5	Bidhan Chandra Granthagar	4, Mitra Lane, Kolkata-700007	27-02-2019	No FSC
6	Bethun Collegiate School	181, Bidhan Sarani, Kolkata-700006	06-03-2019	Notice U/S 35 Issued
7	Bethun College	181, Bidhan Sarani, Kolkata-700006	06-03-2019	Notice U/S 35 Issued
8	Minarva Natya Sanskrity Charch Kendra	6, Utpal Dutta Sarani, Kolkata - 700006	13-03-2019	No FSC
9	Girish Mancha	76/1, Bagbazar Street, Kolkata - 700003	13-03-2019	No FSC
10	Vishudanand Saraswati Vidhyala	160/A, C R Avenue, Kolkata -700007	20-03-2019	Notice U/S 35 Issued
11	Shree Saari Kunj	19, Balmukul Road, Kolkata -700007	20-03-2019	Notice U/S 35 Issued
12	Taki House Govt. Sponsored School For Boys	299B, A P C Road, Kolkata -700009	27-03-2019	Notice U/S 35 Issued
13	Wealfare Association Of A K Point	68, A P C Road, Kolkata -700009	27-03-2019	Notice U/S 35 Issued
14	New Hotel Royal	47, M G Road, Kolkata -700009	03-04-2019	Notice U/S 35 Issued
15	Impirial Lodge	28, M G Road, Kolkata -700009	03-04-2019	Notice U/S 35 Issued
16	Anglo Arabic Secondary School	44/3 & 46/7, M G Road, Kolkata -700009	10-04-2019	Notice U/S 35 Issued
17	Nataraj Residency (Hotel)	128, Raja Ram Mohan Sarani, Kolkata -700009	10-04-2019	Notice U/S 35 Issued
18	Hotelier And Associate	37, M G Road, Kolkata -700009	17-04-2019	Notice U/S 35 Issued
19	Tiru Shivam	56/02, A P C Road, Kolkata -700009	17-04-2019	Notice U/S 35 Issued
20	Shyam Market	174, C R Avenue, Kolkata -700007	24-04-2019	Notice U/S 35 Issued
21	International Lodge	42, M G Road, Kolkata -700009	24-04-2019	Notice U/S 35 Issued
22	Hotel Alka Puri	101, M G Road, Kolkata -700007	22-05-2019	Notice U/S 35 Issued
23	Miranda House	169, C R Avenue, Kolkata -700007	22-05-2019	Notice U/S 35 Issued
24	Hotel Hamza International	4/1A, Sambhu Chatterjee Street, Kolkata -700007	15-05-2019	Notice U/S 35 Issued
25	Aafreen International	12, Tara Chand Dutta Street, Kolkata - 700073	15-05-2019	Notice U/S 35 Issued
26	Madhab Bhaban	116/1/1, M G Road, Kolkata -700007	08-05-2019	Notice U/S 35 Issued
27	Hotel White House	143, M G Road, Kolkata -700007	08-05-2019	Notice U/S 35 Issued
28	Metro Tower	170, C R Avenue, Kolkata -700009	02-05-2019	Notice U/S 35 Issued
29	Tenants Welfare Association	23 and 25/A, Jakaria Street, Kolkata -700073	02-05-2019	Notice U/S 35 Issued
30	Abhinandan Guest House	20, A P C Road, Kolkata -700009	29-05-2019	Notice U/S 35 Issued
31	Vidhya Sagar Tower	15, Shyama Charan Dey Street, Kolkata -700073	29-05-2019	Notice U/S 35 Issued

Sl. No.	Name & Address	Address	Date Of Inspection	Remark/ Action
32	Naiori Restaurant	27, M G Road, Kolkata -700009	04-06-2019	Notice U/S 35 Issued
33	Palace Hotel	31/2, M G Road, Kolkata -700009	04-06-2019	Notice U/S 35 Issued
34	Rites Limited (A Govt. of India Enterprise)	56, C R Avenue, Kolkata -700012	12-06-2019	Notice U/S 35 Issued
35	A G C Bose College	35, Scott Lane, Kolkata -700009	12-06-2019	Notice U/S 35 Issued
36	Goldeen Palace	113, M G Road, Kolkata -700007	19-06-2019	Notice U/S 35 Issued
37	Hotel Cozy	19A, M G Road, Kolkata -700009	19-06-2019	Notice U/S 35 Issued
38	Ashoka Hotel	133, A G C Bose Road, Kolkata -700014	26-06-2019	Notice U/S 35 Issued
39	Flyover Lodge	9/1B, M G Road, Kolkata -700009	26-06-2019	Notice U/S 35 Issued
40	Recovery Nursing Home	15/1, Jatindra Mohan Avenue, Kolkata -700006	03-07-2019	Notice U/S 35 Issued
41	New Central Bar	90, C R Avenue, Kolkata -700012	03-07-2019	Notice U/S 35 Issued
42	Narayani Building	27, Barbourne Road, Kolkata -700001	10-07-2019	Notice U/S 35 Issued
43	Roxy Tower	187, C R Avenue, Kolkata -700007	10-07-2019	Notice U/S 35 Issued
44	Bijaya Bank (Bank of Baroada)	25/1A, Debendra Mallick Street, Kolkata -700073	17-07-2019	Notice U/S 35 Issued
45	Prince Guest House	149/2, B B Ganguly Street, Kolkata -700012	17-07-2019	Notice U/S 35 Issued
46	Megacity Guest House	19, Baithak Khana Road, Kolkata -700009	24-07-2019	Notice U/S 35 Issued
47	Darpan Guest House	18A, Baithak Khana Road, Kolkata -700009	24-07-2019	Notice U/S 35 Issued
48	Shree Sky Crappers Pvt. Ltd.	161, C R Avenue, Kolkata -700007	31-07-2019	Notice U/S 35 Issued
49	Maharshi Debendra Bhawan	159A, Vivekananda Road, Kolkata -700006	31-07-2019	Notice U/S 35 Issued

Source: Records of Directorate, WBF&ES

Appendix 3.8 (Refer Paragraph 3.1.6.2, page no. 91)

Statement showing analysis of fire incidents in commercial/ mercantile/ office premises vis- $\hat{a}$ -vis the respective status of FSC

G.		premises vis-a-vis the re		ī .	:
Sl. No.	Date and Time of fire	Place of Fire	Classification of Place and Fire	Responding Fire Station	FSC No. & Date
1	10.04.19 (9:17 pm)	5A, Oil Installation Road, Kolkata-700088	Industrial/ Small Fire	Alipore FS	No FSC obtained till date
2	24.04.19 (6:20 am)	55A, Mirza Galib Street, Kolkata-700016	Industrial (G+7 storied) -Medium fire	Head Quarters	No FSC obtained till date
3	31.03.19 (7:06 am)	40, Shakespeare Sarani, Kolkata-700017	Bar & Restaurant (B+G+7 storied)/ Small	Head Quarters	No FSC obtained till date
4	16.06.19 (6:30 am)	15, Loudan Street, Kolkata-700017	Industrial (G+5 storied) / Medium	Head Quarters	No FSC obtained till date
5	21.01.19 (1:05 am)	161 A&B, RB Avenue	Mixed occupant/ Medium	Gariahat FS	No FSC obtained till date
6	11.01.18 (12:15 pm)	21, Pramatha Chowdhury Sarani, Kolkata- 700053	Residential (G+21 storied)/ Medium fire	Head Quarters	FSC expired
7	05.11.18 (11:10 am)	Kotak Securities, Park Street.	Office (B+G+M+8 storied)	Head Quarters	FSC expired
8	23.05.18 (12:13 pm)	37B, AJC Bose Road, Kolkata-700017	Industrial (G+3 storied)/ Serious Fire	Head Quarters	No FSC obtained till date
9	20.07.17 (12:50 pm)	12, Pretoria Street, Kolkata-700071	Commercial/ Serious	Head Quarter	No FSC obtained till date
10	04.08.17 (10:52 pm)	Akash Tower (Emami), 781, EM Bypass, Kolkata-700108	Commercial (B+G+6 storied)/ Medium	Pragati Maidan FS	FSC expired
11	11.10.17 (9:53 am)	1/1 Transport Road, Kolkata-700088	Industrial (G+1 storied)/ Medium	Alifnagar FS	No FSC obtained till date
12	21.03.16 (5:55 pm)	Ballygunge Science College, Kolkata-700019	Educational/ Serious	Gariahat FS	No FSC obtained till date
13	04.12.16 (9:15 am)	South City Mall, Prince Anwar Shah Road, Kolkata-700068	Mercantile (Shopping Mall)/ Serious Fire	Gariahat FS	FSC expired
14	26.07.15 (6:36 pm)	AG Tower (7 <sup>th</sup> Floor), 125/1 Park Street	Commercial/ Medium	Head Quarters	No FSC obtained till date
15	15.11.15 (7:48 pm)	15/2 J.L. Neheru Road, Kolkata-700013	Commercial/ Medium	Head Quarters	No FSC obtained till date
16	11.03.15 (2:50 pm)	Hotel Hindustan International, 235/1 AJC Bose Road, Kolkata- 700020	Commercial (G+8 storied)/ Serious	Head Quarters	FSC expired
17	24.10.14 (6:18 am)	B/23/H/3 R.N. Choudhury Road, Kolkata-700015		Head Quarters	No FSC obtained till date
18	01.08.18 (6:43 am)	Bohra Imports Pvt. Ltd., Sankrial	Industrial	Alampur FS	No FSC obtained till date
19	21.08.18 (4:25 pm)	Vijai Shree Pvt. Ltd., Shibpur	Industrial	Shibpur FS	No FSC obtained till date
20	25.12.18 (1:00 am)	Ludlow Jute & Specialities Ltd., Uluberia	Industrial	Alampur FS	No FSC obtained till date

Sl. No.	Date and Time of fire	Place of Fire	Classification of Place and Fire	Responding Fire Station	FSC No. & Date
21	05.09.18 (10:00 am)	Orient Beverages Ltd., Salop More	Industrial	Alampur FS	No FSC obtained till date
22	24.10.18 (10:30 pm)	Kunj Berasi Agencies Pvt. Ltd., Domjur	Industrial	Alampur FS	No FSC obtained till date
23	02.09.18 (9:50 am)	Jai Trading company, Salkia	Industrial	Howrah FS	No FSC obtained till date
24	12.03.19 (3:25 am)	Bagaria Foam Industries, Hanuman complex, Howrah	Industrial	Howrah FS	No FSC obtained till date
25	16.02.19 (7:00 pm)	Allied Wires Pvt. Ltd., Domjur	Industrial	Howrah FS	No FSC obtained till date
26	25.11.18 (1:58 pm)	Chowdhury Bitumen & Allied Products Pvt. Ltd., Domjur	Industrial	Alampur FS	No FSC obtained till date
27	10.12.18 (3:45 pm)	Opposite of Railway Museum, Howrah	Commercial	Howrah FS	No FSC obtained till date
28	24.11.17 (6:45 am)	Bagdogra Tea Estate, Bagdogra	Small Industrial	Siliguri FS	No FSC obtained till date
29	11.02.18 (4:20 am)	M/s Millenium Exim Pvt. Ltd., New Chamta. Matigara	Small Industrial	Matigara FS	FSC expired
30	22.03.17 (4:27 pm)	Dooars Timber Depot	Medium	Siliguri FS	FSC expired
31	18.01.19 (1:34 am)	M/s Lavanya Traders, Fulbari	Small	Siliguri FS	No FSC obtained till date
32	29.12.18 (2:58 pm)	HSB Agro Industries, Rajganj	Medium	Siliguri FS	No FSC obtained till date
33	02.12.18 (6:27 am)	Tulapatty, Bidhan Market	Medium	Siliguri FS	No FSC obtained till date
34	29.01.19 (5:55 pm)	Near Phansidewa More, Matigara	Small	Matigara FS	No FSC obtained till date
35	10.02.19 (5:53 am)	Muraliganj Checkpost, NH 31	Small	Matigara FS	No FSC obtained till date
36	19.05.19 (5:40 pm)	Agrasen Road, Khalpara1	Serious	Siliguri FS	No FSC obtained till date
37	11.06.19 (3:00 am)	Bidhan Market	Small	Siliguri FS	No FSC obtained till date
38	06.08.19 (1:50 pm)	Dey Bhawan, Opposite Bidhan Market	Medium	Siliguri FS	No FSC obtained till date
39	10.08.19 (5:20 am)	Munni Bagan, Bagdogra	Small	Siliguri FS	No FSC obtained till date
40	23.08.19 (3:38 am)	Rich Offset Pvt. Ltd., Fulbari	Small	Siliguri FS	No FSC obtained till date
41	29.10.19 (6:42 am)	Ganesh Bhandar, Haiderpara	Small	Siliguri FS	FSC expired
42	01.01.2018 (6:50 am)	Ganesh Grain Ltd., Lichupukri	Medium	Siliguri FS	FSC expired
43	04.01.17 (7:00 am)	Saha Wood Industries	Small	Siliguri FS	No FSC obtained till date
44	27.07.16 (2:40 am)	PCM Tea Processing Pvt. Ltd.	Small	Siliguri FS	No FSC obtained till date
45	18.09.17 (5.:10 am)	Ghoshpukur, Fulbari	Serious	Siliguri FS	No FSC obtained till date
46	24.06.16 (6:10 am)	Sanjay Biscuit and Confectionery Pvt. Ltd.	Small	Siliguri FS	No FSC obtained till date

Sl. No.	Date and Time of fire	Place of Fire	Classification of Place and Fire	Responding Fire Station	FSC No. & Date
47	31.01.15 (1:32 pm)	M/s Weldon Motors, Siliguri	Medium	Siliguri FS	No FSC obtained till date
48	24.10.14 (8:34 am)	Amit Trading Co., Burdwan Road	Medium	Siliguri FS	No FSC obtained till date
49	29.10.14 (7:15 pm)	Sugana Food Ltd, Matigara	Small	Matigara FS	No FSC obtained till date
50	10.10.14 (6:45 am)	Intex Technologies	Medium	Siliguri FS	No FSC obtained till date
51	18.08.14 (9:50 pm)	Tea Factory Ambootia	Serious	Kurseong FS	No FSC obtained till date
52	07.06.14 (05:30 pm)	Visbruta Printing, Siliguri	Medium	Siliguri FS	No FSC obtained till date
53	31.12.14 (01:05 am)	Hotel Yatri-cum-Bar	Serious	Siliguri FS	FSC expired

Source: Records of the Directorate, WBF&ES

Appendix 3.9

(Refer paragraph 3.2, page 97)

Statement showing details of excess payment made by WBMSCL by allowing payments in excess of carpet area

Name of the SSH		Ghatal SSH August 2018-August 2020	Jalpaiguri SSH August 2018-	Bishnupur SSH August 2018-August 2020	Raghunathpur March 2018- SSH August 2020	Rampurhat January 2019 to SSH August 2020	Diamond March 2018 to Harbour SSH August 2020	Domkal SSH August 2010	Mal SSH August 2020	Grand Total
Built-up Area		80,000	1,60,000	80,000	80,000	80,000	80,000	80,000	80,000	7,20,000
Carpet Area		66,772	1,38,170	65,916	66,677	66,677	66,585	67,177	66,423	7,20,000 6,04,397
Area paid for per month	(in sq ft	76,748	1,60,000	80,000	78,000	71,137	71,142 to 71,154	72,211	80,000	6,89,238
Excess area paid for per month	ft)	976,6	21,830	14,084	11,323	4,460	4,557 to 4,569	5,034	13,577	84,841 to 84,853
Total excess area paid for totaling all months		2,99,280	6,54,900	4,22,520	3,39,690	89,200	1,36,788	85,578	4,07,310	24,35,266
Rate per sq ft		16.36 to 22.10	16.81 to 18.89	16.36 to 22.10	16.36 to 22.10	17.99 to 18.89	18.41 to 20.10	18.41 to 18.89	16.81 to 18.89	
Excess	(in ₹)	50,62,022	1,11,00,118	71,46,503	57,45,517	16,47,256	25,81,407	15,87,573	69,03,633	4,17,74,029
Excess payment (including GST)		59,73,186	1,30,98,140	84,32,874	67,79,710	19,43,763	30,46,060	18,73,336	81,46,287	4,92,93,356

Source: Records of WBMSCL

### LIST OF ABBREVIATIONS USED IN THE REPORT

Abbreviations	Full Form
AA&FS	Administrative Approval & Financial Sanction
AAP	Annual Audit Plan
AICTE	All India Council for Technical Education
AIR	All India Radio
AISHE	All India Survey on Higher Education
AIU	The Association of Indian Universities
am	Ante Meridiem
AQAR	Annual Quality Assurance Report
AY	Assessment Year
BA	Bachelor of Arts
BC	Bituminous Concrete
B Com	Bachelor of Commerce
BDO	Block Development Officer
BoS	Board of Studies
BS	Bharat Stage
BSc/ B.Sc	Bachelor of Science
BU	Burdwan University
BWC	Bituminous Wearing Course
CAD	Computer Aided Dispatch
CAG/	Comptroller and Auditor General
C&AG	
CAT	Common Admission Test
CBCS	Choice Based Credit System
CBR	California Bearing Ratio
CDC	College Development Council
CEDC	Community Education Development Cell
COFAM	Centre of Floriculture and Agri-Business Management
CII	Confederation of Indian Industry
CUGS	Council for Under Graduate Studies
cu mt	Cubic Metre
DCR	Duplicate Carbon Receipt
DDO	Drawing & Disbursing Officer
DG	Director General
DLSA	District Legal Service Authority
DPC	Duties, Powers and Conditions of Service
DPI	Director of Public Instruction
DPR	Detailed Project Report

Abbreviations	Full Form
Dr.	Doctor
DST	Department of Science and Technology
DTW	Deep Tube Well Irrigation
EC	Executive Council
EPF	Employees' Provident Fund
EPF & MP	Employees' Provident Funds and Miscellaneous Provisions
EPFO	Employees' Provident Fund Organisation
ERC	Elevated Road Corridor
EVMs	Electronic Voting Machines
FES	Fire and Emergency Services Department
FEOD	Fire Engine Operator- <i>cum</i> -Driver
FIFA	Federation Internationale de Football Association
FSs	Fire Stations
FSC	Fire Safety Certificate
FSRs	Fire Safety Recommendations
ft./ ft	Feet (s)
FYP	Five Year Plan
GATE	Graduate Aptitude Test in Engineering
GER	Gross Enrolment Ratio
GIS	Geographic Information System
GMAT	Graduate Management Admission Test
GO	Government Organisation
GoI	Government of India
GoWB	Government of West Bengal
GPS	Global Positioning System
GRE	Graduate Record Examinations
H&FW	Health and Family Welfare
HED	Department of Higher Education/ Higher Education Department
HEI	Higher Education Institution
HOD	Head of Department
HR	Human Resources
ICT	Information and Communications Technology
IFM	Integrated Facility Management
IFS	Institute for Fire Services
ILO	International Labour Organisation
INFLIBNET	Information and Library Network
IQAC	Internal Quality Assurance Committee

Abbreviations	Full Form
IR	Inspection Report
IRC	Indian Road Congress
IT	Income Tax
ITRs	Income Tax Returns
KIT	Kolkata Improvement Trust
km/ Km.	Kilometre (s)
KMDA	Kolkata Metropolitan Development Authority
LMS	Learning Management Systems
lt	Litre (s)
Ltd.	Limited
m/ mt.	Metre (s)
MA	Mastic Asphalt
MBA	Master of Business Administration
MCIT	Ministry of Communication and Information Technology
MHA	Ministry of Home Affairs
MHFW	Ministry of Health and Family Welfare
MHRD	Ministry of Human Resources Development
min.	Minute (s)
mld	Million Litres per Day
MLE	Ministry of Labour and Employment
MMCH	Murshidabad Medical College and Hospital
MORTH	Ministry of Road Transport and Highways
MoU	Memorandum of Understanding
M Phil	Master of Philosophy
M/s	Messrs
MSME	Micro, Small & Medium Enterprises
M. Tech	Master of Technology
MWT	Mini Water Tenders
NA	Not Available
NAAC	National Assessment and Accreditation Council
NBU	North Bengal University
NBUAA	North Bengal University Alumni Association
NCC	National Cadet Corps
NDMA	National Disaster Management Authority
NDMG	National Disaster Management Guidelines
NET	National Eligibility Test
NGO	Non-Governmental Organisation
NGRBA	National Ganga River Basin Authority

Abbreviations	Full Form
NHM	National Health Mission
NIRF	National Institutional Ranking Framework
NPCC	National Projects Construction Corporation Limited
NSS	National Service Scheme
OBC	Other Backward Classes
OPAC	Online Public Access Catalogue
PAC	Public Accounts Committee
PAG	Principal Accountant General
P&RD	Panchayats and Rural Development
PG	Post Graduate
PhD/ Ph.D	Doctor of Philosophy
PIUs	Programme Implementation Units
pm	Post Meridiem
PMGSY	Pradhan Mantri Gram Sadak Yojana
PPT	Power Point Presentation
PSC	Public Service Commission
Pvt.	Private
PWD	Public Works Department
RA	Running Account
R&D	Research and Development
RFID	Radio Frequency Identification Device
RLI	River Lift Irrigation
RUSA	Rashtriya Uchchatar Shiksha Abhiyan
SC	Scheduled Caste
SDO	Sub Divisional Officer
SE	Superintending Engineer
SFAC	Standing Fire Advisory Council
SHEC	State Higher Education Council
SLET	State Level Eligibility Test
SLQAC	State Level Quality Assurance Cell
SLSA	State Legal Services Authority
SOR	Schedule of Rates
sq ft	Square Feet
sq km	Square Kilometers
SQM	State Quality Monitor
sq mt	Square Metres
SSC	Staff Selection Commission
ST	Scheduled Tribes

Abbreviations	Full Form
STP	Sewage Treatment Plant
STR	Student Teacher Ratio
SSH	Multi/ Super Speciality Hospital
TOEFL	Test of English as a Foreign Language
UAN	Universal Account Number
UD&MA	Urban Development & Municipal Affairs
UG	Under Graduate
UGC	University Grants Commission
UNDP	United Nations Development Programme
Univ.	University
UPSC	Union Public Service Commission
UTs	Union Territories
VC	Vice Chancellor
VT	Vehicle Tracking
VTS	Vehicle Tracking System
WB	West Bengal
WBFES	West Bengal Fire and Emergency Services
WBFS	West Bengal Fire Services
WBFSA	West Bengal Fire Service Act
WBLSAR	West Bengal Legal Services Authority Regulations 1998
WBM	Water Bound Macadam
WBSSC	West Bengal Staff Selection Commission
WBSWC	West Bengal State Warehousing Corporation
WBFR	West Bengal Financial Rules
WBTR	West Bengal Treasury Rules
WBMSCL	West Bengal Medical Services Corporation Limited
WBSRDA	West Bengal State Rural Development Agency
WMM	Wet Mix Macadam
WPCW	Wireless Planning and Co-ordination Wing

(C)

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