CHAPTER-II ECONOMIC SECTOR

2.1 Introduction

The findings based on audit of the State Government departments/ offices under Economic Sector feature in this chapter.

During 2022-23, against a total budget provision of ₹43,986.34 crore, 18 departments incurred an expenditure of ₹38,706.66 crore. *Table 2.1.1* gives Department-wise details of budget provision and expenditure incurred there against by 18 departments under Economic Sector.

Table-2.1.1:Department-wise budget provision and expenditure during 2022-23

(₹ in crore)

Sl.			Budget provision		Expenditure		
No.	Department	Grant No. and Name	Revenue	Capital	Revenue	Capital	
1100		48 – Agriculture	2,141.65	116.90	1,599.54	17.47	
1.	Agriculture	67 – Horticulture	287.85	1.14	74.26	0	
		Public Debt and Servicing of Debt	9,543.40	2,722.92	8,874.97	7,330.86	
		Appropriation to Contingency Fund	0	1,800.00	0,071.57	1,800.00	
		10 – Other Fiscal Services	3.63	0	2.05	0	
		Public Service Commission	26.58	0	16.97	0	
		5 – Sales Tax & other taxes	665.21	34.29	408.37	14.24	
	7.	13 – Treasury & Accounts Administration	116.70	14.14	93.81	3.35	
2.	Finance	66 – Compensation and Assignment to LBs and PRIs	726.27	0	516.23	0	
		7 – Stamps and Registration	106.66	0	75.64	0	
		8 – Excise and prohibition	88.99	1.52	64.82	0.21	
		68 - Loans to Government Servants etc.	0	0.0001	0	0	
3.	Fishery	54 – Fisheries	113.54	30.42	99.68	9.96	
4.	Water Resources	63 – Water Resources	395.07	1,444.39	317.31	804.75	
5.	Forest and Environment	55 – Environment and Forest	971.19	17.01	717.38	8.12	
6.	Handloom, Textiles and Sericulture	59 – Village and Small Industries, Sericulture and Weaving	397.52	24.95	233.77	1.48	
7.	Industries and	58 – Industries & Commerce	539.49	486.20	425.55	421.54	
/.	Commerce	60 – Cottage Industries	72.25	0.10	48.11	0.09	
8.	Irrigation	49 – Irrigation	986.31	265.46	837.06	166.60	
9.	Mines and Minerals	61 – Mines and Minerals	21.46	4.07	12.52	1.20	
10.	Power	62 – Power (Electricity)	1,206.28	1,228.30	1,154.91	836.90	
11.	Public Works (R)	64 – Roads and Bridges	1,463.82	11,044.74	771.67	8,201.14	
12.	Science and Technology	69 – Science, Technology and Climate Change	21.59	108.43	19.68	89.34	
13.	Soil Conservation	51 – Soil and Water Conservation	151.89	45.08	100.23	38.60	
14.	Transport	9 – Transport Services	459.04	359.04	327.66	313.66	
15.	Tourism	65- Tourism	54.35	78.04	42.98	47.55	
16.	Animal	52 – Animal Husbandry & Veterinary	455.37	58.96	288.12	19.60	
	Husbandry and Veterinary	53 – Dairy Development	73.78	8.59	37.27	2.90	
17.	Information Technology	75 – Information and Technology	183.29	0.0001	144.82	0	

Sl.	Department	artment Grant No. and Name Budget provision		Expenditure		
No.	Department	Grant No. and Name	Revenue	Capital	Revenue	Capital
1.0	Public Works Building	17 – Administrative and Functional Buildings	400.48	2,360.05	192.66	1,044.41
18.	and National Highway	21 – Guest Houses, Government Hostels	55.76	0	33.30	0
		33 – Residential buildings	1.66	0.52	1.35	0
	Total		21,731.08	22,255.26	17,532.69	21,173.97
	Grand Total (includes charged):		43,98	86.34	38,70	6.66

Source: Appropriation Account 2022-23.

2.1.1 Planning and conduct of Audit

During 2022-23, out of 360 auditable entities under Economic Sector (excluding State Public Sector Enterprises, we audited 50 entities¹²² based on risk analysis involving an expenditure of ₹25,816.46 crore (including expenditure of earlier years). This Chapter contains two Performance Audits (PAs) on 'Functioning of Assam Agricultural University' and 'e-Procurement in Assam' and one Compliance Audit Paragraph.

Performance Audit

Agriculture Department

2.2 Performance Audit on "Functioning of Assam Agricultural University"

The Assam Agricultural University (AAU) was established by Government of Assam (GoA) at Jorhat on 01 April 1969 under the Assam Agriculture University Act, 1968. Audit observed that the governance framework of the University was weakened by non-updation of Statutes and non-formulation of Regulations. There was excess enrolment against intake capacity in respect of Under Graduate (UG) Bachelor courses and the university increased seats in Veterinary College without the approval of Veterinary Council of India (VCI). The University also did not comply with Indian Council for Agriculture Research (ICAR) recommendations on establishment of two new colleges, initiation of a new UG degree programme and in conduct/ evaluation of UG examinations (except veterinary). The placement cell did not achieve its objective fully. Sampled research projects remained incomplete as of March 2022. Significant irregularities included: award of work outside e-procurement portal, lack of transparency in bidding process, irregular release of interest free mobilisation advance to contractor, etc. Internal control mechanism at various levels was inadequate.

Highlights:

As of March 2022, out of 35 provisions of AAU Act, 1968, only 16 provisions have been incorporated, seven partially incorporated and 12 provisions were yet to be incorporated in the statute. Required regulations and rules governing the activities of Board of Management (BoM) and Academic Council were yet to be published in official gazette.

(Paragraph 2.2.6.1)

Out of 52 auditable units planned, 50 auditable units were covered during 2022-23.

There was excess enrolment against intake capacity in respect of UG Bachelor courses in two sampled colleges during five years. For Post Graduate (PG) course, shortfall in enrolment was noticed in two colleges whereas for Ph.D. degree courses, shortfall was there in all the three colleges during the same period. Average Teacher student ratio was found to be favourable at 1:7 across all disciplines in three sampled colleges.

(Paragraphs 2.2.7.1 and 2.2.7.2)

Mandatory information such as number of seats approved by VCI, status of available physical assets and amenities, accreditation/recognition, etc. were not published in Information Bulletin as per requirement to give advance information to aspiring students. Placement Cell did not have any plan for helping the students to get employment.

(Paragraphs 2.2.7.5 and 2.2.7.7)

There was huge vacancy across all categories of employees ranging between 41 per cent in teaching faculty and 69 per cent in non-teaching staff.

(Paragraphs 2.2.8)

In College of Veterinary Science, in 110 out of 610 categories, there were significant shortfall (91 per cent) of equipment against the requirement. Two colleges, namely, College of Horticulture and College of Sericulture (situated within the premises of College of Agriculture, Jorhat) had been operating since 2014 without having their own infrastructure.

{Paragraphs 2.2.9.1 (ii) and (iii)}

Out of 27 sampled completed projects, three projects (total sanctioned cost ₹1.94 crore) remained incomplete as of March 2022. Out of 676 research papers, 283 papers (42 per cent) were with score below five or were in the 'not rated' category. Thus, as many as 42 per cent of research papers published failed to meet the minimum benchmark of ICAR for accreditation. Out of 61 technologies developed by AAU, application for patent against 20 technologies were submitted to Patents Office Kolkata and Guwahati, of which, patent against three technologies were granted and two technologies were rejected.

{Paragraphs 2.2.10.1(i), 2.2.10.2 and 2.2.10.4(ii)}

The utilisation of funds ranged between 85 and 97 per cent during 2017-22. There was retention of 45 per cent of Admission fees (₹16.30 crore out of ₹36.63 crore) which was utilised by five sampled units without depositing the same into General Fund of AAU in violation of the AAU Act.

(Paragraph 2.2.12.1 and 2.2.12.2)

Significant irregularities were noticed in award of work outside e-procurement portal, lack of transparency in bidding process, irregular release of interest free mobilisation

advance to contractor, Wasteful expenditure, Irregular execution of works, etc. and Internal control mechanism at various levels was inadequate.

(Paragraph 2.2.12.6 and 2.2.13)

2.2.1 Introduction

The Assam Agricultural University (AAU) was established by Government of Assam (GoA) at Jorhat on 01 April 1969 under the Assam Agriculture University Act, 1968. The major objectives/ mandate of the University were to impart education in the field of agriculture 123 and allied sciences, undertake research projects for development of agriculture and other allied sectors, and to develop and promote modern technology amongst the agriculture-based population of the State through extension programmes 124 and need based training. The



Assam Agricultural University, Jorhat

University offers courses in six areas of science *viz.*, Agriculture, Veterinary, Community, Fishery, Horticulture and Sericulture. While Bachelor Degree is offered in all the above six areas, Postgraduate (Masters and Ph.D.) degree is offered in the field of Agriculture, Veterinary, Community and Fishery.

2.2.2 Organisational set up

According to AAU Act, the Board of Management (BoM) and Academic Council (AC) are the authorities for managing the affairs of the University with the Vice Chancellor being *ex-officio* chairman of BoM as well as AC. Being the highest governing body of the University, BoM frames and approves policies relating to academic, research, extension, financial and administrative activities while AC looks after the academic affairs of the University and is responsible for maintenance of standards of education, examinations and other matters connected with the conferment of degrees or award of diplomas, certificates, *etc*.

The Governor of the State is the Chancellor of the University. The VC is overall in-charge of AAU. The Registrar and Comptroller are whole time office bearers of the University. The Registrar is the custodian of the University records and manages the administration with due approval of the VC while the Comptroller is responsible for Finance and Accounts. The organisational chart of University is given in *Chart 2.2.1*.

¹²³ Agriculture census data of 2015-16 showed that total land under cultivation was 37.95 *per cent* (29.77 lakh hectare) of total geographical area (78.44 lakh hectare) of the State.

¹²⁴ Training programme, testing and demonstration of new technology to the farmers and other groups related to Agriculture and Veterinary Science.

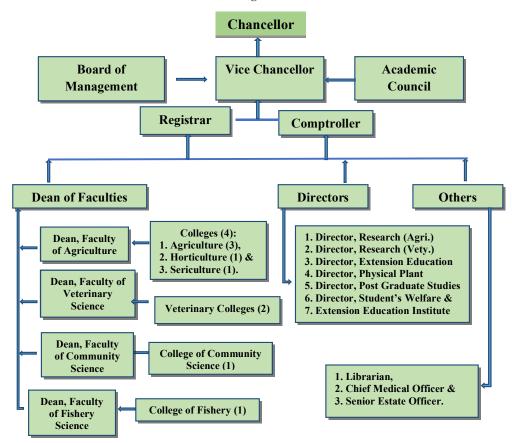


Chart-2.2.1: Organisational Chart

Source: Information/records of AAU.

2.2.3 Audit Objectives

The objectives of the Performance Audit of AAU were to assess:

- extent to which the AAU achieved its organisational goals and stipulated objectives in the field of agricultural education, training, research and dissemination of such learning and research through extension education activities with reference to the existing Act and Regulations;
- b) adequacy of financial resource management and its effective and economic utilisation; and
- c) adequacy of internal control mechanisms.

2.2.4 Audit Criteria

Audit criteria for the Performance Audit were derived from:

- Assam Agriculture University Act, 1968;
- University Grants Commission (UGC) Regulations, ICAR Guidelines and VCI regulations;
- Projects/Schemes guidelines issued by various funding agencies; and

Assam Financial Rules, General Financial Rules, Assam Procurement Act, 2017, Chief Vigilance Commissioner (CVC) guidelines, established accounting principles and guidelines issued by the Finance Committee, AAU.

2.2.5 Audit Scope, Sample and Methodology

The Performance Audit was conducted from July 2022 to February 2023 covering the period from 2017-18 to 2021-22. The sampling method for the Performance Audit was based on stratified random sampling method as given in *Table-2.2.1*:

Table-2.2.1: Sampled units test checked in audit

Sl. No.	Name of Units	Total No. of Units	No. of Units selected	Percentage of sample selected
1	Academic Institutions	9	3125	33
2	Regional Agricultural Research Stations	6	2126	33
3	Commodity Research Stations	5	2127	40
4	Krishi Vigyan Kendras	23	8128	35
5	Short Term Research Projects completed	65	27	42

Source: Departmental records.

An Entry Conference was held (July 2022) with the representatives from the Agriculture and Finance Departments of Government of Assam and the University, in which audit objectives, audit criteria, audit scope and methodology were discussed.

Audit examined records maintained at AAU Headquarters¹²⁹ and at the sampled units of the University (*Appendix 2.1*). Audit findings, conclusions and recommendations were discussed with the representatives from the Agriculture Department, Finance Department of Government of Assam, and the University in an Exit Conference held on 03 October 2023. Replies and views of the Department and AAU have been suitably incorporated in the PA.

Audit findings

The audit findings against the audit objectives include Governance, Academic activities, Research Extension education, Financial resource management and Internal control as given in the succeeding paragraphs.

2.2.6 Governance Framework

2.2.6.1 Non-Compliance to the provisions of AAU Act, 1968

The Assam Agricultural University, Jorhat is governed by the AAU Act, 1968. The University also follows, in its functioning, the directives of UGC, VCI, ICAR and applicable Government orders of both Government of India (GoI) and Government of Assam (GoA) issued from time to time. The University is required to frame statues and regulations under the Act to exercise powers and discharge its various functions mandated by the Act.

¹²⁵ College of Agriculture, College of Community Science and College of Veterinary.

¹²⁶ RARS Shillongani and RARS Titabor.

¹²⁷ SRS Buralikson and HRS Kahikuchi.

¹²⁸ KVK Baksa, Dibrugarh, Golaghat, Jorhat, Kamrup, Nagaon, Sibsagar and Sonitpur.

Offices under the establishment of Vice Chancellor – (i) Administration (o/o Registrar), (ii) Accounts (O/o Comptroller), (iii) Masters and Ph.D. course (O/o Director of Post Graduate Studies), (iv) Research (Directors of Research-Agriculture and Veterinary), (v) Extension (Director of Extension Education), (vi) Engineering wing (Director of Physical Plant), (vii) Library (at Jorhat and Khanapara).

Audit observed that some of the important provisions of the Act providing authority for governance of the University and discharge of its mandated functions, were not complied with, as highlighted below:

Sl. No.	Provisions of the Act	Audit observations
1.	Section 42 of the AAU Act empowers the University to make statues for functioning of the University and publishing the same in Official Gazette. Section 41 read with 2 (14) of the Act stipulates for incorporation of 35 provisions in the statutes.	The Statutes were prepared and stated to be published during the year 1970 in the official Gazette. Out of the 35 provisions of AAU Act to be incorporated in the Statutes, only 16 provisions were incorporated, seven provisions were partially incorporated and 12 provisions were not incorporated (<i>Appendix 2.2</i>). The Statutes were amended seven times without publishing these amendments in the official Gazette. Similarly, the University stated to have adopted Rules of GoA in regard to accounting, financial, administrative, pay, works manual, leave, TA, medical entitlements, <i>etc.</i> However, these Rules were adopted without incorporating them in the Statutes as required under the provisions of the AAU Act. The impact of partial/ non-incorporation of provisions is discussed under paragraph 2.2.8.1.
2	Section 43 (6) of the AAU Act stipulates that the authorities ¹³⁰ of the University are to make 16 Regulations ¹³¹ consistent with the Act and the Statutes by notifying in the official Gazette.	 Out of 16 Regulations, only three Regulations viz., Regulations on Board of Management and Academic matters for UG and PG Degree Programmes were framed but the same were not published in the Official Gazette. As a result, various shortcomings were noticed in functioning of various bodies of the University, for example, the Academic Council, which was in-charge of the academic affairs of the University in terms of Section 12 (1) of the Act, as enumerated below: A. Quorum and transaction of business for the meeting of AC was not available; B. Operation and functioning of AC was not defined; C. Agenda for meetings of AC included items not related to academics; D. Exclusion of academic related issues¹³² from discussions due to paucity of time; and E. Discussion on mandated duties of AC relating to syllabus of B.Sc. (Hons), Food Nutrition and Dietetics and professional identity of agricultural graduates being done under 'Any Other Items' (AOI) in place of being taken up under main agenda.
3	AAU Act stipulates BoM as high-level management authority, comprising VC as the <i>ex-officio</i> Chairman and 18 Members from various fields ¹³³ .	Participation of distinguished Members of various categories in BoM was not ensured as stipulated in the AAU Act. Members from category of distinguished industrialist or manufacturer were not nominated during January 2017 to October 2021. Further, Members from categories of progressive farmers/ livestock breeders were not nominated since July 2018 and the post of one outstanding woman social worker was lying vacant during July 2018 to October 2021.

Board of Management, Academic Council, Board of Studies of each Faculty including Post Graduate Studies and such other bodies as may be declared by the Statutes to be authorities of the University.

Procedures of meetings of authorities including the quorum for the transaction of business, holding of convocations to confer degrees and diplomas, conferment of honorary degrees, academic distinction and withdrawals of degrees, the establishment and abolition of hostels, institution of fellowship, *etc.*

The issue of increasing the rate of State Merit Scholarship offered by AAU and professional identity of Agricultural graduates were deferred.

¹³³ Members of Legislative Assembly, distinguished industrialist, woman social worker, teachers, progressive farmers, livestock breeders.

Thus, there is a need for compliance to the provisions of the Act to give the governance of the University, the authority to exercise powers and discharge its various functions by framing the required statutes and regulations and to lend legality to its actions and activities.

AAU (September 2023) stated that the proposal for amendment of AAU Act and Statutes had been submitted to the Government and the same would be notified on receipt of approval and necessary steps would be taken to publish the regulations in the Official Gazette. AAU also stated that the minimum requirement of member for formation of quorum of AC would be framed.

2.2.7 Academic Activities

The University offers courses in six areas of science *viz*., Agriculture, Veterinary, Community, Fishery, Horticulture and Sericulture. While Bachelor Degree was offered in seven fields¹³⁴ under the above six areas, Postgraduate (Masters and Ph.D.) degree was offered in the field of Agriculture, Veterinary, Community and Fishery. Education in agriculture and allied fields was imparted through its nine colleges *viz*., three Colleges of Agriculture (Biswanath, Jorhat and Dhubri), two Colleges of Veterinary (Guwahati and Lakhimpur), College of Fisheries at Raha, Nagaon, College of Community Science, College of Horticulture and College of Sericulture at Jorhat.

2.2.7.1 Enrolment of Students

AAU offered UG Bachelor Degree, Masters Degree and Ph.D. during 2017-18 to 2021-22. The overall enrolment of students *vis-à-vis* intake capacity¹³⁵ of AAU during the last five years ending March 2022 was as shown in *Table 2.2.2*:

2017-18 2018-19 2019-20 2020-21 Courses 2021-22 490 Intake capacity 487 515 515 567 **UG Bachelor Degree** 458 529 **Enrolled** 516 561 630 **Intake capacity** 326 353 385 392 364 **PG Masters Degree** Enrolled 307 343 308 372 339 Intake capacity 158 181 155 160 183 Ph.D. Doctoral Degree **Enrolled** 126 123 130 133 93

Table-2.2.2: Intake capacity and the number of students enrolled

Source: Information/records of AAU.

The position of enrolment of students *vis-à-vis* intake capacity in the sampled colleges during the last five years ending March 2022 was as shown in *Table 2.2.3*:

Table-2.2.3: Intake capacity and the number of students enrolled

Courses	UG Bachelor Degree		PG Master Degree		Ph.D. Doctoral Degree				
Session	Session Intake capacity Enrolled		Intake capacity	Enrolled	Intake capacity	Enrolled			
College of	College of Agriculture								
2017-18	150	164	150	188	76	79			
2018-19	150	155	170	200	83	71			
2019-20	150	152	169	176	90	73			

^{134 (}i) B.Sc. (Hons) Agriculture, (ii) B.Sc. (Hons) Community Science, (iii) B.Sc. (Hons) Food Nutrition and Dietetics, (iv) B.Sc. Fishery Science, (v) B.Sc. (Hons) Horticulture, (vi) B.Sc. (Hons) Sericulture and (vii) B.Sc. Veterinary and Animal Husbandry.

¹³⁵ As per Information Bulletin of each academic year.

Courses	UG Bachelor D	egree	PG Master D)egree	Ph.D. Doctoral Degree	
Session	Intake capacity	Enrolled	Intake capacity	Enrolled	Intake capacity	Enrolled
2020-21	150	165	169	205	90	74
2021-22	165	180	178	201	86	64
College of	Veterinary Science					
2017-18	100	98	113	64	60	27
2018-19	100	93	108	72	48	27
2019-20	100	110	133	60	64	36
2020-21	100	121	133	79	64	34
2021-22	110	123	112	62	56	17
College of	Community Science					
2017-18	45	55	34	24	20	17
2018-19	45	47	36	24	20	14
2019-20	45	46	36	29	20	13
2020-21	45	48	38	29	20	21
2021-22	50	53	28	17	9	9

Source: Information/records of AAU.

From *Table 2.2.3*, it was observed that:

- There was excess enrolment against intake capacity ranging between two and 22 *per cent* in respect of UG Bachelor courses in all the three sampled colleges.
- There was excess enrolment against intake capacity in respect of UG Bachelor courses in two sampled colleges during five years.
- In PG Masters course, there was excess enrolment of students against intake capacity ranging between four and 25 *per cent* in College of Agriculture in all the five years.
- For Post Graduate (PG) course, shortfall in enrolment was noticed in two colleges whereas for Ph.D. degree courses, shortfall was there in all the three colleges during the same period.
- In College of Veterinary Science, Guwahati, the intake capacity for UG Bachelor Degree programme was 80 as per the permission of VCI. However, the College took its intake capacity as 100 during 2017-21 and 110 during 2021-22 without obtaining the requisite permission from VCI.

Thus, enrolment of students beyond the intake capacity would impact the quality of education being imparted to the students in the colleges particularly in view of the requirement of practical classes and availability of infrastructure. Further, the University violated the VCI norms by unilaterally increasing the intake capacity in respect of College of Veterinary Science for UG Bachelor Degree.

AAU (September 2023) stated that the excess enrolment was due to addition of number of unsuccessful students of previous years. Although, the reply was silent on unilateral increase in intake capacity of Veterinary College, Guwahati, the AAU added that all the matters raised by Audit would be placed in the Academic Council.

2.2.7.2 Teacher Student ratio

UGC recommends that the teacher-student ratio should be minimum of 1:10 in case of world class institutions and ICAR recommends 1:10 ratio as benchmark during ranking of universities.

The position of teacher-student ratio in the three sampled colleges is given in *Table 2.2.4*:

Table-2.2.4: Teacher student ratio in sampled colleges as of March 2023

Name of college	Tea	cher	Student	Teacher-
Name of college	Sanctioned	In-position	on roll	student ratio
College of Agriculture, AAU, Jorhat	222	131	1,151	1:9
College of Community Science, AAU, Jorhat	41	29	319	1:11
College of Veterinary Science, Guwahati	216	129	697	1:5
Total	479	289	2,167	1:7

Source: Information/records of AAU.

Audit observed that the teacher student ratio in AAU was on an average of 1:7 across all disciplines as of March 2023 despite having 40 *per cent* vacancy in teaching staff cadre against the sanctioned strength. This suggested that there was scope for higher intake of student's subject to availability of infrastructure and fulfilment of other normative requirements associated with various courses.

2.2.7.3 Selection of Major Advisor for PG and Ph.D. students

The Regulation on Academic Matters of AAU, 2017 (amended) for Post-Graduate Degree Programmes¹³⁶ provided that concerned Head of Department (HoD) shall select a teacher of a discipline as Major Advisor for not more than six students of which, maximum three students can be from Ph.D. courses.

The status of selection of Major Advisor for PG and Ph.D. students in the sampled Colleges during 2017-22 was as shown in *Table 2.2.5*:

Table-2.2.5: Major Advisor against excess number of students

Sampled College		maximum number of students exceeded ast each Major Advisor
	Six PG students	Three Ph.D. students
Agriculture, Jorhat	One case during 2018-19 (nine students).	One case each during 2017-18 (four students), 2018-19 (four students), 2019-20 (five students) and 2021-22 (four students).
Community Science, Jorhat	One case during 2021-22 (seven students).	Three cases during 2020-21 (four, four and five students).
Veterinary Science, Guwahati	No s	such cases was noticed

Source: Information/records of AAU.

Audit noticed that norm of maximum six PG students for one Major Advisor was not adhered to in one case each in two sampled colleges during 2018-19 and 2021-22 while in the case of Ph.D. students, the norm was exceeded in seven instances during 2017-22.

⁽a) and (d) of 'Regulations on Academic Matters of AAU, 2016 (Amended) for Post-Graduate Degree Programmes'.

While accepting the audit contentions, AAU stated (October 2023) during Exit Conference that the regulation would be adhered to in future.

2.2.7.4 Mandatory requirements for conduct of examination not adhered to

(i) Audit observed non-compliance to mandatory requirements for conduct of examination for students of UG Degree courses as tabulated below:

Recommendation of 5 th Dean's Committee (July 2016)	Provisions in the Regulation framed by AAU (effective from August 2017)	Remarks
Question paper would be set by external paper setter.	Course Teacher would set the question paper for Mid-Term examination.	The Uniform grading system with uniform Overall Grade Point Average, as recommended
Evaluation of answer scripts by teacher other than the Course Teacher.	Course Teacher was to evaluate the answer scripts for Mid-term examinations.	by the Dean's Conference was not ensured while framing the Regulations.

(ii) Para 7.1 of Evaluation Reforms in Higher Education Institutions (2019) of UGC envisaged that by concealing the identity of candidates and examiners, post-examination malpractices can be checked. A fool-proof system like use of encrypted barcodes may be adopted to hide the identity of the student (and the centre) from the examiner and employees of examination department.

Audit observed that AAU did not adopt any measure to hide the identity of the student and centre by putting machine numbers or encrypted barcodes in the blank answer sheets. Adherence to the provisions of evaluation reforms is yet to be ensured in the colleges of AAU.

AAU stated (September 2023) that the examinations were conducted as per the Academic Regulation of AAU for UG programmes. It was also assured to adopt printing of answer sheets with machine number/ barcode as observed by Audit.

2.2.7.5 Shortcomings in functioning of Training and Placement Cell

Under Section 31(2) (c) and (e) of the AAU Act, the Director of Student Welfare (DSW) was to arrange for placement of graduates as per the plans approved by AAU. The Training and Placement Cell (TP Cell) of AAU was set up in 1998 for the purpose of career development of students.

However, the University did not prepare plans for placement of students during the period from 2017-18 to 2021-22. Further, records of applications/ requests received from students and action taken on them were not found maintained by the TP Cell. In absence of records, audit could not ascertain the effectiveness of the TP Cell in providing employment to graduates.

While accepting the audit contentions, AAU stated (September 2023) that though employment were provided through TP Cell but records were not maintained. The AAU further added that draft placement policy had been formulated and was under process of finalisation.

2.2.7.6 Absence of regulation in fixation of fees

The UGC Act specified that charging of fees as well as the scales of fees should be specified in a regulation, which was also mandated by the AAU Act. As per UGC Act,

no college shall levy or charge fees other than specified in regulation and in excess of the scale of fees.

Audit, however, observed that AAU fixed fees in two categories, *viz.*, General Fee Category (GFC) for all and Higher Fee Category (HFC) without framing any Regulation in this regard. The HFC is applicable to the seats reserved for Indian Nationals of North Eastern Region (including Sikkim) subject to certain conditions¹³⁷ and candidates seeking admission under this category are not eligible for any financial benefits including scholarship, stipend, *etc.*

Besides, differential fees for GFC and HFC in respect of UG and PG degrees were fixed by the AAU as per details given in *Chart 2.2.2*.

Semester II and above Semester I ₹50,000 ₹45,000 ₹50,000 ₹40 000 ₹35.000 ₹40,000 ₹30,000 ₹30,000 ₹20,000 ₹20.000 ₹15,000 ₹10.000 ₹10.000 ₹5 000 ₹0 ₹0 2019-20 2020-21 2021-22 2017-18 2018-19 2019-20 2020-21 2021-22 2017-18 2018-19 ■GFC for UG ■GFC for UG ₹7 190 ₹7 190 ₹8.600 ₹8.410 ₹8.410 ₹3 910 ₹3.910 ₹4 630 ₹4 740 ₹4 740 ₹37,500 ₹37,530 ₹37,530 ■HFC for UG ₹36,230 ₹43,450 ₹43,180 ₹43,180 ₹31,260 ■GFC for PG ₹10,280 ₹12,300 ₹12,110 ₹12,110 ₹7,370 ₹7,480 ₹7,480 ₹10,280 ■HFC for PG ₹45,600 HFC for PG ₹45,600 ₹54,780 ₹54,370 ₹38,290 ₹38,290 ₹46,110 ₹46,040 ₹46,040

Chart-2.2.2: Comparison of General Fee Category (GFC) with Higher Fee Category (HFC) for UG and PG degree programmes

Source: Information Bulletin of AAU for the period of 2017-22.

On being pointed out about non-framing of Regulation on fees, AAU stated (September 2023) that AAU Act and Statute empowers the Academic Council to take decision on all academic matters and to make regulations regarding the fee structure and set matrix which was done as per the present cost of education in the country.

The reply confirmed that the Regulations on fee, as required under the Act were not framed.

2.2.7.7 Mandatory information for students not published by AAU

As per UGC's 'Guidelines on Students Entitlements' issued (April 2013) to all Universities, it was mandatory for every college/university to publish their prospectus containing the information stipulated in the guidelines and to post it on its website.

Audit observed that AAU published an Information bulletin for the years 2017-18 to 2021-22 without including mandatory information as given below:

- The status of available physical assets and amenities for the colleges.
- The status of accreditation/recognition of the degree programmes and colleges (College of Horticulture, Jorhat; College of Sericulture, Jorhat; and College

¹³⁷ not more than five students from each State of the Region at the discretion of the selection committee.

of Veterinary, Lakhimpur were not accredited and recognised by ICAR/ VCI) including number of seats approved by various accrediting authorities.

Thus, there was lack of inclusion of vital information necessary to facilitate the aspiring students in taking an informed decision before admission.

AAU while acknowledging the Audit observation, stated (September 2023) that the mandatory information would be incorporated accordingly.

2.2.8 Human Resources

AAU Act specifies that a teacher means a person appointed for the purpose of imparting education, conducting research and conducting extension programmes.

The persons-in-position (PIP) *vis-à-vis* sanctioned strength (SS) for both teaching and non-teaching staff as on 31 March 2023 was as shown in *Table 2.2.6*:

Category of staff	Designation of staff	SS	PIP	Excess (+)/ Shortfall (-)	Percentage
	Professor	126	241	(+) 115	91
Teaching staff	Associate Professor	349	23	(-) 326	93
reaching stan	Assistant Professor	621	383	(-) 238	38
	Sub total	1,096	647	(-) 449	41
	Grade I	17	2	(-) 15	88
Non-teaching	Grade II	113	21	(-) 92	81
staff	Grade III	1,515	480	(-) 1035	68
	Sub total	1,645	503	(-) 1,142	69

Table-2.2.6: Human Resources status

Source: Information/records of AAU.

It may be seen from *Table 2.2.6* that there were vacancies across both categories of employees *viz*. Teaching and Non-Teaching Staff *i.e.*, 41 *per cent* in teaching faculty and 69 *per cent* in non-teaching staff. The percentage of vacancy against the combined strength of professors and associate professors was 44 *per cent* and for assistant professor, vacancy was to the extent of 38 *per cent*. In the non-teaching staff, overall shortfall in persons-in-position *vis-à-vis* sanctioned strength was 69 *per cent*.

Audit further observed that out of the overall sanctioned strength of 1,096, 718 teachers were earmarked for nine colleges and the remaining strength of 378 was for Research Stations and Vice Chancellor's establishment. The shortfall against the sanctioned strength of 718 teachers in respect of nine colleges was 35 *per cent* (251 teachers) whereas the vacancy *vis-à-vis* Research Stations was 59 *per cent* ¹³⁸.

As discussed under *Paragraph 2.2.7.2*, overall vacancies in the sampled colleges (40 *per cent*) was slightly more than the overall vacancy of teaching staff in nine colleges of the University. However, despite such vacancies in the teaching faculty of the colleges, the teacher-student ratio of 1:7 was well within the benchmark of 1:10 set by UGC/ICAR.

2.2.8.1 Non-adherence to the provision of UGC in appointment of teachers

As per Para 3.1 of UGC Regulations on minimum qualifications for appointment of teachers and other academic staff in universities and colleges and measures for the

¹³⁸ 96 Scientists available against the SS of 234 Scientists.

maintenance of standards in Higher Education, 2010, the direct recruitment to the posts of teachers in the Universities shall be on the basis of merit through an all-India advertisement, followed by selection by a duly-constituted Selection Committee as per the provisions made under these Regulations. These provisions are to be incorporated in the Statutes of the University concerned.

Audit observaed that the University did not incorporate these provisions in the Statute in line with the instructions of the UGC. It was further observed that AAU published three advertisements (April 2018, December 2018 and February 2022) for recruitment of 50 Assistant Professors/Associate Professors 139. It was noticed that out of 713 applications 140 received against the advertised posts, candidature of 44 applicants¹⁴¹ for the advertised post were debarred (February 2019/ June 2019/ July 2022) from appearing in the interview by the Screening Committee for want of Permanent Residence Certificate (PRC) of Assam, which was not a pre-condition for appointment to the post in the AAU Act and the Statutes of the University neither was it set as a pre-condition in the advertisement published by the University. Further, there was also no provision of Screening Committee in the AAU Act and Statutes.

Thus, by debarring candidates who did not possess PRC of Assam, the University not only violated its own statutes and advertisements but violated Article 14 of the Constitution of India also which prohibited any discrimination on the basis of caste, creed, region, etc.

AAU stated (September 2023) that the PRC was considered as per the clause 14 of Service Rule which was approved by the Chancellor of AAU.

The justification provided is not acceptable as the aforesaid condition was not in accordance to the AAU Act, Statute of AAU and UGC Regulations.

2.2.9 Infrastructure

2.2.9.1 Inadequacy of facilities in the sampled colleges

College of Community Science, Jorhat i)

AAU introduced (2019-20) Bachelor of Science (Honours) course on Food Nutrition and Dietetics (with duration of four years having eight semesters) as per the recommendation of ICAR - Fifth Deans' Committee 2017. The first semester of 2019-20 started in August

2019, which was approved by the Academic Council (27 December 2019).

Audit observed that the said degree course was conducted in two dedicated classrooms and one makeshift classroom in corridor against the requirement of four classrooms. Moreover, for this degree course, one teacher was engaged on Makeshift Classroom of 25 seating capacity contractual basis against the requirement of four



on the corridor of ground floor having aluminium panels with glasses.

¹³⁹ Assistant Professor-In 26 disciplines (in April & December 2018) and 24 disciplines (February

¹⁴⁰ 378 in April 2018, 75 in December 2018 and 260 in February 2022

^{141 03} for April 2018, 09 for December 2018 and 32 for February 2022

Assistant Professors, as assessed by the college for running the degree course. Thus, AAU did not provide adequate academic staff and the infrastructure as per requirement of the college for the last three years as of March 2022.

While accepting the audit observation, AAU stated (January 2023) that the Dean of Community Science had requested the Registrar for creation of facilities for smooth running of the programme.

ii) College of Veterinary Science, Guwahati

In 16 out of 17 departments in College of Veterinary Science, Guwahati, it was noticed that in 110 category of critical equipment (out of 610 category), against requirement of 556 equipment, only 68 equipment (12 per cent) were available, of which 48 equipment (71 per cent) were functional. The details are given in **Appendix 2.3**. In the remaining 500 categories of equipment, there was no shortfall.

iii) College of Agriculture, Jorhat

The University started (2014) two new colleges of Horticulture and Sericulture, Jorhat by admitting one batch of 25 students each from the academic year 2014-15 onwards with the facilities available at College of Agriculture, Jorhat by utilising its vacant spaces. Though, no serious deficiencies in the availability of infrastructure facilities of the College of Agriculture, Jorhat were noticed, there was gap in infrastructure facilities available at Colleges of Horticulture and Sericulture as of 31 March 2022. The details are given in *Table 2.2.7*:

Table-2.2.7: Facilities required *vis-à-vis* available at Colleges of Horticulture and Sericulture, Jorhat as of March 2022.

Sl. No.	Minimum facilities required as per Fifth Deans' Committee Recommendation	Facilities available
Colle	ge of Horticulture, Jorhat	
1	Five classrooms	Two classrooms in the space provided for the college and one class room allotted in the Academic complex of College of Agriculture, Jorhat.
2	50 teaching staff	18 teaching staff.
3	Two hostels (separate for boys and girls each with 150 capacity)	No hostel.
4	10 full-fledged laboratories	No laboratory
Colle	ge of Sericulture, Jorhat	
1	Four smart lecture halls	Two ordinary classrooms.
2	48 teaching staff	11 teaching staff (including one teaching staff on contractual basis).
3	Two hostels (separate for boys and girls each with 150 capacity)	No hostel.
4	20 full-fledged laboratories	No laboratory

Source: Information/records of AAU.

It may be seen from *Table 2.2.7* that the faculty strength and the infrastructure facilities available at Colleges of Horticulture and Sericulture, Jorhat were far below the requirements as recommended by the Fifth Deans' Committee, which were mandatory to be adhered to by the University as it had a bearing on accreditation of the institution and grants from ICAR, besides impacting the quality of education.

AAU while accepting the audit observations, stated (September 2023) that necessary steps had been taken to fulfill the requirements as recommended by the Fifth Dean's Committee. The University further stated that recommended equipment for Veterinary College would be procured after receipt of Development Grant from ICAR.

2.2.10 Research Activities

Research activity for improvement, management and protection of crops is aimed at serving the farming community and professionals engaged in agriculture sector. AAU Act mandated the University to undertake research projects for development of agriculture and other allied sectors, which are being undertaken through two Directorates, *namely*, Director of Research Agriculture and Director of Research Veterinary. The research activities carried out by the University and audit observations are discussed in the following paragraphs:

2.2.10.1 Research Projects

Research projects in AAU are mainly funded by the State Government, ICAR, Indian Council for Forestry Research and Education, Directorate of Biotechnology and Department of Science and Technology, Ministry of Science and Technology, GoI.

The position of research projects undertaken by AAU during 2017-2022 was as shown in *Table 2.2.8*.

		Amount of			
Directorate	Undertaken	Completed	Terminated	Ongoing	expenditure (₹ in crore)
Director of Research Agriculture	112	34	2	76	27.13
Director of Research Veterinary	51	31		20	9.27
Total	163	65	2	96	36.40

Table-2.2.8: Position of Research Projects undertaken by AAU during 2017-2022

Source: Information/records of AAU.

During 2017-18 to 2021-22, AAU took up 163 research projects of which, 65 projects (40 per cent) were completed, two projects (one per cent) were terminated and 96 projects (59 per cent) were ongoing at the end of March 2022. The expenditure incurred during the audit period was ₹36.40 crore.

Audit selected 27 completed projects (10 in Agriculture and 17 in Veterinary) out of 65 completed projects and observations thereon are discussed below.

(i) Short term Projects reported complete but still in progress

Out of selected 27 completed projects, three projects at a total sanctioned cost of ₹1.94 crore were stated to be complete as of March 2022 by AAU, however, these projects actually remained incomplete as shown in *Table 2.2.9*:

Table-2.2.9: Physical progress of completed projects as of March 2022

Sl. No.	Name of projects	l released l		Expen- diture	Project completion Target	Audit findings			
A. Research Projects implemented through Director of Research (Agriculture)									
(i)	Identification of the Genetics Associated Starch content in Rice for nutraceutical benefits	1.00	0.46	0.46	May 2021	Despite extension of six months, the project remained incomplete and was abandoned as the equipment were placed in the Department.			
Subt	otal (A)	1.00	0.46	0.46					
	B. Research Projects implemented	through Dire	ector of Res	earch (Vet	erinary)				
(i)	"Species Identification of wild herbivores based on molecular, microscopic and ultra-structural characterisation of hair samples"	0.44	0.34	0.34	May 2021	The projects remained incomplete and was abandoned.			
(ii)	Empowerment of the Rural women through capacity building in improved Biotechnological innovation and application	0.50	0.21	0.05	December 2020	Project was lying incomplete for one year three months.			
Subt	otal (B)	0.94	0.55	0.39					
Gran	nd Total	1.94	1.01	0.85					

Thus, three projects stated to be completed were abandoned and remained incomplete as of 31 March 2022 for 10 to 15 months. An expenditure of ₹0.85 crore has been incurred against the total release of ₹1.01 crore.

2.2.10.2 Research Papers and PME Cell

National Academy of Agricultural Sciences (NAAS) is an accredited agency, which evaluates the quality of journals (publishing research articles on agriculture and allied sciences) by allotting scores. During accreditation of Agricultural Universities, National Agricultural Education Accreditation Board (NAEAB) considers the research papers published in journals with score of five and above as one of the criteria for accreditation.

Further, ICAR Guidelines for Internal Evaluation and Forwarding Research Papers to Scientific Journals and Data Management in ICAR Institutes, 2014 envisaged that Prioritisation, Monitoring and Evaluation (PME) Cell of the University would be responsible for acceptance, maintenance of records of manuscripts by assigning a reference number. PME Cell would be the custodian of all publications by forwarding the publications to research journals and would be nodal unit of the University to manage data from research activities under various projects.

The status of research papers¹⁴² submitted by AAU to NAEAB for accreditation during 2017-21 was as under:

^{142 &#}x27;Self-Study Report on Research Papers'.

Table-2.2.10: Details of research papers published in journals.

Period	No. of papers published as	Repetition of papers	Actual No. of papers	Published in Journals with NAAS score of				
	stated by AAU	noticed	published (2-3)	below 5	5 and above	No score/ not rated		
1	2	3	4	5	6	7		
2017 to 2021	715	39	676	63	393	220		

Source: Information/records of AAU.

It may be seen from *Table 2.2.10* that out of total numbers of 715 research papers stated to be published by AAU, 39 (five *per cent*) were repetitions and as such actual number of papers published in journals was 676 only. Out of 676 paper, 393 (58 *per cent*) were with NAAS' score of five and above, 283 (42 *per cent*) papers were with score below five or in the 'not rated' category. Thus, as many as 42 *per cent* of research papers published failed to meet the minimum benchmark of the ICAR for accreditation. This is indicative of weak internal evaluation and monitoring system of the papers before submission to ICAR.

Further, the University did not constitute the PME Cell for acceptance, maintenance and evaluation of research papers. The deficiencies in Research Papers as discussed in the preceding paragraph may be attributable to non-formation of PME Cell.

AAU did not provide any relevant reply (26 September 2023).

2.2.10.3 Establishment of test centres

AAU established two test centres for Bio-safety Level–3 (BSL-3) lab and Regional cum Facilitation Centre (RCFC) during 2017-18 to 2021-22.

(i) Operation of Bio Safety Level 2/3 laboratory without certification



Bio Safety Level – 3 laboratory building (ADMaC-DBT)

Regulation and Guidelines for Recombinant DNA Research and Biocontainment, 2017¹⁴³ envisaged that all category III¹⁴⁴ and above Genetically Engineered (GE) experiments require prior authorisation from Institutional Biosafety Committee (IBSC), subsequent approval from Review Committee on Genetic Manipulation (RCGM), Department of Biotechnology (DBT), GoI before commencement of the experiments. Noncompliance of above regulations shall attract the penal provision under Section 17 of the Environment (Protection) Act, 1986 (EPA

1986) in case of government institutions.

Audit observed that DBT (NER Division) sanctioned (January 2015), establishment of BSL-3 laboratory¹⁴⁵ under AAU at Guwahati at a cost of ₹4.95 crore and the lab

¹⁴³ Issued by Department of Biotechnology, Ministry of Science and Technology, GoI.

Experiments pose moderate to high risk to environment.

¹⁴⁵ The Bio-safety Level–3 (BSL-3) lab deals with genetic engineering experiments on animal, which may pose moderate to high risks to laboratory workers, community and the environment.

started functioning in April 2020. During the period from April 2020 to March 2022, 165 activities including Category-III experiments were carried out by scientists of AAU without any authorisation from IBSC as the same was constituted only in February 2022. Further, AAU had not obtained certification from RCGM, GoI as of March 2023.

Thus, conducting experiments for category III by the AAU without obtaining prior authorisation from IBSC and RCGM, GoI compromised safety of workers and users in violation of the Rules.

While accepting the audit contentions, AAU stated (September 2023) that the process of obtaining the required certificate from the concerned agency had been initiated.

(ii) Closure of Regional cum Facilitation Centre (RCFC) due to slow progress

National Medicinal Plants Board (NMPB) approved (July 2018) setting up of RCFC ¹⁴⁶ at AAU, Jorhat at a cost of ₹1.50 crore. NMPB released ₹90 lakhs (February 2019) and AAU could utilise only ₹27 lakhs till January 2020.

However, as no progress was made, NMPB intimated (March 2021) closure of RCFC on the ground that the purpose of establishing of RCFC (NER) at AAU would not be served by continuing with the lackadaisical approach of the AAU.

Thus, due to lack of commitment to timely completion of the project, the expenditure of ₹27 lakh ended up being unfruitful. AAU also lost the opportunity of becoming a one-stop centre for medicinal plants in the North-Eastern Region.

AAU in its reply (September 2023) stated that the progress was hindered due to delay in appointment of office bearers, restrictions imposed due to Covid protocols and withdrawal of assistance by NMPB.

The justification provided is not acceptable as NMPB considered performance upto January 2020 and closed the project on account of slow progress by AAU.

2.2.10.4 Intellectual Property Management

In accordance with ICAR's Guidelines (2006) for Intellectual Property Management and Technology Transfer, AAU formed an Intellectual Property Rights (IPR) Management Cell in 2016 to look after the activities of intellectual property developed by the University.

(i) Notification of crops developed by AAU

Audit observed that out of 115 varieties of crops developed by AAU, 20 varieties of crops had been notified by the Central Seed Committee under the Department of Agriculture, Cooperation and Farmers' Welfare, GoI.

In addition to above, another 13 varieties of crops had been forwarded (July 2021/May 2022) to the Central Seed Committee by the State Seed Sub-Committee under the Department of Agriculture, Government of Assam for consideration of notification, but these varieties had not been notified till January 2023.

RCFC will act as one stop centre for the growers, cultivators, researchers, traders and other stakeholders of medicinal plants and to function in close co-ordination with State Medicinal Plants Board (SMPBs), the State implementing agency of the medicinal plants component of the AYUSH Mission in the North Eastern Region of India.

(ii) Status of patent protection developed by AAU

ICAR Guidelines prescribe that all research results which are patentable under law and have scope for technology transfer or for advancement of basic and strategic research should be taken up for patent protection against unauthorised use/ exploitation by other agencies within and outside the country for commercial gains under the Patents Act, 1970.

Position of patent protection for technologies developed by AAU as of 31 March 2022 was as shown in *Table 2.2.11*:

Technology developed under the	Number o	f technolo eloped	gies		of technol d for pate	Number of technologies as of 31 March 2022		
Directorate of Research	Up to 31 March 2017	During 2017-22	Total	Up to 31 March 2017	During 2017-22	Total	Granted patent	Rejected
Agriculture	09	09	18	09	06	15	02147	
Veterinary	23	20	43	03	02	05	01148	02
Total	32	29	61	12	08	20	03	02

Table-2.2.11: Status of patent protection

Source: Information/records of AAU.

From *Table 2.2.11*, it can be seen that out of 61 technologies (Agriculture-18 and Veterinary-43) developed by AAU, applications for patent against only 18 technologies (Agriculture-15 and Veterinary-three) were submitted to Patent Office, Kolkata, GoI and applications against two technologies of veterinary ware submitted to Patents Office, Guwahati. Only three out of 18 technologies (Agriculture-2 and Veterinary-1) were granted patent by Patents Office, Kolkata. Patent against two technologies developed by AAU were rejected by Patent office, Guwahati as both the technologies were not found to be as per the standards of novelty, non-obviousness and industrial application set under Patent Act, 1970.

During Exit Conference, AAU informed (October 2023) that all technologies were not fit to be applied for patent.

2.2.11 Extension activities

The AAU Act Mandates Extension activities of AAU to be planned, organised, and coordinated by the Director of Extension Education (DEE) of AAU. The basic objective of the extension activities is to make useful information based on research findings available to the farmers, home makers and other group serving agricultural and veterinary science. The extension education activities of AAU are implemented primarily through the *Krishi Vigyan Kendras* (KVKs) under the DEE.

Audit examined eight out of 23 KVKs undertaking extension activities in AAU and observed the following:

¹⁴⁷ Applied in 2007 and 2009.

¹⁴⁸ Applied in 2007.

2.2.11.1 Shortfalls in implementation of Annual Action Plans of KVKs

Annual Action Plans (AAP) of KVKs were prepared and vetted by Scientific Advisory Committee (SAC) of DEE, AAU and by Zonal workshop at ICAR-ATARI¹⁴⁹. The planned activities of KVKs include On-Farm Testing (OFT), Front Line Demonstration (FLD) and training programmes.

Audit observed that 364 OFTs and 423 FLDs were included in the AAPs of selected KVKs during 2017-18 to 2021-22¹⁵⁰. However, 122 OFTs (34 *per cent*) and 128 FLDs (30 *per cent*) were not conducted by respective KVKs as per its approved AAP. Training programmes were undertaken by selected KVKs as per AAP.

In reply, AAU stated (May 2023) that shortfall in OFT and FLD was due to non availability of seeds, leave/transfer of concerned scientists and scarcity of funds.

2.2.11.2 Non-formation of Extension Education Advisory Committee

The Statutes of AAU mandated formation of Extension Education Advisory Committee at University level to advise on the functioning of AAU's extension education programme and to co-ordinate with the State and National Programme.

Audit observed that the Committee was not formed since inception (1969) as required under the Rules.

While accepting the audit contentions, AAU (September 2023) stated that action has been initiated for formation of the committee.

2.2.11.3 Violation of scheme guidelines by Pulse Seed Hub

National Food Security Mission (NFSM) under centrally sponsored project "Creation of Seed Hubs for increasing indigenous production of pulses in India" for the years 2016-17 to 2017-18 sanctioned six seed hubs for Assam to AAU with a total outlay of ₹9.00 crore¹⁵¹.

Audit noticed that out of these six seed hubs, three seed hubs were operating in the sampled units, *namely*, Regional Agricultural Research Station (RARS), Shillongani, KVK Jorhat and KVK Kamrup. Audit observations on RARS, Shillongani are discussed in the subsequent paragraphs.

Further, the scheme guidelines aimed at creation of seed hubs at selected KVKs for processing and storage of seeds. Each seed hub would take up seed production of pulses through farmers and would buy back the produce from the farmers from its revolving fund of ₹1.00 crore.

The position of distribution and purchase of seeds by Seed Hub to different parties during 2017-22 was as given in *Table 2.2.12*:

¹⁴⁹ Agricultural Technology Application Research Institute, Guwahati.

¹⁵⁰ Excluding 2019-20 and 2020-21 due to Covid pandemic.

¹⁵¹ ₹0.50 crore for infrastructure *plus* ₹1.00 crore as revolving fund for each of six units

Table-2.2.12: The distribution and purchase of seeds by Seed Hub during 2017-22

Activity	Total quantity of seed	Farm under RARS	First Shop owner	Second Shop owner	Farmers (eight numbers)					
	(in quintals)									
Distribution of seeds	76.34	4.81 (6%)	58.64 (77%)	12.18 (16%)	0.71 (1%)					
Purchased under buy back scheme	2445.45	56.60 (2%)	1,861.81 (76%)	506.16 (21%)	20.88 (1%)					

Source: Information/records of AAU

It may be seen from the table above that Seed Hubs had selected eight farmers for seed production. However, it was observed that up to 93 *per cent* and 97 *per cent* of distribution and purchase of the pulse seeds were finally given to only two individuals (registered shop owners) instead of farmers in violation of the schemes guidelines as per reports submitted to Indian Institute of Pulses Research (IIPR), Kanpur and other agencies. Thus, the objective of establishment of seed hubs for enhancement of production through local farmers was defeated.

AAU stated (September 2023) that pursuant to audit observation, an enquiry committee was formed and necessary action would be taken based on the report of the committee.

2.2.12 Financial Management

Funds are provided to the University by Government of India, Government of Assam, ICAR and other agencies like World Bank, Numaligarh Refinery Limited, National Bank for Agriculture and Rural Development, Indian Institute of Technology, Guwahati. In addition, the University also generates funds from its own sources. Audit observations on financial management are given in the succeeding paragraphs:

2.2.12.1 Receipts and Expenditure

The receipts and expenditure of AAU for the period 2017-18 to 2022-23 are detailed in *Table 2.2.13*:

Table-2.2.13: Receipts and Expenditure during 2017-18 to 2022-23

(₹ in crore)

	Opening	Receipts		Total fund	Exper	diture incu	Total (as per	Closing	
Year	balance	Grants	Fees, etc.	available (2+3+4)	Extension	Extension Research		cent of Col. 5)	balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2017-18	-28.28	435.29	7.79	414.80	32.59	90.55	279.08	402.22 (96.97)	12.58
2018-19	12.58	543.50	14.59	570.67	38.00	115.44	350.76	504.20 (88.35)	66.47
2019-20	66.47	648.77	8.27	723.51	44.66	127.94	444.91	617.51 (85.35)	106.00
2020-21	106.00	488.06	25.35	619.41	46.30	116.75	374.88	537.93 (86.85)	81.48
2021-22	81.48	564.86	10.53	656.87	54.06	125.15	384.00	563.21 (85.74)	93.66
		2,680.48	66.53		215.61	575.83	1,833.63	2,625.07	

Source: Information/records of AAU.

*includes Refund and Adjustment

Audit observed that during 2017-2022,

• AAU started with negative balance, which was stated to be due to disbursement of salary during 2016-17 in anticipation of receipt of funds from GoA.

- Out of the available funds of ₹2,718.73 crore (including opening balance, grants received and fee, *etc.*), AAU utilised ₹2,625.07 crore. The utilisation of fund during 2017-2022 ranged between 85.35 *per cent* and 96.97 *per cent* of the available funds.
- Out of the total expenditure ₹2,625.07 crore, an amount of ₹1,833.63 crore (69.85 *per cent*) was spent on other activities (development, salary and training) and the remaining funds were utilised for research activities (₹575.83 crore; 21.94 *per cent*) and extension activities (₹215.61 crore; 8.21 *per cent*).
- Expenditure on extension activities showed an increasing trend as it increased from ₹32.59 crore during 2017-18 to ₹54.06 crore during 2021-22 with an increase of 65.88 per cent.

2.2.12.2 Fees collected kept outside of General Fund

Section 38 (A) (1) of the Act stipulated that the income from fees was to be credited to the General Fund of AAU.

Audit, however, observed from the records made available by the sampled colleges, Registrar's Office and Director of PG Studies¹⁵² that during the period of 2017-2022, while admission fees of ₹36.63 crore was collected, only ₹ 20.33 crore was transferred to the General Fund (Comptroller) of AAU. The remaining fund of ₹16.30 crore was retained by these units, but details of collection of admission fees and their subsequent deposit into the General Fund were not reported to the Comptroller. Further, admission fees amounting to ₹2.20 crore was transferred by the Registrar to the Revolving Fund maintained by the Registrars' office in violation of the AAU Act.

AAU while accepting the audit observation, stated (September 2023) that action had been initiated after being pointed out in audit.

2.2.12.3 Unauthorised utilisation of PL Account funds

AAU framed (2002) "Guidelines for operation of PL Account" to provide partial financial support to the various student activities¹⁵³. The concerned Dean/ Associate Dean/ DPGS/ Associate DPGS was to submit the receipt and expenditure statement to the Comptroller on a quarterly basis and the Internal Audit of AAU was to audit the accounts annually.

Audit noticed that the three sampled colleges and DPGS incurred an expenditure of ₹ 1.64 crore¹⁵⁴ on educational tour and activities from the fund of PL Account, which were not permissible under the guidelines. In addition, DPGS could not produce vouchers against an expenditure of ₹1.01 crore for verification due to which, audit could not ascertain whether the expenditure was related to admissible activities. The quarterly statements were also not submitted by these units to the Comptroller and internal audit was not conducted annually as mandated.

⁽i) Office of Registrar - ₹14.74 crore; (ii) Office of DPGS - ₹9.04 crore; (iii) Office of College of Agriculture - ₹6.85 crore; (iv) College of Community Science - ₹0.96 crore; and (v) College of Veterinary Science, Guwahati - ₹5.04 crore.

¹⁵³ Related to games, common room, magazine, examination, student aid fund, medical, laboratory, identity card, college week and Indoor games.

^{154 ₹0.24} crore by CoCS on educational tour, ₹0.76 crore by CoVS and ₹0.64 crore by CoA on activities not permitted under PL guidelines.

AAU stated (September 2023) that expenditure on non-permissible activities was due to late receipt of fund from ICAR. Further, some vouchers got misplaced during shifting of DPGS office.

The justification provided by AAU was not admissible as these expenditures have not been recouped as yet (March 2023).

2.2.12.4 Deficiencies in operation of Revolving Funds

Under Section 38 (c) of AAU Act, the University adopted a system to generate income through the available internal resources of the University by creating Revolving Funds (RFs). The guidelines for the operation of RFs require (i) monthly submission of statement of receipts and expenditure including stock with bank balance to the Comptroller; (ii) annual audit by the internal audit wing; (iii) balance over and above the seed money to be transferred yearly to the General Fund; and (iv) Monitoring Cell to be set up to monitor all the RFs at Jorhat and Guwahati.

Audit noticed the following:

- (i) Account holders of 75 RFs across 48 constituent units (including KVKs, Reasearch Stations, *etc.*) deposited ₹13.79 crore¹⁵⁵ into the General Fund during 2017-18 to 2021-22. No statement of receipts and expenditure was submitted to the Comptroller.
- (ii) In 16 units¹⁵⁶, 31 RFs had an income of ₹6.34 crore¹⁵⁷ however, ₹5.51 crore only was credited to the General Fund leaving a balance of ₹83 lakh with them during 2017-22.
- (iii) Out of 532 money receipt books issued to 13 units¹⁵⁸, seven books were missing in three units¹⁵⁹ but were not reported to the Comptroller. Revenue of ₹17 lakh in six RFs¹⁶⁰ was deposited with delays ranging between 2 and 1,112 days. Advances of ₹51 lakh remained unadjusted in six RFs¹⁶¹ for a period ranging between 365 and 2,340 days as of March 2022.

¹⁵⁵ ₹1,17,04,772 (2017-18) + ₹3,67,97,337 (2018-19) + ₹48,56,812 (2019-20) +₹4,44,58,505 (2020-21) + ₹4,00,94,114 (2021-22).

¹⁵⁶ Office of the Director of Research (Agriculture) under VC's establishment and 15 sampled units.

¹⁵⁷ Net of Receipts of ₹22.42 crore and Expenditure of ₹16.08 crore.

^{158 (}i) College of Veterinary Science, Khanapara; (ii) College of Agriculture, Jorhat; (iii) Director of Research, Agriculture, Jorhat; (iv) RARS Shillongani; (v) RARS Titabor; (vi) CRS, Kahikuchi; (vii) KVK Baksa; (viii) KVK Dibrugarh; (ix) KVK Golaghat; (x) KVK Jorhat; (xi) KVK Kamrup; (xii) KVK Nagaon; (xiii) KVK Sivasagar.

^{159 (}a) Horticultural Research Station, Kahikuchi; (b) Regional Agricultural Research Station, Titabor; and (c) Krishi Vigyan Kendra, Kamrup.

⁽i) College of Agriculture–2 to 165 days; (ii) Director of Physical Plant – 85 to 500 days; (iii) Director of Research, Agriculture (IFS)–2 to 1,112 days, (iv) KVK Kamrup – 20 to 72 days; (v) KVK Nagaon – 31 to 247 days; and (vi) KVK Sonitpur – 29 to 331 days.

⁽i) Director of Research, Agriculture, Jorhat; (Seed Production: ₹70,000–1,539 to 1,919 days); (ii) Director of Research, Agriculture, Jorhat; (Livestock Poultry: ₹2,42,125–1,524 to 1,720 days); (iii) Director of Research, Agriculture, Jorhat; (Testing Fees: ₹13,99,223–758 to 1,857 days); (iv) Director of Research, Agriculture, Jorhat; (Horticulture: ₹8,26,739–1,228 to 2,340 days); (v) RARS, Shillongani: ₹1,43,000–1,016 to 2,056 days and (vi) CRS (Horticulture), Kahikuchi: ₹24,13,458–365 to 1,870 days.

AAU neither set up any monitoring cell nor conducted any annual audit during that period.

AAU stated (September 2023) that a monitoring cell had been set up to look into the matter.

2.2.12.5 Unadjusted advances from ICAR development grant, TSP, etc.

Advances to the tune of ₹21.08 crore were disbursed to various units under AAU during 2017-22, but were lying unadjusted as on 31 March 2022. Out of this, ₹2.43 crore was pending adjustment since one year, ₹1.21 crore was outstanding for more than one year to three years and ₹17.44 crore was outstanding for more than three years.

Non-adjustment of advances disbursed to various units of AAU for such long periods is fraught with the risk of misappropriation. Steps taken for adjustment of advances given by the University to its units were not on record.

On being pointed out in audit, AAU stated (September 2023) that steps were being taken for adjustment of advances.

2.2.12.6 Utilisation of funds and Execution of works

(i) Award of tenders outside e-Procurement portal

The Finance Department, GoA through office memorandum dated 23 November 2016 and 13 July 2018_instructed that procurement of goods and services valued more than ₹ 0.50 crore¹⁶² should be carried out through e-procurement for institutions receiving funds from Government of Assam.

Audit noticed that 88 tenders (each worth more than ₹0.50 crore) with total estimated amount of ₹281.50 crore were not floated through e-procurement system of GoA during the period 2017-22 in violation of orders as AAU registered itself on the e-Procurement portal only in September 2021.

AAU while accepting the audit observation, stated (September 2023) that non-award of tender in e-procurement portal was due to lack of proper technical infrastructure_and inadequate training.

(ii) Irregular release of interest free Mobilisation Advance to contractor

Clause 17 of Central Vigilance Commission (CVC) guidelines 2002, prescribes that advance payments need to be generally discouraged. Whenever the payment of advance is considered unavoidable, the same should be interest bearing. CPWD Works Manual 2007 provides that contractor may be granted mobilisation advance (MA) for certain special and inclusive works limited to a maximum of 10 *per cent* of the tender value at 10 *per cent* simple interest.

Audit observed that provisions for interest bearing MA was not included in the tender agreement between AAU and the contractor in contravention to CVC guidelines/CPWD Manual. Further, AAU Authority released (31 March 2011) interest free MA of ₹4.90 crore (25 *per cent* of tendered value ₹19.60 crore) to Development Authority of Nagaland (DAN) for the construction of Fishery College at Kachamari.

¹⁶² Revised to ₹0.25 crore from December 2021.

In terms of the CPWD Works Manual, the calculation of interest against MA is given in *Table 2.2.14*:

Table-2.2.14: Statement showing the calculation of interest against MA

Voucher No. and date	Per	No. of days	MA paid	Interest due @ 10 <i>per cent</i> per annum	Principal recovered	Balance MA				
	From	То		(₹ in crore)						
RA II 31.01.2013	31.03.2011	31.01.2013	672		0.90	1.23	3.67			
RA III 31.03.2015	01.02.2013	31.03.2015	788	4.90	0.79	1.27	2.40			
RA I of Raha work 16.09.2015	01.04.2015	16.09.2015	168	(RAI)	0.11	2.40	0.00			
	Tota	1.80	4.90							

Source: Information/records of AAU.

From *Table 2.2.14*, it was seen that though, ₹4.90 crore MA was recovered through subsequent bills, release of extra MA of ₹2.94 crore (above 10 *per cent* of tender value) as well as non-recovery of interest on MA amounting to ₹4.90 crore resulted in loss of ₹1.80 crore towards interest that could have accrued to the University.

On being pointed out in audit, AAU stated (September 2023) that mobilisation advance was extended for early completion of the work.

The justification for allowing interest free MA was not acceptable as the work scheduled to be completed in 18 months, could not be completed till March 2015.

(iii) Wasteful expenditure of ₹2.50 crore due to injudicious selection of site

Audit noticed that the work for construction of Fishery College started at Kachamari in November 2011. A site verification committee formed by VC recommended (January 2013) for relocation of the site of the College of Fisheries from Kachamari to Raha as Kachamari was at an isolated location far off from the National Highway, devoid of habitation and had threat of flood.

Audit further observed that AAU accepted the recommendation for relocation of the college from Kachamari to Raha by abandoning the Kachamari site after incurring an expenditure of ₹2.50 crore as of January 2013 on construction of the college up to plinth level.

AAU stated (September 2023) that the site at Kachamari periodically deluged due to rain as well as release of reservoir water from the Kopili Hydroelectric project.

The reply was indicative of the fact that the site was selected without proper planning and survey leading to the entire expenditure of ₹2.50 crore incurred at Kachamari for construction of Fishery College being wasteful.

(iv) Irregular execution of works through departmental committees

Section 24 (2) of the AAU Act specified that Director of Physical Plant was responsible to make arrangements for the maintenance and construction of buildings and other structures of the University. In addition, the ICAR norms envisaged that approval of ICAR was mandatory for each civil work exceeding ₹10 lakh.

Audit, however, observed that 67 works¹⁶³ amounting to ₹2.42 crore was executed departmentally by constituting committees in two sampled colleges¹⁶⁴ during 2017-22. The reasons for executing the works departmentally was not found available on records.

In one work 165 valuing ₹25 lakh under College of Veterinary Science, the requisite approval of ICAR was not on record and the work was carried out departmentally without preparing detailed estimates nor were measurement books maintained. In the absence of vital records such as estimates, requisite approvals and MBs, Audit cannot rule out the possibility of non-compliance with rules, of excess expenditure over estimates and wastage of resources.

AAU stated (September 2023) that the works had been done departmentally for urgent requirement in the greater interest of the student community.

2.2.13 Internal Control Mechanism

2.2.13.1 Function and Control of Board of Management

AAU Act, 1968 stipulates that the Board of Management (BoM) is a high level management authority for functioning of the University and is required to meet at an interval of two months. Thus, the BoM shall meet six times in a year. The AAU Act confers power and responsibility to BoM on the matters related to administration of funds, appointment of staff and teachers, establishment and maintenance of colleges and hostels, arrange for investment and withdrawal of funds of the University, regulating policies, *etc*.

Audit, however, noticed that during 2017-18 to 2021-22, only 13 meetings of BoM were held against the requirement of 30 meetings. The control of BoM was found to be deficient as there were partial incorporation of provision in the Statute. Out of 35 provisions stipulated in AAU Act, only 16 provisions were fully incorporated, seven provisions were partially incorporated and 12 provisions were not incorporated as yet. Regulations on UG and PG degree programmes were not published in the Official Gazette as per requirement.

While accepting the audit contentions, AAU stated (September 2023) that steps would be initiated in future.

There is a need for BoM to conduct meeting at regular intervals and take action to incorporate provisions of the Act and various regulations in the Statutes and publish them in the official Gazette to ensure legality of the activities and functioning of AAU.

163

Nam	20 of	2017-18		2018-19		2019-20		2020-21		2021-22		Total	Total
Name of College		No. of works	Amount	No. of works	Amount	No. of works	Amount	No. of works	Amount	No. of works	Amount	works	Amount
CoA		13	19,13,972	22	86,31,903	20	64,67,131	5	19,11,004	0	0	60	1,89,24,010
CoV	Sc	2	42,20,000	0	0	0	0	3	7,37,000	2	3,50,000	7	53,07,000
To	tal	15	61,33,972	22	86,31,903	20	64,67,131	8	26,48,004	2	3,50,000	67	2,42,31,010

¹⁶⁴ College of Agriculture (CoA) and College of Veterinary Sciences (CoVSc).

¹⁶⁵ Renovation and up-gradation of Swahid Bedi

2.2.13.2 Monitoring Cell for Revolving Fund

AAU framed (June 2001) guidelines for operation of Revolving Fund for generation of income by utilising its resources. A Monitoring Cell under the Comptroller of AAU to monitor the activities of Revolving Fund and for annual audit by internal audit wing of AAU was to be framed.

Audit, however, observed that neither the Monitoring cell was set up by the AAU nor any internal audit conducted since the guidelines was issued in 2001. Several deficiencies were noticed such as delay in deposit of sale proceeds into Revolving Fund for a maximum period of more than three years, keeping the amount outside the account, cases of unadjusted advances for a period of maximum of six years, *etc.*, indicating the need for operationalisation of Monitoring Cell and internal audit wing of the University.

On this being pointed out, AAU stated (September 2023) that Monitoring Cell had been formed as recommended by Audit.

2.2.13.3 Monitoring of research projects

Audit observed that long term research projects (AICRP/ AINP¹⁶⁶, *etc.*) were being monitored through technical committee and zonal research and advisory committee. Both the committees met twice every year at the end of Kharif and Rabi seasons during 2017-18 to 2021-22.

Audit noticed that committees for monitoring the short term (*Ad-hoc*) projects were not formed during 2017-18 and 2021-22. During the same period, one short term (*Ad-hoc*) research project was closed due to poor performance and other three projects remained incomplete beyond the stipulated timeline for 10 to 15 months. However, records in support of composition, minutes of meeting and frequency of holding of meeting of the committee was not available on records.

AAU (September 2023) stated that action had been initiated after being pointed out in audit.

There is a need for formalised monitoring mechanism, specifying duties and responsibilities of the committee members for effective monitoring of research projects.

2.2.13.4 Monitoring of construction works

Section 24 (1) (b) of AAU Act stipulates that Director of Physical Plant (DPP) under the University is responsible to make arrangements for construction and maintenance of buildings and other structures of University. Further, Clause 10(h) of the Statute of AAU stipulates that DPP shall be responsible for maintenance of up-to-date record of all immovable properties of the University including lands and building.

Audit observed that DPP did not maintain any record such as Asset Register to disclose the status of immovable properties of the University. Moreover, reports of inspections conducted for monitoring of construction works at different levels were not found on record. Due to lack of monitoring, significant irregularities were noticed in award of

¹⁶⁶ All India Co-Ordinated Research Project/All India Network Project.

work outside e-procurement portal, lack of transparency in bidding process, irregular release of interest free mobilisation advance to contractor, *etc.*, as discussed in Paragraph 2.2.12.6.

AAU while accepting the audit observation, stated (September 2023) that action has been initiated in this regard.

2.2.13.5 Internal Audit Wing

AAU had an Internal Audit Wing (IAW) with the sanctioned strength of 15 employees comprising of one Assistant Comptroller, four Audit Officers and 10 Deputy Audit Officers.

Audit however noticed that during 2017-18 to 2021-22, there was huge shortage of staff and IAW was functioning with only Assistant Comptroller. Further, no audit plan to conduct audits during the period 2017-2022 was prepared and out of 63 units, only three units (five *per cent*) were audited during 2021-22 but the reports were yet to be issued for corrective action. The details of audit of the remaining 60 units (95 *per cent*) of the University during the last five years (2017-18 to 2021-22) and status of Inspection Reports were not on record.

AAU accepted (June 2023) that due to shortage of manpower in IAW, audit works were hampered. Thus, there is a need for strengthening the IAW for conducting regular audits of all units in a time bound manner.

2.2.14 Conclusion

In order to fulfil its objective and mandate of imparting education in the field of agriculture and allied sciences in the areas of Agriculture, Veterinary, Community, fishery, Horticulture and Sericulture, undertaking research projects to develop and promote modern technology through extension programmes and training, AAU was required to exercise powers and discharge functions in accordance with the acts and statutes. As of March 2022, out of 35 provisions of AAU Act, 1968, only 16 provisions had been fully incorporated in the statutes, seven partially incorporated, and 12 provisions were yet to be incorporated in the statute. Required regulations and rules governing the activities of Board of Management and Academic Council were yet to be published in official gazette.

While there was excess enrolment against intake capacity in respect of UG Bachelor degree courses in two of the three sampled colleges during five years, shortfall in enrolment was noticed in PG degree courses in two sampled colleges during the same period. Teacher student ratio was found to be favourable at 1:7 across all disciplines in three sampled colleges. Mandatory requirements for conduct of examination and evaluation to make it fair, independent and transparent were not followed by the University.

Mandatory information such as number of seats approved by VCI, status of available physical assets and amenities, accreditation/recognition, *etc.*, were not published before admission as per requirement to give advance information to aspiring students. Placement Cell did not have any plan for helping the students to get employment.

There was vacancy across Teaching and Non-Teaching Staff *i.e.*, 41 *per cent* in teaching faculty and 69 *per cent* in non-teaching staff. In sampled colleges, the vacancy position was 40 *per cent* in teching faculty.

In the sampled college of Veterinary Science, in 110 categories out of 610 categories, there was a significant shortfall (91 *per cent*) of equipments against the requirement. In the sampled college of Community science, Jorhat, UG Bachelor degree course on Food Nutrition and Dietetics started in 2019-20 and was functioning with inadequate teaching staff and makeshift classroom in corridor. Two colleges, namely, College of Horticulture and College of Sericulture had been operating in the campus of College of Agriculture, Jorhat since 2014 without having their own infrastructure. Besides, faculty strength and the infrastructure facilities made available at these two colleges were also far below the mandatory requirements.

Out of sampled 27 completed projects, three projects (total cost ₹1.94 crore) remained incomplete as of March 2022. Out of 676 research papers, 393 (58 per cent) were with NAAS' score of five and above and 283 (42 per cent) papers were with score below five or in not-rated category. Thus, as many as 42 per cent of research papers published failed to meet the minimum benchmark of the ICAR for accreditation.

Out of 61 technologies developed by AAU, applications for patent against 20 technologies were submitted to Patent Office Kolkata and Guwahati, of which, patent against three technologies was granted and against two technologies rejected.

Distribution and purchase of the pulse seeds upto 93 *per cent* and 97 *per cent* were made to two registered shop owners instead of farmers by the Pulse Seed Hub in violation of the schemes guidelines and defeating the very objective of establishment of seed hubs for enhancement of production through local farmers.

The utilisation of fund ranged between 85 and 97 *per cent* during 2017-22. There was retention of 45 *per cent* of Admission fees (₹16.30 crore out of ₹36.63 crore) by five sampled colleges without depositing into General fund of AAU in violation of the AAU Act.

Significant irregularities were noticed in award of work outside e-procurement portal, lack of transparency in bidding process, irregular release of interest free mobilisation advance to contractor, *etc*.

Internal control mechanism at various levels was inadequate.

2.2.15 Recommendation

- * AAU may ensure compliance to the provisions of the AAU Act to give the governance of the University the authority to exercise powers and discharge its various functions by framing the required statutes and regulations.
- * AAU may review to improve the position of shortfall/excess in enrolment of students in various courses vis-à-vis infrastructure available for UG/PG/Ph.D courses combined, and academic calendar/routine for class hours as prescribed for each semester in accordance with the Academic regulations of the University.

- ❖ AAU may meet the mandatory requirements for conduct of examination and independence in evaluation to ensure transparency; and mandatory information for the students should be published in the prospectus before admission.
- * AAU may take steps to fill up the vacant posts and improve infrastructure deficiencies to enhance the overall functioning of the University.
- AAU may take initiatives to improve the support system to strive to achieve NAAS' score of five and above for research papers to meet the minimum benchmark of the ICAR, and take steps for patent protection of technologies developed by the University on regular basis.
- ❖ Internal control may be strengthened by conducting regular meetings of BoM, filling up vacant posts in IAW to ensure regular internal audits, and form monitoring committees specifying duties and responsibilities for effective monitoring of research projects and infrastructure related works.

Finance Department

2.3 Performance Audit on "e-Procurement in Assam"

Government of Asam (GoA) adopted (August 2018) the Government e-Procurement System (GePNIC) developed by National Informatics Centre (NIC) in October 2014 for transparency, cost efficiency, fairness, and accountability in public procurement. The Finance Department, GoA is the nodal agency for implementation of e-Procurement in Assam, responsible for coordination and providing support for system study and design implementation of e-Procurement. During 2018-22, a total number of 26,855 tenders valued ₹ 1,19,849.31 crore was made through e-Procurement system. Audit however, observed deficiencies in implementation of e-Procurement in Assam with incomplete on boarding in e-Procurement portal, declining trend in number of tenders in the e-Procurement system, deficiency in configuration with Assam Public Procurement Rules, 2020 and other system deficiencies. Besides, real time and up-to-date processing of tender was not done and huge number of tenders were showing to be opened or in progress stage for long.

Highlights:

The on-boarding of all departments was yet to be completed as out of total 56 Departments, 45 Departments had been registered in e-Procurement portal, leaving 11 Departments to be on-boarded on the portal as of March 2022.

(*Paragraph 2.3.2.1*)

Uploading of mandatory documents in 33 tenders (16 per cent) including optional items in 18 tenders (8.82 per cent) of the 204 tenders test checked in audit was not complied with by nine departments which reduced transparency in the e-Procurement process.

(Paragraph-2.3.2.4.3)

Maximum time taken for the award of work after opening of price bid was ranging between 436 days and 705 days with an average of 157 days and thus, objective of shortening time and cost savings was yet to be achieved under the e-procurement system.

(Paragraph-2.3.2.4.4)

There was short collection of tender processing fees of ₹9.56 lakh as there was no provision in the portal for automatic calculation of requisite processing fees to be collected from the bidders.

(Paragraph-2.3.2.4.5 and Appendix-2.7)

There was significant non-compliance to Rules and Regulations as regards to acceptance of less than three qualified bidders in technical evaluation.

(Paragraph-2.3.2.5.1)

There was no provision in the system for validation of the name of the Digital Signature Certificate (DSC) holder vis-à-vis registered application user, inconsistencies in PAN and Date of birth details, absence of unique Mobile number and email-ID, absence of logs in respect of registered user, *etc.* to ensure validation control and integrity of the system.

(Paragraph-2.3.2.6.1, 2.3.2.6.2 & 2.3.2.6.3)

2.3.1 Introduction

2.3.1.1 e-Procurement system in Assam

Electronic Procurement or e-Procurement is the process of tendering activity online using the internet and associated technologies. e-Procurement aims at providing transparency and control in procurement process to allow equal access to all eligible and qualified bidders without discrimination. e-Procurement process is also intended to result in competitiveness and saving of cost and time by shortening of procurement cycle and to provide fairness, accountability and public confidence in the procurement process.

Government of Assam (GoA) initiated public procurement through electronic system in April 2013 for State Government Departments which was managed by Information Technology (IT) Department through e-Procurement Facilitation Cell. GoA adopted the Government e-Procurement system (GePNIC) developed by National Informatics Centre (NIC) in October 2014 in consultation with Department of Expenditure, Ministry of Finance, Government of India (GoI) to facilitate electronic procurement in the State. The e-Procurement are governed by Rules, Regulations and instructions of Central and State Government issued from time to time *viz.*, Assam Financial Rules, Assam Public Procurement Act, 2017, Assam Public Procurement Rules, 2020 *etc.* Subsequently, the e-Procurement Facilitation Cell under IT Department, which implemented the e-Procurement system, was merged with the Finance Department of GoA in November 2017. The workflow for e-Procurement activities is shown below:

Workflow of the e-procurement system



Source: GePNIC brochure.

2.3.1.2 Organisational set up

Finance Department, GoA is the nodal agency for implementation of e-Procurement, responsible for coordination and providing support for system study and design implementation of e-Procurement for user departments of the State. To oversee the implementation of e-Procurement in the State, GoA launched (October 2017) Assam Public Finance Institutional Reforms (ASPIRe)¹⁶⁷ project under the umbrella of Assam Comprehensive Financial Management System (AS-CFMS).

The role of AS-CFMS is to undertake all activities necessary for implementation of e-Procurement portal through ASPIRe Project. It establishes a coordination and monitoring mechanism amongst the user entities of the portal and delegated appropriate powers to such entities as would be necessary for implementation of the Project. The organisation *Chart 2.3.1* of AS-CFMS is as follows:

Project Director, AS-CFMS
Commissioner and Secretary, Finance Department, GoA

Additional Director, AS-CFMS
Secretary, Finance Department, GoA

Project Manager, AS-CFMS

Sr. Trainer, e-procurement, AS-CFMS

Technical Support Staff, e-procurement, AS-CFMS

Chart-2.3.1: Organisational Structure

Source: Departmental records.

2.3.1.3 Modules of e-procurement system

The e-Procurement software as adopted by GoA contains the following modules:

ASPIRe Project, an externally aided project, is funded by World Bank for improving the systems in public finance management under the umbrella of AS-CFMS, which was set-up for implementing and managing Public Financial Management Reforms including IT - related projects in the Finance Department and other revenue departments including externally aided projects.

Sl. No.	Module	Function
1	Registration Module	Registration/Enrolment of Government officials and bidders with Digital Signature Certificate (DSC).
2	Publishing of tender	Tender creation and publishing, publishing of corrigendum, publishing of pre-bid meeting documents, clarification on the tenders published.
3	Bid submission	Online bid submission/re-submission, freezing of bids, facility for online payment of bid money, collection through bank payment gateway, encryption of bids submitted by the bidder, facility for single/multiple cover bid system.
4	Tender opening	The bids submitted for a tender, are opened online by the authorised bid openers who have been configured at the time of tender creation.
5	Technical evaluation	Downloading of documents submitted by the bidder through portal and manual evaluation thereof.
6	Financial bid opening	Only the technically qualified bids of the bidders for the tender are opened online by the authorised bid openers.
7	Financial evaluation	This is done off-line in the same manner as in the normal tendering process, based on system generated reports and comparative statements. The results on selection of bidders and date of financial bid opening are uploaded in the system.
8	Award of Contract (AoC)	Letter of Acceptance (LoA) is issued to a successful bidder (L1). The Tender Inviting Authority (TIA), based on the recommendations of the financial evaluation committee, and after getting approval, prepares the order manually and then uploads the order along with the contract details.
9	Return of EMD	After completion of each stage, TIA will declare the status of every participating bidder as successful or unsuccessful. Every unsuccessful bidder will get back his/her EMD within four bank working days from the date on which information of rejection of the bid is uploaded in the e-Procurement portal by the TIA.

Source: information furnished by Finance Department, GoA.

The process of calling and submission of tender, opening of tender, processing of tender, documents uploading, return of earnest money to unsuccessful bidders, award of tender, *etc.*, is done through the e-Procurement portal. Evaluation of bids is done manually by downloading the bid documents in respect of technical bid whereas financial bids are evaluated based on system generated reports and comparative statements.

Audit Framework

The audit objectives, audit criteria, audit scope & methodology and selection of samples are narrated in the succeeding paragraphs.

2.3.1.4 Audit Objectives

The objectives of the Performance Audit were to evaluate whether:

- transparency, cost efficiency, fairness and accountability were ensured in Public Procurement;
- e-Procurement system ensured compliance with relevant rules and regulations governing public procurement; and
- the overall controls of the application and database were adequate to ensure security, reliability and integrity of data including scope and validity of Standardisation Testing and Quality Certification (STQC) for e-procurement system.

2.3.1.5 Audit criteria

Audit criteria used for conduct of the Performance Audit were:

- Guidelines issued by Central Vigilance Commission (CVC);
- Assam Financial Rules;
- IT Act. 2000 as amended:
- e-Procurement guidelines issued by Standardisation Testing and Quality Certification (STQC) Directorate and e-Safe GD220 guidelines issued by the Ministry of Electronics and Information Technology, GoI; and
- Assam Public Procurement Act, 2017, Assam Public Procurement Rules, 2020 and relevant orders/instructions issued by GoA.

2.3.1.6 Audit Scope and Methodology

The Performance Audit covered the period from 2018-19 to 2021-22 to review use of e-Procurement portal by the organisations of GoA, from the stage of publishing of tenders to award of contract, using e-Procurement system of NIC by physical examination of records as well as analysing the data of public procurement done through the e-Procurement Portal of Assam (https://assamtenders.gov.in).

The audit commenced with an Entry Conference held on 05 July 2022 with the representatives of the Finance Department, wherein audit objectives, audit criteria, scope of audit and audit methodology were explained.

Audit was conducted through a combination of documents' review and system testing by gathering relevant information from the key stakeholders like Department of Finance, procuring entities, and system administrators (NIC). Audit also carried out test-check of records relating to 240 tenders¹⁶⁸ which were published through the e-Procurement portal under the categories of Goods, Services and Works pertaining to eight selected organisations. System functionality, security and performance were assessed through targeted testing and analysis. The draft Report was discussed on 05 October 2023 in Exit Meeting with the Secretary, Finance Department, GoA. The Department furnished (November 2023) replies to the draft report, and the views/ feedback of the Department had been suitably incorporated in the report.

2.3.1.7 Selection of samples

For sample selection, details of 26,855 tenders published during 2018-19 to 2021-22 under different categories of tenders *viz.*, Goods, Services and Works along with status¹⁶⁹ of the tender at various stages¹⁷⁰ were obtained from AS-CFMS. From the data of 26,855 tenders (worth ₹1,19,849.32 crore), 4,055 cases (worth ₹24,210.91 crore) of *'cancelled tenders'*, 1,722 cases (worth ₹6,420.73 crore) of *'retenders'* and 1,854 cases (worth ₹11,174.29 crore) of *'tenders to be opened'* were excluded and data for the remaining 19,224 tenders were taken for sample selection.

¹⁶⁸ Out of 26,855 tenders selected using sampling techniques.

¹⁶⁹ Published, Expired, Cancelled and Retender are different status of the tenders.

¹⁷⁰ Bid Opening, Technical Bid Opening, Technical Evaluation, Financial Bid opening, Financial Evaluation, Evaluation, Award of Contract, and 'to be opened' are different stages of the tenders.

The data of 19,224 tenders (worth ₹78,043.38 crore) were stratified under the tender categories of Goods, Services and Works by taking numbers of tenders and values thereagainst across the organisations. Out of 19,224 tenders, 10,541 tenders (55 per cent) valued ₹54,179.88 crore (69 per cent) belonged to top eight organisations¹⁷¹ of GoA.

Out of above 10,541 tenders of top eight organisations, selection of 200 tenders (Goods-60, Service-20 and Works-120) was made in the ratio of 3:1:6 to Goods, Services and Works respectively using Probability Proportional to Size (PPS) method, subject to a minimum of 20 tenders from each category for detailed scrutiny.

Further, 20 samples¹⁷² from 188 cases where the tender value was appearing as *zero*¹⁷³ in the portal and 20 samples from 7,631 tenders (5,777 retendered/ cancelled tenders and 1,854 tenders yet to be opened) were also selected by Simple Random Sampling (SRS) method.

The financial value of 240 selected samples (including 20 *zero* value tenders and 20 cancelled tenders) was ₹52,917.67 crore (44 *per cent* of the tenders published).

Database dump¹⁷⁴ as of 07 July 2022, maintained by NIC covering the period from 2018-19 to 2021-22 relating to e-Procurement portal were also analysed in Audit.

2.3.1.8 Acknowledgement

Audit acknowledges the overall cooperation extended by Finance Department, GoA, NIC and the sampled entities during the Performance Audit.

Audit findings

2.3.2 Efficacy of e-Procurement System in Assam

2.3.2.1 Incomplete on-boarding in e-procurement portal

The Finance Department *vide* its notification (July 2018) instructed all Administrative Departments of GoA and its subordinate Directorates/ Offices/ Agencies to be on-boarded to e-Procurement portal for procurement of all goods, services and works from 01 August 2018 for all tenders valued ₹50 lakh and above, which was subsequently revised to ₹25 lakh from 16 December 2021.

Audit noticed that as on 31 March 2022, a total 122 organisations under various administrative Departments of GoA and its Directorates/ Offices/ Agencies, *etc.* were registered in the e-Procurement portal. During 2018-19 to 2021-22, a total of 369 users published 26,855 bids worth ₹1,19,849.31 crore. The detailed list of 122 organisations registered in the e-Procurement portal is given in *Appendix 2.4*.

⁽i) Public Works (Roads) Department, (ii) Public Works Building and NH Department, (iii) Water Resources Department, (iv) Assam Power Distribution Company Limited, (v) Industries and Commerce Department, (vi) Directorate of Agriculture and Assam Seed Corporation, (vii) Bodoland Territorial Council and (viii) National Health Mission.

^{172 20 &#}x27;Zero value tenders' pertaining to four Departments. Scrutiny showed that out of these 20 tenders, 17 tenders were awarded and three were in progress (at tender evaluation stage-2, financial evaluation stage-1). These tenders were relating to procurement of services, goods, outsourcing of manpower, etc.

¹⁷³ In 188 cases, tender value was not displayed and shown as zero.

¹⁷⁴ A database dump is a major output of data that can help users to either back up or duplicate a database.

Audit observed that out of 56 Departments under GoA, only 45 Departments had been registered in the e-Procurement portal, leaving 11 Departments¹⁷⁵ which were to be registered and on-boarded on the e-procurement portal for electronic procurement of public goods, services and works as on 31 March 2022 as required under the direction of GoA.

In reply (November 2023), the Department stated that some departments due to their specific requirements do not ideally float tenders of high value.

2.3.2.2 Position of tendering under e-Procurement system

The year-wise status of tenders published, cancelled/re-tendered tenders, valid tenders ¹⁷⁶, awarded tenders, tenders in progress ¹⁷⁷ and tenders to be opened ¹⁷⁸ as of July 2022 is detailed in *Table 2.3.1*:

Table-2.3.1: Position of tenders published through e-procurement portal (as of July 2022)

(₹ in crore)

Year	Tenders published		Cancelled/ retendered ¹⁷⁹		Valid tenders		Tenders awarded		Tenders in progress		Tenders to be opened	
	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
2018-19	9,533	28,067.24	1,703	5,558.07	7,830	22,509.17	2,368	7,474.30	4,432	11,023.42	1,030	4,011.45
2019-20	6,018	23,339.20	1,501	5,912.83	4,517	17,426.37	2,484	7,855.11	1,679	7,985.84	354	1,585.42
2020-21	6,783	39,995.77	1,449	11,090.98	5,334	28,904.79	3,424	17,257.50	1,718	8,501.09	192	3,146.20
2021-22	4,521	28,447.11	1,124	8,069.77	3,397	20,377.34	1,461	4,046.98	1,658	13,899.14	278	2,431.22
Total	26,855	1,19,849.32	5,777	30,631.64	21,078	89,217.67	9,737	36,633.90	9,487	41,409.49	1,854	11,174.29

Source: Information furnished by Finance Department, GoA.

Analysis of tender details given in *Table 2.3.1* showed the following positions and audit observations:

- The number of tenders published decreased from 9,533 in 2018-19 to 4,52 (47.42 per cent) in 2021-22 and number of tenders awarded also decreased significantly from 2,368 (₹7,474.30 crore) to 1,461 (₹4,046.98 crore) which is only 32 per cent of the total tender published. The number of valid tenders and its value also decreased from 7,830 numbers (₹22,509.17 crore) to 3,397 (₹20,377.34 crore) during the same period. The number of cancelled and retendered cases, on account of being invalid and defective, was quite significant (5,777; ₹30,631.64 crore) constituting 21.51 per cent of the total tenders published in the e-Procurement system, a little lower than the awarded tenders value of ₹36,633.90 crore.
- The numbers and value of valid tenders (21,078; ₹89,217.67 crore) vis-à-vis tenders published (26,855; ₹1,19,849.32 crore) which constituted 78.49 per cent was also showing a decreasing trend over the four-year period from 2018-19 to 2021-22.

Act East Policy Affairs; Administrative Reforms, Training, Pension & Public Grievances; Implementation of Assam Accord; Judicial; Legislative; Parliamentary Affairs; Personnel; Political; Revenue & Disaster Management; Welfare of Bodoland; and Governor Secretariat.

¹⁷⁶ Valid tenders= Total tenders published *less* cancelled tenders *less* retendered tenders.

Tenders in progress= total valid tenders less awarded tenders *less* tenders to be opened.

¹⁷⁸ 'Tenders to be opened' are those tenders, which are not opened after its creation and publishing.

¹⁷⁹ 4,055 cancelled tenders (valued at ₹24,210.91 crore) and 1,722 retenders (valued at ₹6,420.73 crore).

• The actual number of tenders awarded against the valid tenders was only to the extent of 46.20 per cent (9,737 out of 21,078). This indicated that up to 53.80 per cent of the total tenders did not yield the desired outcome during the relevant years. As many as 11,341 valid tenders valued at ₹52,583.78 crore were not awarded for as per the portal. These were in the state of "tender in progress" and "tenders to be opened" for three years at the end of July 2022.

Thus, the above position indicated that instead of increasing, the number of tenders was showing a decreasing trend over the years. The tender actually awarded, which was the main objective of the system, was just about 46 per cent during the four year period. This was far short of GoA's goal of complete switch over to electronic procurement system. On the whole, coupled with incomplete on-boarding of all departments in the portal, the e-Procurement system of GoA was yet to fully stabilise as of July 2022. It was still not an effective system of procurement of goods and services for which the portal was launched by the Government in October 2017.

Further, huge shortfall (53.80 per cent) in converting tenders into award of works within the relevant years, would have adversely affected implementation of work/ services in the concerned departments. Several deficiencies such as no real time and up-to-date processing of tenders, huge cancellation/retendering, and accumulation of tender to be opened and in progress for three long years as of July 2022 in the existing system point to the serious weakness of the e-Procurement system. Thus, the objective of shortening of procurement cycle and cost saving in procurement process could not be achieved as of July 2022.

2.3.2.3 Status of sampled e-tenders in the portal

In view of huge shortfall in converting tenders into award of works, audit analysed the sampled 240 tenders pertaining to eight Departments which included sampled 10 tenders falling under the category of 'retendered' cancelled', *etc*. Department-wise details were as shown in *Table 2.3.2*:

No. of Cancelled/ Tenders to **Tenders** Tenders in Name of Department sampled Retendered** be opened awarded progress tender Assam Power Distribution 30 1 Company Limited (APDCL) **Bodoland Territorial Region** 0 0 32 30 (BTR) Water Resource (WR) 37 2 1 7 27 Department Agriculture 5 0 0 2 3 Industries and Commerce 11 0 0 7 4 Department (ICD) 0 30 0 16 14 National Health Mission (NHM) PWD (Building and NH) 40 2 3 20 15 PWD (Roads) Department 45 5 6 12 22 116 104 **Total** 240 10 10

Table-2.3.2: Department-wise sampled tenders

Source: MIS data Finance Department

** Cancelled = 8

Retendered = 2.

As per the portal, as of July 2022, out of 240 tenders, 116 tenders had been awarded, eight tenders were cancelled and the remaining 116 tenders (retendered-02, to be opened-10, in-progress-104) were yet to be awarded. However, scrutiny of records in eight Departments showed that other 78 tenders 180 out of the remaining 116 tenders, had actually been awarded but not updated in the portal. As such, as of July 2022, total 194 tenders (116 plus 78) had been awarded. Out of 194 tenders, six tenders were awarded with different ID numbers 181 without cancelling their original ID.

On analysis of real time data (21 July 2023), it was further noticed that out of remaining 46 tenders in progress, additional 10 tenders were awarded of which five tenders were awarded with different tender ID numbers¹⁸² without cancelling the original tender ID in respect of three tenders in the portal.

Hence, till date (July 2023), the total numbers of tender actually awarded was 204 (194 *plus* 10) and 36 tenders were in different stages.

Further analysis of real-time data (20 July 2023) of the e-Procurement portal relating to the remaining 36 tenders out of 240 sampled tenders, along with the physical records, showed the following position:

Table-2.3.3: Analysis of 36 tenders and their status as of July 2023 are given below:

Category	Position as of July 2022	Real time position as of July 2023	Audit observations				
Tender to be opened	10 tenders	Two tenders (value ₹17.22 crore) involving two departments ¹⁸³ pertained to 2019-20 (one tender) and 2020-21 (one tender).	Out of 10 tenders, one tender ¹⁸⁴ was not opened due to Court case, and the remaining nine tenders were awarded (one tender in July 2022 and eight tenders with a delay ranging from 62 days to 1,120 days) with different IDs without cancelling the original IDs. The delay in award of tenders was mainly due to time taken in processing of tenders.				
Cancelled	telled Eight tenders Eight tender		Out of eight cancelled tenders, three were awarded subsequently with different tender IDs (but remained as cancelled in system), the remaining five tenders along with another eight tenders from "in progress" stage were cancelled subsequently due to cancellation of AA, non-response from bidders, work already executed under different scheme, all participating bidders technically disqualified, etc., at different point of time.				

¹⁸⁰ APDCL-eight tenders, BTR-22 tenders, ICD-four tenders, NHM-two tenders, PWD (Building and NH)-14 tenders, PWD (Roads)-23 tenders and WR Department-five tenders.

New ID 2020_BoTC_16345_1, 2019_BoTC_13365_1, 2018_PWBNH_10408_1, 2019_PWBNH_13676_1, 2019_PWD_12495_1, and 2019_MoRTH_470323_1 against original ID 2020_BoTC_16013_1, 2019_BoTC_12536_1, 2018_PWBNH_9857_1, 2019_PWBNH_13373_1, 2019_PWD_11902_1 and 2019_PWD_15566_1 respectively.

¹⁸² New ID 2020_PWBNH_19687_1, 2020_DoWR_18754_2, 2021_PWBNH_21883_1, 2019_PWD_12381_1, and 2021_PWD_21490_2 against the original ID 2020_PWBNH_19131_1, 2020_DoWR_18754_1, 2021_PWBNH_21754_1 (cancelled), 2019_PWD_10912_1, and 2021_PWD_20774_8 (cancelled) respectively.

Water Resource (WR) Department and Public Works Department (Building and NH).

¹⁸⁴ Tender ID 2021 DoWR 20902 1.

¹⁸⁵ APDCL-2 tenders, BTC-4 tenders, WR Department-1 tender, Agriculture Department-1 tender, NHM-1 tender and PWD (Roads)-4 tenders.

Category	Position as of July 2022	Real time position as of July 2023	Audit observations		
Retendered	Two tenders	crore) under PWD (Roads) pertaining to	One tender was retendered and awarded (value ₹1.27 crore) due to non-receipt of minimum bid (August 2020) and the second tender (value ₹1.01 crore) was retendered due to single technically qualified bidder.		
Tenders in progress	104 tenders	20 tenders (value ₹435.11 crore) involving four selected departments 186 pertained to 2018-19 (seven tenders), 2019-20 (five tenders), 2020-21 (three tenders) and 2021-22 (five tenders).	These tenders were in progress as financial bids were opened but not evaluated for nine tenders (3-4 years), financial bids evaluated but not awarded for five tenders, technical bids evaluated but financial bid not opened for six tenders. These tenders were not awarded mainly due to non-receipt of sanctions, funds and requirement no longer existed, <i>etc.</i> , but the same were not found cancelled in the system.		

Source: Departmental records.

It is evident from *Table 2.3.3* that out of 36 tenders, 22 tenders (tenders to be opened-02, tenders in progress-20) were at different stages of procurement cycle for more than three and half years without any conclusion till date (July 2023) due to various reasons as mentioned above. The system also allowed multiple tender IDs for the same work, no linkage between works and system generated tender ID to have unique code for each work *vis-à-vis* tender ID, resulting in generation of incorrect information (MIS) on the status of tenders and the related works. Thus, the position exhibited in the system is not reflecting the real status as the size of tenders shown as not settled or in progress had actually been mostly settled or cancelled.

This indicated that the e-procurement system launched in October 2017 by the GoA was still not functioning properly and effectively.

Thus, there is need for a review of the tendering process followed under e-procurement system to ensure timely finalisation of tenders and generate correct MIS for better monitoring.

In reply (November 2023), the Department accepted the audit observation.

2.3.2.4 Systemic deficiencies in e-procurement

The procurement cycle involves several stages from calling and submission of tender, processing of tender documents, evaluation of bids, award of tender. The primary objective of e-Procurement was to achieve transparency, competitiveness, fairness to bidders and to save time and cost in tendering process of work and services.

Audit noticed several deficiencies in the tendering activities under the e-Procurement system affecting its performance to achieve the intended objectives as discussed below:

2.3.2.4.1 Time prescribed for bid submission not followed

As per Rule 24 (iii) of Assam Public Procurement Rules, 2020, the date for opening of bids shall be fixed after at least twenty-one clear days counted from the date of publication of the latest advertisement inviting bids.

¹⁸⁶ BTC-4 tenders, NHM-8 tenders, PWD (Building and NH)-4 tenders and PWD (Roads)-4 tenders.

Audit noticed that in 43 out of 225 (excluding two tenders not opened and 13 cancelled tenders) sampled tenders (19 per cent), only three to 19 days were allowed for submission of bids as against minimum allowable 21 days from the date of publication of Notice Inviting Tenders (NITs) and the details are shown in *Appendix 2.5*. Restriction of time limit may have led to participation of less than three bidders in 20 tenders.

Thus, bidders were not given sufficient time to allow more participation of bidders to ensure competitiveness in price discovery process. The system was not configured with such restriction of opening of bid after mandated 21 days.

2.3.2.4.2 Required number of bids opener not configured

As per general guidelines for e-Procurement under Central Public Procurement Portal (CPPP-June 2019), Bid Openers are to be identified for each tender at the time of publishing of the tender enquiry and a minimum of four Bid Openers must be configured against each tender to allow transparency in tender opening. However, no such provisions were found included in the Assam Public Procurement Rules.

Audit further noticed from records of AS-CFMS that maximum three Bid Openers were configured in the e-Procurement portal.

On this being pointed out, the Department, while agreeing to the audit observation, assured (November 2023) to look into the matter.

2.3.2.4.3 Uploading of tender documents not ensured

As per Assam Public Procurement (APP) Act, 2017, every procuring entity is required to e-publish all decisions such as extension of time, award of contract, closing of procurement process, commencement of works or services or delivery of goods procured through State Public Procurement Portal. The e-Procurement Portal of GoA has five distinct stages against each Notice Inviting Tender (NIT), where relevant documents related to each stage are to be uploaded by the tender inviting authorities.

The stages of tendering process for uploading related documents were given as below:

SI. Whether uploading of Document Particulars of stages Document to be uploaded No. is mandatory or optional Technical bid opening Minutes of opening of technical bids | Optional 1 Technical evaluation Technical Evaluation Sheet Mandatory Financial bid opening Minutes of opening of financial bid Optional Financial Evaluation Financial Evaluation Sheet Mandatory Formal Work Order/ Supply Order Award of contract Mandatory

Table-2.3.4: Document to be uploaded in each stage of e-Procurement portal

Source: Departmental records.

Audit scrutiny of 204 sampled awarded tenders as regards to mandatory uploading of documents showed the following:

- ✓ In 171 cases, all the mandatory documents were uploaded.
- ✓ In 22 cases (10.78 *per cent*) {13 PWD (Building and NH), two- PWD (Roads), seven -WRD}, technical evaluation though done but instead of uploading 'Technical Evaluation Sheet', other documents *viz.*, 'financial bid opening/ office order regarding 'formation of bid evaluation committee' were uploaded.

✓ In 11 cases (5.39 per cent) of PWD (Building and NH), though financial evaluation was done but in place of Financial Evaluation Sheet, order regarding 'Acceptance of Tender'/ 'work orders' was uploaded.

Similarly, under the category of optional uploading of documents, it was noticed that in 18 cases (8.82 *per cent*) {six - APDCL, two - ICD, 10 - PWD (Building and NH)}, in place of 'Minutes of opening of financial bid', 'Summary of financial evaluation' was uploaded at the stage of 'Financial bid opening'.

Thus, uploading of mandatory documents for 33 tenders (16 per cent) and optional items for 18 tenders (8.82 per cent) of the 204 awarded tenders test checked in audit was not complied with by nine departments. Non-uploading of documents at different stages reduced transparency of the procurement process and up-to-date information could not be made available to stakeholders. As such, complete and actual information on tenders were not provided in the e-Procurement system on a real time basis.

In reply (November 2023), the Department stated that there were some technical issues with the GePNIC which need to be rectified by NIC.

2.3.2.4.4 Timeliness not maintained

In terms of Para 27 of Assam Public Procurement Act, 2017, as soon as the procuring entity, with the approval of the competent authority, decides to accept a bid, it shall communicate the fact to all participating bidders and shall publish the decision on the State Public Procurement Portal. The procuring entity shall advise the successful bidder to complete the requirements within a specified time such as performance security (Bank Guarantee/ Bank instrument) and signing of tender agreement to conclude the contract. Time taken at important stages of tender process are illustrated in *Table 2.3.5*:

Financial No. of Time taken in technical bid opening Time taken in award of work after year tenders and price bid opening (in days) price bid opening (in days) Minimum Minimum | Maximum Maximum Average Average 2018-19 39 121 705 215 23 2019-20 54 0 168 24 2 701 201 2020-21 61 0 457 38 0 473 128 2021-22 50 1 159 32 0 436 82 **Total** 204 30 157

Table-2.3.5: Time taken at important stages of tendering process

Source: Information furnished by Finance Department, GoA.

Audit analysed 204 awarded tenders and found that the maximum numbers of days taken between technical bid opening and price bid opening was to the extent of 121 days to 457 days with an average of 30 days during the four year period (2018-19 to 2021-22) whereas maximum time taken for the award of work after opening of price bid was ranging between 436 days and 705 days with an average of 157 days mainly due to reasons such as change of scope and delay in obtaining fresh sanctions, time taken for technical and financial bids evaluation, *etc*.

Thus, the total time in days taken for award of work from the price bid opening was about on average of 82 days to 215 days during the same audit period. Prolonged process in award of tender indicated that the objective of shortening procurement cycle and time saving was not achieved under the e-Procurement system.

There is no system of auto cancellation of tenders if not finalised within a specified time in the e-Procurement portal. Thus, the system did not ensure timeliness in finalising of tenders. There was a need for prescribing timelines for each stage of tendering process to ensure finalisation of tender in a time bound manner.

2.3.2.4.5 Lack of inbuilt provision for calculation of processing fee

GoA abolished the Tender Fees for e-Tenders and instead decided (21 August 2019) to collect online tender processing fees centrally by accepting online Bid from bidders in place of Demand Draft (DD)/ Banker's Cheque (BC). Tender Processing Fees was fixed at a rate 0.02 *per cent* of the estimated value with an upper limit of ₹20,000 for estimated values of tenders up to ₹50 crore and ₹30,000 for tenders above ₹50 crore.

Audit, however, observed that out of 240 sampled tenders, 163 tenders were published after 21 August 2019, and as such tender processing fees were to be collected. Against these 163 tenders, a total amount of ₹26.68 lakh (₹16.18 lakh for 128 tenders value up to ₹50 crore and ₹10.50 lakh for 35 tenders above value of ₹50 crore was due, but only ₹16.50 lakh (₹12.21 lakh for tenders value upto ₹50 crore and ₹4.29 lakh for tenders value above ₹50 crore) was collected leaving a balance of ₹10.18 lakh $\{(₹3.96 \text{ lakh for tenders up to ₹50 crore})}$ was yet to be collected (*Appendix 2.6*) as of July 2022.

Further analysis showed details of tenders involving short or excess collection as under:

- in 51 tenders, the actual due amount of ₹6.99 lakh was collected without any shortfall and excess;
- in 81 tenders, there was short collection of ₹12.02 lakh (collected ₹5.23 lakh against due amount of ₹17.25 lakh); and
- in 31 tenders, a total excess amount of ₹1.84 lakh was collected (₹4.28 lakh was collected against due amount of ₹2.44 lakh).

There is no provision in the portal for automatic calculation of requisite processing fees to be collected from the bidders. If the system continues to lack inbuilt facilities for calculation of tender processing fees, such instances are likely to recur in future.

In reply (November 2023), the Department stated that the NIC would be consulted for further action.

2.3.2.5 Compliance to Rules and Regulations governing public procurement in Award

Procurement of goods, services and works for public purposes should be in compliance to relevant rules and regulations contained under Assam Financial Rules, Assam Public Procurement Act, 2017, Assam Public Procurement Rules, 2020, and guidelines

issued by CVC from time to time. Audit observations on non-compliance to Rules and Regulations are given below.

2.3.2.5.1 Less than three bidders qualified for technical evaluation accepted

As per Section 35 A (2) (b) of APP Act, 2017 and Rule 23(16) (v) of APP Rules, 2020, the number of firms qualified in technical evaluation should not be less than three. If the number is less than three, the procuring authority may continue the procurement process, by recording in the procurement proceeding.

Audit noticed that, out of 204 sampled tenders, in 16 cases (7.84 per cent) pertaining to Chief Engineer, PWD (Roads), Assam, Chief Engineer, PWD (B), Assam, Chief Engineer, Water Resource Department, Assam and Director of Industries and Commerce, Assam, financial bids were opened even though only two technically qualified bidders had responded. The works were awarded to the firms at a total tendered cost of ₹19.95 crore without any recorded reasons in the procurement proceeding, in contravention of rules as detailed in *Appendix 2.7*.

In reply (November 2023), the Department stated as per Rule 23 (20) on the fulfilment of certain conditions, single bidder may be acceptable.

The reply is not acceptable as the reasons for allowing less than three bidders was not found recorded for justifying selection of single bidder as required under the Rules.

2.3.2.6 Deficiencies in application controls, database including scope and validity of Standardisation Testing and Quality Certification (STQC)

Analysis of database of e-Procurement portal for the period of May 2013 to August 2021, furnished by the Finance Department, GoA showed the following:

2.3.2.6.1 Inadequate validation controls

(i) Digital Signature Certificate not mapped with specific authorised user

As per User Manual on the Bid Submission process, GoA, the online corporate/ bidder enrolment forms¹⁸⁷ had a provision for enrolling vendors and assigning login ID/ password through website for logging into the application software and for system generated user ID for each user. Further, the user ID had to be mapped with the Digital Signature Certificate (DSC).

Audit noticed that the application software could not link the DSC with the user ID used at the time of registration due to absence of validation check. Analysis of data (table named 'gep_user_certificates') showed that six DSCs were mapped against the same user ID-13 and five DSCs were mapped against user ID-52 in the application software.

¹⁸⁷ Form for registration of new bidders.

File Explorer B 60 ALIASNAME

13 B KALAIIMANI

13 B Kalaiimani

13 J SEKAR

13 MADAN PRABHU

13 Prabhudoss Test

13 SIVARAMA SELVAN S DoubtfulMobileNos
Regin Progress 2403
Registered_without_DSC
DinDatabases_BiddingProcess
Registered_with_DSC
Registered_with_DSC
Registered_with_DSC
Registered_with_DSC
Summarization_sitemate mailids
Summarization_sitemate mailids
Summarization_UserStatus
Summarization_MobileNos
Summarization_MobileNos Duplicate
gep_users
Excelumpnt-gep_user_certificates
UserIDs
SurerID 13
AuditPeriod_Extract1
Summarization_Alias_DSCs
Summarization_DSCSINos

Screen Shot 2.3.1: Six DSCs were mapped against same user ID-13

There was no provision for validation of the name of the DSC holder vis-à-vis registered application user. This will allow unauthorised use of DSC by any of the users. Thus, any DSC could be mapped with the user ID and the legal sanctity of DSC was not ensured.

Mapping of multiple DSCs with a single user ID might reduce accountability, in term of tracing out the origin of an electronic document in the procurement process.

Thus, due to improper mapping of DSC with the user ID and in absence of validation checks, the authenticity of the bids could not be ensured.

In reply (November 2023), the department stated that they had sought details from NIC.

Inconsistencies in PAN and date of birth details

UserID 52 Excel_Import-gep_user_role_map

Permanent Account Numbers (PAN) is a unique data entered by the bidder at the time of registration and only alphanumeric fixed length value must be accepted. Similarly, the 'Date of Birth' (DoB) field should accept data in 'dd/mm/yyyy' format only. These were mandatory requirements for processing tenders under e-Procurement portal.

A total 68,213 bidders' applications were received in the e-Procurement portal during 2018-19 to 2021-22. Audit observed that in 13,468 cases (19.74 per cent), PANs were shown as 'NULL' 188 and in 28,200 cases (41.34 per cent), PANs were shown as 'Blank'. A Screen shot of few cases where PANs were shown as NULL is shown below:

HINTANS PHONESTDCODE PHONE
1 348 2872816 PANNUMBER DATEOFBIRTH NULL 1945-01-30 00:00:00 5908 1952-08-20 00:00:00 26560 9810371818 NULL NULL NULL NULL NULL NULL NULL NULL 1961-07-01 00:00:00 NULL NULL NULL 1964-01-01 00:00:00 NULL NULL 8 981 8241120 NULL 1964-02-17 00:00:00 NULL NULL 9 66338000 NULL 1964-06-22 00:00:00 NULL NULL 4093730 66912109 78958877 141279595 25565922 5459523 1965-06-14 00:00:00 1968-12-21 00:00:00 1969-03-12 00:00:00 1971-07-12 00:00:00 00 9830107624 NULL NULL 1972-10-11 00:00:00 17 18 011 9871368108 NULL 1974-07-01 00:00:00 NULL NULL 19 68108 NULL NULL

Screen Shot 2.3.2: ePANs shown as Null

Null is used in the context of databases, where it represents the absence of a value in a particular field of a table.

- PANs were captured in other column of data base *viz.*, in 4,707 cases (6.90 *per cent*) in the *Title* field column and in 781 cases (1.14 *per cent*) in *Designation* field column.
- In 28,225 cases (41.38 per cent), the mandatory DoB was shown as Blank, 000000000, 0094, 0141, 040, 080, etc., as against of date field (dd/mm/yyyy). In 13,466 cases (19.74 per cent), text such as "Medium Unit as per MSME", "Small Unit as MSME", "SSI", "Others", etc. were accepted by the system in Date of Birth field.

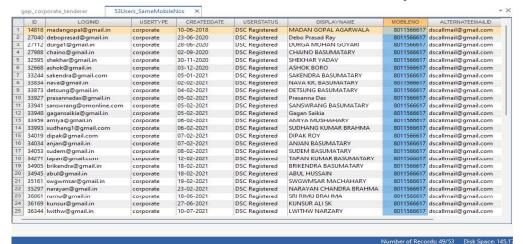
This indicated lack of input validation control in the application software.

In reply (November 2023), the department stated that they had sought details from NIC.

(iii) Mobile number/email ID not made unique for each user

To ensure fair submission of bid and to ensure that each user was properly authenticated and validated for accessing the important fields of portal *viz.*, mobile numbers, email IDs, *etc.* should be unique.

Audit noticed that for 49 out of 12,980 DSC registered users during 2018-19 to 2021-22, same mobile number/email ID was allowed in the application software as shown in the Screen Shot below.



Screen Shot 2.2.3: One mobile number / email ID used for multiple users

This indicated that multiple login IDs were operated by the same user and the basic field was not made unique in the system to ensure that each user was properly authenticated and authorised to access the portal. There was no provision in the system for Aadhaar based authentication of the users.

In reply (November 2023), the department stated that they had sought details from NIC.

(iv) Bidders allowed without DSC

For use of application software of e-Procurement portal, registration of users is prerequisite. After successful registration, the bidder has to buy a DSC and to enrol the same with the portal. Audit, however, observed that application software allowed registration of all users without proper unique authentication. Out of 26,569 Corporate users, 12,980 users (48.85 *per cent*) were registered with DSC, and 11,260 (42.38 *per cent*) users were registered without DSC, one user was blocked and registration was under process for 2,328 users. As many as 12,273 users had participated in the bid process without DSC during 2018-19 to 2021-22.

Thus, due to lack of mandatory linkage of registered users with DSC and non-ensuring unique IDs of each bidder, the system may be accessible to unauthorised users and duplicate users.

2.3.2.6.2 Gap in User ID numbers in registration and bid submission

As per Software Requirement Specification (SRS), the User-ID numbers should be system generated and continuous in ascending orders.

Audit noticed that user IDs were generated while registration with five gaps and 98 missing serial numbers. Unauthorised deletion of users may lead to manipulation in tendering activity, making it unreliable and un-authentic. Thus, due to absence of validation checks in the application software, the possibility of manipulation of data could not be ruled out.

Further, to detect any unauthorised changes in the database, while capturing the data of bids submitted through the application software, the system auto-generates row ID numbers sequentially for ensuring integrity and reliability of data.

Whereas in bid submission, 640 gaps in the row numbers, consisting of 998 missing row numbers in the table that contained the details of tenders along with critical dates were noticed in Audit. The gaps in row ID numbers (serial number) both in registration and bid submission would indicate unauthorised deletion of row ID number/ serial number allowing manipulation in tendering activity. Such action will make the system unreliable and open to manipulation and compromise on the integrity of data.

In reply (November 2023), the department stated that they had sought details from NIC.

2.3.2.6.3 Absence of logs in respect of registered users

Audit trail provides for evidence about how a specific transaction was initiated, processed, and summarised to track the history of transactions, system shortcomings, erroneous transactions, changes/ modifications in data, *etc*. The system should be capable of recording logs of different events with date and time of each event occurring during the tendering process.

Audit noticed that there were 28,387 users registered on the portal and logs were recorded for 28,350 users only. No logs were available for registration of remaining 37 users. In absence of these logs, it could not be ascertained how these users got registered with the portal.

In reply (November 2023), the department stated that they had sought details from NIC.

2.3.2.7 Integrity of data including scope and validity of Standardisation Testing and Quality Certification (STQC)

The Standardisation, Testing and Quality Control (STQC) Directorate of the Ministry of Electronic and Information Technology (MEITY) issued (August 2011) detailed 'Guidelines for Compliance to Quality Requirements of e-Procurement Systems', and a third-party certification for compliance with these guidelines is required. As per the guidelines, the key requirements of an e-procurement system were conformation to General Financial Rules, maintenance of confidentiality and integrity of information, compliance to vigilance guidelines and flexibility in adaptation and customisation, *etc.*

As per Certificate of Approval issued by the Director, STQC, MEITY, GoI, (valid for three years with effect from 21 December 2020), e-Tendering application of Government e-Procurement System of National Informatics Centre (NIC) used by GoA was tested and found to be in compliant with all the applicable requirements relating to security and transparency as prescribed in CVC guidelines for e-Procurement application software, General Financial Rules, 2017 and IT Act, 2000.

However, reports of functional testing, performance testing and Application Security testing, though called for, were not made available to audit for verification.

In view of the above, audit could not ascertain:

- details of third-party certification for compliance with the guidelines as mandated by the MoF and the CVC of the Government of India which was actually conducted;
- complete conformity with General Financial Rules;
- complete confidentiality and integrity of information;
- flexibility in adaptation and customisation for compliance to vigilance guidelines;
 and
- e-Procurement system complied with all the applicable requirements.

2.3.3 Conclusion

As per direction of Finance Department, GOA, all departments were to be on-boarded to e-procurement system w.e.f., from 01 August 2018 for the tender value of ₹50 lakh and for ₹25 lakh since 16 December 2021. The on-boarding of all departments was yet to be completed as out of total 56 Departments, 45 Departments had been registered in e-Procurement portal, leaving 11 Departments to be on-boarded on the portal as of March 2022.

The number of tenders in the e-Procurement system was showing a declining trend as the tender actually awarded was just about 46 *per cent* of the valid tenders during the four-year periods of 2018-19 to 2021-22. Due to several deficiencies such as no real time and upto-date processing of tender, huge cancellation/retendering and accumulation of tender to be opened and in progress for three long years as of July 2022, the objective of shortening of procurement cycle and cost saving in procurement process could not be achieved by the e-Procurement system.

The e-Procurement system was not configured for opening of bid only after mandated 21 days as bids were opened within three to 19 days thereby, restricting the prospective bidders in the tendering process for ensuring competitive pricing.

Uploading of mandatory documents in 33 tenders (16 per cent) and optional items in 18 tenders (8.82 per cent) of the 204 tenders test checked in audit was not complied with by nine departments which reduced transparency in the e-Procurement process.

Maximum time taken for the award of work after opening of price bid was ranging between 436 days and 705 days with an average of 157 days and thus, objective of shortening time and cost saving was yet to be achieved under the e-procurement system.

A total amount of ₹26.68 lakh towards online tender processing fees was due against 163 sampled tenders published after the mandated date (21 August 2019), however, only ₹16.50 lakh was collected resulting in short collection of ₹10.71 lakh. Further, there was no provision in the portal for automatic calculation of requisite processing fees to be collected from the bidders.

There were instances of acceptance of less than three qualified bidders in the system for technical evaluation against the provision under Assam Public Procurement Rules, 2020.

There was no provision in the system for validation of the name of the DSC holder *vis-a-vis* registered application user, inconsistencies in PAN and Date of birth details, absence of unique Mobile number and email-ID, absence of logs in respect of registered user, *etc.*, to ensure validation control and integrity of the system.

2.3.4 Recommendations

- The Government may conduct proper review of the e-Procurement system to identify the reasons for non-finalisation of tenders for unduly long period of time and various systemic deficiencies to take corrective action for providing accountability, fairness and confidence in the e-procurement process.
- The Government may consider generation of Award of Contract through the portal mandatory for all departments to ensure complete capturing of e-procurement cycle and generation of up to date MIS for effective monitoring.
- Provision may be made in e-procurement system for validation control, viz., deduction of processing fee, timely opening and evaluation of bids, configuration of minimum bidders, etc., in tender processing cycle.
- Data validation and integrity may be strengthened by providing respective fields and validation checks, and by creating user logs for all users to keep track of all activities.

Compliance Audit Paragraph

Public Works (Roads) Department

2.4.1 Compromising the integrity of contract by making drastic changes in scope of awarded work

The Department, either on the request of the Contractor or on other grounds, changed the approved design and scope of works, within a short time span of 26 days to 90 days after commencement of the works. It invited tender for one item and executed another item at SoR rates by changing the scope of work.

As per Rule 231 of Assam Public Works Department (APWD) manual, the administrative approval should be based on a preliminary report, an approximate estimate and information as regard to the details of the site.

Further, as per paragraph 4.6 (i) of Ministry of Road Transport and Highways (MoRTH) (Planning Zone) guidelines on preparation of Detailed Project Report (DPR), *etc.* circulated (March 2019) to states, topographic survey should be conducted ensuring quality, accuracy and timely preparation of the DPR. The guidelines *inter alia* also envisaged that for land based surveys, more than 50 points shall be measured per sqm and for aerial based surveys, more than 10 points shall be measured per sqm.

During audit of two Divisions *viz.*, Dhemaji Territorial Road Division, and Jalukbari & Hajo Territorial Road Division of Public Works Department (PWD), audit observed that the divisions revised the estimates of two works after awarding the contracts as shown in *Table 2.4.1*.

	Sl.	Name of	Name of work	Details	of cost (₹ in	Reasons for	Days within	
No.		Division	Approved Tendered Re		Revised	revision	which revised	
	1	Dhemaji Territorial Road Division	Improvement of road from NH-15 at Silikhaguri to Lakhipathar under RIDF ¹⁸⁹	8.75	7.88	8.75	Request of contractor	26 days after commencement of the work
	2	Jalukbari & Hajo Territorial	Improvement by widening and strengthening of	40.84	35.65	39.61	Maintaining uniform level	90 days after commencement

of road

of the work

Table-2.4.1: Revision of estimated costs after awarding the works to contractors

Source: Departmental records.

Dhopatari Mallong

Road

Road

Division

As can be seen from *Table 2.4.1*, the scope of works was changed within a short time span of 26 days and 90 days respectively after commencement of works. Details of approval of the work, change of scope, execution and audit observations are discussed below:

Rural Infrastructure Development Fund of National Bank for Agriculture and Rural Development (NABARD).

1. Improvement of road from NH-15 at Silikhaguri to Lakhipathar under RIDF

The road had a history of frequent overtopping¹⁹⁰, owing to which, Hon'ble Member of Parliament in consultation with the Minister of PWD, Government of Assam (GoA) instructed to construct the road with Interlocking Concrete Block Pavement (ICBP)¹⁹¹. As such, in the estimate, the EE proposed for improvement of the entire chainage of 6.5 Km of road with ICBP and Detailed Project Report for the work was prepared (August 2020) at a cost of ₹8.75 crore. GoA administratively approved (December 2020) and the CE technically sanctioned (January 2021) the work at the estimated cost of ₹8.75 crore.

In response to tender (October 2020) for the above work, out of five participating bidders, three bidders¹⁹² were technically qualified and they quoted the same cost of ₹7.88 crore (10 *per cent* below the estimated cost of ₹8.75 crore put to tender). Based on the recommendation of the Government, CE awarded (05 February 2021) the work to a contractor¹⁹³ at a tendered cost of ₹7.88 crore with the stipulation to complete the work within 24 months.

Subsequently, after a passage of 26 days only from the award of work, the contractor requested (04 March 2021) the EE for allowing Dense Bituminous Macadam (DBM) and Bituminous Concrete (BC) in place of ICBP. Accordingly, based on the request of the contractor, the EE prepared (August 2021) a working estimate of ₹8.75 crore by partially replacing ICBP with bituminous layers of Prime Coat (PC), Tack Coat (TC), DBM and BC. The contractor completed the work in May 2022 and ₹8.75 crore was paid (February 2023) to the contractor.

The sequence of events points to the fact that the original estimate was prepared without any survey leading to change in the scope of work only within 26 days from the start of the work. Further, the newly added items escaped competitive bidding as the additional works were executed at SoR rates.

On this being pointed out, the Special Commissioner and Special Secretary to Government of Assam stated (December 2023) that considering high traffic volume and better riding quality, ICBP was replaced with bituminous pavement. The Department had decided to replace ICBP with DBM after 26 days of awarding the Contract. Since the contractor had already started the initial works and cancelling the work and inviting fresh tender would have attracted legal action/implication.

The reply vindicates the audit conclusion that the DPR was prepared without any preliminary study/ survey necessitating changes only within 26 days.

2. Improvement by widening and strengthening of Dhopatari Mallong Road

The Executive Engineer (EE), Jalukbari & Hajo Territorial Road Division prepared (September 2020) the Detailed Project Report (DPR) for work at the estimated

¹⁹⁰ The rising of water over the top of a barrier (road).

¹⁹¹ It is a brick like structure made of cement, sand etc., with proportionate quantity. It is used for construction of rural roads, footpath, parking area *etc*.

¹⁹² JC Construction Pvt Ltd, Shri Ganga Pegu, Shri Rana Dev Saikia.

¹⁹³ JC Construction Private Limited (JCCPL).

cost of ₹40.84 crore¹⁹⁴. Government of Assam (GoA) administratively approved (December 2020) and the Chief Engineer (CE) technically sanctioned (December 2020) the work at the above estimated amount. The lowest bid price of ₹35.65 crore was same as offered by two bidders. The CE awarded (February 2021) the work to Hi-Tech Construction¹⁹⁵ at his quoted bid price of ₹35.65 crore (10 *per cent* below the estimated cost) with the stipulation to complete the work within 24 months. The work was completed within 12 months *i.e.*, in January 2022 at a cost of ₹39.50 crore. The EE paid ₹10.45 crore to the contractor leaving a balance of ₹29.05 crore to be paid as of March 2023.

Audit observed that only after three months of commencing the work in February 2021, the EE modified the scope of work revising (June 2021) the estimate to ₹39.61 crore by replacing the item of WMM with WBM including other alterations. The WMM (200 mm thickness) was replaced with WBM Gr. II and Gr. III of 150 mm thickness in the revised estimate, on the ground of maintaining uniform level of road. Though the revised estimate was approved by CE only in August 2021 in the meanwhile, the construction continued as per the revised specification of work.

Thus, the DPR was prepared without any preliminary study and site survey leading to change in the scope of work at the most basic pretext of maintaining uniform level of road. This also assumes significance in view of the fact that since the work pertained to widening of an existing road, the new work was to be of the quality and specification of the existing road. Further, the newly added items escaped competitive bidding as the additional works were executed at SoR rates.

On this being pointed out, the Department stated (December 2023) that at the time of preparation of DPR, it was presumed that WMM would be more beneficial but during the course of execution, it was noticed that after the construction of side-drains, the road became narrower and it was not possible to go with WMM as the site became unsuitable for paver. Further, the contractor had already completed the drainage work which was part of the major work and any cancellation of work due to change in scope of work would attract legal implication.

The reply suggests that the DPR was prepared on presumption and that the Department was not even aware of the ground realities.

It was further noticed that in both the above mentioned cases, the selected contractors had quoted unrealistically low prices for the items which were later replaced by another item in the revised/ working estimates.

From the above two case studies, Audit noted that necessity for revision of estimates was discovered just after commencement of the work pointing towards inefficiency of the concerned Engineers who could not assess the requirement at the time of preparation of estimates. Further, the process of revision was designed in such a manner so that the revised cost remains within the administratively approved amount just to skip the approval from government for such revision.

¹⁹⁴ Civil work valued ₹39.61 crore.

¹⁹⁵ Recommended by government without justifying the reason.

Audit also noted that after significant changes made in the approved estimates, the Divisions drew one statement/Bill of Quantities with the awardee contractors showing the items of works, quantities to be executed and item wise payable rates. The divisions termed such statement as 'supplementary tender', though, such term in this regard was neither found available in Assam Financial Rules, 1939 nor in Assam Public Procurement Act, 2017. Thus, rates for newly added items escaped tender process and terming it as supplementary tender was also misleading. Moreover, tendering for one item and executing another item by avoiding the tendering process denied the benefits of transparency of competitive bidding.

Moreover, possibility of cartelisation and passing on of the sensitive information relating to the scope of work to the contractors cannot be ruled out as the awardee contractors bagged the contract by quoting lower rates for the items which subsequently got changed with new items at SoR rates.

Responsibility needs to be fixed on the Engineers concerned for violation of provisions of APWD Manual and guidelines issued by MoRTH *ibid*, and for preparation of DPRs/original estimates of these projects without any preliminary study and survey.