



**DEPARTMENTALLY RELATED STANDING COMMITTEE
ON DEVELOPMENT (C) DEPARTMENTS**

2025-26

FIFTEENTH ASSEMBLY

SIXTY NINE REPORT

ON

GRANT NO. 69

DEPARTMENT :

SCIENCE, TECHNOLOGY & CLIMATE CHANGE

Presented to the House on 21st March, 2025

**ASSAM LEGISLATIVE ASSEMBLY SECRETARIAT,
DISPUR, GUWAHATI-781006.**

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(i)

**COMPOSITION OF THE DEPARTMENTALLY RELATED STANDING
COMMITTEE ON DEVELOPMENT (C) DEPARTMENTS, 2025-26**

CHAIRMAN :

1. Shri Naba Kumar Doley, MLA.

MEMBERS

- | | |
|-------------------------------|--------------|
| 2. Shri Prodip Hazarika | MLA & Member |
| 3. Shri Suren Phukan | MLA & Member |
| 4. Shri Darsing Ronghang | MLA & Member |
| 5. Shri Diganta Kalita | MLA & Member |
| 6. Shri Ramkrishna Ghosh | MLA & Member |
| 7. Shri Rekibuddin Ahmed | MLA & Member |
| 8. Smti Sibamoni Bora | MLA & Member |
| 9. Shri Abdul Batin Khandakar | MLA & Member |
| 10. Dr. Rafiqul Islam | MLA & Member |
| 11. Shri Ashraful Hussain | MLA & Member |
| 12. Shri Rabiram Narzary | MLA & Member |
| 13. Shri Jiron Basumatary | MLA & Member |

SECRETARIAT

1. Shri Dulal Pegu, Secretary
2. Shri Prodip Handique, OSD (Joint Secretary)
3. Smti. Hema Devi, Under Secretary
4. Smti. Ruman Choudhury, Asstt. Language Officer
5. Smti. Deepa Das Kakati, Committee Officer
6. Smti. Sewali Bhagawati Sarma, Committee Officer

(ii)

INTRODUCTION

1. I as Chairman of the Departmentally Related Standing Committee on Development (C) Departments having been authorized by the Committee to submit the Report on its behalf present this 69th Report on Grant No. 69 relating to Science, Technology Climate Change on the Budget Estimates for the Financial Year 2025-26, Govt. of Assam.
2. The present Committee, in pursuance of Rule 260 H (1) of the Rules of Procedure and Conduct of Business in Assam Legislative Assembly has been constituted on 30th December, 2024 by the Hon'ble Speaker, Assam Legislative Assembly for a term of one year and accordingly notification was published on 1st January, 2025.
3. The Committee has considered the Demand for Grant No. 69 on the Budget Estimates for the Year 2025-26 in its meeting held on 13th March, 2025.
4. The Committee has been befitted with the assistance rendered by the Government representatives during the course examination of the Budget Estimates under the aforementioned Grant for the year 2025-26. The Committee has formulated its observations taking into consideration the valuable submission tendered by the Official witnesses, during the course of consideration of the Budget estimates.
5. The Committee wishes to keep in record the genuine services rendered by the Government Officials to the Departmentally Related Standing Committee on Development (C) Departments, Secretary as well as the concerned Officers and Staff of Assam Legislative Assembly Secretariat for their unstinted services devoted to the Committee during the preparation of this Report.
6. The Committee has considered the Draft Reports on 18th March, 2025 and approved it on the same day.

Dispur
Dated 18th March, 2025

Naba kr. Doley
Chairman
Departmentally Related Standing Committee
on Development (C) Departments
Assam Legislative Assembly.

GRANT NO.69

SCIENCE, TECHNOLOGY & CLIMATE CHANGE DEPARTMENT

The Budget provision under Grant No.69 of Science, Technology & Climate Change Department for the year 2025-2026 is given under the following table :-

BUDGET ESTIMATES

	Revenue	Capital	Total (Rs. In lakh)
VOTED	2848.13	6139.06	8987.19
CHARGED	0.00	0.00	0.00

Major Head of Account	Head Details	Budget Estimates for the year 2025-2026 (Rs. In lakhs)
2810	New and Renewable Energy	78.50
3425	Other Scientific Research	2674.63
3435	Ecology and Environment	95.00
5425	Capital Outlay on other Scientific and Environment Research	6139.06
Grand Total		8987.19

The DRSC on Development (C) Departments in its sitting held on 13th March, 2025 and examined the papers and documents received from the Department and took evidences from the Departmental representatives.

CHAPTER - I REPORT

GRANT NO. 69

Science, Technology & Climate Change Department:

Under Grant No. 69, relating to Science, Technology & Climate Change Department there are 4 nos. of Major H/A viz. "5425" "3425" "3435" and "2810. The detailed vote of Account Budget Provision for the current Financial Year is as below:

Head of Account	Budget Estimates (Rs. in lakhs)	
	Revenue	Capital
2810-New and Renewable Energy	127.45	-----
3425-Other Scientific Research	2500.16	-----
5425- Capital Outlay on Other Scientific & Environmental Research	-----	8557.75
3435- Ecology & Environment (Green Innovation Fund)	375.00	-----
Total	3002.61	8557.75
Grant Total	11560.36	

The Science, Technology & Climate Change Department with its various organs are implementing various programmes to utilize and propagate the benefits of Science & Technology to all sections of people.

Originally known as the "Department of Science Technology and Environment" was created on 22nd November, 1982. After transferring the "Environment" subject to the Environment & Forest Department, the Department was later renamed as Science & Technology Department. Now, showing commitment of the Govt. towards a climate change resilient society and to spearhead the effort in a focused manner, the Hon'ble Chief Minister has announced the renaming of Science and Technology Department as Science, Technology and Climate Change Department on 5th June, 2021 and the same has been notified vide Notification No. AR.47/2021/4 dated 03/09/2021 issued by Administrative Reforms, Trainings, Pension and Public Grievances Department.

SCIENCE & TECHNOLOGY (GRANT NO. 69)

The Government of Assam is giving due priority to the science & technology sector for overall growth and development of the state. The Science & Technology Department, with its various organs are implementing various programmes to promote and popularise science & technology and to utilise and propagate the benefits of science & technology to all sections of people.

The sub-ordinate wings of Science, Technology & Climate Change Department are:

i. Directorate of Science & Technology:

The Directorate of Science & Technology was created in the last part of 1995 for efficient functioning and co-ordination at different level and for monitoring the various schemes of science & technology sector. The post of Ex-officio Director was created in 1983 with a few technical and non-technical staff. The post of the Director was created by the Govt. in December 1995 and the DDO power was delegated to the Director, Science & Technology from 1st April, 2014 vide Notification No.STE 74/2013/7 dated 30/12/2013.

All the schemes under the Science, Technology & Climate Change Department are co-ordinated and monitored by the **Directorate of Science & Technology**. The new office of the Director, Science & Technology, Government of Assam at Bihyan Bhawan, ABC, Guwahati was inaugurated by Shri Keshab Mahanta, Hon'ble Ministry, Science, Technology and Climate Change, Assam, on 20th February, 2021.

ii. Assam State Space Application Centre (ASSAC) :

ASSAC was formed as per the decision of Hon'ble Cabinet held on 28.07.2021 in the Cabinet Room of Chief Minister's Office at Janata Bhawan, Dispur and subsequently registered under Societies Registration Act, XXI of 1860 on 3rd November, 2021. ASSAC as an independent autonomous body formed by carving out Assam Remote Sensing Application Centre (ARSAC) from ASTEC. The basic objective of setting up of ASSAC is to promote extensive use of Geo-spatial technology and space inputs by user departments for governance and developmental planning of various activities. The Centre is well equipped with necessary computer systems / software and modern surveying tools such as UAV / Drone, DGPS as well as well-trained highly motivated scientific staff to render necessary services using space inputs and geospatial technology. Moreover the Hon'ble Cabinet in its meeting held on November 19, 2024, the Governor of Assam is pleased to designate the Assam State Space Application Centre (ASSAC) as the State Nodal Agency for providing policy support pertaining to Remote Sensing, GIS, GPS and UAV/Drone surveys in the State to effectively utilize space-based inputs in various developmental projects. Further, ASSAC is included under the PM Gati Shakti programme for data sharing, establishing data quality standards and developing a policy framework for geospatial data in the State. This designation has enable ASSAC to better liaise with stakeholders of the State

Government, ISRO, DOS and NESAC in scientific and techno-managerial activities and provide advanced space technology inputs more effectively to various line departments Water Resources, Irrigation, Agriculture, Town and Country Planning, Fisheries, Border protection and Development of Assam, Revenue and Disaster Management, facilitating innovative approaches in the design and implementation of development projects and potentially reducing costs and time overruns. ASSAC has also initiated an outreach activity at district level to sensitise the line departments at district level for utilisation geospatial technology in governance and developmental planning which are ongoing. During Financial Year 2023-24 ASSAC was mostly involved and carrying out schemes identified and prioritized under Plan of Action (POA) by Government of Assam. POA schemes were prioritized as per the suggestion of Hon'ble Union Home Minister during 9th NESAC Society Meeting to be completed within 3(three) years. With available budget provision of Rs. 293 lakhs made during financial year 2022-23 under SOPD-GA , which are carried forward to successfully complete all 10 nos of POA projects supported by STCCD under Annual Plan Schemes. In addition ASSAC is also involved in 7 regional nature of projects under POA in technical collaboration with NESAC, NRSC/ISRO. During this Financial Year ASSAC has carried out many important projects on Natural Resources Management as per need of line departments as well as developed Web GIS Application, Field Survey using DRONE & DGPS and Capacity Building.

iii. Guwahati Biotech Park (GBP):

The Government of Assam, supported by the Department of Biotechnology, Government of India, has setup the Guwahati Biotech Park (GBP) in Guwahati, Assam to promote business in biotechnology and allied areas through entrepreneurship development particularly in the North-Eastern region of the country.

The Technology Incubation Centre of Guwahati Biotech Park is actively assisting entrepreneurs in transforming their ideas into commercially viable products. With over 40 supported start-ups, the centre currently accommodates 19 ventures specializing in biotechnology and related sectors. The park also conducts internship and training programs to foster growth and innovation.

Guwahati Biotech Park nurtures and support startups through its incubation programs, fostering a dynamic environment for research, development, and collaboration in the field of biotechnology.

With a motive to facilitate and catalyze the Biotech Industrial Growth in the state, Business Enterprise Zone (BEZ) of Guwahati Biotech Park is being developed. The BEZ will stand as a beacon for large and medium scale bio-tech players seeking long-term land lease options for manufacturing or research facilities. This zone will play a pivotal role in attracting investment and fostering collaboration, thereby propelling the growth of the biotechnology sector in our region. Earth filling & boundary wall work is nearing completion and external electrification works (Supply & installation of DG set, supply and installation of main cable, street lighting) has been completed.

iv. **Assam Science Technology & Environment Council (ASTEC)**

The Assam Science Technology & Environment Council (ASTEC) was established in 1986-87 as an autonomous society under the Societies Registration Act, 1860. It operates through two key divisions:

1. **Science & Technology Division**
2. **Environment Division**

Since its inception, ASTEC—under the Department of Science, Technology, and Climate Change, Govt. of Assam—has been actively promoting science popularization, scientific research, and innovation. It plays a crucial role in inspiring the younger generation to pursue careers in science while fostering a scientific temper in society.

ASTEC implements various programs aimed at the comprehensive development of Assam through scientific and technological interventions. These initiatives focus on enhancing social security, environmental sustainability, efficient utilization of natural resources, human resource development, knowledge creation, and innovation.

Recognized as one of the leading State Science & Technology Councils in India, ASTEC continues to make significant contributions to the state's progress in science, technology, and environmental sustainability.

Objectives:

1. **Identify Key Gaps for S&T Intervention** – Assess the critical gaps in society where science and technology can play a transformative role in driving the state's overall development.
2. **Prioritize Research & Development Areas** – Determine the key focus areas for research and development within state-level science and technology institutions to align with strategic goals.
3. **Evaluate S&T Program Implementation** – Analyze the challenges and opportunities in implementing various science and technology programs to foster an innovative mindset across the population.
4. **Leverage S&T for Socio-Economic Growth** – Explore ways to harness science and technology for achieving socio-economic objectives, addressing unemployment and poverty in rural and underprivileged communities through targeted interventions.
5. **Support & Coordinate R&D Initiatives** – Initiate, support, and coordinate research and development projects that align with specific S&T objectives, optimizing the state's natural and human resources through institutional collaboration and engagement with national S&T bodies. Additionally, contribute to the domain of Intellectual Property Rights for the state.
6. **Promote Scientific Awareness & Engagement** – Encourage the popularization of science and technology, cultivate scientific temper and curiosity among all sections of society—especially children—and enhance public understanding and acceptance of S&T.

7. **Address Critical S&T Gaps** – Intervene in key areas of science and technology applications that fall outside the scope of conventional state institutions, ensuring comprehensive coverage of critical needs.

v. **Assam Energy Development Agency (AEDA):**

Assam Energy Development Agency (AEDA) is responsible for promoting, popularizing and preparing projects and implementing schemes related to new and renewable energy under the Ministry of New and Renewable Energy, Govt. of India and Science & Technology Department, Govt. of Assam.

vi. **Science City, Guwahati:**

Science City, Guwahati will be the first of its kind in the state and a major step towards farther improving science and technology infrastructure for generating scientific awareness among the people. Science City, Guwahati has been conceptualized in such a manner that it is attractive and useful to students, families, tourists and general public. The Science City, Guwahati project has been developed jointly by the National Council of Science Museums, Ministry of Culture, Govt. of India and Science and Technology Department, Govt. of Assam with the objective of stimulating scientific temperament among the students and general public. A plot of land 250 bighas (aprox.) allocated for this purpose at Sonapur and foundation stone of the project was laid by then Hon'ble Chief Minister Assam on 18.01.2021.

It is a joint initiative to be shared by Govt. of India and Govt. of Assam in the ratio of 90:10.

vii. **Guwahati Planetarium**

The prime objective of the Guwahati Planetarium is to promote scientific knowledge and to inculcate scientific temper amongst the masses by providing entertainment based Astronomical programmes to people, students and children in particular.

To serve as knowledge based Science communicator, Planetarium has to take another action by introduction to regular training programme in Astronomy to impart knowledge to new Generation. All Planetaria in other parts of the country and also in the world, have already addressed this vital issue. Guwahati Planetarium has been conducting Public Outreach programmes as well as awareness programmes amongst masses along with observation programme on special Astronomical events occurring from time to time. Besides the regular shows the Guwahati Planetarium has relentlessly arranging lectures and workshops on Astronomy and Space Science; over and above guided night sky observations in Planetarium premises. Planetaria have to serve as knowledge bank and fulfil this vital aspect introduction of regular training programme with updated knowledge on Astronomy is of utmost necessity.

Guwahati Planetarium has already been declared as an Institution of Higher Education and Scientific Research for advancement and development of Science Technology and Research in the State of Assam. To this effect an Astronomy Gallery, 3-D Theatre, Virtual Reality Zone and Educational Metaverse have been running successfully for the first time in the North Eastern Region at the Guwahati Planetarium. Mobile Planetarium and Telescopes for mass awareness on

Astronomy among students and children in remote corners across the State have also been inaugurated at Guwahati Planetarium recently dedicated to the society.

Construction work of a Multi-Activity Centre(G+3 Building) is going on for the benefit of students, children and members of the public in the premises of the Guwahati Planetarium for which Govt. accorded Administrative Approval amounting to Rs.12.43 Crore. Some additional works including Central AC system Structural glazing, Acoustic treatment, Fire fighting system etc. Govt. accorded Administrative Approval amounting to Rs.4.94 Crore and for installation and commissioning of 15-D Theatre, FAÇADE Lighting and External Lighting Govt. accorded Administrative Approval amounting to Rs.4.60 Crore. Further, with the progression of time and technology high quality and high resolution Projection System has been installed recently at Guwahati Planetarium to sustain interest among General Public and Students in particular, who visits the Planetarium. With this Upgradation of the State-of-the-Art Hybrid Planetarium Instrument System, Guwahati Planetarium has become a World class Planetarium. This would indeed be able to provide direct benefit to the field of Science, Education & Research, Tourism, etc, boosting revenue earning, building a scientific temperament among the general mass of people of the Society, especially the student, teacher and children communities across the State.

viii. Jorhat Science Centre & Planetarium

With a view to giving priority to science & technology sector for overall growth & development of the state, Jorhat Science Centre & Planetarium was jointly established by National Council of Science Museums, Ministry of Culture, Govt. of India & Assam Science Technology & Environment Council, Dept. of Science Technology & Climate Change, Govt. of Assam & was inaugurated on 6th of July, 2013. However, it was constituted and registered in December, 2016 as an autonomous Society under Dept. of Science Technology & Climate Change, Govt. of Assam for implementation of some of the important programmes in the sectors of science & technology for popularisation of science as the institutional organization of the department.

a. *Objectives:*

The objectives for which the Society was established are-

1. To foster and disseminate scientific and technological knowledge on various aspects of science & technology which are in the interest of the Upper Assam region and the state;
2. To formulate and disseminate different programmes on various aspects of science, technology and environment;
3. To execute/implement schemes on science, technology and environment of the Govt. of India, Govt. of Assam, North Eastern Council and other public bodies;
4. To portray the growth of science & technology in different spheres and their application in industry & human welfare, with a view to develop scientific attitude and temper and to create, inculcate and sustain a general awareness amongst the masses;
5. To design, develop and fabricate science museum exhibits, demonstration equipments and scientific teaching aids for science education and popularization ;

6. To popularize science & technology in cities, rural & urban areas for the benefit of students and for the common people by organizing exhibitions, seminars, popular lectures, science camps and various other programmes;
7. To supplement science education given in schools & colleges and to organize various out-of-school educational activities to foster a spirit of scientific enquiry and creativity amongst the students;
8. To organize training programmes for science teachers/students/young entrepreneurs/technicians/handicapped/house-wives and othe on specific subjects of science, technology & industry;

b. Functions: The basic functions of JSC&P Society are-

- i. Display and demonstrate different science exhibits in different science galleries within the campus of the society.
- ii. Conduction of planetarium shows for creating awareness on astronomical science
- iii. Conduction of various workshops related to science and technology for the teachers community as well as the students community.

In order to introduce new scientific installations & to modernize Jorhat Science Center & Planetarium, the Hon'ble CM, Govt. Of Assam has declared Rs.10crores, in the Cabinet Jorhat, held on 15th December,2022 for the bonafide interest of the society. And in accordance to this, JSC&P has submitted a list of requirement facilities as part of the CM Modernisation Plan, to the PWD for preparation of the estimate. Accordingly, PWD has prepared a DPR amounting Rs. 8,64.15 lakhs and other necessary works under the CM modernization plan. Administrative approval is received for the execution of modernization plan of Jorhat Science Centre and Planetarium.

Status of Grant No. 69

Science, Technology & Climate Change Department:

Under Grant No. 69, there are four major H/A in respect of Science, Technology & Climate Change Department viz- "5425" Capital account of Science, Technology and Environment, "3425 Other Scientific Research, "3435"-Ecology & Environment (Green Innovation Fund) and "2810" – New & Renewable Energy.

The position of grant for the last three years was as follows: Rs. in Lakhs.

Major H/A	2022-23		2023-24		2024-25	
	EE	SOPD-G	EE	SOPD-G	EE	SOPD-G
3425-Other Scientific Research	712.78 1.22 (SD)	1203.96 157.81(SD)	977.71 210.65(SD)	1134.60	1252.27	1247.89
2810-Non conventional source of energy	78.39	4.75	122.07	4.66	127.45	-----
5425-Capital Outlay on other Scientific & Environmental Research	----	3657.50 7186.00(SD)	----	7548.96	--	8557.75
3435-Ecology & Environment (Green Innovation Fund)	-----	-----	----	2500.00	----	375.00
TOTAL	792.39	12210.02	1330.43	11182.22	1379.72	10180.64

A Brief Note in respect of Grant No. 69

The detail schemes of Science, Technology & Climate Change Department under Grant No. 69 are furnished below:

Projects Identified under Plan of Action (PoA)

ASSAC is at present involved in 24 projects under POA to support various line departments in technical collaboration with NESAC, NRSC/ISRO. Out of this 24 Projects are ongoing as per schedule and some of them are near completion. A Budget provision Rs. 160 lakhs (Grants-in-aid, non-salary) released during FY 2021-22 for execution of projects identified under Plan of Action (POA) by Government of Assam as per the suggestion of Hon'ble Union Home Minister during 9th NESAC Society Meeting. Under SOPD-GA 10 nos. of PoA projects are supported and remaining are being supported by NEC / DoNER.

Projects under SOPD-GA:

Under SOPD-GA, ASSAC has successfully completed all 10 nos of POA projects supported by STCCD under Annual Plan Schemes. In addition ASSAC is also involved in 7 regional nature of projects under POA in technical collaboration with NESAC, NRSC/ISRO. These projects identified under Plan of Action (POA) by Government of Assam as per the suggestion of Hon'ble Union Home Minister during 9th NESAC Society Meeting. Under SOPD-GA 10 nos. of PoA projects are supported and Regional nature are being supported by NEC / DoNER.

i) Plan of Action (POA) under SOPD-GA are as follows:

1. Application of geospatial technology in small tea garden development and management (House hold Tea gardens: small & marginal):

Use of modern technologies such as satellite based remote sensing in combination with GIS, Global Positioning System (GPS), Mobile Apps and Web GIS have been used to create a comprehensive database of Small Tea Gardens (STG) of Udalguri district of Assam for its Development and Management. The mapping of the tea growing areas in the district has been done on 1:1000 scale. Ground visit was also performed to collect necessary data using GPS and Mobile app. Finally, integrating spatial and non spatial data a Web-portal for the Small tea growers is developed. This portal will connect STGs to the organized sector, large gardens, and stakeholders, and provide assistance from the government and NGOs. This pilot project aims to empower small tea growers, enhance their visibility in the tea industry, and contribute to the region's economic progress and sustainability.

2. Mapping and geotagging of SATRAS and Archaeological sites of Assam using mobile apps:

The project's purpose is to document and digitally map (geotagged) the cultural and historical treasures of Assam, focusing on SATTRA (The Institution of SATTRA is a unique feature of Vaishnavism in Assam, founded by Sri Shankardev, the father of Assamese culture and it's considered as special indigenous social institutional centers).

Archaeological Sites of 4 prioritised districts as per list shared by Directorate of Archaeology are also geotagged. As per record 862 Sattras of Assam distributed in 21 districts of Assam and 139 Archaeological sites distributes in 25 districts of Assam. In phase I for 4 identified priority districts 176 Sattras and 52 Archaeological Sites are geotagged and an Web GIS Dashboard application has been developed for visualisation. The URL for the web site is <https://gis.assac.in/satra/>.

3. Ground Control Point (GCP) library using DGPS :

The project aims to enhance the accuracy of existing maps in Assam by establishing Ground Control Points (GCPs) using Differential Global Positioning System (DGPS). This initiative addresses the lack of GCPs in the region, which hinders proper georectification and registration of spatial data, including Cadastral data. The establishment of a dense network of GCPs is crucial towards enhancement of geometric accuracy which will facilitate exact location based micro-level planning and intervention on ground. The project formulated a methodology to establish GCPs in selected location by Assam State Space Application Centre (ASSAC) using DGPS with reference to the existing Continuously Operating Reference System (CORS) established by Survey of India within Assam. The project also aims to capture the established GCP points in high-resolution satellite data. Currently, 9 (nine) GCP points have been established on the ground, with plans to extend the network to cover the entire Assam region. This initiative is expected to significantly enhance the geometric accuracy of geo-referencing and minimize errors in spatial data management, facilitating better decision-making and planning processes.

4. Site Suitability Analysis for 21 Proposed Model Degree Colleges using Geospatial Technology :

The Rashtriya Uchchattar Shiksha Abhiyan (RUSA) is a comprehensive initiative by the Ministry of Education, Government of India, launched in 2013, aimed at enhancing higher education across the country and focuses on strategic funding for higher educational institutions with the objectives of improving access, equity, and quality in higher education. It aims to address regional disparities in access to higher education by establishing institutions in under served areas. This study explores the higher education landscape in Assam, addressing the College Population Index (CPI) and the need for additional Model Degree Colleges. Analysis through Web GIS Application to find the number of existing colleges within 25 Kms buffer of proposed 21 locations. 15 (fifteen) ideal locations out of 21 are to be finalized considering criteria of number of colleges within proximity of 25 Kms and low CPI Index of district concerned. Colleges in Sonitpur and Dhubri are recommended based on low CPI.

5. Site Suitability Analysis for Tea Garden Model High School :

Almost 10 percent of total geographical area of Assam is under Tea Garden. The prime population within Tea Garden area is primarily rural in nature and estimated to be around 20% of Assam's total population. As per report already 118 Tea Garden Model High School are constructed in addition to existing 109 Non-Model School. To fill the existing gap area 100 more Model High School area proposed to be constructed.

Considering the overall density and spread of these existing Model and Non Model Schools, Hon'ble CM has asked Assam State Space Application Centre, ST & CCD Department to make a study of the proposed school location using Geospatial Technology. Outcome of the study was that 21 numbers of Proposed TG Model Schools has no schools within its 5 Km radius and hence these 21 schools are recommended to be considered on priority. Moreover additional 7 (seven) numbers of Proposed TG Model Schools may also be considered which are falling within range of 4.5 Km to 5 Km from the Existing Model and Non Model Schools.

6. Mapping location of Fair Price Shops (FPS), GPSS, Godowns :

The basic objective of the project is Mapping of Fair Price Shops (FPS), Gaon Panchayat level Samabai Samity (GPSS) and Godowns in Assam along and to geotag all these locations using mobile apps with necessary attributes. Hence the project involved mapping of all the FPS, GPSS and Godowns of entire Assam and creation of GIS database at District level and to bring the whole information into single database. Assam has a total of 34381 FPS distributed across different districts (this is inclusive of GPSS and Godowns). This will provide better visualisation of all FPS, GPSS and Godowns of entire Assam and jurisdiction layer in a map frame. The scheme will facilitate easy browsing of infrastructural data (spatial and attribute) of the department. It will help to build query of specific data to derive action plan as per users need.

7. Conversion of manual conventional maps of Minerals and Mines /Quarry into GIS maps:

The project aimed at converting the conventional/traditional maps of Directorate of Geology and Mining, Government of Assam into digital database through the GIS platform. Maps from the areas of Dima Hasao, East & West Karbi Anglong, Cachar and Hojai districts of Assam were received from the directorate of Geology and Mining. These maps were large scale Geological maps, Location maps, Isopachyte maps, Isochore maps, Contour maps etc. A total of 75 maps were provided by the Department of Geology and Mining (DGM), Govt. Of Assam for converting them into the digital form for the ease of analysis and for future upgradation. 28 maps were possible to georeferenced out of 75 maps shared by DGM.

8. Mapping location of Police Stations/ outposts, jurisdiction and their connectivity :

The mapping of Police Stations (Thana) and outposts, along with their jurisdiction and connectivity, was identified as a priority during the Assam Space Meet held in Guwahati. The outcome of the Space Meet was considered as one of the priority area under Plan of Action (PoA), Assam for utilization of Space Inputs for Governance and Developmental Planning. Assam Police has shared partial database of 25 districts out of 33 districts of Assam. These dataset contains name and number of Police Stations including Police Outpost etc. for each district. As per the data shared the number of Police Stations within these 25 districts are 194 numbers out of 279 Police Stations (Thana) of Assam. The basic approach followed to prepare jurisdiction of Police Stations maps are as follows:

- i). GIS based Village Layer for each district of Assam is prepared based on available records of Revenue & Disaster Department. Available names and census code are attached as attribute
- ii). Police station name is attached, based on data provided by Assam Police for 22 districts (excluding 3 hill districts) out of 25 Districts.
- iii). Geotagged Police Stations (Thana) location information shared by Assam Police are integrated. It is informed that the Jurisdiction of Police Stations will be changed subject to delimitation operation of Legislative Assembly Constituency (LAC) and process is at present ongoing. After official notification of the same the course correction will be taken up by Assam Police in association with ASSAC as per methodology designed and adopted by ASSAC.

9. WebGIS Platform for Mapping of Crime Incidents :

The primary objective of this project is to leverage geospatial technology for improving crime management and law enforcement operations. By integrating Geographic Information System (GIS) tools, the project aims to enhance the capacity of police departments in resource deployment, crime prevention, investigation, and strategic decision-making. As suggested by Assam Police, Rangia Sub-Division was prioritized for this study.

- a) Development of Mobile App for crime incident reporting. This will help in real time incident reporting with the help of mobile application.
- b) Development of Web based Crime GIS Dashboard to visualize the crime incidents in spatial domain with capability of building spatial query to filter out specific incident based on multi-criteria filtering (viz. location specific crime head, date and time). The URL to visualize the same is <https://gis.assac.in/crime-gis-rangia/dashboard>.

10. Development of Spectral Library for Important Agricultural Crops of Assam

The study explores the potential of hyperspectral data for the classification of different types of crop. It also provides a foundation for analyzing the crop health, stress, disease, and nutritional requirements. A spectral library for selected agricultural crops of Assam namely Sali Rice, Rapeseed mustard, Rabi Maize, Potato, Black gram, Sugarcane and Jute was developed. Spectral data collection was done using SVC HR-1024 spectroradiometer, following a developed standard protocol for hyperspectral and metadata collection. A Graphical User Interface (GUI) was also developed for viewing the spectral library. The interface comes with a spectral pre-processing tool which can process raw spectra and calculate a number of vegetation indices. Utilizing the high spectral resolution of EnMAP with ground field spectra of targeted crops, a combination of end member extraction, endmember spectral matching with the spectral library and Spectral Angle Mapper (SAM) classification algorithm was implemented to effectively differentiate between various types of crop. An overall classification accuracy of 88.43 % was achieved. The study demonstrates the potential of spectral library as a reference for identifying and discriminating crop type. This project is executed in collaboration with North Eastern Space Application Centre (NESAC), Dept. of Space, Govt. of India,

In addition to above following projects are also being executed by ASSAC with funding support from NEC and line departments of government of Assam:

1. Preparation of Database for existing fisheries both government and private :

The project was sponsored by Dept. of fishery, Govt. of Assam and total budget of the project was 25 Lakh. The main objective of the project was to delineation of all types of Fishery Resources in Kamrup District (undivided) up to 0.05 ha area and development of digital data repository for Kamrup District. Total 34,025 nos of fishery resources have been identified and delineated in the study district. The project has been completed and report is submitted to the Dept. of Fishery, Govt. of Assam.

2. Wetland mapping using very high resolution satellite data both pre and post monsoon to delineate wetland extent up to 0.1 acre as well as water quality analysis:

Wetlands represent a significant component of the hydrologic regime of the Brahmaputra and the Barak rivers. These water bodies act as natural storage basins for flood run off, providing thereby a cushioning effect and reducing the intensity and devastation of flood hazard. This project focuses on the wetlands of the state representing various districts and covering diverse socio-economic and environmental settings. Through visual as well as digital analysis of Cartosat 2S imagery along with high resolution Google hybrid imageries of 2022-23 time frame and integration of various information related to the wetlands using Geographical Information System (GIS). The Global Positioning System (GPS) is used in conjunction with the GIS for accurate location coordinates. A general wetland database was prepared from the data collected in the field and through visual interpretation of satellite imagery. It is observed that the total number of wetlands in the state of Assam is estimated to be 133648 and the total area covered by the wetlands is 986526.4 ha during the pre monsoon season which constitutes 12.58 percent of the total geographical area of the state. The natural water-logged areas are 8373 in number and occupy 44107.42 ha of area. Among various categories of wetlands, river/streams account for maximum area (628073.97 ha). The problem of invasion by aquatic weeds is observed in all types of wetlands irrespective of size, shape and location and need ameliorative steps for conservation. However the degree of invasion is relatively low in the manmade wetlands as compared to the natural wetlands.

3. Identification and mapping of encroached and degraded forest area :

In order to generate a scientific database on the status of degraded forests in relation to land use and land cover within the protected forests, the project "Identification and Mapping of Degraded Forest areas of Assam" has been undertaken with the financial support from NEC, Govt. of India. The study is based on remotely sensed high resolution satellite imagery of the year 2016 and 2023 time frame. The results indicate that about 5.36% of the total geographical area under closed forests has been converted to open forests and other land use/land cover categories during the period indicating a high degree of forest degradation. The results will be useful in the restoration programme of degraded forest areas for conservation and sustainable management of forest. It will also help in identifying areas where anthropogenic disturbances is very high so that the State Government can chalk out appropriate measures to reduce the pressure on the forest land.

4. Space Based Support for Integrated Development of Horticulture in NER (SSIDH):

The main objectives of the project are to identify suitable area for Assam Lemon (in Barpeta, Dibrugarh, Golaghat, Tinsukia and Udalguri districts), Banana cultivation (in Dhubri, Kamrup and Morigaon districts) and Potato in Biswanath district . Moreover a pilot study was carried out for acreage estimation of Banana in Goalpara district and Assam Lemon in Nagaon district using google hybrid image (resolution 50 cm). Project executed in technical collaboration with NESAC. The final database has been Submitted to NESAC.

5. Geotagging of all existing Sports Complexes and playground of Assam :

Sponsored by the Directorate of Sports & Youth Welfare, Government of Assam, the project aims to geotag and map all sports complexes and playgrounds in Assam, leveraging high-resolution satellite imagery to delineate boundaries and compile a comprehensive geospatial database. The initiative aligns with the Assam Youth Development Mission Society's goals to enhance sports infrastructure, particularly focusing on the creation and upgrade of football and volleyball facilities. This digital transformation facilitates efficient planning, funding allocation, and the overall advancement of sports infrastructure in Assam, thereby benefiting local sportspersons and communities. According to the list provided by the Directorate of Sports and Youth Welfare Department, Government of Assam, under the CMSGUY scheme 500 playfields, 85 available infrastructures and 74 ongoing infrastructures have been geotagged using ArcGIS Survey123. Out of the 500 playfields, 390 playgrounds in schools, 27 in clubs, 28 in colleges/institutes, 5 in different development committees, 7 under DSA, 7 under Krida Santha, 2 under SAI, SAG, 7 under Sangha, 20 under different sports associations, 2 under TE, 4 under Yuvak Sangha, and 1 public playground.

ii) **GPRIS:** Creation of GIS-based Resources Information System at Gaon Panchayat (GP) Level using High Resolution Remote Sensing Satellite data. The portal has 22 layers of information which includes 6 layers of Administrative Boundaries (viz. State, District, Circle, Block, Gaon Panchayat and Village), 7 thematic layers including legacy data, 3 nos. of point thematic layers, 3 layers of base map, 2 layers of satellite data and 1 layer of open street map. The web site is functional and can be visualized using url: <https://gpris.assac.in> (usr_id: assac_user, passwd: Assac@111)

iii) **Bhuvan State Node:** It's a Assam State Node for load balancing of data. The BHUVAN State Node Server was maintained at ASSAC w.e.f 2021 to 2024, wherein the thematic layers generated under various National Missions are uploaded. At present the portal is centrally maintained at NRSC, ISRO Hyderabad.

iv) **Setting Up of Remote Sensing Centre (non salary):** To achieve the goal of optimal use of space technology coupled with Geospatial analysis using Geographic Information System (GIS), the centre is carrying out few projects on pilot basis identifying vulnerable issues that require special attention and spatial data by government. The scheme will facilitate to establish the centre as a service provider to all government departments taking into consideration the departmental requirements. The scheme facilitates following particulars:

- Procurement, up gradation and maintenance of Software licenses (SAAS, LIDAR processing, Arc GIS Enterprise Server and Drone Operation Services and maintenance
- Drone based multispectral/hyper-spectral/LIDAR analysis for important agricultural crops etc.
- Capacity building on RS and GIS at district level
- Up gradation of Hardware & Software Licenses
- Geo-portal, Dashboard and mobile app development applications and operational services
- Participation in Meetings/ Seminars / Workshop etc.
- Hiring of office Vehicle &
- Engagement of Contractual staff

Guwahati Biotech Park (GBP) has been thriving in its mission to propel Assam towards becoming a frontrunner in innovation and entrepreneurship development in Biotech and allied sectors. The Technology Incubation Centre at Guwahati Biotech Park is successfully operating in its permanent campus at Amingaon. This centre has been providing a nurturing environment for budding entrepreneurs, fostering innovation and turning their ideas into tangible products and services. The laboratory spaces at the Incubation Centre have mostly been leased up by enthusiastic entrepreneurs/innovators, showcasing the potential and demand for such initiatives in the state. **With over 40 supported start-ups, the centre currently accommodates 19 ventures specializing in biotechnology and related sectors.** The park also conducts internship and training programs to foster growth and innovation. **Total numbers of trainees at Guwahati Biotech Park for Year 2024 is 413 numbers and total training programs conducted for 2024 is 14 numbers.**

Several prospective entrepreneurs have expressed a need for laboratory space for small Scale production, which is not available in the current centre. Therefore, vertical extension of the existing modular laboratory building and utility building is in progress in Phase 2 for the small scale production unit to accommodate start up entrepreneurs on lease basis. A hostel building (G+1) is also proposed in Phase 2 construction for the internship students / researcher from outside of the city and state. Interior work, landscaping work, car parking shed is also included in Phase II work.

AA amount Rs 17.36 crore.

Physical progress 25%.

Tentative completion June 2026.

Operational Expenditure of Assam Biotechnology Councilfor operations of the Assam Biotechnology Council which has been established to ensure proper implementation of the Biotechnology Policy for the state of Assam.

Incentive Under Biotechnology Policy of Assam Biotechnology Council to provide financial support for various initiatives aimed at fostering biotechnology research and innovation in the State of Assam through the Biotechnology Policy.

Growth in the number of biotechnology startups, encouraging entrepreneurship and fostering a culture of innovation. Attraction of private and public investments into the biotechnology sector, fueling further growth and development. Promotion of research and development activities, fostering innovation, and leading to the generation of new technologies and solutions. Expansion of the biotechnology sector contributing to the creation of high-skilled jobs, boosting employment opportunities.

NIDHI PRAYAS: Guwahati Biotech Park was granted a **NIDHI PRAYAS (Promoting and Accelerating Young and Aspiring Innovators and Startups) Centre by Department of Science and Technology, Government of India**. DST-NIDHI's is specifically to support young innovators turn their ideas into PoC. This support allows innovators to try their ideas without fear of failure, thus enabling them to reach a stage where they have a ready product and are willing to approach incubators for commercialization. **Total fund received is Rs. 1.69 Cr.**

A Business Incubation Centre for Fisheries and Aquaculture (BICFA), funded with Rs. 299.99 Lakhs under the Pradhan Mantri Matsya Sampada Yojana, is set to drive the Blue Revolution in the region. This initiative aims to promote growth in entrepreneurship in the Fisheries and Aquaculture and allied sectors. BICFA is established with an aim to nurture the development of budding entrepreneurs and support business launch of new and existing products, consultancy services, TT assistance and IPR assistance etc.

Furthermore, a **pilot packaging unit** has been established, enhancing the biotech industry's value chain.

Govt. of India has also approved a new Centrally Sponsored Scheme (CSS), entitled "National Beekeeping & Honey Mission (NBHM)" for overall promotion and development of scientific beekeeping in mission mode to achieve the goal of "Sweet Revolution". GBP received Financial Assistance under National Beekeeping and Honey Mission (NBHM) of Rs. 551.45 lakh to create **Regional Honey Testing Lab**.

Schemes under STEC

1. Research & Development Programme:

Assam Science Technology and Environment Council (ASTEC) has been initiating and supporting Research & Development Programme in selected areas which are related to location specific problems and in the emerging areas of agriculture, horticulture, sericulture, health and nutrition. Pure and basic research in science and engineering are also supported under this scheme.

The objectives of the R&D Programme are to promote research and development projects related to resource development, management, and utilization, as well as technologies that promote efficient use and conservation of resources, including conventional and non-conventional energy sources. It also aims to encourage young scientists and technologists in the state to pursue R&D activities.

During 2023-24, the following activities are taken up under the R&D programme:

- Under the newly introduced Student Research Project (SRP) component, 7 (seven) projects are recommended for support from different universities/institutions of the state viz., Tezpur University (3 project), Dibrugarh University (1 project), Assam Engineering College (1 project), Morigaon College (1 project) and Gauhati University (1 Project).
- Under the General R&D component, 13 (thirteen nos.) of projects are selected for support from different universities/institutions of the state viz. Bhattadev University; Assam Engineering College; CSIR-North East Institute of Science and Technology, Jorhat; Eastern Karbi Anglong College, IIT Guwahati, Tocklai Tea Research Institute, Gauhati University, Assam Don Bosco University, Tezpur University, Assam University, Pragjyotish College.

2. Aryabhata Science Centre (Block Level) under Popularization of science:

219 Aryabhata Science Centre (Block Level) were set up in schools, colleges, and NGOs one in each Development Blocks of the state in the year 2008. The centres are equipped with scientific instruments, tools, kits, scientific films with audio visual systems, books, telescope, DLP Projectors, Portable Sound Systems and a book on Herbal Medicine etc. for carrying out science and technology-based activities for the benefit of students, teachers and common people. Block level, District Level and State Level activities with science-based poster drawing competition, Model making competition, extempore speech competition and Idea Competition are the regular activities of the state. Apart from these observations, National Science Day, National Mathematics Day, World Environment Day, National Technology Day organizing Raj Mel, participation in National Children Congress Science, Mathematics Olympiad, grooming and mentoring etc. are the regular activities of the centres. The telescopes provided to the centres are helping the students and common people to observe the phenomena of celestial bodies. These centres as a whole are functioning as a science, technology and innovation hub at the grass root level covering the entire remote areas of the state. It is observed that the participation of students from the year 2008 to 2024 almost doubled from 32,707 nos. to 1,05,068 nos. Similarly, involvement of teachers and common people from the year 2008 to 2024 increased from 3,591 nos to 32,020 nos. and 8,135 nos. to 25,677 nos. respectively. State Meet of Aryabhata Science Centre' 2023 was held from 10-11th September 2024 at Maniram Diwan Trade Centre, Guwahati. This year Robotics competition have been introduced among the students in the Aryabhata Science Centres where participation has increased considerably.

3. Patent Information Centre (PIC):

PIC-Assam is an all-inclusive Intellectual Property Rights (IPR) facilitation Centre in the public domain since 2003. The PIC extends support to the inventors/innovators in registering their Intellectual Property (IP) and creates awareness on IPR. The Centre provides guidance and encouragement to state innovators for getting Patents for their inventions. The PIC also supports people in securing protection for other IPs like Trademark, Design, Copyright, Geographical Indication (GI) etc. The Centre serves as a resource body for workshops, seminars, refresher courses, training etc. at state, national and international levels. Its stakeholders are grass-root level innovators, researchers, academicians from Universities, IITs, NITs, Engineering colleges, Research Institutes, entrepreneurs, Government Departments, start-ups etc.

PIC has filed more than 100 Patents out of which more than 25 Patents were granted till now. Around 350 Patent Searches have been conducted till date. Apart from Patents, more than 50 other IPRs (Copyright, Design, Trademark, GI) have been registered. It has sensitized more than 71,000 people in IPR through 400+ workshops, seminars, lectures etc. organized. 20 nos. of IPR Cells have been established by PIC in the colleges/universities/institutions of the state. The PIC is the state nodal agency for GI filing and is the registered proprietor of GI-Muga Silk of Assam. In recent times, PIC has facilitated the GI registration of 'Boka Chaul' and 'Gamosa of Assam'. In recognition of the activities of PIC-Assam, it was conferred "National IP Awards- 2020" as the "Best PIC" in the country by DPIIT, Ministry of Commerce & Industry, Government of India and Intellectual Property Office, Government of India on 17th August, 2021.

During 2023-24, the following major activities under the programme:

Sl. No.	Items	Quantity
1	Workshops/camps/Meetings	32
3	Patent filed	2
4	Patent granted	1
5	New Plant Varieties applied	-
6	New Plant Varieties registered	-
7	Industrial Design applied	2
8	Industrial Design registered	2
9	Trademarks applied	1
10	Trademarks registered	1
11	Copyrights and Related Rights applied	2
12	Copyrights and Related rights registered	1
13	Traditional Knowledge applied	-
14	Traditional Knowledge registered	-
15	Geographical Indications applied	1
16	Geographical Indications registered	-
17	Number of IPR Cells created	5
Additional Activities		
18	Patent Searches conducted	9
19	Patent Examination Report resolved	1
20	Patent hearing support	1
21	Patent renewal	-
22	Industrial Design Examination Report resolved	-
23	Trademark Searches conducted	5
24	Trademark Examination Report resolved	-
25	Copyright examination report resolved	1
26	GI Authorised User applied	150
27	GI Authorised User registered	50
28	IPR Commercialization	-
29	IPR Publications	-
30	Total People Visits to PIC Regarding IPR Support	210+
31	Total People Sensitized through Workshops & IPR Camps	1411+
32	IPR Training provided	1
33	Supporting other PICs	-

Workshops supported/organised by PIC-ASTEC:

Sl. No.	Date	Workshop details	No. of participants
1	6 th November, 2023	Organized jointly with Patent Information Centre, Assam, National workshop on intellectual property rights, academic ethics, and innovation for entrepreneurship Development (NWIPR-2023) at Handique Girl's College Guwahati.	100
2	23 rd November, 2023	Collaboration with Birjhora Mahavidyalaya on IPR and research ethics.	120
3	28 th March, 2024	Organised with collaboration of the Assam Kaziranga University	100

Workshops supported/organised by PIC-ASTEC:

Sl. No.	Date	Workshop details	No. of participants
1	27 th & 28 th November, 2024	Two Days Workshop "Intellectual Property Right (IPR) in Innovation and Academia" held on at Nowgong College, Nagaon in collaboration with Nowgong College IPR Cell.	100

4. Mentoring Programme (CM's Bigyan Pratibha Sandhan):

The "Mentoring Programme (CM's Bigyan Pratibha Sandhan)" scheme of Science, Technology and Climate Change Dept., Govt. of Assam implemented by Assam Science Technology and Environment Council (ASTEC) endeavours to identify and nurture young scientific talents starting from the secondary level through a rigorous selection process. Recognizing the extraordinary potential of students exhibiting curiosity, innovation, and research inclination at an early age, the initiative aims to bridge the gap between talent and opportunity. The program focuses on identifying 100 exceptionally talented students at the Class XI level and providing them with tailored exposure and mentoring opportunities in renowned institutions across the state, country, and internationally.

The 1st Stage 5-day Mentoring Programme, conducted in collaboration with the Indian Institute of Technology, Guwahati, witnessed the successful completion by 98 selected students. Hon'ble Chief Minister of Assam interacted with the participating students in the valedictory session. The 2nd stage of the mentoring programme was held at Bengaluru, in collaboration with the Karnataka State Council for Science & Technology (KSCST) which includes visit to IISc,

Bengaluru, Department of Aerospace / CeNSE / Centre for Brain Research, U R Rao Satellite Centre, ISRO, JNCASR etc.

The mentors from the institutions have also provided online mentoring to the students based on their field of interests. 5 best students are chosen to visit an internationally renowned scientific institution of Cambridge and Oxford Universities like Trinity College, Wincoster College, St John's, King's etc. and also various laboratories of University College London and Imperial College London from 22 September to 28 September 2024.

5. Green Innovation Fund:

The Green innovation fund is a newly introduced scheme by the Govt. of Assam as per the Assam Budget F.Y. 2023-24. It is targeted to promote green technology-based innovations in the state which aims to strengthen and improve the R&D ecosystem to find solutions to locality specific problems in focused areas like climate vulnerabilities, traditional knowledge-based technologies, disruptive technologies, eco-tourism, and climate friendly agriculture techniques. It further focused on enhancing the scientific temperament of the state's populace through capacity building and awareness generation amongst students & common people of the state. In addition, it will also help in strengthening the start-up culture of the state, especially in green technology and innovation sector.

During 2024-25, the major activities under the programme:

- The advertisement for the call for proposals under the Research and innovation specific components were published. A total of 107 nos. of proposals were received which were thoroughly reviewed by the Research Advisory and Review Committee and recommended 21 nos. of proposals to the steering committee for further evaluation.
- The review of the shortlisted proposals has been completed by the Steering Committee & also further reviewed by the Hon'ble Minister, ST &CC Dept., Govt. of Assam. Based upon their presentations, a total of 9 project proposals were recommended for support.

6. Promotion of Science, Technology and Innovation:

Under the scheme, there are four different programmes namely,

(i) Innovation, Technology Generation and Awareness which encourage innovation in the state by providing financial and technical support especially the grass root level innovators and guides to obtain patents under the programme.

During the year 2023-24 the council supported 7 projects from different universities/institutions of the State.

(ii) Students Science Projects which provides opportunities to young scientists for pursuing existing and innovative research ideas in the field of basic science and applied science.

During the year 2023-24 the council supported 18 projects till now from different universities/institutions of the State.

(iii) **Science Connect** which helps in strengthening science education and location specific scientific environment in the state. Popular Talks, Scientific Seminar, Workshop which create an environment for scientific discourses and also helps to inculcate scientific temper among grass root level policy makers who could play a catalytic role in overall societal development and

(iv) **Conservation of Rare endangered and Threatened Species of Plants** which helps in Mass propagation of *Rhynchostylis retusa* (L) Blume, i.e. Foxtail orchid, for conservation and Education and Awareness on RET Plants.

7. National Science Day and State Science Award:

The Government has initiated the conferment of three Science Awards in three categories in the field of science and science popularization on the occasion of National Science Day to eminent scientists, young scientists and organizations since 2017. For the year 2024 and 2025 the screening and selection of the nominees completed. The names of the awardees proposed to be declared on 28th February 2025 on the occasion of National Science Day 2025.

8. Science & Mathematics Facilitators in Schools under Popularization of Science:

The basic objective of the scheme is to improve and inculcate the method of Science and Mathematics teaching in schools of the state and to build up a pool of innovative Mathematics and Science Teachers to act as facilitators and to create interest in Mathematics and Science teaching in schools. With the help of the facilitators, the students have raised interest in these two subjects which motivated them to take up different challenges in a more practical approach. Presently 28 Science Facilitators and 37 Mathematics Facilitators have been engaged in 56 High and Higher Secondary schools of the state. The facilitators have also received positive feedback from the principals/headmasters of the respective schools for providing meaningful and explanatory rationale to the students.

State Cabinet has approved continuation of services of Science and Mathematics Facilitators engaged through ASTEC on fixed pay basis till attaining the age of 60 years with annual enhancement of 5 percent.

9. District and State level Children's Science Congress:

National Children Science Congress (NCSC) is a National Level programme of Department of Science and Technology, Govt. of India and is organised in Assam through ASTEC. Children of the age group 10-17 years both from formal school system as well as from outside of school participate through mini research projects first at district level. Selected participants from district level take part in State Level and then in National Level. The Children Science Congress is not only a platform but also a process to transform children to be able to develop the spirit of science and ability to apply methods of science in their day-to-day lives. The State Level Congress was held at Don Bosco Sr. Secondary School & Haflong Govt. College, Haflong, Dima Hasao during 08-11 November, 2023. At the State level 260 projects were registered from 31 districts. 26

projects were selected as best projects at the State level and these projects represented Assam at the National Level held at Bhopal during 3-8 January, 2025.

Among the projects presented at the National Level, 1 project was selected among the 20 outstanding Projects presented.

10. School Plant Diversity Centre:

This scheme primarily aims to set up School Plant Diversity Centres (SPDCs) in Assam with the development of School Botanical Garden with academic facilities like herbarium and museum. The centres are providing quality education to children and youths on plant sciences besides activities such as planting of endemic, threatened plant species and plants of high economic importance involving students, teachers and local people. Till date 35 SPDCs have been established covering all 35 districts.

11. Assam Bio-resource Centre (ABRC):

The Assam Bio-Resource Centre (ABRC) was established by ASTEC near the historic Madan Kamdev temple in Baihata Chariali during 1994-95, covering an area of 55 Bighas. The primary objective of the Centre is to conserve biotic resources of ecological and economic significance while also conducting research and development in the field of life sciences.

The key objectives of the Centre include:

1. **Conservation of Rare, Endangered, and Threatened (RET) plant species** native to Assam and the Northeast region, including those of high economic value.
2. **Enrichment and development** of a botanical garden, conservatories, a herbarium, and a museum.

Serving as both a knowledge hub on plant life and a center for conservation, the ABRC benefits students, researchers, teachers, and the general public by providing valuable facilities and resources. Additionally, the Centre actively promotes awareness about biodiversity conservation through nature trails, field visits, and seminars. Around 70 orchid species, 42 species of cactus, 25 species of bamboo and 350 live plant species are being maintained in the garden and conservatories.

12. Science Centre and Planetariums in Assam (Capital):

23 District Science Centres to be established across Assam, including those under construction. Currently, 11 District Science Centres are being built in the first phase to boost interest in astronomy and scientific aspects. These initiatives aim to promote scientific temper through hands-on activities, displays, shows, and awareness programs. The physical and financial status of these Science Centre and Planetariums are attached as *Annexure*

13. Vertical Extension of Bigyan Bhawan Building

The construction of Bigyan Bhawan is in progress. The Directorate of science & Technology has been shifted to the fourth floor of the building vide order of the Hon'ble Minister, Science

Technology & Climate Change, Assam. The work for the 3rd floor is almost completed and the ASSAC office shifted. The work for the 2nd floor has been completed.

14. Climate Cell:

Climate Cell is dedicated to addressing climate change challenges in Assam by integrating traditional knowledge with scientific approaches. It focuses on identifying and documenting indigenous practices related to climate mitigation and adaptation while assessing the vulnerability of various sectors to climate change. The cell actively promotes climate-related scientific temperament among students, teachers, and grassroots stakeholders through hands-on activities and awareness programs. Additionally, it encourages climate mitigation efforts through carbon sequestration initiatives and works towards building climate resilience in villages. To further its outreach and impact, the Climate Cell also develops Information, Education, and Communication (IEC) materials on climate change, ensuring informed decision-making and sustainable action across all levels of society. During last years, various activities like a comprehensive study and documentation of traditional knowledge systems and practices in Assam were conducted, with a special focus on climate adaptation and resilience. Additionally, a climate vulnerability assessment was carried out in the Dhubri, Darrang, and Tinsukia districts of Assam. Various initiatives were undertaken, including a capacity-building program for College Environment and Climate Cells (CECC) coordinators on climate change issues, along with financial support to CECCs for activities related to climate change. Efforts were also made to incentivize technology-based carbon sequestration activities to promote climate mitigation and adaptation. Furthermore, capacity building on climate resilience was promoted through the use of bio-fertilizers in a three-village cluster. To enhance awareness and engagement, Information, Education, and Communication (IEC) materials on Green Audit and careers in climate change were developed and printed. In the coming year, more focus will be given to actions suggested under the State Action Plan on Climate Change 2.0. Accordingly, training and capacity building of government officials for handling climate change-related issues will be prioritized. Development of audio-visual content for the school curriculum on climate change will be undertaken to enhance climate education. Additionally, existing state and departmental policies will be scanned and reviewed through the lens of climate change to ensure alignment with sustainability goals. A climate change outreach program will be conducted across four agro-climatic zones of Assam to raise awareness and promote climate action. Furthermore, a six-month training-cum-certificate course on climate change will be introduced for 20 students in a reputed educational institution to build expertise in the field.

15. Chief Minister's Climate Resilient Village Fellowship Programme:

The "Chief Minister's Climate Resilient Village Fellowship programme" (CMCRVF) is also being implemented now through Climate Cell. The CMCRVF project aims to find solutions for developing climate-resilient villages in Assam. Post-graduate students are selected for this Fellowship programme and they collect data related to impact of climate change in village level and accordingly design model interventions for creating climate resilience in that village under guidance of assigned scientific institutions. The study has two components- A baseline survey of the village regarding climate change impact, biodiversity, environment, etc.

and scientific interventions as a model for building climate resilient village. In the first batch, 43 Fellows have completed their work and submitted the reports. In the next Batch, 44 more fellows are now continuing with their village level intervention work in their adopted villages across Assam.

16. Sadou Asom Maina Parijat (Maina Act on Environment, Health and Hygiene) – A Children’s participatory activities – based initiatives to enhance the awareness and understanding on conserving biodiversity, water along with health care and hygienic sanitation:

The objective of the scheme is to (i). Involve children in discovering biodiversity and environment change of season and its impact on environment, (ii). To generate sense of curiosity among children by participatory and community approach in understanding roles of species in ecosystems, (iii). To understand the source, usage and importance in conservation of water, the impact of food for good health, domestic hygiene and (iv). To understand the importance of “Swach Bharat Abhiyaan.” The scheme has been implemented by ASTEC through Sadou Asom Maina Parijat targeting children from 5 to 16 years of age and adolescent upto 18 years of age covering all the branches of Maina Parijat (Children Club) of Assam. A sum of Rs.10 lakh only has been sanctioned for the year FY 2024-25 and a detailed proposal for more than Rs.50 lakh has already been submitted to ST&CC Department, GoA for submission in National Health Mission.

17. Science Centre & Planetarium in Assam (Revenue):

The scheme is basically aimed to run and maintain the Science Centre and Planetariums in Assam as well as organising sensitization workshops and awareness programmes. The basic objectives of the scheme are development and maintenance of DSCPs including Nalbari, North Lakhimpur and Kokrajhar centres. Meanwhile 3 instalments to Innovation Hub at Jorhat Science Centre and Planetarium has already been released as per agreement with NCSM. Promotion and popularization of science and technology among the masses, dissemination of information on recent development in the field of science and technology and facilitating as Science Hubs are some of the prime objectives.

The DSCs and DSCPs besides Innovation Hub act as district level entities for promotion and popularization of science and technology among students, teachers and general public.

18. Science Centre & Planetarium and District Science Centres in Assam (Capital):

23 DSCs to be established across Assam, including those under construction. 11 DSCs are being built in the first phase to boost interest in astronomy and scientific aspects. These initiatives aim to promote scientific temper through hands-on-activities, displays, shows and awareness programmes.

At present 6 DSCPs are also under construction which will amplify the scientific temperament across the region.

19. Science Centre & Planetariums in Kokrajhar, Nalbari and Lakhimpur:

The basic aim of this scheme is to establish Science Centre and Planetariums in Kokrajhar, Nalbari and North Lakhimpur for the benefit of the common people and especially the students. All the three centres have been inaugurated by Hon'ble Chief Minister of the state. Some additional civil and other related works like internal approach roads, gardens etc are on-going in the centre.

Schemes under AEDA:

PM KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) scheme from the Ministry of New & Renewable (MNRE), Govt. of India is a flagship scheme of Government of India with an objective to increase the income of farmers, provide easy access to irrigation in farmer's fields by de-dieselisation of the pumping systems, water and energy security in the agriculture. Under the scheme, individual farmers will be supported to install standalone solar Agriculture pumps for replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available.

Assam Energy Development Agency (AEDA), under Science Technology & Climate Change Department, Govt. of Assam received an allocation of 4000 units of solar pumps under the PM-KUSUM from the Ministry of New & Renewable (MNRE), Govt. of India with 50% Central Financial Assistance on the benchmark cost or tender cost whichever is lower. AEDA has discovered L1 rate through open tender and are going ahead with implementation of 2 HP DC Submersible and Surface Pumps. The Government of Assam has agreed to provide the additional part of the L1 rate over and above 35% of state share to provide relief to the targeted beneficiaries i.e. small & marginal farmers and hence beneficiaries have to contribute only 15% of the benchmark cost.

Multi-Activity Centre at Guwahati Planetarium

Construction work of a Multi-Activity Centre(G+3 Building) is going on for the benefit of students, children and members of the public in the premises of the Guwahati Planetarium for which Govt. accorded Administrative Approval amounting to Rs.12.43 Crore. Some additional works including Central AC system Structural glazing, Acoustic treatment, Fire fighting system etc. Govt. accorded Administrative Approval amounting to Rs.4.94 Crore and for installation and commissioning of 15-D Theatre, FAÇADE Lighting and External Lighting Govt. accorded Administrative Approval amounting to Rs.4.60 Crore.

New Initiative of Guwahati Planetarium:

To sustain interest among General Public and Students in particular, who visits the Planetarium; state-of-the-art Sound System and Cove lighting for Sky Theatre of Guwahati Planetarium will be procured. With the progression of time and technology high quality and high resolution Projection System Cove lighting will be installed at Guwahati Planetarium. This would indeed be able to provide direct benefit to the field of Science Education & Research, Tourism, etc, boosting revenue earning, building a scientific temperament among the general mass of people of the Society, especially, the student, teacher and children communities across the State

**PERFORMANCE BUDGET OF SCIENCE, TECHNOLOGY & CLIMATE CHANGE
DEPARTMENT FOR THE FINANCIAL YEAR 2024-25 AGAINST GRANT NO. 69.**

Sl. No	Name of Scheme	Released Amount (Rs. In lakhs)
1.	Grants in Aid(Non-salary) Guwahati Planetarium	76.50
2.	Research and Development	54.00
3.	Promotion of Science, Technology and Innovation	34.20
4.	National Children Science Congress	42.75
5.	Patent Information Center	4.10
6.	Instrumentation Repair and Development Centre	5.47
7.	Aryabhatta Science Centre	415.26
8.	Bhuvan State Node	0.90
9.	School Plant Diversity Centre	5.40
10.	Science Centre & Planetarium in Assam	54.00
11.	Jorhat Science Centre cum Planetarium	34.000
12.	Maina Parijat	3.42
13.	Science & Mathematics Facilitator in School	254.32
14.	Up-gradation of Software & Hardware Licenses	12.83
15.	Bio Research Centre	23.94
16.	Creation of GIS-based State Resource Information System at Gaon Panchayat level using High Resolution Remote Sensing Satellite Data	6.84
17.	Science City(Capital)	1614.71
18.	Assam Science Society	8.89
19.	Construction of Common Infrastructure of Business Entrepreneurship Zone(BEZ)	180.00
20.	Guwahati Bio-Tech Park-Operational Expenses GBP	135.00
21.	Climate Cell	67.50
22.	GIA for Setting up of Solar Plant Karbi-Anglong	3.76
23.	Setting up of solar thermal North Cachar Hill	0.90
24.	Assam Bio-Technology Council	41.71
25.	Incentive under Bio-Technology Policy	1.71
26.	11 District Science Centre	250.56
27.	Construction of Incubation Centre, Bio-Technology Park	524.37
28.	Setting up of New Planetarium at Nalbari, North-Lakhimpur, Kokrajhar	158.06
29.	Science City(Revenue)	13.50
30.	New Planetarium in 6 new locations	1579.42
31.	MultiActivity Centre Guwahati Planetarium	145.36
32.	Jorhat Planetarium Salary	54.59
33.	AEDA Salary	89.40
34.	Environment Division(ASTEC) Salary	53.29
35.	ASTEC Salary	124.05
36.	ASSAC Salary	274.61
37.	Salary, Guwahati Bio-Tech Park	65.10
	TOTAL	6414.42

PHYSICAL TARGETS ACHIEVED DURING THE LAST THREE YEARS

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
1	Research & Development Programme	Fund not received	Support to 7 Nos. of student specific R&D projects and 13 Nos. of General R&D projects	Fund not received yet
2	Instrument Repair & Development Centre	Centre is functioning with design, develop and repair of instruments	Centre is functioning with design, develop and repair of instruments	
3	Radio Astronomy Centre (RAC)	Centre is functioning research activities in the field of solar radio activities	Centre is functioning research activities in the field of solar radio activities	
4	Patent Information Centre (PIC)	Fund not received	Details in list (Annexure-I)	Details in list (Annexure-II)
5	Aryabhata Science Centre (Block Level)	219 Block Level Aryabhata Science Centres established in 219 Development Block of the state are functioning as science hub in grass root level of the state	219 Block Level Aryabhata Science Centres established in 219 Development Block of the state are functioning as science hub in grass root level of the state	Idea Competition and Robotics Competition have been introduced among the students in the 219 Aryabhata Science Centres yearly competition to make the centre more vibrant.
6	Science & Mathematics Facilitators in Schools	Engaged 70 Science & Mathematics Facilitators in schools of Assam. State cabinet has approved continuation of services of Science and	28 Science Facilitators and 37 Mathematics Facilitators (total 65) have been engaged in 56 High and Higher Secondary schools of the state and district	28 Science Facilitators and 37 Mathematics Facilitators (total 65) have been engaged in 56 High and Higher Secondary schools of the state and district

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
		Mathematics Facilitators on fixed pay basis till attending the age of 60 years with monthly fix pay of Rs.26000/- + CPF and annual increment of 5 %	science centres and planetarium	science centres and planetarium to improve the method of science and mathematics teachings at school
7	National Science Day and State Science Award	Selection process for 2021-22 and 2022-23 completed. Awards to be announced and conferred.	Awards for 2021-22 and 2022-23 completed in three (3) categories and declared on National Technology Day-2023 (11-05-2023)	Selection of awardees under three (3) categories completed for the 2024 and 2025.
8	Climate Cell	No fund has been received for that year. Key initiatives include setting up Climate Cells in 40 colleges, assisting in Assam's first "Green Budget 2023," conducting a green audit for educational institutes.	Conducted study on block level vulnerability assessment in Dhubri, Tinsukia and Darrang District, and documentation of traditional practices with Special reference to Climate Change; conducted 3 training programmes for farmers on Bio fertilizers; conducted 1 training for College Teachers on integration of Climate change in the curriculum, developed two books on Green Audit and	Proposal for FY 24-25 has been submitted to Govt. of Assam for release of Fund. Proposed activities include- training government officials on climate issues, developing climate-focused audio-visual content, Climate outreach program, and a six-month certificate course on climate change.

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
			Career in Climate Change.	
9	School Plant Diversity Centre	Coordination and Monitoring of 35 active centres. Established 5 (five) nos of green houses.	Setting up of 5 Nos of Green Houses in 5 School Plant Diversity Centres	No allocation of fund
10	District & State Level National Children Congress	31 district level and 1 state level programmes organised 26 Child Scientists participated in the National level CSC held at Ahmedabad during December 2022	31 district level and 1 state level programmes organised 25 Child Scientists participated in the National level CSC held at Bhopal during January 2025	No information from DST GoI has been received as of now
11	Maina Parijat	Organised health and environment awareness programme in 18 districts	4 Residential Orientation Workshops for children and facilitator for three zone of SMP as well as logistic support for Drawing Competition on Environmental Issues	State level Residential Orientation Workshop to the Core Group facilitators covering 15 districts of Maina Parijat Logistic support to 150 branches (Children Clubs) under Maina Parijat of 15 districts covering 2250 children for field survey under the guidance of their facilitators to identify the indigenous medicinal plants at their locality Logistic support to districts for workshop on uses of indigenous medicinal plants

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
				and their preservation
12	Assam Bio-resource Centre	1 Renovation work completed	Collection of RET plants through field visits have been completed	Collection of RET plants through field visits have been completed
13	Up gradation of Software and Hardware License	One established laboratory is in function	One established laboratory is in function	One established laboratory is in function
14	Creation of GIS-based Resources Information System at Gaon Panchayat (GP) Level	93 nos of GP covered	25 districts GP's will be covered	All districts of Assam is incorporated and Web GIS portal is live for visualization
15	BHUBAN State Node	1 State Node is upgrading	1 State Node is upgrading	At present maintain centrally at NRSC
16	Setting up of ISRO Centre at Guwahati	Shifting in progress	Equipment shifted from temporary set up of GU to ASSAC office premises	Equipment are functional are being used for training officials.
17	Projects identified under plan of action (POA) for utilization of space inputs in Governance and developmental planning by Govt. of Assam Assam State Space Application Centre	80% completed of 4 nos. of POA projects and remaining will be completed by 2023-24 within target	All 10 POA projects are near completion	All 10 POA projects are completed and report submitted
18	Promotion of Science , Technology and Innovation	No fund has been received for that year.	7 nos. of Innovative project supported 18 nos. of student science project supported. Regarding Science connect, financial support for 3 nos of Seminars and 4 nos of Workshop 2 Workshops	Proposal for FY 24-25 has been submitted to Govt. of Assam for release of Fund.

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
			under RET organised	
19	Science City Guwahati	The construction work is now progressing well and 50-55% of the civil works are completed	The construction of the three main buildings is going on full swing and it is proposed to be completed tentatively by March 2025. The progress is Convention Centre, Gate Complex Building, Space Odyssey Building and Science Discovery Complex with a physical progress of 58% External Development work with a physical progress of 55% Boundary Wall with a physical progress of 95%	Construction of all the three main buildings underway. Expected to be inaugurated by this Financial Year
20	Nalbari Planetarium	Hon'ble Chief Minister of Assam inaugurated the centre on 6 th December 2022 and now it is functioning	Catering to the needs of the people of the region. Annual recurring grants for maintenance of the centre along with celebration of important days	Catering to the needs of the people of the region. Annual recurring grants for maintenance of the centre along with celebration of important days

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
			being undertaken	being undertaken
21	Lakhimpur Planetarium	Hon'ble Chief Minister of Assam virtually inaugurated the centre on 16 th December 2022 and now it is functioning	Catering to the needs of the people of the region. Annual recurring grants for maintenance of the centre along with celebration of important days being undertaken	Catering to the needs of the people of the region. Annual recurring grants for maintenance of the centre along with celebration of important days being undertaken
22	Kokrajhar Planetarium	Annual recurring grants for maintenance of the centre	Annual recurring grants for maintenance of the centre	Annual recurring grants for maintenance of the centre
23	New Planetariums at 6 Locations	Construction work in progress. Places: Amingaon, Diphu, Majuli, Silchar, Kaliabor and Bongaigaon	Construction work in progress. Places: Amingaon, Diphu, Majuli, Silchar, Kaliabor and Bongaigaon	Construction work in progress. Places: Amingaon, Diphu, Majuli, Silchar, Kaliabor and Bongaigaon
24	District Science Centers	Construction of 11 DSCs are ongoing	Construction of 11 DSCs are ongoing	Construction of 11 DSCs is under halt
25	Drive Against Superstitions	Organised 2201 Awareness Programme for eradication of superstition through Gaon Panchayat/ Gaon VCDC	Organised Awareness programme like survey and documentation of superstitious beliefs, street play, selfie	Awareness programme in couple of places organised. No allocation of fund

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
		Release of short movie under this project named Puhoroloi (Towards Hope) based on witch hunting released for mass awareness through social media and YouTube	point, organising debate competition, awareness programme involving parents and guardians in school level activities, etc. through 22 nos. of District Nodal Agencies under Environment Education Programme involving 12 nos. of Self Help Groups (total 264 nos of SHG) in each districts, involving 17 Colleges throughout Assam, 219 Aryabhatta Science Centres and 31 District Organising Committee under NCSC throughout Assam	
26	Green Innovation Fund	-	-	The review of the shortlisted proposals has been completed by the Steering Committee & also further reviewed by the Hon'ble Minister, ST &CC Dept., Govt. of Assam. Based upon their presentations, a

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
				total of 9 project proposals were recommended for support
27	Mukhya Mantrir Bigyan Pratibha Sandhan	-	Selection of 110 students. Successfully conducted 5-day Mentoring Programme from 5th-9th February 2024	The 2nd stage of the mentoring programme was held at Bengaluru, in collaboration with the Karnataka State Council for Science & Technology (KSCST) from 13-17 May 2024 which includes visit to IISc, Bengaluru, Department of Aerospace / CeNSE / Centre for Brain Research, U R Rao Satellite Centre, ISRO, JNCASR etc. The mentors from the institutions have also provided online mentoring to the students based on their field of interests. 5 best students are chosen to visit an internationally renowned scientific institution of Cambridge and Oxford Universities like Trinity College, Wincoster College, St

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
				John's, King's etc. and also various laboratories of University College London and Imperial College London from 22 September to 28 September 2024.
28	Construction of Multi-Activity Centre at Guwahati Planetarium premises	25% of Construction work completed.	50% of Construction work completed	75% of Construction work completed
29	Upgradation of Hybrid Planetarium System of Guwahati Planetarium	Work order has been issued	Upgradation of Hybrid Planetarium System completed at Guwahati Planetarium	-
30	Development of Metaverse-Extension of Virtual Reality	MoU has been signed with IIT Guwahati and work order was issued	60% work of Metaverse completed	Completed Educational Metaverse Work and Launched
31	Renovation of chairs inside Sky theatre of Guwahati Planetarium	Renovation of Chairs inside Sky Theatre is completed	-	-
32	Renovation of Photo Lab. and service Room at Guwahati Planetarium	Renovation of Photo Lab and service room is completed	-	-
33	Procurement of 2 (two) sets of Mobile Planetarium for Guwahati Planetarium	-	Supply order has been issued to National Council of Science Museums (NCSM) Kolkata	Completed supply of Mobile Planetarium Work and Launched
34	Procurement of 4 Nos. of Telescopes for Guwahati Planetarium	-	Procured of 4 Nos. of Telescopes for Guwahati Planetarium	-
35	Procurement of Sound System for Sky Theatre of Guwahati Planetarium	-	-	Procurement of Sound System for Sky Theatre under process

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
36	Procurement of Cove light System for Sky Theatre of Guwahati Planetarium	-	-	Procurement of Sound System for Sky Theatre under process
37	Construction of Technology Incubation Centre at Guwahati Biotech Park	-	-	10 %
38	Operational Expenditure of Guwahati Biotech Park (GIA- Non Salary)	100 %	100 %	100 %
39	Common Infrastructure Development of setting up of Business Enterprise Zone of Guwahati Biotech Park (Balance work-construction o Road, RCC Drain, Culvert, Electrical work etc)	-	-	20%
40	Guwahati Biotech Park Salary	100 %	100 %	100 %
41	Incentives under Biotech policy of Assam Biotechnology Council	100 %	100 %	100 %
42	Operational Expenditure of Assam Biotechnology Council (GIA- Non Salary)	100 %	100 %	100 %
43	Jorhat Science Centre & Planetarium (JSC&P)	<ul style="list-style-type: none"> Innovation hub inaugurated on 15th August, 2022. On Cabinet meeting in Jorhat, Hon'ble CM had announced Rs.10 crore for modernization of JSC&P 	As a part of CM modernization plan, an administrative approval of Rs.1,63,73,610.0 for replacement of the projection system of the Planetarium, JSC&P has been accorded & this accordingly communication is also being made with NCSM for procurement of the projection system.	<ul style="list-style-type: none"> Renovati on work of the Digital Planetarium, JSC&P is completed. However, the new Projector is yet to be installed. As the new initiative of Innovation Hub, JSC&P, two nosof Teachers' Training Camp on Atal Tinkering Rejuvenation Programme was organized to provide the basic concept of Electronics and

Sl. No	Name of the Schemes/Programmes	During 2022-23	During 2023-24	During 2024-25
				Robotics usage in schools. • 9 numbers of Atal Tinkering Labs of Jorhat District have been reactivated through innovation hub of JSC&P

ACTION TAKEN ON THE OBSERVATION & RECOMMENDATIONS OF DRSC (E) UNDER GRANT NO 69 (SCIENCE TECHNOLOGY & CLIMATE CHANGE DEPARTMENT FOR THE YEAR 2023-2024

Sl. No.	OBSERVATIONS & RECOMMENDATIONS	ACTION TAKEN
1	The committee observes that the AROHAN is a scheme in the Secondary School in the age group 13 to 18 studying in class IX to XII need scientific knowledge for the students. The committee recommended the Department to conduct awareness and training programme for the betterment of the students in the various scientific fields.	A new scheme is implemented by ASTEC named "Mukhya Mantrir Bigyan Pratibha Sandhan" which focuses on identifying 100 exceptionally talented students at the Class XI level and providing them with tailored exposure and mentoring opportunities in renowned institutions across the state, country, and internationally.
2	The Committee observes that the necessary fund for Aryabhata Science Centres has been allocated through re-appropriation for the year 2023-24 and also Rs. 3.00 Crore has also been proposed in the budget for the year 2024-25. The Committee recommended that the activities should now be more effective and Science & Technology schemes should cover all the blocks. All the Centres should be provided with scientific kits.	Idea Competition and Robotics Competition have been introduced among the students in the Aryabhata Science Centres yearly competition to make the centre more vibrant.
3	The Committee observes that a pilot project to rejuvenate the Atal Tinkering Labs has	In rejuvenation of Atal Tinkering Labs (ATL), total Nine numbers of Atal

	<p>been invites through the Jorhat Science Centre & Planetarium. Necessary fund has also been provided by ASTEC for the purpose. The Committee recommended that an appropriate model to rejuvenate the established ATLs in Assam should be evolved. The ST&CC Department to cover all the existing ATLs so that the desired outcomes of establishing the ATLs may be achieved. The Department may explore allocating more fund through the scheme "Promotion of Science, Technology & Innovation "to rejuvenate the ATLs or through support from the Education Department. The Department should also set up such Labs in the Aryabhata Science Centre and model schools in the state in phase manner.</p>	<p>Tinkering Labs (ATLs) of Jorhat District of Assam were reactivated by Innovation Hub of Jorhat Science Centre and Planetarium (JSC&P). Same model maybe replicated for other districts based on the availability of funds.</p>
4	<p>The committee expressed satisfaction over the progress of the civil work after the site visit on 3rd January. 2024 and expected timely completion of the project. The committee also observes that out of 250 bighas of allotted land only 100 bighas have been covered through concrete boundary. The committee recommended that the status of the rest of the available land should be immediately assessed and be covered through green fence and planation should be done wherever required.</p>	<p>As per the recommendation, the primary goal was to establish green fencing as a natural barrier along the boundaries of Science City and the elephant corridors. Over the course of six visits for plantation at Science City campus during July to September 2024, approximately 600 bamboo saplings of <i>Bambusa bambos</i> (<i>Kotuha Banh</i>) were planted and now they are alive and growing well. The bamboo saplings were planted strategically along the elephant corridors and the perimeter of Science City. In addition to the green fencing, about 120 fruit-bearing plants were planted outside the campus to serve as a sustainable and nutritious food source for the elephants. Apart from that more saplings are being prepared for plantation and green fencing in and around the Science City campus. Further, the ST&CC Department has requested the concerned Circle Officer for proper assessment for planning and development of the campus.</p>
5	<p>The Committee observes that the ongoing works of the Climate Cell has been</p>	<p>As per budget allocation for 2024-25, a proposal for Rs. 70 lakhs for Climate</p>

	<p>appreciated. However, to have state wide reach more impactful programme should be taken up. The Committee further look note of the Chief Minister's Resilient Village Fellowship scheme, where Fellows are presently working in 43 villages. This scheme has the potential to develop a model for crating climate resilience in the state. The Committee supported that idea for taking 10 (ten) of these villages on pilot villages to develop a climate resilient model village. The Committee recommended that the proposal for taking up ten villages for developing as climate resilient village needed more financial support and therefore, more fund should be allocated in the scheme climate Cell. Proposed allocation of Rs. 70.00 lakh for the financial year 2024-25 would not be adequate. Necessary collaboration with other departments should also be made for more impact.</p>	<p>Cell have been submitted to the Govt. of Assam. Moreover, the CMCRVF programme, leads to a budget announcement on 2024-25 for developing 10 model Climate Resilient Villages, without any financial announcement. The Climate Cell has been actively collaborating with different Non-Government Organizations like TERI, Aaranyak, We for You etc, and Government Institutions like Cotton University, and Assam Government Departments like Environment and Forest Department (ACCMS), P&R Department etc. for carrying out various activities with limited budget.</p> <p>CMCRV programme is also implemented by the Climate Cell</p>
6	<p>The Committee observes that if the established 35 school plant biodiversity centres are not functioning properly then there will be wastage of fund. The committee recommended that before considering any expansion of the scheme, the ST&CC Department would have a meeting with the Education Department to discuss about making the scheme effective and exploring further different sources</p>	<p>For the FY 2024-25, No fund has been allotted for the scheme – School Plant Diversity Centre. Further, fund has been proposed for the FY 2025-26. If approved, a meeting may be convened with the Education Department to enhance the scheme's effectiveness and explore additional funding sources.</p>
7	<p>The Committee observes and expressed satisfaction over the initiatives taken to implement the Biotechnology Policy. The proposed allocation for the "Incentives under Biotechnology Policy" is Rs.125.89 lakh. The Committee recommended adequate implementation of the policy incentives through the allocated fund. More funds should be allocated, if required.</p>	<p>Financial support of Rs. 125.89 Lakhs has been sanctioned for the F.Y. 2024-25 to support various initiatives aimed at fostering biotechnology research and innovation in our state through the Biotechnology Policy for the State of Assam. Rs. 182 Lakhs has been proposed for the F. Y. 2025-26.</p>
8	<p>The Committee observes that the AEDA has completed a study with the National Institute of Wind Energy by setting up wind monitoring stations and collected necessary</p>	<p>AEDA has requested NIWE, GoI for providing prospective sites and capacity of wind power stations that can be taken up in the state of Assam</p>

	data. The Committee retained the recommendation already made to install wind energy power system in the state based on the feasibilities.	based on the data collected from the wind monitoring stations.
9	The Committee observes and appreciated the initiatives taken by ASTEC through various institutions and Aryabhata Science Centres for eradication of superstitious beliefs. The Committee recommended that such campaigns should be continued to eradicate the superstitious beliefs and social evils creating scientific temperament among all section of the people	Some activities through various social organisations are being carried out during festivities where large number of people gathers like Raas festival at Malaybari, Kamrup with the help of photographic points and awareness programmes at Garbhanga. No fund is allotted for the FY 2024-25.
10	The Committee observes that the Sadou Asom Maina Parijat is a respectful organization having state-wide reach and the continuous support of the Department towards the organizing awareness programme on health and environment was appreciable. However, allocation of Rs.3.42 lakh in the year 2023-24 was too meager for any effective campaign. The department is trying to allocate more funds through re-appropriation and also Rs.20.00 lakh has been earmarked in the proposed budget for the year 2024-25. The Committee recommended that the network of Sadou Asom Maina Parijat should be effectively utilized by the Department for creating scientific awareness among the children through allocation of adequate fund	<p>As per recommendation of the DRSC, the fund for Maina Act on Environment, Health and Sanitation was increased from Rs.3.42 lakh to Rs.10 lakh.</p> <p>State level Workshop to the Core Group Facilitators and Logistic support to 150 branches (Children Clubs) under Maina Parijat of 15 districts covering around 2250 children for field survey under the guidance of their facilitators to identify the indigenous medicinal plants at their locality are prime activities.</p> <p>Though detailed proposal was submitted to NHM, no response received till date</p>
11	The Committee observes that the Department is supporting North East Renewable Energy Research Lab (NERERL) through AEDA and has taken up various R&D activities in Majuli and Kaliabor. As per renewable energy research is concerned the Committee observes that the state has large number of smaller lotic water bodies which could be explored for localized power generation in villages. The Committee recommended that the Assam Energy Development Agency should compile all available data on smaller water bodies and assess the potential for localized power generations through these water	<p>District wise data with respect to smaller water bodies/ponds with size less than 1 acre has been compiled with the support from Assam State Space Application Centre (ASSAC) (Details enclosed as Annexure I). Further study to ascertain the capacity of the floating power plant that can be installed and the impact of the power plant on the ecosystem for using these water bodies would be required.</p> <p>However, with regard to localized power generation from small water bodies, AEDA had taken an innovative</p>

	bodies. If necessary organizations like NERERL should be involved in this work.	step and commissioned first ever Floating Solar Power Plant (8kW capacity) with an aerator system on an Amrit Sarovar in Rajgarh Bongali-2, under Lakhimpur Development Block, Lakhimpur, Assam. AEDA would like to undertake similar Floating Solar Power Plants on Amrit Sarovars in various districts subject to budget provisions from the State Government.
12	<p>The Committee observes in the first phase the construction work of 11 District Science Centres and 6 District Science Centres and Planetariums are going on. With already functioning 5 Centres, the number will become 22. The Committee recommended for early completion of the ongoing construction works so that in future setting up of District Science Centres in other districts could be considered. The Committee also recommended that the ST&CC Department would take adequate steps to rejuvenate the Kokrajhar Planetarium and Science Centre. The Committee further recommended that a Planetarium should be setup in Sivasagar District.</p>	<p>The Civil works of the 6 New Science Centre and Planetariums are under process and with good pace. Civil works of these 6 New Science Centre and Planetariums are expected to be completed by 2025-26. Further, the civil works of the 11 District Science Centres are under halt. PWD (B) has issued necessary letters to the concerned contractor.</p> <p>Recurring cost for Kokrajhar Planetarium and Science Centre are being disbursed. Besides, a detailed DPR has been submitted for installation of Grid Connected Solar Power Plant at Kokrajhar Planetarium and Science Centre. Regarding Sivasagar DSC, a letter has been sent to DC, Sivasagar for allotment of land for construction of DSC at Sivasagar. No response has been received till date.</p>
13	<p>The Committee observes that the AEDA has submitted a proposal for 1000 street light per assembly constituency with 90% subsidy. The agency has also requested the Ministry of New and Renewable Energy for early sanction of the project. The Committee recommended that this is a good scheme and AEDA should further pursue the matter with the Central Ministry. A letter from the Secretary should also be sent to the Ministry. If necessary, the matching grant of 10% could be provided by the MLAs of the respective constituencies from the Assembly Constituency fund.</p>	<p>Request letter sent from the Secretary, Science, Technology & Climate Change Department to the Secretary, Ministry of New & Renewable Energy (MNRE), Govt. of India regarding allocation of 1,50,000 Nos. of Solar Street Lights under Off Grid and Decentralized Solar PV Programme of MNRE. MNRE is yet to take a decision in this regard.</p>

OBSERVATION AND RECOMMENDATIONS

SCIENCE, TECHNOLOGY & CLIMATE CHANGE DEPARTMENT, 2025-26

GRANT NO-69

1. The Committee recommends to enhancement of State Research and Incubation Fund by setting up a state Innovative council to facilitate research in emerging fields like AI, clean energy, biotechnology etc. and start up incubation in collaboration with IITs, NITS, advanced research centres and prominent universities.
2. The Committee recommends to setting up a Science & Technology Park/Science city in Dhakuakhana establishing science museum, botanical garden, bio reserve centre, planetarium, innovation labs and other facilities for venturing incubation and start-ups, exhibitions, science conclaves etc.
3. The Committee recommends for strengthening existing science and Engineering Colleges with advanced facilities and research funding.
4. The Committee recommends to thrust on Space & Remote sensing for resource mapping, connectivity, weather forecasting, climate monitoring and early warnings.
5. The Committee recommends for more investment in solar farms, bio energy and waste to wealth management systems.
6. The Committee recommends to promote Electric mobility & Smart Transportation.
7. The committee recommends for establishment of Assam Centre for Disaster resilience and climate research to conduct advanced studies on climate change.
8. The Committee recommends for additional fund for rejuvenation of all existing Atal Tinkering Labs (ATLs) in Assam by replicating the Jorhat Model so that the desired outcomes of establishing the ATLs is achieved.
9. The Committee recommends to research on local ornamental fish like 'Chanda Maas', 'Khalihona Maas' etc. for better commercial purpose.
10. The Committee observe that the floating solar power plants have a great potentiality in the state. Therefore, the Committee strongly recommends to focus on the subject with required fund for making floating solar power plants with special reference to Sibsagar, Nagaon, Barpeta, Chaygaon areas.
11. The Committee observe that street lights are most essential in all over the districts of Assam. Therefore, the Committee strongly reiterates its earlier recommendation No.13 of Report No.68 to implement the scheme with required budget provision.
12. The Committee recommends for strengthening research and development of Ecosystem by establishing a North East Science and Technology Innovation Hub with a focus on Bio Technology, sustainable energy, nano science, AI and material science.

13. The Committee recommends to create a dedicated fund for start-up incubation centre in collaboration with IIT, Guwahati, NITs and Central Universities and to promote Industry- academia collaboration and public- private Partnership (PPP) facilitate collaboration with global institutions for knowledge sharing, training and Joint research.
14. The Committee recommends to focus on north east risk bio-diversity and tribal knowledge for drug discovery, herbal medicine and sustainable agriculture.
15. The Committee recommends to create a state Patent Cell to support IPR protection for innovations routed in local knowledge. The Committee further recommends to establish a North-East knowledge repositing for documentation and digital preservation of traditional scientific practices.

THE COMMITTEE, HOWEVER, RECOMMENDS THAT THE BUDGETARY ALLOCATION PROVIDED UNDER GRANT NO-69 FOR THE YEAR 2025-2026 be VOTED FOR THE SCIENCE, TECHNOLOGY & CLIMATE CHANGE DEPARTMENT BY THE AUGUST HOUSE.