ANNUAL REPORT 2022-23













Assam Agricultural University

Jorhat-785013, Assam





ASSAM AGRICULTURAL UNIVERSITY Jorhat - 785013, Assam



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Vice-Chancellor Assam Agricultural University Jorhat 785013, Assam, India

FOREWORD

s Assam Agricultural University enters the 54th year of its existence with its two premier colleges-Colleges of Agriculture and College of Veterinary Science celebrating their respective platinum jubilee year, the University is boosted by many positive developments in its march towards excellence in its mandated fields and beyond. It is a matter of pride for the University to be ranked 19 in the National Institutional Ranking Framework (NIRF) with a jump of 22 places from its earlier 41st rank among the institutes of agriculture and allied sectors when AAU is celebrating 100 and 50 years of establishment of AAU-Assam Rice Research Institute and College of Community Science respectively. It was possible due to the relentless efforts of its members to bring excellence to its different mandates. It also gives us immense satisfaction to present the AAU Annual Report 2022-23.

The four faculties of the University have accommodated more than 3000 students pursuing bachelor, masters, doctoral degrees and diploma and certificate courses in agriculture and allied subjects. Apart from the regular modes of disseminating education in agriculture and allied subjects, the University has also ventured into 'Open Distance Learning' to cater to thousands of aspirants. Though the 'Open Distance Learning' mode of education is in its nascent stage but going by the response it has been receiving, we are confident that it will fulfil its mission.

Assam Agricultural University has a vision of motivating a percentage of its graduates to become entrepreneurs as it understands that society needs job creators rather than job seekers. To fulfil this 100 young faculty members had been sent to the Entrepreneurship Development Institute of India (EDII), Ahmadabad during 2022-23 to inculcate an entrepreneurial mindset and competence. The trained faculty members will act as intermediaries in building competitiveness, motivation and personality development of the students put under their wings. Phase-wise, promising and aspiring students will also be sent for getting real-place exposure to entrepreneurship so as to encourage the students to set up their own start-ups.

Under the Student Development Program, 20 final-year students have been sent for exposure visits to different international institutions like UCNL, NEBRASKA, LINCOLN, IRRI and AIT under IDP, NAHEP in 2022-23. During the period under report, 36 students were the recipients of Junior Research Fellowships, 11 Senior Research Fellowships, 21 DBT fellowships and 45 NTS Scholarships. Likewise, 16 students were selected for the Assam Civil Service and allied services. 69 final-year students of the University during this period were also recruited by ten reputed organizations through Campus placement cell.

The University has framed guidelines for its ambitious *Earn While You Learn* (EWYL) scheme and implemented it this year with the motto to create parallel efforts in maintaining the class hours of students in colleges as well as to pursue internship and parttime jobs. In tandem with NEP-2020 policy, AAU has already started the registration process of students in the Academic Bank of Credits as a means of promoting flexibility and credit mobility in higher education and more than three hundred students have already registered and received ABC ids.

The research works of the university are oriented as per the needs of the stakeholders. The scientists under the four faculties of the University are engaged in 218 research projects in its different establishments. During this reporting period, eight high-yielding varieties of Rice and one each of Finger millet, Sesame, Mungbean and Urdbean developed by AAU have been notified by the Central Variety Release Committee (CVRC) for cultivation in the state of Assam. AAU has recently transferred four technologies - AAU Vet Mumb, AAU Vet Dog Loaf, AAU Vet Chicken Powder and

Thermo stable live lentogenic Newcastle disease virus formulation to private sector industries with license fee and royalty. AAU has developed a Muga Detection Kit to check the purity of muga silk. This will help to protect the interest of the local weavers of Assam. In a bid to check the dwindling population of local fishes, protocols have been standardized for the induced breeding of Cirhinhus reba (Lasim Bhangon) and habitat breeding of Chitala chitala (Chital) successfully. AAU has already stepped into the field of natural farming research with the establishment of Natural Farming and Organic Agriculture and works are in progress for the establishment of the model unit. AAU funded 21 research projects under competitive mode to the young faculties for the benefit of farming community and agripreneurs.

The Directorate of Extension Education of the university has been continuously striving to better the lives of the farming community through its various programmes. The Directorate through its 23 KVKs conducted 1,220 training programmes and these training programmes were attended by 31,969 farmers. The personnel of the 23 KVKs located in 23 districts of Assam have been rendering services to farmers by visiting their fields, by method demonstrations, through advisory /helpline service etc.

The teachers and scientists of the University have published 1285 publications in the form of research papers, research abstracts in journals and proceedings, books, book chapters, practical manuals, popular articles and technical bulletins. It is also pleasing to note that 44 research papers were published in journals with NAAS score of 10 or above.

The Veterinary Clinical Complex at AAU, Khanapara campus has been providing services to various central and state agencies apart from the sick pet animals of private individuals. The Clinical Complex treats around 100-150 animals daily earning revenue of more than one crore during 2022-23.

A rooftop solar power plant of 1 MW production capacity has been installed at Assam Agricultural University, Jorhat campus which has helped the university to cut down its electricity bill by 30-35%. AAU has also taken the initiative on internal revenue generation and for that a Corpus Fund of Rs. five crore has been created from the "University Receipt" for investing in income generating projects of different colleges, Research Stations and KVKs and to market its services through its own brand 'AAU Select'.

Aiming to fast-track the file movement within the University establishment and lessen the use of natural resources, the University has introduced EFMS (Electronic File Management System) and the system has brought a sea change in the whole process of file movement.

The inauguration of the College of Horticulture & Farming System Research at Lokopur, Nalbari on 6 December 2022 by our Hon'ble Chief Minister was a momentous occasion for AAU. The college is expected to play a pivotal role for the state in the development of the horticultural sector.

We were pleased to host quite a few distinguished dignitaries in different establishments of the university this year. We were extremely delighted to have hosted the Hon'ble Governor of Assam and Chancellor of our University Sjt. Gulab Chand Kataria ji who visited AAU on 26 March, 2023. We have also hosted Jigme Thinlye Namgyal, Consul General of Bhutan and Marit Strand, Counsellor, Norwegian Embassy apart from other dignitaries from India and aboard during the reporting period.

The University has been striving hard to realize its goals. The goal of producing market-ready graduates through student-ready programme as per the requirement of the employers, the goal of converting AAU into and Organic/ Natural Farming hub, the goal of meeting the entire seed requirement of rice, pulses and oil seeds of Assam, the goal of meeting the entire demand for swine fever and duck plague vaccines for the state and many more.

The ingrained one-for-all and all-for-one feeling of the University fraternity give us the confidence to be able to adapt and convert a challenging situation into an opportunity. I would like to take this opportunity to congratulate each member of the AAU family for making a dedicated effort to keep the teaching, research and extension activities of the University in the right direction with a positive momentum.

I, on behalf of the AAU family, would like to offer sincere gratitude to the Govt of Assam, ICAR, DBT, Govt of India and other organizations for their financial and technical support. Various International, National, Non-Government and private agencies also deserve our gratitude for their continuous support. AAU is ever grateful to the farming community for its generous support and guidance. AAU understands what it stands for and will never be found wanting to live up to its motto '*Vigyanam Lokasevaratam*'.

With regards,

(Bidyut C. Deka)

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University at a glance



A birds-eye view of Assam Agricultural University headquarter at Jorhat

ssam Agricultural University, the first institution of its kind in the entire northeastern region of India was established on April 1, 1969 by an act called *The Assam Agricultural University Act, 1968* with its headquarters at Jorhat. The base of this new institution comprised of the erstwhile Assam Agricultural College (established on 16th August 1948) at Jorhat and the Assam Veterinary College at Nagaon now at Khanapara (established on 18th August 1948).

The establishment of two rice research stations, one at Karimganj in 1913 in the Barak Valley and the other at Titabar in 1923 in the Brahmaputra Valley sowed the seeds of agricultural education in the North-Eastern part of the country. The trainees produced by these two research stations were not enough to meet the growing demand for scientifically trained manpower in the agricultural and allied sectors in this part of the country. Consequently, the Assam Agricultural College at Jorhat and Assam Veterinary College at Nagaon came into existence in 1948 as a result of exemplary willpower and dedication to the service of Bharat Ratna Late Gopinath Bordoloi, the first Chief Minister of Assam. Both the colleges were affiliated with Gauhati University at first and then with Dibrugarh University before the establishment of Assam Agricultural University in 1969.

1.1 Mandate

- Imparting technical education in agriculture and allied branches of learning
- Furthering the advancement of learning through innovative research in agriculture and allied sciences, and
- Taking the technologies to the stakeholders' doorstep to harness optimum benefits in production, profitability and permanency in agriculture.

1.2 Vision

Provisioning of quality human resource to facilitate technology-led agricultural renaissance revitalizing and rejuvenating post-green revolution agriculture ensuring both production and environmental sustainability targeting a minimum of 4% agricultural growth while addressing the issues of household food

and nutritional security, farmers' distress, commerce in agriculture as well as regional, national and global food crisis taking the advantage of innovative technology, market reforms and liberalization.

1.3 Mission

To fill up the talent gap in agriculture and allied sectors to preposition the state to combat the emerging challenges in agriculture and ensure productivity increase in agri-horti-animal-fish crops in the face of shrinking/ fragmented land holdings, ailing soil health, diminishing water resources and increased human population.

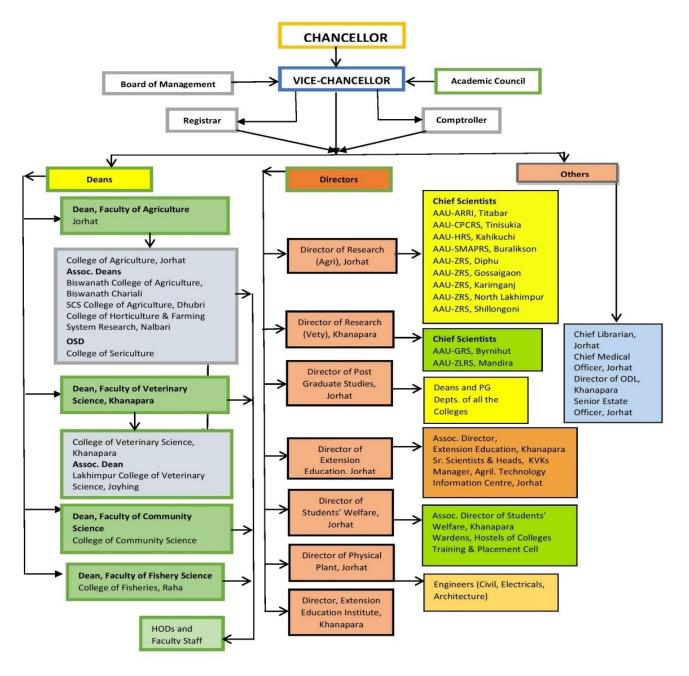
1.4 Goals

- Provide quality education and training in the areas of agriculture and allied sciences.
- □ Undertake basic, applied and adaptive research relevant to the needs of the farmers and entrepreneurs of Assam.
- □ Transfer the technologies to the stakeholders, particularly, farmers for increasing the production, productivity and income to ultimately improve the socio-economic conditions of the people, and
- Play a key role in transforming the state's agriculture of subsistence to agriculture of abundance.

1.5 Organization

To carry out the education as per mandate, the University has four faculties in the fields of Agriculture,

Veterinary, Community Science and Fishery with 9 constituent colleges - three in agriculture, two in veterinary science and one each in community science, fishery, horticulture and sericulture. Except for sericulture, all the other eight constituent colleges have state of the art facilities for imparting education in designated locations in the state. The Dean is the official head of the Faculty and Chairman of the Board of Studies of the respective Faculty. There is a Director of Post Graduate Studies to coordinate Post-Graduate Studies in all the departments and colleges of the University. To coordinate the research activities, the University has two full-fledged Directorates of Research, one for agriculture and community science headed by the Director of Research (Agriculture) and the other for veterinary science and fishery science headed by the Director of Research (Veterinary). The extension programme of the University is carried out under the Directorate of Extension Education headed by a Director of Extension Education. In addition, the University has a Director of Students' Welfare, a Director of Physical Plant and a Chief Librarian and other important officers as per the Statute. The Director of Students' Welfare is responsible for the arrangement of housing for students, student counseling and placement besides supervising the extra-curricular activities and general needs of the students. The Director of Physical Plant is responsible for all construction-related activities and repair/ renovation of the University. The organizational structure of the University is depicted in the organogram presented below.



Organizational structure of Assam Agricultural University, Jorhat

Awards and Recognitions

The year, 2022-2023, was a fruitful year for Assam Agricultural University. The University shone in the academic sphere and the faculty members as well as the students of different colleges and outstations were able to grab several international, national, regional and state-level honours and recognitions.

2.1. College of Agriculture, Jorhat

2.1.1. Teachers/Scientists

2.1.1.1. ISAE Fellowship 2022 to Dr. Chandan Hazarika

The Indian Society of Agricultural Economics is a very old and legendary organization of noted agricultural economists of the country. The society was established in December 1939 under the Societies registration Act, 1860 and the Bombay Public Trusts Act, 1950. The objectives of the Society are to promote the study of social and economic problems of agriculture in the rural areas and also to promote technical competence for teaching and research in agricultural economics and allied subjects. Dr. Chandan Hazarika, i/c Chief Librarian and Professor of Dept. of Agril. Economics, CA, AAU, Jorhat, was recognized for his scholarly services by the society in 2022. Prof. Hazarika was recognized as a fellow of the society (ISAE Fellow), 2022, in its 82nd annual conference held from November 10-12, 2022 under the auspices of Central Agricultural University, Imphal at College of Agriculture, Iroisemba, Imphal, Manipur.



Dr. Chandan Hazarika receiving the "ISAE Fellow Award, 2022" at the 82nd Conference of the Indian Society to Agricultural Economics, from Gajendra Singh Shekhawat, the union Minister of *Jal Shakti*

2.1.1.2. Kisan Shiromani Sanman, 2022 conferred to the Dept of Entomology, CA, AAU

In the International Conference on Recent Advances in Agricultural, Biological and Applied Sciences

Research organized by Nowgong College, Nagaon, Assam, the Dept of Entomology, CA, AAU, was conferred with the *Kisan Shiromani Sanman*, 2022. Prof. Badal Bhattacharyya, on behalf of the Dept, received the award in the conference, organized on 8th and 9th August, 2022.



Dr. Badal Bhattacharyya, receiving the Kisan Shiromani Sanman, 2022 from Dr. S. Borkataky, Principal, Nowgong College

- Dr. Nivedita Deka, Dept of Agricultural Economics and FM
 - acted as expert in the Experts Committee for "Restructuring the Existing Programme of the Dept of Agribusiness Management and Food Technology", North-Eastern Hill University, TURA Campus, Meghalaya, on 5th April, 2022.
 - acted a panellist in the Panel discussion on "G-20 Presidency and Development Prospects for Northeast India & Quot"; held at Tezpur University on 10th March, 2023 organized by Tezpur University.
 - received certificate of Excellence in Reviewing Awards, Asian Journal of Advances in Agricultural Research (Indexing: Ebsco, Proquest, Index Copernicus, Google Scholar) on 18 March, 2023.
 - resource person and delivered a talk on Product profiling of Rice - Understanding the product in terms of consumers, Industry, Food technologist and plant breeders in SERB funded training program on "Climate Smart Rice Breeding: Concepts and Application in North East India" on 28th June, 2022, organized by RARS, Titabor.

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- invited as Chief Guest by Kristir Kothia, an NGO for the workshop (4th to 9th July, 2022) on "Bamboo Mask under Skill Development" on 4th July, 2022 at Chandrakanta Handique Bhawan, Jorhat.
- invited as resource person in Training on "Recent Advances in Social Sciences for SMS" organized by DEE on 29th July, 2022.
- Radio talk in AIR, Dibrugarh, on Why Farmers Should Know the Market information for Agricultural Products on 17th July, 2022.
- organised NAHEP, AAU, Jorhat, sponsored lecture series on "Frontier Areas in Quantitative Analysis in Agricultural Economics" from 18th July, 2022 to 1st August, 2022 in the Dept of Agricultural Economics, AAU, Jorhat.
- jointly edited the book 'Swadinottor Bharatborsor Krishi Arthaneetir Ek Alokpat' published by Dean, Faculty of Agriculture, Assam Agricultural University, Jorhat.
- received certificate of excellence in reviewing Asian Journal of Advances in Agricultural Research (Indexing: Ebsco, Proquest, Index Copernicus, Google Scholar).
- attended 5th Research Council Meeting of Assam Rajiv Gandhi University of Cooperative Management (ARGUCOM) on 22nd November, 2022.
- invited to attend 1st Convocation of Assam Rajib Gandhi University of Cooperative and Management on 28th December, 2022.
- Letter of Appreciation on broadcast of Discussion programme on Union Budget 2023-24 and special emphasis on agricultural sector.
- acted as resource person for International Women Day celebration by Indian Women Veterinary Association (Assam Chapter) and delivered a lecture on "Digitize Women for Equality": Call of the hour, on 9th March, 2023 at College of Veterinary Science, Khanapara, Guwahati.

- acted as invited speaker in the 5 days training on "Food Processing, Safety and Regulatory Guidelines for Micro level Food entrepreneurs" organized by College of Community Science and delivered a lecture on Micro enterprise, Food processing and women on 17th March, 2023.
- received certificate of Excellence in Reviewing Awards, Asian Journal of Advances in Agricultural Research (Indexing: Ebsco, Proquest, Index Copernicus, Google Scholar) on 18 March, 2023.
- acted as resource person in the NAHEP sponsored training on "Navigating through New Education Policy to Facilitate Learning, Developing Skills And Enhancing Employability" and delivered a lecture on G20 India Presidency and NEP: An overview on 25th March 2023 at 10. 30 AM at ABT conference Hall, AAU.
- Dr. Riyaz Abdul Halim, Dept of Agricultural Economics & FM, jointly edited the book *'Swadinottor Bharatborsor Krishi Arthaneetir Ek Alokpat*' published by Dean, Faculty of Agriculture, Assam Agricultural University, Jorhat.
- Dr. Udeshna Talukdar, Dept. of Agricultural Economics
 - awarded best paper of 82nd Annual Conference of Indian Journal of Agricultural Economics held at Central Agricultural University, Imphal.
 - Dr. Horindra Gogoi, Dept. of Agricultural Economics and FM
 - co-Nodal Officer, the Core Group on Natural Farming at AAU Head Quarter.
 - > member of CBBO, Jorhat Unit.
 - adviser (Technical, Media & Publicity) of International Conference on Biodiversity Food Security, Sustainability & Climate Change (ICBFSCC-2023), AAU, Jorhat.
 - alternate Nodal Officer "Project; Survey of Rural Primary markets (*Gramin Periodical Haats*) in Assam" under SITA, GoA.

- co-PI: Integrated Approaches towards Addressing Sustainable Agriculture among the SC/ST Population with Special Reference to Jhum Cultivators of Karbi Anglong District of Assam.
- acted as resource person and delivered lecture on 'The role of Board of Directors and members for proper functioning FPC" in Synthesis meeting of North West Jorhat FPC organized on 19th July, 2022 at Alengmora.
- organized Review Meeting of Project "Survey of Rural Primary (Gramin Periodical Haats) markets in Assam" funded by State Innovation and Transformation Aayug (SITA), Govt. of Assam, Dispur, Assam on 13th September, 2022.
- acted as a Resource Person in a training programme "Business Planning and Management of FPOs/FPCs" organized by the Directorate of Extension Education, AAU, Jorhat on the topic, "Financial Statement and Record Keeping of FPC" at Conference room, DoEE on 12th October, 2022.
- > one of the editor of AAU Annual Report, 2022-23
- Dr. Sangita Bora, Dept. of Agricultural Economics
 - acted as a Resource Person in a training programme Business Planning and Management of FPOs/FPCs organized by the Directorate of Extension Education, AAU, Jorhat on the topic, "Financial Planning in Business" at Conference room, DoEE on 12th October, 2022.
 - resource person for "Digital Marketing: Concept and Application in Export" in DEE, AAU on 8th November, 2022.
 - acted as resource person for training programme on Capacity Building of FPOs on the Topic "Harnessing market through FPOs" organised by Project Implementation Unit- CBBO Horticultural Research Station, Kahikuchi, Guwahati-

781017 at the conference hall of Directorate of Extension Education, AAU, Jorhat on 28th March, 2023.

- Ms. Ranjana Deka, Dept. of Agril. Engg., received the Springer Best Poster Award during North East Research Conclave held at IIT Guwahati during 20th to 22nd May, 2022.
- Er. Amrita Teronpi Recognised as Reviewer under INSPIRE Awards-Manak under Dept of Science and Technology, Govt of India on 21st November, 2022.
- Invited as a resource person for skill-oriented training programme on "Operation, Repairing and Maintenance of Agricultural Machineries" by KVK, Karbi Anglong on 25th November 2022.
- Er. Kaushik Hazarika and Dr. Rejaul Hoque Bepary, AICRP on PHET, Dept of Agricultural Engineering, were selected for the final round along with three other teams, in the innovative idea competition to mine out innovative design for "Automated stem removal of King Chilli (popularly known *as Bhut Jolokia*)", organized by DST-funded technology enabling centre (DST-TEC) at Tezpur University. They were awarded with third prize for their prototype working model. The winning idea is to be taken for further development and technology transfer to MSME.



Er Kaushik Hazarika, on behalf of the AICRP on PHET, is receiving the third Best Center Award from the Director ICAR-CPCRI, Kasaragod.

- Dr. Abhijit Borah and Er. Amrita Teronpi, Dept of Agri. Engg.
 - recognised for their achievements for the technology dissemination of AICRP-PHET

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and AICRP-FIM at SRS, Buralikson, AAU by Indian Society of Agricultural Engineers, North East.

> AICRP on PHET, Assam Agricultural University, Jorhat Centre was awarded the third best centre for the year, 2022-23 among the thirty centers across the country. In the workshop, six technology leaflets were also inaugurated namely Bamboo Shoot grating machine, '*Chunga Chaol*' making machine, Mechanised *Dheki*, Areca Nut peeling machine, Storage Structure for high moisture environment and bamboo shoot based curry powder.



Dr. Chitrasen Lairenjam attended and presented a paper on "Assessment of the potential rooftop rainwater harvesting – A case study for Nagaland" during the 56th Annual Convention of ISAE on Agricultural Engineering Innovation for Global Food Security and International Symposium on India @2047: Agricultural Engineering Perspective scheduled on 9–11 November, 2022 at Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu.

Dr. Th. Bidyalakshmi Devi attended and presented a paper on "Study of the engineering properties, proximate and microbiological analysis of soybean for making fermented product" during the Soft Annual Convention of ISAE on Agricultural Engineering Innovation for Global Food Security and International Symposium on India @2047: Agricultural Engineering Perspective scheduled on 9-11 November, 2022 at Tamil Nadu Agricultural University Coimbatore, Tamil Nadu.

Dr. Chitrasen Lairenjam attended and presented a paper on "A review on rejuvenation of water bodies for enhanced water scarcity over Nagaland" during the National Symposium cun Workshop on Springshed Management, scheduled on 18–19 November 2022, North-Easter Regional Institute of Water and Land Management (NERIWALM)

Dr Abhijit Borah and Er Amrita Terongpi participated in Farmers Fair on 14th Dec at Sugarcane Research Station Buralikson Under AAU.



Dr. Abhijit Borah and Er. Amrita Teronpi was recognized for the technology dissemination of AICRP PHET and AICRP FIM by ISAE, NE.

- Dr. Anjumoni Devee, Dept. of Entomology, received the 2nd position in oral presentation on Studies on efficacy of certain biopesticides against honey beees (*Apis cerana* F) under laboratory and field condition. The paper was presented in Indian Phytopathological Society-North Eastern Zonal Symposium and National conference, organized by Dept of Plant Pathology, AAU, on 24th and 25th November, 2022.
- Dr. Saurabh Sarma, Dept of Entomology, AAU received the "Best Ph.D. Thesis Award 2022" in the 5th International Conference on Advances in Agriculture Technology and allied sciences held at MS Swaminathan School of Agriculture, Centurion University of Technology and Management, Odisha, on 4th and 5th June, 2022

Received 2nd Best Exhibit Award in the Farmers Fair held at AAU-ARRI, Titabar on 8th November, 2022.



The faculty members of the Dept of Entomology, CA, receiving the 2nd Best Exhibit Award in the Farmers Fair held at AAU-ARRI, Titabar

 Dr. AK Sarmah, Assistant Professor, Dept of Agronomy, bagged the Best oral presentation in National Webinar on "Sustainable Interventions Towards Resource Conservation and Natural Farming" organized jointly by ANRCM and AAU, Jorhat, on 22nd and 23rd April, 2022.



The certificate and the memento offered to Dr. Saurabh Sarma, Dept of for the "Best Ph.D. Thesis Award 2022" in the 5th International Conference on Advances in Agriculture Technology and Allied Sciences

- Dr. Supriya Sharma, Asstt. Professor, secured the 1st Position in Oral Presentation (Technical session -V) on the topic Harnessing therapeutic properties of artificially induced *Cordyceps bassiana* from *Beauveria bassiana*, in IPS-NEZ symposium and National Conference on "Reframing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, 24th to 25th of November, 2022.
- Mr. Apurba Das, Asstt. Professor, Dept. of Plant Pathology
 - received the 1st Position in Oral Presentation (Technical session -III) on

the topic Epidemiology and biointensive management of cercospora leaf spot of castor (*Ricinus communis* L.) in agroclimatic condition of Assam, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, from 24th to 25th of November, 2022.

- Bagged 3rd Position in Oral Presentation (Technical session -V) on the topic "Artificial Production of *Cordyceps bassiana* a teleomorph of *Beauveria bassiana*", in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat-13 from 24th to 25th November, 2022.
- Dr. Pranjal Kr. Kaman, Jr. Scientist, Dept of Plant Pathology, was awarded the 3rd Position in Oral Presentation (Technical session -IV) on the topic Antifungal activity of biosynthesized copper nanoparticles against Fusarium wilt of tomato, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, from 24th to 25th of November, 2022.
- Dr. Madhumita Barooah, Prof. Dept of Agril Biotechnology, received the Certificate of Appreciation for her pioneering work on *Xaaj* and *Poita bhat*, from 74th Republic Day (2023), from Hon'ble Vice Chancellor, AAU.
- Ms. Sibani Das, AAU-HRS Kahikuchi, received the Best Poster Award in National Seminar on CRHAMS-2022, held in Nalanda College of Horticulture, Noorsarai, BAU.
- Dr. Naseema Rahman, AAU-HRS Kahikuchi, was awarded the First prize in the oral presentation of a paper entitled Importance of *Gramin Krishi Mausam Sewa* (GKMS) Project in Natural Farming in the National Webinar on "Sustainable Interventions towards Resource Conservation and Natural Farming" held on 22nd and 23rd April, 2022.
- Dr. Kaberi Mahanta, AAU-HRS Kahikuchi

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> Received the Best Oral presentation award

in 3rd International Web-Conference on "Natural Resource Management for Global Food Security and Sustainable Development Goals" held on 2nd and 3rd December, 2022.

- Received the Best Oral presentation award in 7th International Conference in Hybrid Mode on "Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2022)" held from 21st to 23rd November, 2022 at Birsa Agricultural University, Ranchi.
- Received the Best Oral presentation award in IVth International Conference on ICAAAS-2022 held from 12th to 14th June, 2022 at Himachal Pradesh University, Summer Hill, HP.
- Best Oral presentation award National Webinar on "Sustainable Interventions towards Resource Conservation and Natural Farming", held on 22nd and 23rd April, 2022, organised by Academy of Natural Resource Conservation and Management in collaboration with Assam Agricultural University, Jorhat.
- Ms Ranjita Bezbarua, AAU-HRS Kahikuchi, reviewed the manuscript entitled Participatory intervention in farmers' practice of vegetable production to increase productivity in hill agriculture for Indian Journal of Hill Farming, ICAR Research Complex for N.E.H. Region, Umium, Meghalaya during December, 2022.
- Dr. Kaberi Mahanta, Ms Ranjita Bezbarua, AAU-HRS Kahikuchi, won the Video Competition Award, 2022 on the theme: Agroforestry Adaptations in Farmers Field, organized by CAFRI, Jhansi.
- Dr. Parveen Khan, AAU-ZRS, Karimganj secured the third prize in poster presentation in Indian Phytopathological Society NE Zonal Symposium on "Reframing Fururistic Plant Health Safeguard" organized by Dept of Plant Pathology, CA and Indian Phytopathological Society, New Delhi.
- Dr. Tulika Medhi, received the 2nd Best oral presentation at North Eastern Zonal Symposium and National Conference on "Reframing

Futuristic Plant Health Safeguards" organised by Indian Phytopathological Society and Dept. of Plant Pathology, AAU on 23rd and 24th November, 2022.

- Dr. Bibha Chetia Borah, Principal Scientist and in/charge, Fisheries Research Centre
 - Invited as guest speaker for Aqua talks presented by Jaljeevika (www.jaljeevika. org) under the theme, International Year of Artisanal Fisheries and Aquaculture on the topic Fisheries in Flood Prone Area, on 30th December, 2022.
 - Invited as expert penalist for consultative seminar cum workshop organized by Ekgaon Consulting Services, New Delhi, on opportunities and challenges of fisheries sector of Assam in virtual mode on 21st December, 2022.
 - Invited as speaker for Jorhat Conclave for entrepreneurship development on *Swaniyojan*, organised by Govt. of Assam, at Jorhat from 7th to 9th April, 2022.
 - Invited as Guest speaker for 21-days ICAR sponsored Winter School on "Health Foods for sustainable Living", organised by College of Community Science, AAU, Jorhat, on 9th December, 2022.

2.1.2. Students



Ms. Preetipuja Kashyap, Dept of Entomology,CA, receiving the 1st Position in Oral presentation in IPSNEZA National Conference

- Ms. Priya Kaur, Dept of Entomology, received the Best Research Scholar award in the International Conference in Guru Kashi University, Bathinda, Punjab.
- Ms. Sunita Chetri, Dept of Entomology, received the 10th position; INSPIRE fellowship, DST, GOI 2021.



Ms. Swapnalisha Mahapatro, Dept of Entomology, CA receiving the Best Poster Presentation in 18th AZRA International Conference

- Ms. Preetipuja Kashyap, Dept of Entomology, secured the 1st prize in oral presentation at Indian Phytopathological Society North Eastern Zonal Symposium and National Conference on 24-25th November, 2022.
- Ms. Swapnalisha Mahapatro, Dept of Entomology, AAU received the Best Poster Presentation in 18th AZRA International Conference on Advances in Applied Zoological Researches towards Food, Feed and Nutritional Security and Safer Environment held at Odisha, from 10th to 12th February, 2022.
- Ms. Bhaswati Saikia, Dept of Entomology, got the 1st prize in poster presentation at Indian Phytopathological Society North Eastern Zonal Symposium and National Conference on 24-25th November, 2022.
- Ms Anindita Saikia, Dept of Plant Breeding and Genetics, received the Springer Best Paper in the North East Research conclave 2022 held at IIT - Guwahati from 20th to 22nd May, 2022 for her paper entitled Induction of RNA mediated resistance against cucumber mosaic virus on exogenous application of dsRNA authored by Ms. Anindita Saikia, Mr. R. Gowtham Kumar and Dr. Munmi Borah.
- Mr. Pranjal Pratim Mudoi, Dept of Agricultural Economics and FM, Received the Certificate of Participation for participating the lecture series on "Functional properties of millets and milletbased foods" organized by Mizoram University, Mizoram, India on 10th October, 2022.
- Ms. Dibyashree Dutta, Dept of Plant Pathology, was nominated for APS-IPS Travel Grant Contest on the topic Distribution, molecular diagnostics

and host diversity of phytoplasma associated with Brinjal little leaf disease in Assam, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.

- Ms. Shenaz Sultana, Dept of Plant Pathology,w was nominated for APS-IPS Travel Grant Contest on the topic Encapsulation of microbial bioagents for development of bioinoculant kit for sustainable disease management, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Dikshita Saikia, Dept of Plant Pathology, was nominated for M J Narasimhan Academic Merit Award Contest on the topic Molecular epidemiology and pathological characterization of Citrus tristeza virus in Assam lemon (*Citrus limon* Burm.) using serological and molecular approaches, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat on 24th and 25th November, 2022.
- Ms. Bandana Saikia, Dept of Plant Pathology, secured the 2nd Position in Oral Presentation (Technical session-II) on the topic Diversity and Bioactivities of fungal endophytes from *Solanum pimpinellifolium* against Fusarium wilt of Tomato, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Bhuvaneshwari V., Dept of Plant Pathology, bagged the 2nd Position in Oral Presentation (Technical session-IV) on the topic Induced Systemic resistance activated by endophytic fungi against *Colletotrichum capsici* causing fruit rot of Chilli, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Gurpreet Kaur Bhamra, Dept of Plant Pathology, received the 1st Position in Poster

Presentation (Technical session-III) on the topic Influence of weather parameters on the progression of Rhizoctonia aerial blight of soybean under Assam condition, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.

- Ms. Lunisha Pegu, Dept of Plant Pathology, got the 1st Position in Poster Presentation (Technical session-V) on the topic Study of contaminants on mushroom beds treated with formaldehyde and carbendazim, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th to 25th November, 2022.
- Ms. Rajshree Nath, Dept of Plant Pathology, was awarded the 3rd Position in Poster Presentation (Technical session-V) on the topic Efficiency of Liquid state fermentation over solid-state fermentation of mushroom for the production of bioactive compounds, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Rajashree Chetia, Dept of Plant Pathology, received the 3rd Position in Oral Presentation (Technical session-III) on the topic Explorative study reveals *Ralstonia solanacearum* Race1 biovar 3 to be the predominant strain causing bacterial wilt of brinjal in Assam, in IPS-NEZ symposium and National Conference on "Reframing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Ankita Saha, Dept of Plant Pathology, received the 1st Position in Oral Presentation (Technical session-IV) on the topic *Ralstonia solanacearum* –triggered anatomical and proteomic shifts in tomato xylem vasculature acting as vital defence responses to prevent the bacterial wilt disease, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.

- Ms. Dibyashree Dutta, Dept of Plant Pathology, obtained the 1st Position in Poster Presentation (Technical session-IV) on the topic Screening of alternate host species for brinjal little leaf phytoplasma in Assam, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Mr. Abhishek Rath, Dept of Plant Pathology, secured the 1st Position in Poster Presentation (Technical session-II) on the topic Mycovirus - a natural fungicide, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Trishna Taye, Dept of Plant Pathology, received the 2nd Position in Poster Presentation (Technical session-II) on the topic *In vitro* assays of biocontrol agents against fruit rot (*Colletotrichum gloeosporioides*) of King Chilli (*Capsicum chinense* Jacq.), in IPS-NEZ symposium and National Conference on "Reframing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Chayanika Bora, Dept of Plant Pathology, received the 3rd Position in Poster Presentation (Technical session-II) on the topic Management of rust disease of bach (*Acorus calamus*) through integrated approach, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Ms. Bandana Singha, Dept of Plant Pathology, secured the 1st Position in Poster Presentation (Technical session-II) on the topic Endophyte-a novel plant protection tool for sustainable agriculture, in IPS-NEZ symposium and National Conference on "Re-framing Futuristic Plant Health Safeguards" held at Dept. of Plant Pathology, AAU, Jorhat, on 24th and 25th November, 2022.
- Mr. Jitul Bora, Dept of Agricultural Biotechnology, HG Khorana fellowship under which he will be able to visit USA for

a short period of time and conduct part of his research.

- Mr. Jitul Bora and Mr. Nishanta Jyoti Kharghoria, Dept of Agricultural Biotechnology, won third prize at the Inter-hostel Quiz Competition held on the National Science Day, organized by Assam Science Society – AAU Branch.
- Mr. Madhurjya Ranjan Sharma, Dept of Agricultural Biotechnology, got 2nd prize in poster session at the Indian Phytopathological Society (NEZ) Zonal Symposium and National Conference on "Reframing Futuristic Plant Health Safeguards" held on 24th and 25th November, 2022.
- Ms. Reshma Ahmed, Dept of Agricultural Biotechnology, awarded for best oral presentation at the international symposium on "Advances in Plant Biotechnology and Nutritional Security" from 28th to 30th April, 2022), organised by ICAR-NIPB, New Delhi.
- Ms. Sanyukta Kalita, Dept of Agricultural Biotechnology, cleared GATE-2023 in 'Life Sciences'.
- Ms. Reshma Ahmed, Ms. Gracia P Kumari, Ms. Subhrota Bordoloi, Ms. Paromita Saikia, Ms. Sanjukta Singha, Ms. Manjistha Baruah, all Ph.D students, Dept of Agricultural Biotechnology, were awarded with grants to attend 3-months international training under the European Union funded AdaptNET programme of Erasmus+.
- Ms. Eimon Bharadwaj, Dept. of Tea Husbandry and Technology, received the Budding Scientist Award, 2019 & 2020, by Indian Society of Horticultural Research & Development, Uttarakhand, India during Progressive Horticultural Conclave held at GBPUA&T, Pantnagar during 3rd to 5th February, 2023.
- Ms. Tulika Narah with her co-debater, Dept of Agronomy, received the 2nd best team award in state level debate competition held on 9th September, 2022 at Dibrugarh University.
- Ms. Priyanka Hazarika, Dept of Agronomy, received the 2nd position in 4x100 m relay race and 1st position in women volleyball along with the co-players in Inter-college meet of Assam Agricultural University held on 1st and 3rd March, 2023 at Khanapara.

- Mr. Abinash Majumdar, Dept of Soil Science, won the Students Incentive Award (Best M. Sc thesis) given by Soil Conservation Society of India, New Delhi.
- Ms. Priyanka Saikia, Dept. of Entomology, received the Best Poster Presentation Award at 2nd Biotic Science Congress, and International Conference on Recent Advances in Agricultural, Biological and Applied Sciences Research on 8th and 9th August, 2022, held at Nowgong College, Assam.
- Ms. Priya Kaur, Dept. of Entomology, won the Best paper award at 4th International conference on global efforts on Agril., forestry, Environment and food security (Climate change and its impact) GAFEF-2022, organized from 17th to 19th September, 2022, held at Guru Khasi University, Panjab.



The certificate awarded to Ms. Anindita Saikia, Dept of PBG at North East Research Conclave in IIT – Guwahati

 Ms. Uddipana Sandilya, Dept. of Entomology, Best thesis award, International conference on global efforts on Agril., forestry, Environment and food security (Climate change and its impact) GAFEF-2022, organized from 17th to 19th September, 2022, held at Guru Khasi University, Panjab.



Ms. Eimon Bharadwaj, Dept. of THT, receiving the Budding Scientist Award, 2019 & 2020, in Progressive Horticultural Conclave

2.2. College of Veterinary Science, Khanapara

2.2.1. Teachers/Scientists

2.2.1. Lifetime Achievement Award to Dr. Kushal Konwar Sarma

Padmashri Dr. Kushal Konwar Sarma, Dept of Veterinary Surgery & Radiology, College of Veterinary Science, Khanapara, is a nationally and internationally renowned face in the veterinary and wildlife treatment. He has successfully accomplished several assignments worldwide in this line. Dr. Sarma was selected for the Dr. SC Pathak Memorial Lifetime Achievement Award for excellence in Wild and Zoo Animal Surgery by the Indian Society for Veterinary Surgery for the year of 2-22-23. The award was handed over to Dr. Sarma, in a gorgeous function on 11th of January, 2023 in its 45th annual congress and National Symposium held at Nagpur Veterinary College, Nagpur.



Dr. KK Sarma is receiving Dr. SC Pathak Memorial Lifetime Achievement Award

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- Dr. Bendangla Changkija, Dept of Veterinary Clinical Medicine, Ethics and Jurisprudence, received VIPM Appreciation Award 2022 at the 3rd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on "Pragmatic approaches for animal health and welfare: Present Perspective of Climate Change" at the CVSc&AH, Anand, Kamdhenu University, Gujarat,India.
- Dr. Razibuddin Ahmed Hazarika, Dept of Veterinary Public Health, received Award of Honour in the International Symposium on "Zoonotic and Transboundary Diseases : Breaking the chain through Multidisciplinary Approach" and 18th Annual Conference on Indian Association of Veterinary Public Health Specialists (IAVPHS) organized by ICAR Research Complex for NEH Region during 1st and 2nd December, 2022 at Umium, Meghalaya, India.



Dr. RA Hazarika receiving the Award of Honour from ADG, ICAR

- Dr. Archana Talukdar, Dept of Veterinary Public Health, received Professor Mahendra Pal Zoonoses Award in the International Symposium on Zoonotic and Transboundary Diseases: Breaking the Chain Through Multidisciplinary Approach" and 18th Association of Veterinary Public Health Specialists organized by ICAR Research Complex for NEH Region during 1st and 2nd December, 2022 at Umium, Meghalaya.
- Dr. Mridusmrita Buragohain, Dept of Veterinary Pathology, received 2nd prize in the poster presentation of the 39th Annual Conference of IAVP, Hyderabad, from 17th to 20th November, 2022.
- Dr. Anil Deka, Dept of Veterinary Anatomy & Histology, received Dr. CM Singh Veterinary Science Excellence Award 2022.

- Dr. Snehangsu Sinha, Dept of VeterinaryAnatomy & Histology, was awarded with Dr.CM Singh Veterinary Science Excellence awardfrom *Pashudhan Praharee*.
- Dr. Kanta Bhattacherjee, Dept of Veterinary Parasitology, was awarded Best ANO (associate NCC Officer). Award of Incentive of Rs. 10,000/- was received as best ANO under the State of Assam as per recommendations of the DDG, NCC, NE Region and Director of Sports and Youth Welfare, Govt. of Assam during February, 2023.
- Dr. Kuntola Roy, Dept of Veterinary Parasitology, was Awarded with the 2nd prize in Poster presentation in the 31st National Congress of Parasitology held at Madras Veterinary College, Chennai on 10th to 12th November, 2022.
- Dr. Sulekha Choudhury Phukan, Dept of Veterinary Parasitology
 - > got the Certificate of Appreciation for development of novel anthelmintic "AAUVET MUMB" from the Assam Agricultural University, Jorhat on 26th January, 2023.
 - acted as Chairman of Session-VI, 31st ≻ Conference of National Veterinary Parasitology, held from 6^{th} to 8^{th} December, 2022 in the Dept of Veterinary Parasitology, Odisha University of Agriculture & Technology, Odisha.
 - selected as Member of Board of Editors of the Journal of Veterinary Parasitology, the official journal of the Indian Association for the Advancement of Veterinary Parasitology.



Dr. SC Phukan is receiving the Certificate of Appreciation on World Veterinary Day, 2023

- Dr. Saidul Islam, Dept of Veterinary Parasitology
 - nominated as Member of the Assam Publication Board, Assam, 2023.
 - received Best Paper Award in oral presentation in Session IV in the 31st National Conference of Veterinary Parasitology, held from 6th to 8th December, 2022 in the Dept of Veterinary Parasitology, Odisha University of Agriculture & Technology, Bhubaneswar, Odisha.
 - > delivered a Lead Paper in Session IV in the 31st NCVP, held from 6th - 8th December 2022 in the Dept of Veterinary Parasitology, Odisha University of Agriculture & Technology, Odisha.
 - invited as Special Guest in the webinar on 11th February, 2022 by Sathya 0 Grazing.
 - member of the Editorial Board of Veterinary Practitioner.
- Dr. Jakir Hussain, Dept of Livestock Production & Management, was conferred National Fellow of Animal Production and Management by Indian Society of Animal Production and Management on the inaugural ceremony "29th Annual Convention and National Conference" held on 18th to 20th January 2022 at College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar, Odisha.
- Dr. Saurabh Kumar Laskar, Dept of Livestock Products Technology, received the Certificate of Appreciation for achievement in the Development of AAUVET Dog Loaf and AAUVET Chicken Power.



Dr. Saurav Kumar Laskar is receiving the Certificate of Appreciation along with his team

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- Dr. Ankur Das, Dept of Livestock Products Technology, received the Certificate of Appreciation for achievement in the Development of AAUVET Dog Loaf and AAUVET Chicken Power.
- Dr. Santosh Upadhyay, Dept of Livestock Products Technology, received the Certificate of Appreciation for achievement in the Development of AAUVET Dog Loaf and AAUVET Chicken Power.
- Dr. Protiva Gogoi, Dept of Livestock Products Technology, received the Certificate of Appreciation for achievement in the Development of AAUVET Dog Loaf and AAUVET Chicken Power.
- Dr. Deepshikha Deuri, Dept of Livestock Products Technology, received the Certificate of Appreciation for achievement in the Development of AAUVET Dog Loaf and AAUVET Chicken Power.
- Dr. Kushal Konwar Sarma, Dept of Veterinary Surgery & Radiology, was bestowed with "Green Ambassador" title by Centre for the Environment, Indian Institute of Technology, Guwahati on the occasion of World Environment Day, 5th June, 2022.
- Dr. Probodh Borah, Dept of Animal Biotechnology
 - Recognized as a Fellow of the National Academy of Veterinary Sciences (FNAVS) in 2022 in the annual convocation of the Academy held at Nagpur on 20th June 2022.



Dr. P. Borah is receiving the FNAVS award

Visited Dhaka and Chittagong, Bangladesh to act as a Resource Person for training programmes on 'In-silico approaches for genomics and proteomics research' organized by Bangladesh Livestock Research Institute, Savar, Dhaka, Bangladesh on 15th and 16th October 2022.

- Acted as a Resource Person in Workshop on 'Proteomics, Comparative Genomics, Drug Discovery and Bioinformatics' at University of Science & Technology, Chittagong (USTC) on 17thOctober 2022. Also, delivered a guest lecture on 'Computer-aided drug designing' at Asian University for Women, Chittagong Bangladesh, on 18thOctober 2022.
- Nominated as a Member of the Technical Committee constituted by ICMR for the Task- force project entitled "Surveillance of Foodborne Pathogens from North-East India".
- Nominated as a Member of Institute Management Committee of ICAR-NRC on Yak, Dirang, Arunachal Pradesh.
- Nominated as a Member of the Project Monitoring Committee of DBT-funded Network Project on Establishment of a Consortium for One Health for addressing Zoonoses, Phase I: towards detection and control of select transboundary and zoonotic diseases".
- Nominated as a Member of the Steering Committee for Biotech-Based Programme for Societal Development constituted by DBT, Govt. of India since 18th May, 2022.
- Dr. NN Barman, Dept of Veterinary Microbiology
- Fellow of National Academy of Veterinary Sciences (India).
- Certificate of Appreciation from AAU, Jorhat-13.
- Received Best Teacher Award 2022 from the Indian Veterinary Association on 11th December, 2022.



Dr. NN Barman is receiving the FNAVS certificate

- Dr. Sutopa Das, Dept of Veterinary Microbiology
 - Underwent overseas training under faculty development programme of PIU NAHEP, AAU.
 - Received Certificate of Appreciation for development of VET-MUMB on the occasion of 74th Republic Day (2023), from Hon'ble Vice Chancellor, AAU.
- Dr. Pankaj Deka, Dept of Veterinary Microbiology
- P received Best oral presentation award on in 34th Annual Convention of IAVMI and National Conference on "Current trends in Immunodiagnostics & Vaccinology for Health of Livestock and Poultry" held at LUVAS, Hisar on 27th and 28th May, 2022.
- received the Certificate of Appreciation for achievement in the Development of Thermostable Newcastle Disease Vaccine from AAU.



Dr. Pankaj Deka is receiving the Certificate of Appreciation

received Outstanding Innovation Award in the 9th Kolkata International Poultry Fair 2023 held at Science City Exhibition Ground, Kolkata from the West Bengal Poultry Federation.



Dr. Pankaj Deka receiving the Outstanding Innovation Award

Sophia M Gogoi, Dept of Veterinary Microbiology, received Best oral presentation award in VIROCON 2022- Annual convention cum International Conference on "Emerging and Re-emerging Viral Infections Impacting Humans, Animals, Plants, Fish and Environment held at Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir (SKUAST-K), Srinagar (J&K), on 5th and 6th November, 2022.

- Dr. Bibeka Nanda Saikia, Dept of Animal Nutrition
- delivered a lead paper in the 19th Biennial International Conference of Anima Nutrition Society of India held at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab.
- received Fellow Award, Society of Veterinary Nutrition and Animal Welfare, IVRI, Bareilly.



Dr. BN Saikia receiving the Fellow Award

- Dr. Sadananda Payeng, Dept of Extension Education, was awarded as one of the best Associate NCC officers of Assam by Director of Sports, Govt. of Assam.
- Dr. Deepa Lahkar, Dept of Epidemiology and Preventive Medicine
 - received VIPM Appreciation Award 2022 at the 2nd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on "Innovations in Veterinary Medicine: Present status and futuristic implications" held at CVSc & AH, ANDUAT, Ayodhya, Upon 6the and 7th May, 2022.
 - received the VIPM Appreciation Certificate 2022 for successful conduction of VIPM National Webinar, and honoured at the 2nd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on "Innovations in Veterinary Medicine: Present status and futuristic implications" held at CVSc &

AH, ANDUAT, Ayodhya, Upon 6the and 7th May, 2022.

- received the 3rd prize 2022 at the Technical Session "Farm Animal and Production Medicine" at the 2nd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on "Innovations in Veterinary Medicine: Present status and futuristic implications" held at CVSc & AH, ANDUAT, Ayodhya, Upon 6th and 7th May, 2022.
- ≻ honoured with the Certificate of Appreciation 2022 for expert role as Judge at the Technical Session "SAD-Ear, Hormonal and Tumor" at the International Conference on "Advancing Veterinary Practice, Education Dermatology & Research in Developing Countries" and Inaugural Convention and Satellite Symposium of the Association for Veterinary Dermatology (IAVD) India and Dermatology Case Conference for students and Practitioners held at Madras Veterinary College, TANUVAS, Chennai, on 9th and 10th June, 2022.
- ≻ honoured with the Certificate of Appreciation 2022 for expert role as rapporteur at the Technical Session "Farm Animal Research" at the International Conference on "Advancing Veterinary Dermatology Practice, Education & Research in Developing Countries" and Inaugural Convention and Satellite Symposium of the Association for Veterinary Dermatology India and Dermatology Case Conference for students and Practitioners held at Madras Veterinary College, TANUVAS, Chennai, India on 9th and 10th June, 2022.
- received the Certificate of Award 2022 (3rd) as Co-author at the Technical Session "Companion Animal Medicine for undergraduates" at the TANUVAS 12th Clinical Case conference on Farm and Companion animal practice for Veterinary Students held at Madras Veterinary College, TANUVAS, Chennai, India, on 10th and 11th August, 2022.

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- honoured with the Certificate of Appreciation 2022 for expert role as Cochairman at the 3rd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on "Pragmatic approaches for Animal Health and Welfare in present perspective of climate change" held at CVSc & AH, Kamdhenu University, Gujrat, from 7th to 9th October, 2022.
- Dr. Jyoti B. Dutta, Dept of Epidemiology and Preventive Medicine, received the Certificate of Award 2022 (1st) for Poster Presentation as Co-author at the International Symposium on "Zoonotic and Transboundary diseases: Breaking the chain through multidisciplinary approach" and 18th Annual Conference of Indian Association of Veterinary Public Health Specialists organized by ICAR Research Complex for NEH Region, Umiam in technical collaboration with International Livestock Research Institute (ILRI), Nairobi on 1st and 2nd December, 2022 at Umiam, Meghalaya.

2.2.2. Students

- Dr. Tanu Sharma, Dept of Veterinary Clinical Medicine, received the Best Paper Presentation Award 2022 in the scientific session on "Companion Animal Medicine" of the 2nd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on Innovations in Veterinary Medicine: Present Status and Futuristic Implications" held at ANDUAT, Ayodhya, UP, on 6th and 7th May, 2022.
- Dr. Prerona Patowary, Dept of Veterinary Clinical Medicine
 - received the Veterinary Internal and Preventive Medicine Society Young Scientist Award-2022 in the 2nd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on on Innovations in Veterinary Medicine: Present Status and Futuristic Implications" held at ANDUAT, Kumarganj, Ayodhya(UP) on 6th and 7th May, 2022.
 - received the Best Oral Paper Presentation Award 2022 in the 2nd Annual Convention

of Veterinary Internal and Preventive Medicine Society and National Symposium on Innovations in Veterinary Medicine: Present Status and Futuristic Implications" held at ANDUAT, Ayodhya, UP, on 6th and 7th May, 2022.

- Dr. Malela Sai Krishna Goud, Dept of Veterinary Public Health, received the 3rd position for oral paper presentation in the International Symposium on "Zoonotic and Transboundary diseases: Breaking the Chain Through Multidisciplinary Approach" and 18th Association of Veterinary Public Health Specialists organized by ICAR-NEH on 1st and 2nd December, 2022 at Umium, Meghalaya.
- Dr. Nur Abdul Kader, Dept of Veterinary Public Health
 - Secured the 2nd position for poster presentation in the International Symposium on "Zoonotic and Transboundary diseases: Breaking the Chain through Multidisciplinary Approach" and 18th Association of Veterinary Public Health Specialists organized by ICAR-NEH on 1st and 2nd December, 2022 at Umium, Meghalaya.
 - secured the 2nd position for oral presentation in the DST-SERB funded National Symposium on "One health for a Pandemicfree Future" organized by ICAR-NEH at Umium, Meghalaya 28th and 29th January, 2023.
- Dr. Chandrani Goswami, was awarded with student travel grant to attend the International Symposium on "Zoonotic and Transboundary diseases: Breaking the Chain Through Multidisciplinary Approach" and 18th Association of Veterinary Public Health Specialists organized by ICAR-NEH on 1st and 2nd December, 2022 at Umium, Meghalaya.
- Dr. Vanlalngi lneii, Dept of Veterinary Physiology, Cleared ARS-2022, ICAR in Veterinary Physiology.
- Dr. Jayashree Sarma, Dept of Veterinary Microbiology
 - Received the 2nd Prize in poster presentation in VIROCON 2022- Annual

convention cum International Conference on "Emerging and Re-emerging Viral Infections Impacting Humans, Animals, Plants, Fish and Environment held at Sher-E-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar on on 5th and 6th November, 2022.

- Received the 3rd Prize in Oral presentation in VIROCON 2022- Annual convention cum International Conference on "Emerging and Re-emerging Viral Infections Impacting Humans, Animals, Plants, Fish and Environment held at Sher-E-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar on on 5th and 6th November, 2022.
- Dr. Tinku Das, received the VIPM Young Scientist Award 2022, First Runners Up' on Prevalence of Bat Lyssavirus in Assam in the Young Scientist Award session (Wildlife/ Equine/Avian and others) in 2nd Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on "Innovations in Veterinary Medicine: Present Status and Futuristic Implications" held at ANDUAT, Ayodhya, UP on 6th and 7th May, 2022.
- Dr. Prasanta Kr Boro, received the First Position for Poster Presentation in the International Symposium on Zoonotic and Transboundary Diseases: Breaking Chain through Multidisciplinary Approach and 18th Annual Conference of Indian Association of Veterinary Public Health Specialists held at ICAR-NEH, Umiam, Meghalaya, on 1st and 2nd December, 2022.

2.3. College of Community Science, Jorhat

2.3.1. Teachers/ Scientists

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 Dr. Sayanika Borah, Dept of EECM, received the Excellence in Teaching Award for outstanding contribution in the field of Agriculture and Extension Education and Communication Management in the National Conference on "Food & Nutritional Security and Sustainable Agriculture" held during 15th to 16th April 2022, Hyderabad, India. The event was organized by Society for Agriculture Innovation and Development, Ranchi.

2.3.2. Students

- Ms. Priyanka Bhattacharyya received the University Gold medal in Bachelors of Home Science programme.
- Dr. (Ms.) G.V. Subaima received the Cash Prize for securing the highest grade point average in the general courses of Food Science and Nutrition in BSc (Home Science).
- Ms. Pramila Pandit Barooah received the Cash Prize for securing the highest grade point average in the general courses of Human Development and Family Studies in BSc (Home Science).
- Ms. Manisha Dutta received the University Gold medal in Bachelors of Home Science programme.
- Dr. (Ms.) G.V. Subaima received the Cash Prize for securing the highest grade point average in the general courses of Food Science and Nutrition in MSc (Home Science).
- Ms. Mansi Tiwari and Dr. (Ms.) G.V. Subaima received the Cash Prize for securing the highest grade point average in the general courses of Food Science and Nutrition in M.Sc. (Home Science).
- Ms. Deeptimayee Mahapatra bagged the Young Researcher Award-2022 from Institute of Scholars, India for her PhD thesis.



The certificate awarded to Ms. Deeptimayee Mahapatra for winning the Young Researcher Award-2022

- Ms. Deeptimayee Mahapatra bagged the Best MSc thesis award in the 1st International Conference on "Global Initiatives in Research, Innovation and Sustainable Development of Agriculture and allied Sciences", held in Guru Kashi University, Punjab, from 6th to 8th June, 2022.
- Ms. Ginisha Kalsi received the Springer Best Paper Award at the North East Research Conclave at IIT-Guwahati, held on 28th April, 2022. The topic of her paper was: Sensory and functional qualities of fruit leather prepared from Guava (*Psidium guajava*), papaya (*Carica papaya L.*), and *mirikatenga (Parameria polyneura)*.



The certificate awarded to Ms. Deeptimayee Mahapatra for the Best MSc thesis in the International Conference

• Mr. Anup Saikia was selected for Republic Day parade, 2022, held in New Delhi.

2.4. College of Fisheries, Raha

2.4.1. Teachers/Scientists

- Dr. P.K. Saharia, Associate Professor, Dept. of Aquaculture, had undergone a 3-months training on "Recent Advances in Fish Nutrition & Feed Formulation" at University of Idaho, USA.
- Dr. A.N. Patowary, Asst. Professor, Dept. of FEES, had undergone a 6-months training n "Application of Statistical Models in the Fish Nutrition for Sustainable Aquaculture" & acted

as a visiting faculty at Aquaculture Research Institute (ARI), University of Idaho, USA.

 Dr. R. Dutta, Asst. Professor, Dept. of AEM, had gained a 6-months post-doctoral experience on "Harmful Algal Bloom Management using Advanced Scientific Tools & Technique" at Auburn University, USA.

2.5. Biswanath College of Agriculture, Biswanath Chariali

2.5.1. Teachers/Scientists

Dr. Bikram Borkotoki, received NAHEP Fellowship under faculty development programme. He served as adjunct faculty at Wahington State University, USA, from 1st February to 31st July, 2022.

2.6. SCS College of Agriculture, Dhubri

2.6.1. Teachers/Scientists

- Dr. Pranamika Sharma, Assistant Professor, Dept of Plant Pathology
 - received the Young Scientist Award, 2022 from Society of Tropical Agriculture, New Delhi.
 - received the 2nd Best poster award in IPS NE Zonal symposium jointly organized by Indian Phytopathological Society (IPS), New Delhi and Dept of Plant Pathology, AAU, Jorhat from 24th to 25th November, 2022.
- Dr. Gunadhya Kumar Upamanya, Assistant Professor, Dept of Plant Pathology, received the 2nd Best Oral presentation award in IPS NE Zonal symposium jointly organized by Indian Phytopathological Society (IPS), New Delhi and Dept of Plant Pathology, AAU, Jorhat from 24th to 25th November, 2022.

2.7. College of Horticulture and Farming System Research, Nalbari

2.7.1. Teachers/Scientists

Dr. Shahida Choudhury bagged the Innovative
Scientist Award in the International Conference
on 'Existing Climate Change Scenario and its
Arising Risk' at Sher E Kashmir University of
Agricultural Sciences and Technology, Jammu.
The conference was held on 21st and 22nd
October, 2022.

Important Events

The year 2022-2023 was the Platinum Jubilee Year of the College of Agriculture, Jorhat and College of Veterinary Science, Khanapara beside being the Golden Jubilee Year of College of Community Science, Jorhat Therefore, the year was indeed eventful for the university as a whole. Several curricular and co-curricular events were successfully organized the university in this year. This chapter summarizes some of those events.

3. Some major events held in AAU during 2022-23

3.1. College of Agriculture, Jorhat

This year was the Platinum Jubilee Year of the college. A total of 165 events, 50 online and 115 offline, were organized in the year. Out of those, 12 were international events, 47 were national-level events, 40 were regional events and 38 were state-level events. 28 events were classified as other type of events.

- A five days training programme on Processing of Speciality Tea and Organic Tea Production Technology was conducted from 26th to 30th April, 2022; the state-level event was sponsored by North East Centre for Technology Application & Reach, New Delhi.
- A state-level five days training programme on Tea Production Technology was conducted from 6th to 10th June, 2022; the state-level event was sponsored by Tea Board, India.
- Another state-level five days training programme on Tea Production Technology was conducted from 8th to 12th June, 2022; the state-level event was sponsored by Tea Board, India.
- Two similar events were organized in two groups. One was from 13th to 17th June, 2022; and the other was from 27th June to 1st July, of the same year.
- A seminar cum workshop on Value addition in Tea – A Way to entrepreneurship development was organized 21st February, 2023. The state level event was sponsored by Department of Biotechnology, Govt. of India.



Five days training programme on 'Tea Production Technology' for growers of Dhemaji

A training on Production Technology of Horticultural Crops was organized from 16th to 20th March, 2023. The state-level event was sponsored by ICAR.



Release of Souvenir in the Seminar cum workshop on Value addition in Tea – A Way to entrepreneurship development

- A training on Prospects of tuber crops cultivation in Assam was organized thrice; once on 17th March, once on 21st March, and the other on 24th March, 2023. The state-level events were sponsored by ICAR.
- A workshop on Horticulture Statistics for North Eastern States was organized on 24th August,
 2022. The national event was sponsored by Horticulture Statistics Division, DA & FA,
 Ministry of Agriculture & Farmers Welfare,
 GoI, New Delhi; Directorate of Arecanut and
 Spices Development; DA & FA, Ministry of
 Agriculture & Farmers Welfare, GoI, Calicut,
 Kerala.
- A state-level training on Cultivation practices of Medicinal & Aromatic plants and Betelvine in Assam for Subject matter specialist and State agriculture department officers was organized on 5th November, 2022. The state-level events were sponsored by Directorate of Extension Education, AAU, Jorhat.



The workshop on Horticulture Statistics for North Eastern States is being inaugurated by the Hon'ble VC, AAU

• A regional training on quality planting material generation and popularization of aromatic and medicinal plants in Assam was organized on 22th November, 2022, at Sarthe Tokbi, Karbi Anglong. The state-level events were sponsored by ICAR.



Exhibition of Medicinal and aromatic plants from AICRP on MAP & Betelvine at Farmers Day, Organized by RARS, Titabor on 9th November, 2022

- A state-level training on Cultivation practices of Medicinal & Aromatic plants and Betelvine in Assam for Subject matter specialist and State agriculture department officers was organized on 5th November, 2022, at Directorate of Extension Education, AAU, Jorhat. The state-level events were sponsored by Directorate of Extension Education, AAU, Jorhat.
- A regional training on Cultivation practices of Medicinal & Aromatic plants and Betelvine in Assam was organized on 20th September, 2022, at RARS, Diphu. The state-level events were sponsored by AICRP on MAP & Betelvine.
- A regional training on Skill development programme on GAP in MAP & Betelvine was organized on 27th September, 2022, at RARS, Gossaigaon. The state-level events were sponsored by AICRP on MAP & Betelvine.

- A regional training & method demonstration for promotion of Medicinal & Aromatic plants and Betelvine cultivation in Assam was organized on 23rd November, 2022, at Sarthe Tokbi, Karbi Anglong. The state-level events were sponsored by AICRP on MAP & Betelvine.
- A national workshop on Horticulture statistics for North-Eastern States was organized on 24th August, 2022. The state-level events were sponsored by MIDH, DASD, Calicut.
- An FPC convention was held on 21st and 22nd October, 2022 at AAU. The national event was sponsored by Directorate of Extension Education, AAU, Jorhat.
- A regional Farmers training on Advanced technologies in Horticultural Crop Production on 27th May, 2022 at CRS-Tinsukia. The statelevel event was sponsored by AICRP on Fruits.
- Three more regional Farmers trainings on Advanced technologies in Horticultural Crop Production on 1st July, 2022 at Khelbari, Baganpara, Baksa; on 8th August, 2022, at Uttarpara, Baganpara, Baksa; and on 23rd November, 2023, at Sarthe Tokbi, Karbi Anglong. The three state-level events were sponsored by AICRP on Fruits.
- The World Lac Day was celebrated on 16th May, 2022. The event was sponsored by ICAR-IINRG, Ranchi.
- The World Bee Day was celebrated on 20th May, 2022. The event was sponsored by ICAR.
- An invited speaker lecture in commemoration of 75th completion of Independence Day under the banner of *Azadi ka Amrit Mahatsav*, was organized on 13th August, 2022, with the sponsorship of Dept of Entomology.
- Another invited speaker lecture on Anti -Ralstonia solanacearum microbes isolated from tomato seedling (speaker: Dr. Suvendra Kumar Ray) was organized on 21st September, 2022, with the sponsorship of Dept of Entomology.
- An awareness programme on White grub and Input Distribution to beneficiary groups of farmers was organized in Kamalabari, Majuli, on 28th September, 2022. The sponsor was TSP, AINP on Soil Arthropod Pests.

- An exposure visit of students' team from Tripura was held on 9th September, 2022, to the dept of Entomology.
- Organized an invited speaker lecture on *Xaap* aru ami (speaker: Dr. Surajit Giri) on 29th October, 2022, with the sponsorship of Dept of Entomology.



Glimpses of NAHEP, AAU sponsored short training on Apiculture

 Organized 15 days NAHEP sponsored national level short training programme on Apiculture with special ecosystem, from 29th October, 11th November, 2022.



Invited speaker lecture series by Mrs. Binita Dutta, Noted Educationist, Jorhat

- Expert lecture series, first lecture on Post -Independence Crop Production Scenario of Assam with special reference to Rice on the occasion of 75th Azadi Ka Amrit Mahotsav, was organized on 30th April, 2022.
- Popular Talk Competition on the occasion of 75th *Azadi Ka Amrit Mahotsav*, was organized on 3^{1st} May, 2022.
- Awareness programme on Region specific agroforestry under the National Campaign on the occasion of 75th Azadi Ka Amrit Mahotsav, was organized on 29th June, 2022, at Parbatia village at Parbatia Dairy Cooperative Society, Parbatia, Jorhat.
- One day study trip to AAU-ARRI, Titabar for 3rd year B.Sc. (Agri) students, was arranged on 28th October, 2022, to AAU-ARRI, Titabar.



Expert lecture by Dr. H.C. Bhattacharyya, Former Director of Extension Education, AAU

Special Guest Lecture on Prospects of minor oilseed specially niger and castor in the emerging global market on the occasion of 75th Azadi Ka Amrit Mahotsav, was organized on 29th November, 2022.



Special Guest Lecture by Mr. Mrinal Sharma, Assistant Director, Directorate of Plant Protection, Govt. of India

- Indian Phytopathological Society (NEZ) Zonal Symposium and National Conference on Reframing Futuristic Plant Health Safeguards was organized from 24th to 25th November, 2023. The national event was sponsored by Dept. of Plant Pathology, AAU, Jorhat-13 and RARS, Titabar.
- Skill development workshop on Plant immune system and integrating OMICs tools in imparting disease resistance was held from 21st to 23 rd November, 2022. The national event was sponsored by NAHEP.
- Skill development workshop on Advanced Diagnostics of Plant Pathogens was conducted from 12th to 22nd September. The national event was sponsored by NAHEP.
- Motivational cum Personality Development Programme was organized on 24th and 25th September, 2022. The national event was sponsored by NAHEP.
- Molecular aspects of pathogenesis and plantpathogen interaction was organized online on 4th June, 2022. The national event was sponsored by NAHEP.

- Two days Farmer Scientist interaction program on Technical Guidance on Soybean Cultivation Package of Practices was conducted on 10th and 11th May, 2022; the state-level event was sponsored by ICAR-NEH.
- Molecular aspects of pathogenesis and plantpathogen interaction was organized online on 6th May, 2022. The national event was sponsored by NAHEP.
- Molecular aspects of pathogenesis and plantpathogen interaction was organized online on 30th April, 2022. The national event was sponsored by NAHEP.
- Regional self-financed 15 days long training programs on Techniques in Molecular Biology was organized for the students from Kaziranga University, from 18th December 2022, to 5th January 2023.
- Regional self-financed 15 days long training programs on Techniques in Molecular Biology was organized for the students from St. Anthony's College, Shillong, from 15th February to 1st Marhc, 2023.
- National workshop cum training on Advanced Biotechnological Knowledge and Skills for Research and Innovation was organized from 4th to 8th April, 2022. It was sponsored by DBT-NECAB, AAU, Jorhat.



Personality Development and Soft Skill training' for 1st semester UG students

• National 10 days training Programme on Navigating through the New Education Policy to facilitate Learning, Development Skills and Enhancing Employability was conducted from 20th to 29th March, 2023. The event was sponsored by NAHEP.



Convention of Farmer Producer Company

- A three days national lecture series on Promoting Millets and Cereal Genomics to Feed Billion was held from 15th to 17th March, 2023. The event was sponsored by NAHEP.
- A lecture on Common Errors and Mistakes in Thesis Writing (Guest Speaker Dr. Dilip Kumar Gogoi, Retired Prof & Head Dept. of Extension Education, FA, AAU and former Director EEI (NER)) was organised on 11th May, 2022. It was a regional online event.
- A regional online lecture on Personality Development – Precursor for success by the Guest Speaker Dr. R.K Talukdar, Retired Prof & Head Dept. of Extension Education, FA, AAU, was organised on 27th May, 2022.
- Regional Training programme on Farmers' Producer Organization was conducted on 13th August, 2022, at Allengmora Sonari Gaon, Jorhat. The programme was sponsored by Dept. of Extension Education.
- District level Training programme on Farmers' Producer Organization in order to commemorate the 76th year of Independence Day (*Azadi Ka Amrit Mahotsav*) was organized on 13th August, 2022.
- A regional awareness cum Interaction programme on Potentialities of Agripreneurship in Jorhat District was organized on 28th January, 2023 at Dahikhor Gaon, Jorhat.
- Personality Development and Soft Skill training for 1st semester UG students was conducted from 31st October to 5th November, 2022, at IDA Hall, AAU, Jorhat. The event was sponsored by NAHEP.
- Soft skill training programme on Developing Team Spirits in Groups was conducted on 11th February, 2022 at Bamchuk Gaon, Jorhat. The regional event was self-sponsored.
- Regional Lecture Series on Skill Application in Emerging areas of Extension Approaches was organized from 12th to 17th December, 2022. The event was sponsored by NAHEP.
- Art of Clearing a Job Interview was conducted on 23rd September, 2022; online nationally.
- Navigating through the National Education Policy to facilitate Learning, Developing Skills

and Enhancing Employability was organized from 20th to 29th March, 2023. The national event was sponsored by NAHEP.

- A national 10 days CAFT Training on Natural Farming-way forward for sustainable farming and ecological balance under CAFT in organic farming was conducted from 13th to 22nd December, 2022. Sponsored by ICAR CAFT.
- A regional two days farmer Scientist interaction program on Technical Guidance on Soybean Cultivation Package of Practices on 10th and 11th May, 2022. The sponsor was the ICAR-NEH.
- Innovative skills for modern day plant breeding was conducted from 14th to 21st December, 2022. The national event was sponsored by NAHEP.
- Agripreneurship: innovative approaches to create a path to the future was conducted from 23rd February to 20th March, 2023. The national event was sponsored by NAHEP.
- Interaction meeting on Agromet Advisory Services under GKMS was organized on 10th December, 2022. The state level event was sponsored by IMD, New Delhi.
- Farmers Awareness Programme on the Impact of weather in Agriculture and role of Agromet Advisory Services on the occasion of World Meteorological Day was organized on 23rd March, 2023 at Khamjonia Gaon, Kasukhat, Titabor. The regional event was sponsored by IMD, New Delhi.
- National webinar on *Rice: feeding the independent India*, was held on 11th April, 2022, as a part of *Azadi ka Amrit Mahotsav*.
- Scientific talk on Altered Gut Endocrine Cell Function in Obesity by Dr. Alip Borthakur, Marshall University, West Virginia, USA was organized on 17th November, 2022. The regional event was sponsored by ISAB, Jorhat Chapter.
- International Conference of Agricultural Librarians and Users Community, 2022, was conducted on 28th and 29th April, 2022.
- Lecture on the Growth of Population and the Environment - The Missing Link (Speaker: Dr. Udoy Saikia, Flinders University, Australia) was organized on 21st July, 2022. The state level event was sponsored by NAHEP.

- Lecture series on Frontier Areas in Quantitative Analysis in Agricultural Economics was delivered by Dr. Kamal Vatta, Professor and Head, Punjab Agricultural University, Ludhiana, from 18th July to 1st August, 2022. The state level event was sponsored by NAHEP.
- Review Meeting of SITA Project Survey of Rural Primary (Gramin Periodical Haats) markets in Assam was arranged on 13th September, 2022. The state level event was sponsored by SITA, Dispur.
- Three days Skill Development training on Artificial Intelligence and Robotics in Agriculture was conducted from 27th to 29th June, 2022. The national event was sponsored by NAHEP.
- One day Farmers' training cum demonstration programme on Sustainable crop production and post-harvest management was organized on 18th April, 2022, at Barbha, Nalbari. The state level event was sponsored by AICRP on PHET, ICAR.
- One day Farmers training on Irrigation Water Management was organized on 19th April, 2022, *at Nalbari*. The state level event was sponsored by AICRP on IWM, ICAR.



Hon'ble VC of AAU, Dr. Bidyut C. Deka, inaugurating the Technology and Machinery Demonstration *Mela*

- Thirty days training on Operation, Repair and Maintenance of Agricultural Machinery for KVK was organized from 25th Aprilto 24th May, 2022. The state level event was sponsored by Government of Assam.
- Thirty days training on Operation, Repair and Maintenance of Agricultural Machinery for KVK, Karimganj was organized from 1st to 30th September, 2022. The state level event was sponsored by Government of Assam.

- Thirty days training on Operation, Repair and Maintenance of Agricultural Machinery for KVK Dhemaji was organized from 1st January to 17th February, 2023. The state level event was sponsored by Government of Assam.
- Thirty days training on Operation, Repair and Maintenance of Agricultural Machinery for KVK, Jorhat was organized from 23rd February to 24th March, 2023. The state level event was sponsored by Government of Assam.
- A one day fair on Technology and Machinery Demonstration *Mela* was organized on 24th March, 2023. The state level event was sponsored by AICRP on PHET, and AICRP on FIM, ICAR.



Participants and Organizer of Skill Development training on Artificial Intelligence and Robotics in Agriculture

- Microbial based Intervention for management of plant parasitic nematodes and improving the soil health was arranged from 23rd to 25th May, 2022. The event was sponsored by NAHEP.
- National Intellectual Property Awareness Mission (NIPAM) was arranged on 4th July, 2023. The online event was sponsored by NIPAM, Office of the Controller General of Patents, Design & Trademarks.



Organizing Quiz programme during *Har Ghar Tiranga* Programme



Organising three days skill development workshop under NAHEP. Hon'ble VC, Dr. Bidyut C. Deka, and Dean, FA, Dr. J Deka are seen in dias.

D. Srirup Ratan Saha Memorial Interinstitution Debating Competition

The Srirup Ratan Saha Memorial Inter-institution Debating Competition was held in the Dr. MC Das Memorial Auditorium of Assam Agricultural University on 30th May, 2023. The pan-state event was a part of the yearlong celebration of the Platinum Jubilee Year of the College of Agriculture, AAU. The event got a commendable response from various educational institutions from across the state, and all total 19 teams, each comprising of two members, one for and one against the motion, participated in the day-long event. The topic of the debate was - in the opinion of the House, "Indian Education System has failed to create a Scientific Mindset in the Society". Dr. Diganta Biswa Sarma, renown orator and member of the Sahitya Academy, served as the speaker in the event, and Dr. Sankab Kausik Baruah, Mr. Jyoti Prasad Borah and Mr. Manas Jyoti Borah served as the judges of the event. College of Agriculture, Jorhat, was adjudged the best team of the event, while Bahona College, Jorhat, won the second best team award, and Biswanath College of Agriculture, Biswanath, won the third best team award. Individually, Mr. Mrinmoy Borah from Bahona College, Jorhat, won the best debater award, and Mr. Sarbananda Neog, College of Agriculture, Jorhat won the second best debater award.



The Organizers, the winning teams, and other participants of the Srirup Ratan Saha Memorial Interinstitution Debating Competition with Dr. Diganta Biswa Sarma, the Speaker of the competition, Dr. J. Deka, Dean, FA and Dr. C. Hazarika,

i/c Chief Librarian

E. All Assam Inter College/University Invitational Table Tennis Championship

The All Assam inter-college/University invitational table tennis championship was held at Assam Agricultural University on 10th and 11th June, 2023, under the aegis of the Platinum Jubilee celebration of the College of Agriculture. A total of 11 teams from different colleges of Assam participated in the competition, out of which 7 teams competed under the men's category and four teams competed under the

women's category. The competition was inaugurated by Sjt. Nayanjyoti Sarma, Vice President, All Assam Table Tennis Association, and Vice President of Jorhat Table Tennis Association. The inauguration was also attended by Dr. Gautam Dutta, Principal, POWIET, Jorhat. Dr J Deka, Dean, FA, gave the welcome address, and the dignitaries, players, and members of the Students Association paid floral tributes to Late Jiban Baruah. In the men's category the championship was won by Guwahati Commerce College and the runners up team was Sivasagar Commerce College. In the women's category the champions were the College of Agriculture and the runners up was Jagannath Barooah College, Jorhat.



The inauguration of the All Assam Inter College/ University Invitational Table Tennis Championship. Sitting in the dias, from left to right, Dr. Gautam Dutta, Principal, POWIET; Sjt. Nayanjyoti Sarma, VP, All Assam Table Tennis Association; Dr. J Deka, Dean FA, AAU and Sjt. T. Gohain, ACS, Registrar, AAU.

3.2. College of Veterinary Science, Khanapara

Platinum Jubilee Celebration of the College of Veterinary Science

The College of Veterinary Science, AAU, Khanapara, entered 75th years of its glorious service. On this occasion, a year-long program was chalked out starting from the curtain raiser programme on 18th August, 2022. The *Swahid Tarpan* was followed by Flag hosting by Dr. BN Saikia, Dean, CVSc; it was followed by a colourful cultural procession. More than 500 students, faculty, alumni and distinguished guests & invitees participated in the procession. Sjt Atul Bora, Hon'ble Minister, Agriculture, Veterinary etc. graced the event as the Chief Guest, and Dr. Bidyut C. Deka, Hon'ble Vice-Chancellor, AAU was the Guest of Honour. Two compilations, "Package of Practices of Livestock and Poultry", and "A Memoir" were released. Eminent Veterinary Educationist, Prof. AK Srivastava, Hon'ble Vice Chancellor, Pandit Deen Dayal Upadhya *Pashu Chikitsa Vigyan Viswavidyalaya Evam Go – Anusandhan Sansthan*, Uttar Pradesh, delivered the Foundation Day Lecture. A "Wildlife Health and Research Centre", and an "Open Distant Learning Centre" were also digitally inaugurated. The college campus was illuminated in the evening, which was followed by a cultural programme.



The books being released by Sjt. Atul Bora, Hon'ble State Minister, Dr. Bidyut C. Deka, Hon'ble VC, AAU and others



Inauguration of the thematic cultural procession by Dr. Bidyut C. Deka, Hon'ble VC, AAU

F. Alumni Meet of CVSc, Khanapara

CVSc, Khanapara, organized a daylong Alumni Meet on 28th January, 2023 Approximately 500 Alumni of the college joined the meet from different parts of the country and abroad. The distinguished Alumni that contributed significantly to the society, profession and different services were felicitated in the open meeting.



Hoisting 75 Flags to commemorate 75th year of CVSc, Khanapara

Dr. KM Bujarbaruah, former DDG (Animal Science) and Former VC, AAU, graced the occasion as the Chief Guest and Dr. BC Deka, Hon'ble VC, AAU, graced the occasion as the Guest of Honor. Dean, FVSc; DR (Vety) and ADEE were also present in the occasion. All the Directors of the Animal Husbandry and Veterinary Department of the North-Eastern region graced the meet. In the cultural nite organized during the evening, various alumni performed their talents. The evening was made more delightful by the performance of noted singer Smt. Priyanka Bhorali and other guest artists.



A view of the alumni during play of the National Anthem

• The Advanced Level State Biotech Hub organized a regional level Hands-on Training on Gene Cloning, Protein Expression and Next Generation Sequencing Data Analysis from 12th to 18th July, 2022, which was sponsored by Department of Biotechnology, Govt. of India.



Participants at a Hands-on Training organized by ALSBTH

- The college, in collaboration with the KVK, Lakhimpur, organized a state level programme on Scientific pig farming for entrepreneurship development in the north bank zone of Assam on 8th and 9th September, 2022 at Lakhimpur. The training was sponsored by the DBT, GoI.
- A regional level Hands-on Training on Nucleic acid-based techniques for detection and molecular typing of microbes was organized

from 15th to 21st November, 2022; it was sponsored by DBT, GoI.

- The college, in collaboration with the KVK, Nagaon, organized a state level Outreach programme on Scientific management of commercial pig farms with special reference to biosecurity on 19th and 20th December, 2022. The training was sponsored by the DBT, GoI.
- The college, with Sub-divisional administration, Tamulpur, organized a regional level Outreach programme on Advances in Management and Biosecurity of Commercial Pig Farms on 7th and 8th February, 2023. The training was sponsored by the DBT, GoI.
- A regional level Hands-on Training on Molecular cloning for production and purification of recombinant proteins was organized from 21st to 27th February, 2023; the training was sponsored by the DBT, GoI.
- An online international lecture on Progress towards antiparasitic vaccines and what immunological lessons they can teach us (delivered by Dr. Robin Flynn, Project Manager, Graduate Studies, South East Technological University, Ireland cum Honorary Senior Lecturer, University of Liverpool, UK) was arranged on 3rd August, 2022. The lecture was sponsored by the DBT, GoI.
- An online international lecture on *In silico* approach for understanding the molecular mechanism of diseases (delivered by Dr.Reshmi Ramakrishnan, Postdoctoral Research Fellow, Structural Biology and Engineering King Abdullah University of Science and Technology, Jeddah, Saudi Arabia) was arranged on 22nd December, 2022; sponsored by the DBT, GoI.



Outreach programme at Tamulpur

- A national level one-week compulsory training course of IFS officers on the theme Importance of Forensics: Wild animal conservation and prevention of wildlife crime was conducted from 19th to 23rd December, 2022 with the financial assistance of AIGF, MoEF-CC, GOI, New Delhi. First part of training was conducted at the CVSc, Khanapara, and the second part was conducted at the Kaziranga National Park, Kohora, Bokakhat.
- A National level Refresher's Training on Elephant healthcare & managerial practices was held from 22nd to 28th November, 2022, and sponsored by the Directorate of Project Elephant, Govt. of India.
- A National level training on ODL: Broiler Farming was arrranged from 9th to 17th March, 2023, sponsored by Directorate of ODL, AAU, Khanapara.
- An online National level Research Advisory Committee meeting of the Multidisciplinary Research Unit, to select the research proposals submitted by the faculties of GMCH for onward submission to Department of Health Research, Govt. of India was organized on 26th December, 2022 at the Gauhati Medical College and Hospital, Guwahati and sponsored by GMCH.
- The college organized a State level training cum awareness camp on Scientific geese rearing as well as entrepreneurship development on 21st September, 2022, at Udalguri.
- A state level Training cum demonstration programme on Processing and value addition of geese meat was organized on 3rd November, 2022, sponsored by ASTEC.
- A state level Training cum demonstration programme on the topic Scientific slaughter of geese and by product utilization was conducted on 2nd February, 2023, sponsored by ASTEC.
- A chick distribution programme under SCSP (ICAR) fund Outreach Proraggem on Monitoring of Drug Residue and Environmental Pollutants was held at Mandira, Kamrup campus of AAU on 16th March, 2023. A total 25 schedule caste beneficiaries of the said area were selected for distribution of 20 Kamrupa chicks with medicines and feeds each.



Chick distribution programme under SCSP

- A National level ICAR Outreach Programme on Livestock health for livelihood augmentation & women empowerment in hill districts of Assam was conducted from 19th to 22nd May, 2022, at Matipoong Village, Manja, Karbi Anglong, sponsored by ICAR National Research Centre on Meat, Hyderabad.
- A National level ICAR Outreach Programme on Livestock health for livelihood augmentation & women empowerment in hill districts of Assam was organized on 2nd and 3rd November, 2022, at Matipoong Village, Manja, Karbi Anglong, sponsored by ICAR National Research Centre on Meat, Hyderabad.
- A National level ICAR Outreach Programme on Livestock health for livelihood augmentation & women empowerment in hill districts of Assam was conducted on 16th and 17th March, 2023 at Haflong, Dima Hasao District, sponsored by ICAR National Research Centre on Meat, Hyderabad.
- A National level Interactive meet of network partners on Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the Northeast Region was held on 11th March, 2022.
- A National level Interactive meet of NER Partners of Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the Northeast Region was arranged with central committee members on 22nd April, 2022.
- A National level Hands-on-training for Laboratory Technicians under DBT-One Health

Consortium Programme was held from 1st to 7th August, 2022.

- A National level Hand-on Training for RA's/ SRF's as well as Screening of Serum Samples under the project entitled "Establishment of a Consortium ... North East Region" was arranged from 22nd to 27th August, 2022.
- An International Satellite Symposium of VIROCON/ Brainstorming workshop on Transboundary and Emerging infectious Zoonotic diseases of Livestock including Wildlife: Perspective and preparedness was held on 16th February, 2023.
- CVSc organized a state level Hands on training for Diagnosis of zoonotic diseases from 20th to 22nd March, 2023. It was sponsored by NCDC, Ministry of Health & Family Welfare (MHFW), Govt. of India.
- A state level Joint Orientation training on Zoonotic diseases and One Health approach was held on 21st January, 2023, sponsored by NCDC, MHFW, GoI.
- A state level World Zoonosis Day was observed on 6th July 2022 at the *Krishi Vigyan Kendra*, Dudhnoi, Goalpara; sponsored by NCDC, Ministry of Health & Family Welfare, Govt. of India.
- A state level World Rabies Day was held at Krishi Vigyan Kendra, Dudhnoi, Goalpara, on 28th September, 2022; sponsored by NCDC, MHFW, GoI.
- A National level Training on Application of Molecular Tools in Animal Disease Diagnosis and Research was held under STUTI from 11th to 17th October, 2022.
- A state level Workshop cum sensitization meeting was conducted on 10th March, 2023 at Morigaon; sponsored by sponsored by NCDC, MHFW, GoI.
- A state level Workshop cum sensitization meeting was held on 27th March, 2023 at Darrang; sponsored by NCDC, MHFW, GoI.
- A state level Workshop cum sensitization meeting was held on 31st March, 2023 at Howli, Barpeta; sponsored by NCDC, MHFW, GoI.

The college, in collaboration with ICAR-IVRI,
Kolkata organized a ICAR-sponsored State
Level Training for Veterinary officers on Cell
based Classical Swine fever Vaccine production
from 13th to 18th March, 2023.

3.3. College of Community Science

Golden Jubilee Year of the College of Community Science



Inauguration of the Golden Jubilee Year of the College of Community Science

The year 2022-23 was the Golden Jubilee Year for the College of Community Science. The gracious occasion was celebrate with number of events encompassing the entire year. The celebration was started with the Flag off ceremony of Golden Jubilee Year on 8th August, 2022, in the College Premises at Jorhat. The Hon'ble Vice Chancellor, Dr. B.C. Deka, was present in the Flag-Off Ceremony. The day-long celebration was also marked with a colourful cultural procession. The event was attended by the Faculty Members and the students of the students, as well as invitees from other faculties of the university. The retired teachers and scientists of the college were also invited for the occasion.



Cultural procession organized on the occasion of the Golden Jubilee Year of the College of Community Science

The College of Community Science, Jorhat, organized four national, one regional and 35 state-level events in the year 2022-23. The details are given below.



Some participants in the Creative Clicks. Dr. KK Sharma, NAHEP Coordinator and Dr. M Neog, Additional Director of Research are also seen with the resource persons and faculty members also seen

- International Women's Day was observed on 8th March, 2023 in the college seminar hall.
- An eight day skill development training programme on Photography, entitled Creative Clicks, was organized by the college during the year. The programme was sponsored by NAHEP.



A scene from the training on community nutrition, organized jointly with Purba Bharati Educational Trust, Jorhat

- A state-level training on Community Nutrition was organized by the college, jointly with Purba Bhartati Educational Trust, Jorhat, on 20th August 2022, at the conference hall of EEI, AAU, Jorhat. The programme was sponsored by Purba Bhartati Educational Trust.
- A training on vermin-compost production was held on 9th March, 2023, Hilikhabari Gaon, Titabor, Jorhat. The state-level training was sponsored by the University.
- A four-day training on Food Processing was organized at Hilikhabari Gaon, Titabor, Jorhat. The state-level training was sponsored by the University.

Entrepreneurship Development was held from 5th to 14th July, 2022, at the college conference hall; the event was sponsored by NAHEP.



Participants in the Entrepreneurship Development programme

A workshop on Application of Ergonomics in Farm Mechanization was organized from 3rd to 12th January, 2023, at the college conference hall; the regional event was sponsored by APART, AAU.



Training on application of ergonomics in farm mechanization organized from 3rd to 12th January, 2023

- A training on Drudgery Reducing Technology of Farm Women under AICRP-WIA was held on 11th November, 2022, at Dhemaji, Assam. It was sponsored by ICAR.
- Another ICAR-sponsored training on Drudgery reducing technology of Farm Women under AICRP-WIA was held on 20th December, 2022, at Teok, Assam.
- A Cleaning and Demonstration Programme on *Swach Bharat* under AICRP-WIA was held on 20th December, 2022, at Teok, Assam. It was sponsored by ICAR.
- A Method Demonstration on Farm Tools and Implements under AICRP-WIA was held on 25th January, 2023, at Teok, Assam. It was sponsored by ICAR.
- A training on Method Demonstration of Detection of Adulterants under AICRP-WIA was held on 22nd March, 2023, at Teok, Assam. It was sponsored by ICAR.

- A seven day skill development training on Advances in Culinary Arts was held from 11th to 18th July, 2022, at Department of Food Science and Nutrition. The state level event was sponsored by NAHEP.
- An ICAR-sponsored by 21 days winter school on Healthy Foods for Sustainable Living was organized from 30th November, 2022 to 20th December, 2022. It was national-level event.



The opening of the ICAR-sponsored by 21 days winter school on Healthy Foods for Sustainable Living. Sitting in the front row, from left to right, Mr. T Gohain, ACS, Registrar, AAU; Dr. Bidyut C. Deka, Hon'ble Vice Chancellor, AAU and Dr. M. Das, Dean, Faculty of Community Science

- An awareness session on importance of Breastfeeding and complementary feeding among mothers of young children and preschool children on the theme Step up for Breastfeeding: Educate and Support on the occasion of World Breastfeeding Week celebration was organized on 1st August, 2022 at the college.
- State-level self-sponsored Junior Chef 1.0 demonstration cum competition among VIII-XII standard students from three different schools on account of Celebration of National Nutrition Month (September) was organized on 16th September, 2022, in the college.
- A self-sponsored nutrition awareness cum exhibition programme at Dahotia Girl's High School on the occasion of Celebration of National Nutrition Month (September) on 22nd September, 2022.
- A self-sponsored training of SHGs on value added products from locally available resources on the occasion of Celebration of National Nutrition Month (September) 27th September,

2022, in the college. Some 20 participants took part in the event.

- A competition on development of Nutri-game among UG and PG students on the occasion of National Nutrition Month celebration and exhibition cum display of of Nutrit-games was organized 29th September, 2022. It was a selfsponsored state-level programme.
- A one day hands on Training on Mainstreaming Millet consumption at indigenous level for our healthy life was organized in collaboration with sub component of APART-JAAPIA, Jorhat, in the college on 9th March, 2023. It was a Govt. of Assam sponsored state-level event, and 31 beneficiaries were benefited.
- A hands-on training on millet based products under AICRP-WIA was organized to benefit some 25 participants by the college on 15th March, 2023. It was a Govt. of Assam sponsored state-level event.
- A skill development training was organized on 18th March, 2023 at KVK, Nagaon. It was a Govt. of Assam sponsored state-level event.
- Celebration of World Food Safety Day was done on 7th June, 2022, on the theme Safer food, better health with the following activities: (i) Slogan writing competition (Topic: Food safety and human health) among UG students, (ii) Essay writing competition (Topic: Safer food for better health) among PG students of the college. The college sponsored the event itself.
- Celebration of World Food Day was organized on 17th October, 2023, on the theme: Leave No One Behind. On that occasion, an exhibition was organized where different stalls on the display of technologies developed under the Post Graduate Programme and AICRP along with Nutri Clinic booth for nutritional assessment were also set up. Booth on Fix My Plate, Food Pyramid and Nutri-games were also set up. The exhibition was inaugurated by Hon'ble Vice Chancellor of AAU, Jorhat. The sponsors of the event were CCSc itself and and AICRP-WIA.
- The World Heart Day was observed on 29th September, 2022, with display of wall magazine with latest information about the theme and topic.

- A National seminar on Fix Your Plate: for Sustainable Health, was organized in the college on 28th September, 2022. The event was sponsored by Nutrition Society of India, Jorhat Chapter.
- *Balya Bikash*, the lab nursery school, under Dept of HDFS, organized a Parents Meeting, on 6th May, 2022. Another such meeting was held on 22nd November, 2022.
- A summer camp was organized for children from 15th July to 30th July, 2022.
- Happy Days Creativity Camp for children was organized by the ELP students, from 15th July to 30th July, 2022.
- A camp for speech & language development was organized on 18th November, 2022.
- The International Day of Disabled Person was observed on 3rd December, 2022, in Barbheta Public LP, ME and High School, Jorhat.



Skill development Training on Psychometric Tests for Human Development Professionals

- A seminar in connection with International Women's Day was organized 3rd March, 2023, in the college. The event was sponsored by All India Radio, Jorhat.
- A skill development training on Psychometric Tests for Human Development Professionals was 20th from 20th to 27th March, 2023. The programme was sponsored by NAHEP.



Participants in the Fun & Learn Summer Camp

- A national webinar on Positive Parenting Technique was organized on 7th March, 2023, in association, and with sponsorship of MANOJAGRITHI, Hyderabad.
- A skill development training on Repairing and Care of Sewing Machine was organized from 6th to 7th June, 2022.
- A training on skill development on Advanced Pattern Making and Retailing and Fashion Merchandising was organized from 20th to 28th June, 2022. The event was sponsored by NAHEP.
- Skill development training on Sewing Machine Operator was held on 7th November, 2022.
- A workshop on Vrindavani Bastar Eiti Bitta, Shilpa Samagra aru Bishlekhan was organized on 29th November, 2022, which was sponsored by the University.
- National Dress Day was celebrated on 6th March, 2022.



Inauguration of the workshop on Vrindavani Bastar Eiti Bitta, Shilpa Samagra aru Bishlekhan

3.4. College of Fisheries, Raha

- A national-level short term training programme on Mapping of Aquatic Biodiversity and Its Conservation was conducted from 10th to 22nd March, 2023. The training was sponsored by NAHEP.
- A seven-days training was organized on Fisheries Data Analysis using R Software from 19th to 25th December, 2022. The national-level event was sponsored by NAHEP.
- A five-days training was organized on Personality Development and Soft Skills from 6th to 10th March, 2023.
- The college conducted a seven days training programme on Application of AI in Smart Fish Farming from 6th to 11th March, 2023. The

national-level event was sponsored by NAHEP.

- A training cum demonstration programme on Skill development through preparation of value added fish products was held from 8th to 12th September, 2022. The district-level programme was sponsored by RKVY, GoA.
- A training cum demonstration programme was organized by the college on Skill development through preparation of value-added fish products. The district-level event was sponsored by RKVY, Govt. of Assam; and was held from 19th to 23rd September, 2022.
- A one-day training programme on Ethics and Plagiarism in Academics was conducted on 26th December, 2022. Prof. AK Buragohain, Former VC of Dibrugarh University and Prof. P Borah, Head, Animal Biotechnology, CVSc, Khanapara were present as resource persons. The programme was sponsored by NAHEP.

3.5. Biswanath College of Agriculture (BNCA), Biswanath

BNCA hosted one state-level training during the year. There were eight other events, including one regionallevel event, was organized by the college. They are listed below:

- World Soil Day was celebrated on 5th December, 2022. This regional event was sponsored by NAHEP, AAU. In association of the department of Soil Science, the Training and Placement Cell also organized two trainings on (1) Career opportunities of Agricultural Students in Space Science Research.
- And (2) Heavy Metal Build up in soil due to use of poor-quality irrigation water and its possible management.
- An awareness programme on Mental Health & Wellness was organized by the Training and Placement Cell of the College on 19th July, 2022, in the auditorium of the college. The programme was sponsored by ICAR.
- A Skill Training on Production on Biogas and Organic Manure was organized on 21st March, 2023 at Tezpur University. The programme was sponsored by ICAR.
- A training on Entrepreneurship and Startup was organized by the Training and Placement Cell

of the College on 28st March, 2023 at BNCA auditorium. It was sponsored by ICAR.

- A Yoga camp and Mind power memory workshop organized organized by the Training and Placement Cell of the College on 19th March, 2023 at BNCA indoor auditorium. The programme was sponsored by ICAR.
- An awareness lecture on Entrepreneurship Development in Horticultural Sector, and a visit of Kanyaka Krishi Pam was organized on 4th November, 2022. The event was held at RARS-Shillongoni and was sponsored by ICAR.
- Another training on Entrepreneurship Development in Agricultural Sector was held on 14th October, 2022 at Kaliabor Nursery and Brahmaputra Valley Aromatic Oil Industries, Kaliabor. The programme was sponsored by ICAR.

3.6. Lakhimpur College of Veterinary Science, Lakhimpur

- Antirabies vaccination and sterilisation of street dog was done on request from RVC unit of Dinjan Military Station. The programme was conducted on 13th and 14th February, 2023 at Dinjan Military Station, and was sponsored by the RVC unit.
- A one day Free Pet Animal Health Camp was organized at VCC, LCVSc. The programme was sponsored by Sky EC Pharmaceutical.



Prof. AK Buragohain being introduced in the training on Ethics and Plagiarism in Academics

3.7. SCS College of Agriculture, Dhubri

- National level training on Emerging Management Strategies for Climate-smart Agriculture was conducted from 7th to 12th December, 2022. The event was sponsored by NAHEP.
- National level training on Entrepreneurship development through Horticulture Nursery was

organized from 13th to 16th September, 2022. The event was sponsored by NAHEP.

- Faculty Development Programme on Statistical Techniques for Efficient Use of Data Using R Software was arranged 8th to 14th March, 2023, in association with NIELIT, Tezpur Extension Centre. The national programme was selfsponsored.
- Training on Personality Development and Soft Skills was organized from 9th to 13th March, 2023. The national programme was sponsored by NAHEP.

3.8. College of Horticulture and Farming System Research, Nalbari

 A six-days training on "Improving Livelihood of Rural Youths and Women Groups of Kokrajhar district through Horticulture" was organized from 28th February, 2022 to 4th March, 2022. The training was sponsored by NTPC Bongaigaon, and was attended by several enthusiasts. It was held at NTPC, Salakati.

3.9. Inter-College Meet of AAU

• The 30th AAU Inter College Meet, 2023 was held at the CVSc, AAU, Khanapara campus from 28th February to 3rd March, 2023. All the nine constituent colleges participated in various outdoor, indoor, literary, drama, music and cultural section. Dr. BC Deka, Hon'ble VC, AAU, hoisted the University Flag and declared the meet open.



An athletic event during the Inter-College Meet

Dr. Ashish Kumar Bhutani, IAS, Additional Chief Secretary to the Govt. of Assam, Department of Agriculture & APC, Assam, and Shri Elvis Ali Hazarika, renowned International Swimmer of Assam, graced the occasion as the Chief Guest and the Guest of Honour, respectively, during the inaugural programme. College of Veterinary Science was adjusted as the Best College in both sports and culture.



An equestrian show during the Inter-College Meet

Education

4.1. Faculties

Assam Agricultural University is the only agricultural university of the state, and the first agricultural university in the northeastern India. Education is the frontier mandate of the University like any other agricultural university in the country. There are four faculties in the University to carry out this mandate. They are (1) Faculty of Agriculture with its headquarters at Jorhat (2) Faculty of Veterinary Science at Khanapara (3) Faculty of Community Science at Jorhat and (4) Faculty of Fishery Science at Raha, Nagaon. The nine constituent colleges are College of Agriculture at Jorhat, College of Veterinary Science at Khanapara, College of Community Science at Jorhat, College of Fisheries at Raha, Biswanath College of Agriculture at Biswanath Chariali, Lakhimpur College of Veterinary Science at Lakhimpur, Sarat Chandra College of Agriculture at Chapar, Dhuburi, Colleges of Horticulture & Farming System Research at Lakhopur, Nalbari and College of Sericulture at its temporary campus at Jorhat.

4.2. Degree Programme

Assam Agricultural University offers courses in six areas of science, viz., Agriculture, Veterinary, Community Science, Fishery Science, Horticulture and Sericulture. Bachelor's Degree is offered in all the six areas while postgraduate (Master's and Ph. D.) Degree is offered in the first four areas, viz., Agriculture, Veterinary, Community Science and Fishery Science. With the implementation of the 5th Deans Committee's recommendation from the academic session 2016-17 (in all the Faculties except Veterinary), the 4 year Bachelor's Degree is broken into two parts. The first three consecutive years are devoted to course work and in the final year, the students are exposed to the 'Student READY' (Rural Entrepreneurship Awareness Development Yojana) Programme of 40 credits - 20 credits each in the 7th and 8th semester. The duration of the B.V.Sc. Degree also has been increased in the same academic session from 5 years to 5 ¹/₂ years comprising course work of 4 ¹/₂ years and internship for 1 year. Besides, the nomenclatures of the degrees have also been changed in the areas of Agriculture, Community Science, Horticulture and Sericulture in accordance with the recommendations of the ICAR.

In addition to the degree courses, the University also offered 15 Certificate courses during the year through its Directorate of Extension Education, Jorhat. These courses include (i) Aquaculture Production & Management (ii) Tea Production Technology & Management (iii) Cut flower production and Flower Design (iv) Bakery (v) Designing and Value Addition of Marketable Products for Home Furnishing (vi) Food Preservation (vii) Apiculture (viii) Management of Day Care Centre (ix) Nursing Management of Horticultural Crops (x) Dyeing and printing of Textiles (xi) Dairy farming and fodder production (xii) Floral Design (xiii) Biofertilizer Production (xiv) Poultry Farming, and (xv) Plant Tissue Culture.

4.3. Course Curricula

Assam Agricultural University is implementing the undergraduate Course Curricula prescribed by the 5th Deans Committee of ICAR in the Faculty of Agriculture, Community Science and Fishery Science. However, the colleges under the Faculty of Veterinary follow the course curricula approved by the Veterinary Council of India as per the MSVE, 2016. The present UG Curricula is a market/ time driven curriculum as it includes the 'Student READY' Programme (prescribed by the ICAR 5th Deans Committee from the year 2016-17) designed to develop much needed skill and entrepreneurial mindset among the graduates to take up self-employment. The 'Student READY' Programme is being offered in all the colleges of the University since the academic Session 2016-17.

4.4. Intake and Output

During 2022-23, 3068 students were admitted in the University of which 2194 in Bachelor's, 539 in Master's and 335 in Ph.D. degree programmes. In regards to output, 858 students obtained degrees during the year, of which 478 were Bachelor's Degree, 245 Master's Degree and 135 Ph.D. Degree holders. The constituent college wise student enrolment and output under different degree programmes is shown in Table 4.1.

For easy representation in this section and elsewhere, the following abbreviations would be used for different the colleges under AAU.

Colleges	Abbreviations
College of Agriculture, Jorhat	CA
Biswanath College of Agriculture, Biswanath	BNCA
SCS College of Agriculture, Dhubri	SCSCA
College of Veterinary Science, Khanapara	CVSc
Lakhimpur College of Veterinary Science, Joyhing	LCVSc
College of Community Science, Jorhat	CCSc
College of Fisheries, Raha	CF
College of Sericulture, Titabor	CS
College of Horticulture and Farming System Research, Nalbari	СН

 Table 4.1. Fresh students enrolled and students passed out in different degree programmes of the University during 2022-23

	Bachelor	Bachelor's Degree		Master's Degree		PhD Degree		Total	
Colleges	Enrolled	Passed out	Enrolled	Passed out	Enrolled	Passed out	Enrolled	Passed out	
CA	184	151	129	162	50	112	363	425	
BNCA	61	41	15	21	-	-	76	62	
SCSCA	48	38	-	-		-	48	38	
CVSc	121	80	60	44	9	12	190	136	
LCVSc	44	30	-	-	-	-	44	30	
CCSc	67	63	20	12	5	10	92	85	
CF	29	23	7	6	1	1	37	30	
CS	34	29	-	-	-	-	34	29	
СН	38	23	-	-	-	-	38	23	
Total	626	478	231	245	65	135	922	858	

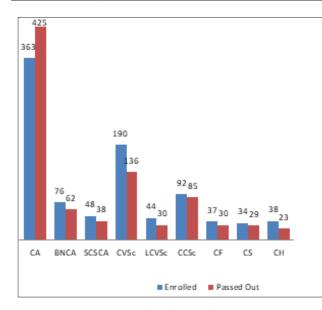


Figure 4.1. Total fresh students enrolled and students passed out in different degree programmes of AAU during 2022-23

4.5. Total Students on Roll

Altogether, 3068 students were on roll in the University during 2022-23 academic year of which nearly 53 per cent were girl students (1,614). Out of the total students on roll, 2,194, 539 and 335 were in Bachelor's, Master's and PhD degree programmes, respectively. The college wise details of total and girl and boy students are given in Table 4.2 and Figure 4.2.

4.6. Fellowships/Scholarships Awarded to Students

During the year, 946 students of the University were either awarded fellowships or qualified for national or state test or University UG & PG merit scholarships of which 36 were awarded Junior Research Fellowships, 11 Senior Research Fellowships, 21 students received DBT fellowship and 45 NTS scholarships among others.

Collogog	Bachelor's Degree		Ma	Master's Degree			PhD Degree			Total		
Colleges	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
CA	296	318	614	129	189	318	69	150	219	494	657	1151
BNCA	90	100	190	28	19	47	-	-	-	118	119	237
SCSCA	93	69	162							93	69	162
CVSc	297	232	529	54	60	114	24	33	54	375	322	697
LCVSc	92	79	171							92	79	171
CCSc	88	147	235	5	31	36	7	41	48	100	219	319
CF	47	59	106	11	13	24	12	2	14	70	74	144
CS	51	54	105							51	54	105
СН	61	21	82							61	21	82
Total	1115	1079	2194	227	312	539	112	226	335	1454	1614	3068



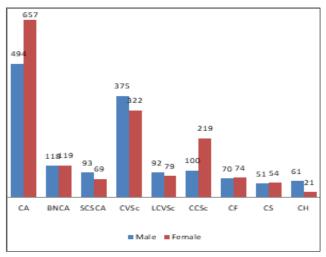


Figure 4.2. Total students on roll in different colleges of the University during 2022-23

4.7. Publications

The teachers and scientists of the University have published altogether 1285 publications during the year. Out of these 556 were research papers in journals, 29 review paper, 143 research abstracts in journals and proceedings, 28 books, 133 practical manuals, 117 book chapters, 37 popular articles, 59 technical bulletins and 88 other publications. College of Agriculture, Jorhat had the maximum number of publications (534), which was closely followed by College of Veterinary Science, Khanapara with 237 publications. The college wise breakup of the publications is shown in Table 4.3 and depicted in Figure 4.3.

Particulars	Number of Publications								Total	
	CA	BNCA	SCSCA	CVSc	LCVSc	CCSc	CF	CS	CH	Total
Research papers	237	42	16	143	25	41	12	8	32	556
Review paper	13	6	3	0	2	3	1	0	1	29
Research abstracts	79	13	8	23	7	4	7	0	2	143
Paper in conference/ proceedings	69	3	10	0	2	6	2	1	2	95
Books	11	1	1	5	2	1	7	0	0	28
Practical manual	18	0	36	32	34	10	1	0	2	133
Book chapters	49	14	7	10	2	17	7	1	10	117
Popular articles	19	0	4	3	0	3	7	0	1	37
Technical bulletin	5	0	12	19	0	20	3	0	0	59
Others	34	0	0	2	46	6	0	0	0	88
Total	534	89	97	237	120	111	47	10	50	1285

Table 4.3. Publications from different constituent colleges of the University during 2022-23

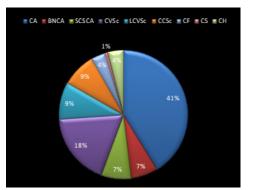


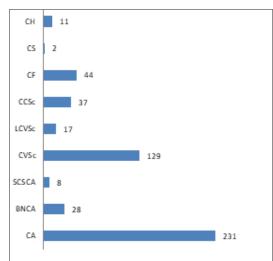
Figure 4.3. Publications from different constituent colleges of the University during 2022-23

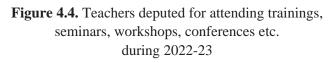
4.8. Human Resource Development

Altogether 507 teachers/scientists of the University were deputed for attending regional/national/ international level training/workshop/seminar etc during 2022-23. Maximum number of teachers/ Scientists from the College of Agriculture, Jorhat (231) attended these training/workshop/seminar etc both in online and offline modes. The college wise and event wise breakup of the number of teachers deputed from the University is given in Table 4.4 and Figure 4.4.

Deathersteam			No	o. of teach	ners atten	ding				T -4-1
Particulars	CA	BNCA	SCSCA	CVSc	LCVSc	CCSc	CF	CS	CH	Total
International training	1	2	0	7	0	0	3	0	0	13
National training	60	18	8	46	12	12	32	2	6	196
Regional training	32	0	0	3	0	2	0	0	0	27
International seminar	3	0	0	13	0	0	0	0	2	18
National seminar	24	2	0	9	0	3	0	0	0	38
Regional seminar	7	0	0	18	0	0	0	0	0	25
International conference	10	2	0	14	1	4	1	0	1	33
National conference	16	0	0	12	1	3	1	0	1	34
Regional conference	3	0	0	0	0	0	0	0	0	3
International workshop	6	2	0	1	0	0	0	0	0	9
National workshop	18	0	0	6	2	3	4	0	0	33
Regional workshop	1	0	0	0	0	1	0	0	0	2
Others	50	2	0	0	1	9	3	0	1	66
Total	231	28	8	129	17	37	44	2	11	507

Table 4.4. Teachers depu	4 1 C 44 1 4 · ·	• 11	6	1 . 0000 00
Table 4.4 Teachers debu	ted for attending training	s seminars worksho	ns' conterences el	ie during 2022-23





4.9. Trainings/ Seminars/ Workshops Organized

The University organized 245 regional /national level trainings/ workshops/ seminars etc. during the year. The College of Agriculture, Jorhat (organizing 150 events) topped the list of colleges of the University in organizing such events. The breakup of the organized events in different colleges of the University is presented in Table 4.5 and Figure 4.5.

Doutionloss of Events		Training, seminar, workshop etc organized (No)										
Particulars of Events	CA	BNCA	SCSCA	CVSc	LCVSc	CCSc	CF	СН	CS	Total		
International training, Seminar, Workshop	12	-	-	3	-	-	-	-	-	15		
National training Training, Seminar, Workshop	33	-	4	12	-	3	4	-	1	57		
Regional training Seminar, Workshop	39	-	-	3	-	1	-	-	-	43		
State training, Seminar, Workshop	38	9		14	-	33	-	1		95		
Others	28	-		-	2	3	2	-		35		
Total	150	9	4	32	2	40	6	1	1	245		

Table 4.5: Training, seminar, workshop organized in the colleges during 2022-23

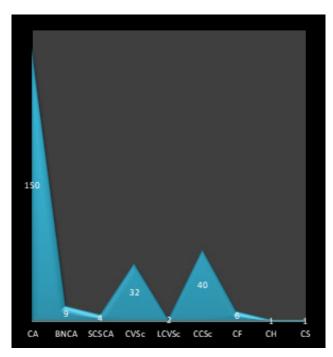


Figure 4.5: Total number of training, seminar, workshop etc. organized in the colleges during 2022-23

4.10 Library

The Central Library, located at the University headquarter in Jorhat, is called the Rev. B M Pugh Library (RBMPL) to commemorate the memory of Rev. B. M. Pugh, the first Principal of erstwhile Assam Agricultural College, jorhat. RBMPL is serving as the knowledge resource center on Agriculture and allied areas since its inception in the year 1969 to the user community consisting of students, teachers/scientists, research scholars and the staff. The RBMPL offers it's Library and Information Services to the three colleges housed within the University Head Quarter, Jorhat viz., College of Agriculture, College of Community Science and College of Sericulture. Besides RBMPL, the University has its branch libraries in the following colleges such as College of Veterinary Science, Khanapara, Guwahati; College of Fisheries, Raha; Biswanath College of Agriculture, Biswanath Chariali; Lakhimpur College of Veterinary Science, Joyhing, Lakhimpur, SCS College of Agriculture, Dhubri and College of Horticulture & Farming System Research.

4.10.1 Library Holdings

The total library holdings in the University during 2022-23 were 2,74,561 which include 1,91,757 text books, 53,496 reference books; 38 journals; 308 periodicals and 9,996 back volume of periodicals, 4,471 e-books, 8,686 e-journals and 5,810 theses. The Rev. B. M. Pugh Library, Jorhat constitutes the maximum (approx. 73 per cent) of the total holdings of the University. College-wise details of the types of printed collection during the year are given in Table 4.6. The e-resources available in the RBMPL are accessible to registered users from the other colleges and research stations through the EZ-Proxy server. During the year 2022-2023 no ICAR fund has been received for procurement of new books. Rev B M Pugh Library, Assam Agricultural University, Jorhat & Association of Agricultural Librarians and Documentalists of India (AALDI) organized the International Conference of Agricultural Librarians & Users Community (ICALUC-2022) on Innovation, Growth and Sustainability of Agricultural Libraries during 28th & 29th April, 2022.

Table 4.6: Books and other printed	collection of the libraries	s of constituent co	olleges of the University
during 2022-23			

			Librario	es of the co	nstituent	colleges	of the Un	iversity	
Particulars of co	ollections	CA							
		Central	BNCA	SCSCA	CVSc	LCVSc	CF	СН	Total
		Library							
Text Books		146242	10985	5094	20500	3050	5502	384	191757
Reference Books		36108	2716	577	12800	655	640		53496
Journals		30	4		4				38
Periodicals		4			9	3	291		308
e - book		3924			547				4471
e - journals		4021			4665				8686
Back Volume of P	eriodicals	6911	210		2720		155		9996
Theses	Masters	3157	80		1385		48		4670
Theses	Ph D	820			315		5		1140
Total		201217	13995	5671	42945	3708	6641	384	274561

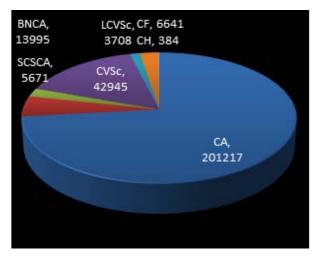


Figure 4.6: Books and other printed collection of the libraries of constituent colleges of the University during 2022-23

4.10.2 Rev. B M Pugh Library and its Activities

Some of the facilities/services of "Rev. BM Pugh Library (RBMPL)" and its activities during the year under report are discussed below.

4.10.2.1 E-Resources Availability

• **CeRA**: Consortium of e-resources in Agriculture: Access to full text electronic journal on Agriculture and allied areas. About 3765 e-journals are available under CeRA and Access is available to full text 1174 e-books along with 17 e-book series of Elsevier.

URL: http://cera.iari.res.in/

URL: http://jgateplus.com/search/

• **DeLCON:** DBT-Electronic Journal Consortium: About 900 full text journals are covered under DeLCON

URL: http://delcon.gov.in/eresources.htm

• **Krishprabha:** It is a Full text electronic Database of Agricultural Doctoral dissertations submitted by research scholars of the 45 State/ Deemed Agricultural Universities during the period from 1.1.2001- 31.12.2006

http://14.139.232.167:8080/equestthesis/ IPLogin.do

http://krishikosh.egranth.ac.in/handle/1/466

Krishikosh Repository: It is a digital repository of accumulated knowledge in agriculture and allied sciences, having collection of old and valuable books, old journals, thesis, research articles, popular articles, monographs, catalogues, conference proceedings, success stories, case studies, annual reports, newsletters, pamphlets, brochures, bulletins and other grey literatures spread all over the country in different ICAR Research Institutions and State Agricultural Universities (SAUs).

http://krishikosh.egranth.ac.in/

- CAB Abstract available online at www.cabdirect. org and those from 1972 to 2013 are available on CD ROM at RBMP Library, AAU.
- International E-Book Packages, CRC Press, Taylor & Francis (617)
 - 1. AGRICULTUREnetBASE (288)
 - 2. NUTRITIONnetBASE (112)
 - 3. VetnetBASE(147)
 - 4. Agri Economics netBase (70)

Online Access Link: www.crcnetbase.com

- Cabi E-Books on Veterinary(166)
- Indian E-Book Packages (456)
 - 1. E-Books on Horticulture (101)
 - 2. E-Books on Agriculture (223)
 - 3. E-Books on Aquaculture and Fisheries (10)
 - 4. E-Books on Veterinary (122)

Online Access Link: www.asapglobe.com

• India AgriStat Database

http://www.indiaagristat.com/default.aspx

 ISO Agriculture in CD ROM (575 E-Resources)
 Online Access Link: http://standards.bsbedge. com

E-books & E-Journals of Rev B.M Pugh Library are accessible remotely through OCLC Ezproxy software for all registered members including those from outstations of AAU.

Library Membership to Enrolled Users: In Circulation section, readers (Library Users) can get themselves registered as members of the library by abiding library rules. After enrolment as bonafide member, they have the privilege to borrow books (Figure 4.7). Books are issued for a period of one month. Number of books to be issued for different categories of students is (i) Under Graduate students: 5 books (ii) Post Graduate students: 7 books and (iii) Research Scholars: 10 books.

4.10.2.2 User Service Provided

Users Enrolled: A total of 2644 users have been enrolled in the library during the year which include students (1581 MSc / PhD students in Agri / Community Science), Faculty/scientist (523) and Non-teaching/others (540). **Consultation Services to Outside Scholars:** The library provides consultation facilities to outside scholars on the basis of letter of introduction. Consultation fee @ Rs 10/- per day and Rs 50/- per month is charged.



Rev. B.M. Pugh Library, AAU, Jorhat

- Library Services: The library provides the services such as Lending service, Reference/ Information service, Current Awareness Service, Documentation service, Internet/E-mail facility, E-journal/ eBook and CD-ROM database searching facility, Resource-sharing facility, User education programme, Document delivery service and Reprography facility.
- Lending Service to Readers through Text Book Bank: This section of the library provides minimum five to six books to every enrolled student for the semester and the number of borrowed books depends upon availability of books in this section.
- Library Service to Patron: The RBMPL provides service to patrons with an average of 10,000 students and 400 faculty & research scholars annually. The number of faculties and students that used library during the year was 600 and 12,936, respectively.
- **Library management system:** The Chief Librarian, Assam Agricultural University as Statutory Officer look after the management of the Central library of main campus as well as the Campus libraries of constituent colleges by exercising all the power as delegated to him by AAU act 1988 (As amended). He is assisted by Deputy Librarian, Assistant Librarian and Documentation officer in the overall management of the Library.

Table 4.7. Some e-resource packages available with AAU

>	ASAP Indian e-Books	>	India AgriStat Database
\succ	Astral e-Books	\succ	Indianjournals.com
\succ	Bibliotex e-Books	\succ	NIPA e-Books
>	CAB Direct	>	Taylor & Francis e-Books
≻	Cambridge Core	≻	Wiley Online
≻	EBSCO e-Books	\succ	WT e-Books
\triangleright	Elsevier e-Books		

- Services to Visitors: A good number of visitors paid visits to the central library and the libraries under its constituent colleges of Assam Agricultural University.
- Internet Services: The internet browsing facility is available in the library premises on the basis of a user account created in the AAU Portal which is strictly provided by the System Administration i.e. AKMIT cell of the AAU. There is also the provision of access to the internet by the visitors on request of a guest account created by ARIS accordingly.
- User Education Programme Provided: The RBMPL, apart from providing dedicated user service, is also extending quality user education programmes.

These include:

- Library orientation which is one of the most common user education programmes is provided to the users of AAU, in particular the under graduate patrons, maintaining a proper discipline-wise streaming in the early part of their formal vocations.
- Education on Library and Information Service in the form of a non-credit compulsory course (PGS 501) is also conducted to impart appropriate knowledge in the field of information retrieval and dissemination, technical writing stressing more on literature review and citation analysis as well as the proper techniques in browsing the different resources present in the library.
- **On-request User Service:** Most users, the faculty and research scholars, in particular enjoy

the on request information service from CeRA in print form for those information resources are available only in electronic form and are not downloadable.

- Automation and Digitization: Rev. B M Pugh Library and Library at CVSc, Khanapara have implemented automation of library by introducing ICAR recommended Library Management Open source software KOHA which is sponsored by ICAR under Library strengthening. The surveillance system of the Rev B M Pugh Library is fully covered by CCTV with powerful camera including night vision provision in certain areas. Access of vast number of e-resources can be done by log on to CeRA, Krishikosh and DELCON through high speed bandwidth internet connectivity. Off campus Library user can also avail such facility by using Ezproxy server. The Rev B M Pugh Library also provides Electronic Document deliver service to deferent ICAR, SAU and CAU institute across the country.
- **RFID Library Security System:** Library has been implementing the Radio Frequency Identification (RFID) security system for security of rare and reference documents of the library.
- **Book Bank Facility:** There is a Book Bank collection which is provided by the Directorate of Schedule Caste for the benefit of Scheduled Cast students of the College. They can issue two books from the collection for the whole semester.
- **Internet Services:** The internet browsing facility is available in the library premises.



Library e-resource, Rev. BMP Library, AAU, Jorhat

4.11. Students' Welfare

4.11.1. Activities under the Directorate of Students' Welfare

4.11.1.1. National Service Scheme (NSS)

• World Bicycle Day

On 3rd June 2022 Students of Assam Agricultural University in Jorhat where 100 volunteers participated in a cycle rally and raise awareness on cycling and its benefit towards health and environment. Dr R. P. Bhuyan, Programme Co-ordinator NSS and Director of Students of Welfare, AAU, Jorhat-13 flagged off the programme at the initiative of the University NSS Unit, Jorhat and Jorhat Branch of Assam Cycling Community.



Glimpse of World Bicycle Day at AAU, Jorhat

• World Environment Day:

The day was celebrated at Assam Agricultural University, Jorhat on 5th June 2022. A Micro Forest Green Zone was created near the second gate of Assam Agricultural University, Jorhat campus with a tree planting programme by NSS volunteers, teachers and employees of AAU, Jorhat on World Environment Day on June 5, 2022. The NSS Unit BNCA conducted world environment day programme at BNCA campus. Dr. R.N.Barman, Associate Dean, BN College of Agriculture inaugurated the programme wherein he narrated about the effect of of air polution to human life. A tree plantation programme was held at BNCA campus involving teachers, employees and students of the college. About 100 white chandan and debadaru saplings were planted in the campus. Besides, an essay writing competetion on the topic "Only one earth" and poster making competetion on the theme ' Ecosystem restoration' was held among the NSS Volunteers of BNCA. World Environment Day was celebrated at SCS College of Agriculture, Dhubri and a tree plantation programme was done in the college campus where NSS volunteers, teachers and the office staff were present. A rally was also organized by the NSS volunteers to mark the celebration.



Celebration of World Environment Day at AAU, Jorhat

• World Blood Donor Day:

World Blood Donor Day was observed at SCSCA, Dhubri on 14th June 2022. Forty-five NSS volunteers and seven teachers attended the programme. Dr. Ranjit Sarma, Associate Dean of SCS College of Agriculture highlighted the importance of blood donation. Dr. F. A. Ahmed, Senior Scientist & Head, KVK Dhubri emphasized the importance of the blood donation camp. Mr. Tarun Kalita, Assistant Professor, Department of Nematology narrated his experiences as blood receiver and asked NSS volunteers to come forward for blood donation. During the programme, the Associate Dean of the college administered the pledge in connection with blood donation to NSS volunteers and teachers.

• International Yoga Day 2022

NSS Unit Biswanath College of Agriculture, AAU, celebrated International Yoga Day on 21st June, 2022. Yoga demonstration and practice followed by 'Shambhavi' Meditation' (for Beginners) was held among the teachers and NSS volunteers of the college. NSS volunteers and teachers at the college participated in the programme. A special programme was organized on 15th May, 2022 to sensitize NSS volunteers about the good effects of yoga, by the NSS unit of SCS College of Agriculture, wherein a few NSS volunteers of the college demonstrated different postures of yoga. On the 20th of June 2022, Mr. Arup Karmakar, a yoga instructor from Bilasipara, demonstrated yoga and pranayama among 81 participants, including the NSS volunteers, teachers, and staff of SCSCA and scientists of KVK, Dhubri. On 21st June, 2022, Mr. Bhuban Kalita, yoga teacher from Chapar, Dhubri demonstrated different postures of yoga including Pranayama.

• Har Ghar Tiranga

On 6th August 2022 Awareness programme of "Har Ghar Tiranga" by the NSS Volunteers of Assam Agricultural University, in the Jorhat campus and distributed Tirangas in the neighboring areas. NSS volunteers of SCSCA, Dhubri organized the awareness programme among the villagers of Rangamati on "Har Ghar Tiranga" campaign to commemorate the 75 years of India's independence. Volunteers appraised the leaders of the village about the importance of the Tiranga, as our national pride and urged them to hoist the tri color in their homes. Volunteers also sold the tri color among the teachers and the villagers.



Awareness programme of *"Har Ghar Tiranga"* by the NSS Volunteers of SCSCA, Chapar, Assam Agricultural University

• International Youth Day

On 12th August 2022, NSS Unit BNCA celebrated International Youth Day at Biswanath Dagaon village. Several youth and farm women participated in the programme and shared their experience in conducting developmental works for self-employment. Dr P.P.Neog, Programme Officer NSS addressed the youth and farm women. On this occasion NSS volunteers along with village youth also conducted an awareness programme on *Har Ghar Tiranga* as a part of *Azadi Ka Amrit Mahotsav*.



Celebrating Har Ghar Tiranga

• NSS Day:

The National Service Scheme Cell of Assam Agricultural University, Jorhat celebrated NSS Day on 24th September 2022 across all units. Various programme were taken up to celebrate the day in a benefiting way. In the Jorhat campus, the day starts with a Cycle rally by the NSS volunteers of College of Agriculture, Community Science, Sericulture and Horticulture with the theme, "Youth against Drugs and Narcotic Substances". Dean, Faculty of Agriculture and Director of Student's Welfare flagged off the cycle rally. The program was followed by a brief cultural program at Student's Centre._An Inter-Hostel Quiz competition was organized by the NSS units of AAU, Jorhat in collaboration with the Soil Conservation Society of India in the AAU Auditorium, to mark the NSS Day celebration and 71st Foundation Day celebration of Soil Conservation Society of India. Out of 41 quiz teams, 6 teams were screened for the main round. The First and Second position were grabbed by the two teams from Hostel No. 7, whereas the third position was secured by Hostel No 6. Dr Rupjyoti Borah and Dr Akhil Baruah conducted the quiz competition as quiz masters. On 24th September 2022 NSS Unit BNCA celebrated NSS Day at Madhupur L.P. School, Biswanth Chariali. Dr. Pranjal Pratim Neog, Programme Officer of NSS Unit BNCA welcomed the gathering. NSS volunteers of BNCA Unit organized an art completion among the students of Madhupur L.P. School and an awareness programme on health, hygiene, food, and nutrition was also organized with a series of lectures by Dr. R.K. Goswami, Professor BN College of Agriculture, Mrs. Nisha Bora, Head Teacher of Madhupur L.P. School, Mr. Chandan Jyoti Mali, and Ms. Saiba Siddiqui, NSS volunteer, BNCA Unit. A short cultural programme was conducted by NSS volunteers along with school students as a part of the NSS Day celebrations. Prizes were distributed to the winners of Art competition. Ms. Ananya Borah, NSS volunteer, BNCA offered thanksgiving._NSS day at SCS College of Agriculture started with the NSS song performed by the NSS volunteers. Dr. G.K. Upamanya, Programme Officer of the NSS unit of SCSCA welcomed the guests. Dr Manashi Hazarika, former Program officer of the NSS unit addressed the audience on various activities that could be performed by the NSS unit of the college. The Senior Scientist & Head, KVK, Dhubri, Dr. F.A. Ahmed emphasized volunteers working for the farmers in the adopted village and ensured to provide

the possible assistance from the KVK, Dhubri. A cultural program was organised by the NSS volunteers to mark the event.



"Youth against Drugs and Narcotic Substances" rally

• Swachhta Pakhwada

NSS volunteers participated in the Swachhta Pakhwada programme at AAU Jorhat, and a "Plog walk" was also organized on 19th of October 2022 where volunteers collected 38 kg of plastic waste in around their hostels and AAU campus and safely disposed the waste. A Cleanliness drive was organized on 30th March,2023 under NSS Unit of College of Horticulture & FSR, AAU, Nalbari at Milan, HS School, Lakhopur, Nalbari with active participation of teachers and students of both the College as well as School. To create awareness on maintenance of cleanliness in and around BNCA, a Swachhta Pakhwada programme was organized by NSS unit, BNCA on 13th August 2022 to clean the BN College of Agriculture campus. On 15th October 2022 NSS Unit BNCA organized a Clean India Campaign programme at BNCA campus as well as Kadamoi-Biswanath Ghat link road. In this programme, over 45 NSS volunteers collected and destroyed single use plastic from the college campus as well as from Kadamoi – Biswanath Ghat link road. On 19th October 2022 NSS Unit BNCA organized Swachhata 2022 at Kadamani village, Biswanath Chariali, where NSS volunteers collected and destroyed single use plastic from roadside as well as the community hall campus of Kadamani village. As part of the special Swachhta program, a "Plog Walk" was conducted on 19th October 2022 for collection and safe disposal of the plastic waste in AAU, Jorhat campus and its nearby public places by the NSS volunteers of College of Agriculture, Community Science, Sericulture and Horticulture. During a weeklong Swachta programme during 11th to 16th October 2022 at SCSCA Dhubri, NSS volunteers collected & disposed single use polythene waste bags and cleaned the football playground and market area of Rangamati village.



Observing Swachhta Pakhwada

• Rashtriya Ekta Divas

The NSS units of AAU, Jorhat organized a Run for Unity in line with celebration of Rastriya Ekta Divas in the Jorhat campus of the university. On 31st October, 2022 NSS Unit BNCA celebrated "Rastriya Ekta Divas" to mark the 147th birth anniversary of Sardar Vallabhbhai Patel, Iron man of India and first home minister of the country, NSS unit organized "Run for unity" programme from BN College of Agriculture campus to Deputy Commissioners Office, Biswanath. From the DC office, NSS volunteers joined the "Run for unity" programe that was organized by the district administration, Biswanath. Prior to the start of the programme Associate Dean, BNCA narated the contribution of Sardar Vallabhbhai Patel and Rashtriya Ekta Divas pledge taking ceremony was also conducted. Over 75 NSS volunteers participated in the run programme. National Unity Day was celebrated by the NSS unit of SCSCA to mark the birth anniversary of Sardar Vallabhbhai Patel and a Run for Unity was organized. A "Unity pledge" was



Run for Unity was organized by all NSS units of the university: top at AAU, Jorhat campus and bottom by NSS volunteers of SCSCA, Chapar, AAU

administered by the Associate Dean to NSS volunteers and teachers of SCSCA. About 100 participants comprising of NSS volunteers and teachers of SCSCA took part in the Run for Unity.

• Communal Harmony Campaign Week (19th-25th November)

On 19th November 2022 NSS Unit BNCA organized an awareness programme on Communal Harmony Campaign Week at Kadamani LP School, Biswanath Chariali. In this programme an art competition was also conducted by NSS volunteers among school students. All total 46 NSS volunteers participated in the programme. An essay writing competition on the topic" "Communal Harmony and National Integration" and poster making competition on the theme "Unity in Diversity" was also organized.

Constitution Day

National Constitution Day was observed by the NSS volunteers of AAU Jorhat, on 26th November 2022 with a ceremonial oath taking in the classrooms of the IDA building. At BNCA on this special day, the preamble of the Constitution was read out by Dr. R.N. Barman, Associate Dean, and followed by all teachers, scientists, employees, and students present in the event. Apart from this, a series of lectures on the theme "India: The Mother of Democracy" was delivered by Dr. B.P.Gautom, Professor and Head, Department of Horticulture; Dr. R.N. Barman, Associate Dean, and two students of BN College of Agriculture BNCA, viz., Ms. Misha Kumari Singh and Mr. Jyotimoy Nath.



Observing Constitution Day

• Heartful Campus at Assam Agricultural University

The Indian Council for Agricultural Research (ICAR) and Hyderabad-based Heartfulness Education Trust's

(HET) Heartful Campus signed an MoU aimed at bringing in all the university students together through meditation. Heartfulness Education Trust is aligned with the goals of education, training, and research in environmental sustainability and sustainable technologies - in line with the recommendations of the National Education Policy. As a follow-up of the Vice Chancellors Conference and MoU, students of AAU attended the first phase of the programme, from 27th November -1st December 2022. Two certified Facilitators of Heartful Campus, Ms Biswakalyani Sahoo and Ms Akansha Gupta, travelled to Jorhat to cover the 4 colleges headquartered at Jorhat. The students of other campuses, College of Veterinary Sciene and SCSCA were privileged to learn on Personality development from two other facilitators, Shri Pragyan Dowerah and Shri Samarth Harlalka, of Heartfulness Institute, during 23rd- 24th December 2022.

Agro Youth Summit & National Youth Day

Further 63 students from Assam Agricultural University visited a three-day Agro Youth Summit at Kanha Shanti Vanam - the Headquarters of Heartfulness which was organized by Heartfulness Education Trust in association with the Indian Council for Agricultural Research (ICAR), Govt. of India in the outskirts of Hyderabad city. The summit, organized during 12th -14th January 2023, was inaugurated by Shri R C Agarwal, Deputy Director General, ICAR and Shri Kamlesh Patel 'Daaji', Guide of Heartfulness Meditation Worldwide. The summit coincided with the National Youth Day and the birth anniversary of Swami Vivekananda. This was organized with the intent to empower the youth of the country to study agriculture and to keep a meditative mind with the advancements of agriculture. The students had the privilege to learn more about heartfulness meditation and the agricultural systems and innovative practices that have been adopted at Kanha Shanti Vanam. A total of 63 students from the university took part in this youth meet out of which 13 are from college of Agriculture Jorhat, 9 from college of Community Science, 5 from College of Sericulture, 7 from College of Horticulture & FSR, 6 from BNCA, 3 from College of Fisheries, Raha, 15 from College of Veterinary Science, Khanapara and 5 are from SCSCA Dhubri.



AAU students visiting the "Hearty-culture" nursery in Kanha Shanti Vanam



AAU Students visiting the hydroponics facility at Kanha Shanti Vanam

• Engaging with youth for gender equality

Regular activities of NSS during the year included a workshop on Gender biased Violence against Women and Girls in collaboration with ASRLM, Assam A district level programme with boys and girls "Engaging with youth for gender equality" was jointly organised by the NSS units of AAU, Jorhat with the Department of Women and Child Development, Govt of Assam with technical support from State hub for empowerment of women (SHEW) on on 9th December 2022. A talk was delivered by Dr. Tulika Baruah, Associate Professor, College of Community Science on gender-based discrimination against women and girls.

• NSS Pre RD camp & Republic Day Parade Camp, 2023

A selection Camp was organized on 12th October 2022 to select the NSS volunteers for participation in

the Pre RD-Camp to be held at Kalyani, West Bengal. The selection committee was comprised of NSS Youth Officer from Regional Directorate of NSS, Guwahati, Assam Police personnel, Medical & Health Officer, AAU, Dr Sailen Gogoi, Professor, Horticulture, AAU, Jorhat and the Director of Students Welfare, AAU.



Selection Camp to select NSS volunteers for participation in the Pre RD-Camp, 2023

Four volunteers from AAU namely Miss Indrani Borgohain (CA), Mr Anup Pratim Saikia (CCSc), Ms Dhriti Barman (SCSCA) and Mr. Hirak Barman (CA) were selected to attend the Pre RD camp at Kalyani University, Nadia, West Bengal from 16th -25th November 2022.

Mr Anup Pratim Saikia attended the RD Parade camp at New Delhi from 1st -31st January 2023. Mr Anup Pratim Saikia, of the College of Community Science was further selected to represent the state team in the Republic Day Parade, New Delhi on January 26, 2023.

• Yuva Samvad-India @2047

As the nation moves on from Amrit Mahotsav towards Amrit Kaal, in conformity with the appeal of the Hon'ble Minister for Youth Affairs & Sports to carry this vision, it was considered essential for the youth to understand and adopt the Panch Pran in the age of Amrit Kaal. NSS at Assam Agricultural University organized Yuva Sambad-India @1947 on the theme "India's Panch Pran a youth dialogue" on March 6, 2023, to deliberate on (a) Goal of Developed India (b) Removal of any trace of slavery or colonial mindset (c) take pride in our heritage and legacy (d) unity and solidarity and (e) sense of duty among citizens. Shri Kamakhya Prasad Tasa, Hon'ble MP (Rajya Sabha) was present and interacted with the NSS volunteers. Shri Tapan Gohain ACS, Registrar, AAU, Dr. P.K. Pathak, Director of Extension Education, Dr. R.P.

Bhuyan, Director of Students Welfare and all NSS Programme Officers of AAU Headquarter were also present. Over 300 volunteers participated in the programme where 5 of several NSS volunteers were selected by a jury to speak on Panch Pran before the dignitaries.



Observing Yuva Samvad-India @2047

• World Water Day:

World Water Day was celebrated by the NSS unit of SCSCA on 22nd March 2023. A quiz competition was held during the occasion that was attended by 109 NSS volunteers. Dr. Hrishikesh Ojah, Assistant Professor, Department of Plant Breeding and Genetics acted as the quiz master on this occasion.

A Special NSS camp was organized in Choibari Hindupara, the NSS adopted village of SCS College of Agriculture during 23 to 29th March 2023. About 75 school children from the adopted village and 50 NSS volunteers took part in the programme. There were several programmes such as Yoga practice programme was stated with the yoga demonstration and practice, art competitions, training on sports, games and dance. Career counseling was done for the benefit of village children. An awareness programme on drug abuse, blood donation, HIV AIDS, CORONA virus was also held. Female NSS volunteers under the leadership of female teachers of SCSCA took part in an awareness camp on "Menstrual Hygiene for adolescent girls" for the adolescent girls of the village. Sanitary pads were distributed among the participating school students. A colorful cultural programme was organized among the NSS volunteers, school children and the villagers on the 29th of March 2023. Certificates and prizes were distributed to the winners and participants by the Associate Dean, SCSCA, Dhubri, Dr. F.A. Ahmed, Senior Scientists & Head, KVK, Dhubri, village heads and the teachers of SCSCA. Dr. Gunadhya Kumar Upamanya, Programme Officer, NSS Unit, SCSCA,

Dhubri proposed the vote of thanks to mark the end of the programme.

Beti Bachao Beti Padhao Awareness programme

A seven-day NSS Special Camp was organized during 25-31 March 2023 under NSS Unit of College of Horticulture & FSR, AAU, Nalbari at the newly shifted College campus. NSS volunteers of College of Horticulture & FSR, AAU, Nalbari participated in a Street play in the College campus on the theme "Save Tree Save Life". NSS volunteers and students at College of Horticulture and FSR, Nalbari also participated in *Beti Bachao Beti Padhao* Awareness programme under NSS unit of the College at Lakhopur village on 31st March 2023. Teachers of CH&FSR and local villagers actively participated in the programme.

Plantation Programme:

A Plantation Programme and NSS Special camp was organised by NSS Unit, College of Horticulture & FSR, AAU, Nalbari at its newly shifted campus located at Lakhopur on 29th March, 2023. Similarly, plantation programmes were taken up by the NSS unit of BNCA and AAU, Jorhat from time to time.



Plantation Programme by NSS volunteers at BNCA and CH&FSR

Workshop on Mission Life for NSS functionaries

Mr Himadri Sekhar Datta, Programme Officer, NSS Unit, College of Horticulture & FSR and Mr Tabaruk Hussain, Programme Officer, NSS Unit, College of Agriculture attended the Workshop on Mission Life for NSS functionaries at IIT Guwahati from March 26-28, 2023.

Northeast NSS Festival

10 students from constituent colleges of AAU participated in the Northeast NSS Festival at Guwahati University from March 31-April 4, 2023

• NCC Army Wing

The National Cadet Corps (Army wing) of AAU comprises of a total of 84 numbers of cadets (two batches) registered under the 33 Assam Comp. Tech. Regiment, NCC, Army, Jorhat Group. A group of 19 cadets participated in the Annual Training Camps held at the NCC National Academy campus, Gormur, Jorhat on 1st- 8th of October and 5th - 12th December, 2022. The cadets also actively participated in 'Puneet Sagar Abhiyan: Logo designing', celebration of 'Rashtriya Ekta Divas' held on 31st October 2022, a donation program at the Sarothi Old age home, Lichubari on 9th November 2022 and a rally on the theme 'No pollution' on 9th December, 2022.





Cadets participating in Advanced Leadership Training, Rangia, Guwahati

Cadet Taranginee Bora, BSc. 2nd year, College of Agriculture participated in the All-India Thal Sena Camp held at New Delhi from 14th -23rd September 2022, representing North-east region.

Cadet Bishal Saud, BSc. 2nd year, College of Community Science attended a motivational camp at the Indian Military Academy (IMA), Dehradun from 18th to 27th December 2022 representing the Jorhat group of NCC cadets. This visit is organized each year for encouraging cadets aspiring for the Indian Army.



Cadets along with CTO, Dr Ankita Dutta donating blood in the occasion of World Blood Donors Day, 2023



• 51 Assam Air (T) Sqn NCC

All India Vayu Sainik Camp 2022: The All India Vayu Sainik Camp (AIVSC) is essentially a Centrally Organized Training Camp for Air Wing SD and SW cadets organized by Directorate Gen NCC. AIVSC 2022 was conducted at DPS Pali Rd Jodhpur from 24 Sep to 05 Oct 2022. A total of 608 cadets from 16 directorates of Air wing NCC participated in the

camp. The selection of AIVSC is carried out based on studies (Special subject, Virus SOP and Health & Hygiene) and events like firing (0.22 & skeet shooting), aero modelling, drill, line area, tent pitching. The selection of the cadets for NER Directorate was held in two phases Pre Vayu Sainik Camp-I, Pre VSC-II conducted by 51 Assam.Air (T) Sqn NCC, Jorhat and 1 Nagaland Air Sqn NCC, Dimapur respectively. Cadets from all the Air Wing NCC Units of NER assembled in Jorhat and after assessing their performance in PVSC-I, PVSC-II, a total of 38 cadets were chosen out of which two students of Assam Agricultural University, Cadet Amlanjyoti Pathak and Cadet Under Officer Desdimona Borah were selected to represent NER in AIVSC 2022.



Cadet Tahnin Tanisha Rahman

Cadet Tahnin Tanisha Rahman, from College of Community Science, AAU, cadet of NCC Air Force Wing (55 Assam Air (T) Sqn NCC) represented NER in the Rock-Climbing Training Camp held at Gwalior, Madhya Pradesh. The RCTC Camp took place from December 2nd -11th 2022.

• Inter College Meet

The 30th AAU Inter College Meet, 2023 was held at the CVSc, AAU, Khanapara campus from 28th February to 3rd March, 2023. The nine constituent College of AAU participated in various outdoor, indoor, literary, drama, music and cultural section. Dr. Bidyut Chandan Deka, Hon'ble Vice-Chancellor, AAU hoisted the University Flag and declared the meet open. Dr. Ashish Kumar Bhutani, IAS, Additional Chief Secretary to the Govt. of Assam, Department of Agriculture & APC, Assam and Shri Elvis Ali Hazarika renowned International and Guest of Honour, respectively during the inaugural programme. College of Veterinary Science was adjusted as the Best College in both sports and culture.



XXX AAU Inter College Meet Khanapara inaugurated by Dr Ashish Kumar Bhutani, Principal Secretary, Agriculture AH& Veterinary & APC and State Project Director, ARIAS Society, Assam as Chief Guest and Mr Elvis Ali Hazarika, Sports Icon as Guest of Honour.



Lighting the Olympic torch by Guest of Honour, Mr. Elvis Ali Haazarika



Showcasing of Horse-riding skills by the students of CVSc, Khanapara



A view of drama competition in the ICM 2023

• 21st All India Inter University Youth Festival (Agri Unifest) 2022-23

The 21st All India Inter University Youth Festival (Agri Unifest) 2022-23 was organized at University of Agricultural Science, Bangalore, Karnataka from 13th -17th March, 2023. The AAU contingent consisted of 13 boys and 9 girls. Dr Masuk Raquib, DDSW, CVSc, Khanapara led the contingent as Team Manager and Dr Mohua Das Gupta, Assistant Professor, Dept of SRGO, CVSc accompanied the team as Prof-incharge.



Inauguration of 21st All India Inter University Youth Festival (Agri Unifest) 2022-23 at UAS, Bangalore by Shri Narendra Singh Tomar, Hon'ble Union Minister of Agriculture & Farmers Welfare



Participants from the AAU in Agri Unifest, 2022-2023 at Bengaluru



AAU students performing in Agri Unifest, 2022-2023 at Bengaluru

4.12. Students' Welfare Activities under constituent Colleges

4.12.1. College of Agriculture, Jorhat

- Staged Bhauna and Drama on 23 Dec, 2022 and 24 Dec, 2022 on the occasion of Platinum Jubilee Celebration.
- Bishnu Rabha Divas was observed on 20th June 2022.
- Freshers' Social was held on 9th November, 2022.
- College week was held from 7 to 9, April, 2022,
- International day of Yoga was observed on 21st June 2022.
- NSS functionaries attended a Workshop on Swacchata and Mission Life for at Indian Institute of Technology (IIT) Guwahati from March 26-28, 2023.
- AAU NSS Volunteers participated in the North East NSS Festival to be held at Guwahati University, from 31st March – 4th April, 2023.
- NSS Volunteers for Republic Day Parade Camp, 2023.
- NSS Exam held on 30th December 2022 "YuvaSamvad – India@ 2047" in the presence of Shri Kamakhya Prasad Tasa, Hon'ble MP (Rajya Sabha) organized by NSS Unit, Assam Agricultural University, Jorhat-13 on 6 March 2023. Theme: "India's Panch-Pran a Youth dialogue"
- Annual Training Camps was held at the NCC National Academy Campus, Gormur Jorhat on 1st -8th October, 2022.

- Rashtriya Ekta Divas was held on 31st October, 2022.
- No pollution themed rally was held on 9th December, 2022.
- Republic Day Camp at New Delhi on 28th December 2022 to 01st Feb. 2023.
- NSS Volunteers participated to pay tributes to the national leaders in the Central Hall of Parliament, on 2nd October, 2022.
- Quiz competition on 15th July,2022 Deptt. Of PBG occasion of Bicentenary celebration.
- Soil Conservation Society of India, organized 4th Prize Money Quiz Competition (inter hostel) on 24/09/2022 occasion of Foundation day.
- Training in soft & Life Skills was held during October- November 2022.
- Personality Development and soft skill training was held under NAHEP, from 31st Oct to 2022 to 5th November, 2022.
- Campus recruitment drive for recruitment at District Position under Assam Millets Mission (AMM) was held.
- Felicitation programme for AAU students who have been selected for ACS/APS/Allied services 2022 was held on 05.11.2022.
- Campus Interview for Assistant Manager Plantation Amalgamated Plantation Private Limited was held on Feb 26-27, 2023.
- Campus recruitment for Seed Production Technical Managers(SPTMs) was held on 18th March, 2023
- 4.11.2. College of Veterinary Science, Khanapara

• Election of the Students' Union, C.V.Sc.

The Election of the Students' Union C.V.Sc., Khanapara for the year 2021-22 was held on 21st February, 2022. A total 15 students were elected for various portfolios, 1 student representative for BOS and 5 class representatives took oath and formed the Executive Body of the Students' Union, 2021-22 (Fig. 1). On the approval of the Dean, FVSc, Khanapara a total 11 teachers were allowed to act as Professor-in-Charge of the Students' Union for different sections. All the students' activities were conducted under their supervision.



CVSc AAU, Khanapara Students' Union, 2021-2022

• NCC Activities

- Cadet Roopam Bordoloi, 2nd year BVSc & AH and Cadet Tushar Mazumdar 4th year BVSc & AH student participated in Pre-Thal Sainik Camp (TSC) held at NCC Academy, Jorhat, Assam w.e.f. 27th August - 11th September, 2022
- Cadet Sudeep Rajkumar, 2nd year BVSc&AH student participated in All India Trekking Expedition held at Gaya w.e.f. 11th - 20th October, 2022.
- Senior Under Officer Buli Taro and Corporal Tribeni Buraghain both 4th year BVSc&AH students participated in Inter Group Drill Competition held at ARC, Shillong w.e.f. 1st - 8th September, 2022.

• Republic Day Camp (RDC), New Delhi

Four students from CVSc, AAU, Khanapara, i.e., Sergent Lokesh Guleria, Corporal Akhilesh Yadav, Lance Corporal Nisha Bhatt and Under Officer Anikit Kumari participated in the Republic Day Camp in Equestrian events held at New Delhi from 28th December, 2022 to 1st February, 2023. They competed in different events that includes show jumping, hex, tent pegging, etc.



A view of cadets with dignitaries at the RDC, New Delhi

• 6 A-side Cricket Tournament

Late Achyut Kr. Tamuli Memorial 6 A-side Day & Night Cricket Tournament was held from 18th - 19th March, 2023 at the Assam Type Hostel playground (Fig. 7 & Fig. 8). Following teams bagged the prizes:-

Boy's Champion	Main Hostel (MH-6)
Runners up-	New Hostel PG
	(No Mercy)
Girl's Champion	Girls Hostel No. 1 (Dhumuha)
Runners up	New Girls Hostel (Brahmastra)



Boys' Winners Team of the 6 A-side Cricket Tournament



Girls' Winners Team of the 6 A-side Cricket Tournament

• Annual Freshman Social, 2022

The Annual Freshman Social was held on 9th November, 2022 with different programmes like Prefreshman stage amusement, Pre-freshman cultural night, friendly football match etc. The open session was graced by Dr. Bidyut Chandan Deka, Hon'ble Vice-Chancellor, AAU. Dr. K.M. Bujarbaruah, Ex-VC, AAU was the Chief Guest and Dr. C. Rajkhowa, Ex-Director, NRC on Mithun was the Guest of Honour in the function. A melodious cultural nite was also held in the occasion. Assam Civil Service rank holder Dr Jebin Gulnar was also felicitated on the occasion for her achievement (Fig. 14, Fig.15, & Fig.16).

• 8th International Yoga Day

The 8th International Yoga Day was observed at CVSc Indoor Stadium on 21st June, 2022 in collaboration with 47 Assam R&V Sqn NCC. Faculty, students, and employees of the college enthusiastically participated in the programme and performed yoga *asana* under the yoga guru Retd. Professor Dr. Rohini Roy.

• Educational Excursion Tour

The All India Educational Excursion tour of 2018 batch (both new and old) was conducted from 26th September - 15th October, 2022 where a total of 73 nos. of students comprising of both boys and girls participated in the excursion tour and visited different premier institutes of the country like Indian Veterinary Research Institute, National Dairy Research Institute, Guru Angad Dev Veterinary and Animal Science University, Madras Veterinary College, etc. Dr. Jadumni Kachari, Assistant Professor, Teaching Veterinary Clinical Complex and Dr. Syed A. Arif, Assistant. Professor, Department of Veterinary Clinical Medicine, Ethics and Jurisprudence, CVSc, AAU, Khanapra accompanied the students for the excursion tour.

• Annual College Meet, 2022

The Annual College Meet, 2022 was organised from 23rd - 26th November, 2022. Dr. B.N. Saikia, Dean FVSc, AAU, Khanapara inaugurated the ACM, 2023 open. Sri Hemanta Kumar Kalita, Secretary General, Boxing Federation of India and Asian Bronze medallist Anushita Boro were the Chief Guest and Guest of Honour in the inaugural ceremony. The four day event was marked by various Outdoor, Indoor, Literary, Drama, Music and Cultural events where students took active participation. The 5th year class was adjusted the Best Class in the Annual College Meet, 2022.

Saraswati Puja

Saraswati Puja, the festival to celebrate the Goddess of Learning was celebrated with much enthusiasm and vigour by the students, faculty and employees in the premise of CVSc, Khanapara on 26th January, 2023 and offered *pushpanjali* to seek blessings from the Goddess. The Puja was organised by CVScSU (K).

4.12.3. Biswanath College of Agriculture

• Annual College Meet during 27th to 30th June, 2022:

Biswanath College of Agriculture celebrated XXXI Annual College Meet with great enthusiasm in the college campus from 27th June to 30th June, 2022. The Cultural rally of the Annual College Meet was inaugurated by Mr. Munindra Nath Ngatey, Deputy Commissioner, Biswanath in presence of Dr. R. N. Barman, Associate Dean, BNCA and other dignitaries. During the Annual College Meet the students participated in different co-curricular and extra-curricular activities including sports, literary and cultural events.

Celebration of 400th Birth Anniversary of Bir Lachit Borphukan from 20th November to 24th November, 2022:

To mark the occasion, programmes like drawing competition, cultural rally, street drama, essay writing competition on Bir Lachit Borphukan among the students were organized to mark the occasion.

• 54th. Foundation Day of Assam Agricultural University

54th. Foundation Day of Assam Agricultural University, Jorhat was celebrated at Biswanath College of Agriculture on 1st. April, 2022 with a daylong programmes including Plantation programme, Cleanliness drive and a colorful cultural night. The plantation programme was inaugurated by Dr. R. N. Barman, Associate Dean, BNCA at 7.30 am followed by a cleanliness drive by the teachers, scientists, employees and students of BNCA in front of the Indoor Stadium and Canteen. In the evening, a colourful Cultural Night was organized by the students with dancing, singing and other attractive events.

• Basanta Utsav at BNCA on 11th. April, 2022:

A unique programme *Basanta Utsav* was organized by the Students' Union of BNCA with varieties of programme including Husari, Bihu geet, Bihu dance, some traditional sports of Assam. A quiz competition based on bihu was also held among the students. The programme was inaugurated by Dr. R. N. Barman, Associate Dean, BNCA in presence of all the teachers, staff and students of BNCA.



Basanta Utsav Celebration

• Tribute to *Sudha Kontho* DrBhupen Hazarika: on 5th November, 2022:

Tribute was offered to Dr. Bhupen Hazarika on his 11th death anniversary with programmes like singing of Bhupendra Sangeet, Dancing and other such programmes.

Freshers' Social:

The Freshers' Social of BNCA was celebrated on 14th. December, 2022 with a daylong programmes including an inaugural session, interaction session of senior students with the Freshers and a Cultural Programme in the evening. The inaugural session was presided over by Dr. R. N. Barman, Associate Dean, BNCA and Dr. R. P. Bhuyan, Director of Students' Welfare, AAU, Dr. A. K. Das, Director of Post Graduate Studies, AAU and Dr. Sunil Borah, Professsor, AAU, Jorhat graced the occasion as the Guests of Honour. The performance of the Freshers in the cultural night attracted the audience. Mr. Kaju Deka and Ms. Reetika Sanjenbam were awarded with the Mr. and Ms. Freshers, 2023.

• LUMINOX 2.0 from on 22nd & 23rd December, 2022:

The Students' Union of Biswanath College of Agriculture organized a two day programme, LUMINOX 2.0 with varieties of events including Agricultural Exhibition, Cultural rally, Sports competition, cultural programme, interaction with the nearby academic institutions, Fashion show with traditional costumes of Assam and North- East India. The programme was inaugurated by Superintendent of Police, Mr. Nabin Singh in presence of Dr. R. N. Barman, Associate Dean and all the staffs of BNCA.

• Rangoli making competition:

On the occasion of 54^{th} Foundation Day of Assam Agricultural University NSS Unit BNCA organized

Rangoli making competition among the students of the college on 1st April 2022. The theme of the Rangoli making competition was unity in diversity. All total eight numbers student groups participated in the competition. Among the eight groups three best teams were selected for winning the prizes.



Rangoli Making Competition

• World Environment Day:

On 5th June, 2022 NSS Unit BNCA conducted world environment day programme at BNCA campus. Dr. R.N.Barman, Associate Dean, BN College of Agriculture inaugurate the programme with a short speech. On this occation a tree plantation programme was held at BN College of Agriculture campus involving teachers, employees and students of the college. About 100 numbers of white Chandan and debadaru sapling were planted in the campus. In this occasion an Essay writing competetion on the topic "Only one earth" and poster making competetion on the theme 'Ecosystem restoration' was also held among the NSS Volunteer of BN College of Agriculture. Fourteen NSS Volunteer participated essey writing competetion and fifteen NSS volunteer participated in poster making competetion. Among them three best essay and posters were slected for prize.



Poster Making Competition

International Day of Yoga

On 21st June, 2022 NSS Unit Biswanath College of Agriculture, AAU, Biswanath Chariali celebrated International Day of Yoga. In this programme Yoga demonstration and practice followed by 'Shambhavi' Meditation' (Beginner's) was held among the teachers and NSS volunteers of the college.



Observing Yoga Day

• International Youth Day:

On 12th August, 2022 NSS Unit Biswanath College of Agriculture, AAU, Biswanath Chariali celebrated International Youth Day at Biswanath Dagaon. The programme was started with lectures by Dr. P.P.Neog, Programme officer and few NSS volunteers. Several youth and farm women also participated in the programme and sharing their experience in conducting developmental works for self employment. On this occasion NSS volunteers along with village youth conducted an awareness programme on Har Ghar Tiranga as a part of Azadi Ka Amrit Mahotsav. All total 25 NSS volunteers participated in the programme.

• Swachhta Pakhwada:



Swachhta Pakhwada at Kadamani Basti

To create awareness on maintenance of cleanliness in and around swachhta pakhwada programme was organized by NSS unit, BNCA on 13th August, 2022 to clean out the BN College of Agriculture campus.

• NSS DAY:

On 24th September, 2022 NSS Unit BNCA celebrated NSS Day at Madhupur L.P. School, Biswanth Chariali. On the special day, NSS volunteers of BNCA Unit organized an art completion among the students of Madhupur L.P. School. An awareness programme related to health, hygiene and food and nutrition was also organized with a series of lectures by teachers and NSS volunteers of BN College of Agriculture. A short cultural programme was also conducted by NSS volunteers along with school students as a part of NSS Day. At the end of the programme, prizes were distributed among the winners of art competition.



Observing NSS Day

• Clean India Campaign programme :

On 15th October, 2022 NSS Unit BNCA organized clean India campaign programme at BNCA campus



Clean India Campaign programme

Education

as well as Kadamoi –Biswanath Ghat link road. In this programme NSS volunteers collected and destroyed single use plastic from college campus as well as from Kadamoi –Biswanath Ghat link road.

• Swachhata 2022:

On 19th October 2022 NSS Unit BNCA organized Swachhata 2022 at Kadamani village, Biswanath Chariali. In this NSS volunteers collected and destroyed single use plastic from road side as well as campus of community hall of Kadamani village.

• Rashtriya Ekta Divas :

On 31st October, 2022 NSS Unit BNCA celebrated "*Rashtriya Ekta Divas*". On the occasion of 147th birth anniversary of Sardar Vallabhbhai Patel the Iron man of India and first home minister of the country, NSS unit organized " Run for unity" programme from BN College of Agriculture campus to DC Office Biswanath. From DC office Biswanath,NSS volunteers join with run programme organized by district administration, Biswanath and continue the programme to Biswanath College campus. At the beginning of the programme Associate Dean, BNCA narrated the contribution of Sardar Vallabhbhai Patel and **Rashtriya Ekta Divas** pledge taking ceremony was also conducted. All total 75 numbers of NSS volunteers participated in the run programme.

• Communal Harmony Campaign Week (19th-25th November):

On 19th November 2022 NSS Unit BNCA organized an awareness programme on the occasion of Communal Harmony Campaign Week at Kadamani LP School, Biswanath Chariali. In this programme among school students an art competition was also conducted by NSS volunteers. Among the NSS volunteers an essay writing competition on the topic" "Communal Harmony and National Integration" and poster making competition on the theme "Unity in Diversity" was also organized as a part of this occasion.

• Constitution Day:

On 26th November, 2022 National Constitution Day was celebrated by NSS unit BNCA at College Auditorium. On the occasion of special day the preamble of the constitution was read by Associate Dean Dr. R.N.Barman, which was simultaneously followed by all teachers, scientists, employees and students present in the event. Apart from this a series of lectures on the theme India: The Mother of Democracy was delivered by Dr. B.P.Gautom, Professor and Head, Department of Horticulture; Dr. R.N. Barman, Associate Dean followed by Ms. Misha Kumari Singh and Mr.Jyotimoy Nath, students of BN College of Agriculture

• Swachha Abhiyan:

Swachha Abhyan was conducted at BNCA campus on 25th March, 2023 involving teachers, employees and NSS volunteer. In this programme different hostels and office campus were cleaned out.



Observing Swachha Abhiyan

• Plantation Drive:

On 31st March, 2023 a plantation drive was conducted by NSS Unit BNCA at college campus involving all teachers, employees and NSS Volunteers

4.12.4. College of Community Science

• Anup Saikia from College of Community Science was selected for Republic Day parade, New Delhi.



Anup Saikia selected for RD Pararde

- Four students from College of CommunityScience have participated on the theme "India'sPanch-Pran a youth dialogue in presence of ShriKamakhya Prasad Tasa, Honorable MP (RajyaSabha)
- NCC The National Cadet Corps (Army wing) of AAU currently comprises of a total of 16 numbers of cadets (two batches) registered under the 33 Assam Comp. Tech. Regiment, NCC, Army, Jorhat. The senior batch has participated Annual Training Camps held at the NCC National Academy campus, Gormur, Jorhat on 1st - 8 th of October and 5th - 12th December, 2022. The cadets have actively participated in 'Puneet sagar Abhiyan: Logo designing', celebration of 'Rashtriya Ekta Divas' held on 31st October, 2022, a donation program at the Sarothi Old age home, Lichubari on 9th November, 2022 and a 'No pollution' themed rally on 9th December, 2022.
- Cadet Bishal Saud, BSc. 2nd year, College of Community Science attended a motivational camp at the Indian Military Academy (IMA), Dehradun from 18th to 27th December, 2022 representing the Jorhat group of NCC cadets.

4.12.5. Sarat Chandra Singh College of Agriculture

- Different games and sports events were organised in SCSCA, AAU, Dhubri, during 2022-23 *viz*, inter class volleyball competition (1st -3rd Oct. 2022), Track and Field events, Indoor & outdoor Games and Gymnastics, during Annual College Meet (3rd -5th Nov., 2022). Students also participated in ICM, 2023 held at Khanapara, Guwahati from 28th Feb- 3rd Mar, 2023 and received 2nd prize in boys relay race competition. Altogether 15 numbers of medal consisting of 1 Gold, 8 Silver and 6 Bronze were received in Gymnasium section.
- Different literary events were organised in SCSCA, AAU, Dhubri, during 2022-23 *viz*, Essay, Eloquence, Extempore Speech competition during Annual College Meet (3rd -5th Nov., 2022). Further,
- Students participated in ICM, 2023 held at Khanapara, Guwahati and received 1st Prize in Extempore Speech and 3rd prize in Eloquence.

- Students participated in Dance, Music and Drama competition in Annual College Meet organised during 3rd -5th Nov., 2022.
- A cultural programme on the occasion of 400th birth Anniversary was organised on 24th Nov, 2022 and students were participated on patriotic song, dance and patriotic poem recitation.
- NSS unit of SCS College of Agriculture, Dhubri organised different important days, as mentioned below:
- Special programme on "International day of Yoga" on 15th May, 2022
- World Blood Donor Day on 15th June, 2022
- Special programme on "International day of Yoga" on 20th and 21st June, 2022
- NSS day on 24th September, 2022
- Unity Day on 31st October, 2022
- World Forest Day on 21st March, 2023
- World Water Day on 22nd March, 2023
- Special Camping Programme at Choibari Hindupara village on 23rd to 29th March, 2023
- Quiz competition was organised on the occasion of World Water Day 22nd March, 2023 among the students of the college.
- The Students of SCS College of Agriculture, Dhubri received 3rd Prize in Quiz Competition in ICM, 2023 held at Khanapara, Guwahati.
- Free Ambulance service for students.
- Gymnasium Facilities for both boys and girls students
- The students of SCSCA, Dhubri received altogether 3 numbers of medals consisting of 2 silver and 1 bronze in Fine Arts competition in ICM, 2023 held at Khanapara, Guwahati.
- Constitution Day was celebrated on 26th November 2022 at SCSCA, Dhubri. On the occasion, preamble of constitution was read out by Associate Dean, SCSCA, Dhubri. In addition, a lecture on "India: Mother of Democracy" was delivered by Associate Dean, SCSCA, Dhubri.
- The 400th Birth Anniversary Bir Lachit Borphukan was celebrated at SCSCA, Dhubri. On the occasion, Spot Essay writing competition

was organized among the students, teachers and employees. In addition, a street programme was organized on 23rd November 2022 where students performed patriotic poem recitation, dance, singing of patriotic songs. Over and above, live webcast at Vigyan Bhavan, New Delhi in connection with celebration of the 400th Birth Anniversary Bir Lachit Borphukan was arranged at the college on 25th November, 2022. The students, teachers and employees attended the live webcasting programme of Hon'ble Prime Minister of India, Shri Narendra Modi

4.12.6. College of Fisheries

Significant Performance in Games & Sports of XXXth Inter-College Meet of Assam Agricultural University held from 28th February to 3rd March 2023

- College of Fisheries secured the Best march past parade
- Mr. Parash Patar, a student of 3rd year second semester student secured Gold medal in long jump, Silver Medal in triple jump and two hundred meter and bronze medal in Body show and weight lifting competition.
- Mr. Pragyan Bhuyan and Mr. Manjil Parasar secured the Gold medal in Table tennis men competition

4.12.7. Lakhimpur College of Veterinary Science

Annual College Meet, 2022 was organised on 16th-19th November, 2022



Annual College Meet, LCVSc

• A contingent of 64 students participated in the Inter-College Meet, 2023 held on 28th February to 3rd March, 2023 in CVSc, AAU, Khanapara and secured 2nd best college among different colleges of AAU.



ICM contingent of LCVSc

• Extempore Speech competition was organised on the occasion of Independence Day on 15th August, 2022.



Extempore Speech competition

 Constitution Day of India was organised on 26th November, 2022



Observing Constitution Day of India

• Bihu dance competition was organised on 9th May, 2022



Bihu dance competition



Cleanliness drives



400th Birth Anniversary celebration of Bir Lachit Borphukan

International Yoga Day was organised on 21st
 June, 2022.



Observing International Yoga Day

4.12.8. College of Horticulture & Farming System Research



Poem writing competition, Poster making competition on the occasion of *Azadi ka Amrit Mohotsov*



Debating competition on the occasion of *Azadi ka Amrit Mohotsov*



Contingent of CH&FSR for ICM 2022



One-Act-Play by students of CH&FSR for ICM 2022

4.12.9. College of Sericulture

- Celebration of World Environment Day on 5th June, 2022 in the adopted village (Maloti Gaon, Jorhat).
- Celebration of International Yoga Day on 21st June, 2022.
- Celebration of NSS Day on 24th September, 2022.

Research

5.1 Agriculture

5.1.1 Cereals

5.1.1.1 Rice

• Three high yielding rice varieties *viz.*, Prachur, Shatabdi and Patkai were notified by the CVRC for cultivation in the state of Assam.



Rice variety-Patkai

- One promising rice variety Surma Dhan had been tested under AVT2-SDW and found promising in Zone-III. The variety has been identified by the Variety Identification Committee (VIC) for cultivation in Zone-III (West Bengal, Bihar, Odisha and Uttar Pradesh).
- Spraying of Cartap hydrochloride 50% SC @ 2.0ml/litre at 30 days after transplanting (DAT) and 50 DAT against stem borer and leaf folder reduced 58.8 % dead heart and 63.7% white ears and 53.6% leaf folder damage leaves with cost benefit ratio of 1:1.67. The technology has been accepted for recommendation in the state of Assam.
- Spraying of Chlorantraniliprole 0.4G @ 50g a.i /ha at 30 days after transplanting (DAT) and 50 DAT against stem borer and leaf folder reduced 47.2% dead heart and 53.7% white ears and 57.3% leaf folder damage leaves with cost benefit ratio of 1:1.36. The technology has been accepted for recommendation in the state of Assam.
- Application of silicon in the form of orthosilicic acid granules @20 kg/ha each at maximum tillering and at flowering is effective in

improving plant growth, yield and increase the tolerance to both biotic (stem borer, leaf folder, grain discolouration, blast etc.) and abiotic (moisture stress) stresses in rice. The technology has been approved for recommendation for all zones of Assam

- One promising rice line IET 31253 (IR 85947-CR1-TTB 1-1-1) had been tested under Initial Variety Trial-Rainfed Shallow Lowland (IVT-RSL) and promoted to AVT1-RSL.
- Two promising rice lines IET 31259 (TTB 1272-6) and IET 31270 (TTB 1048-60-6) had been tested under Initial Variety Trial-Semi Deep Water (IVT-SDW) and promoted to AVT1-SDW.
- One hundred ninety-two (192) Deep Water Rice (DWR) local landraces have been genotyped (sequenced). This information has been submitted to National Centre for Biotechnological Information (NCBI) and is in public domain.
- Two hundred ten (210) nos. of soil samples from 105 locations of the Char areas of Lakhimpur and Dhemaji Districts were collected based on GPS data received from NESAC, Umiam, Borapani under the project "Characterization and mapping of Char areas of Assam using Geospatial Techniques for planning strategies of crop management and improving livelihood security". The analysis of the soil samples are in progress.



Rice variety-Prachur

- RDF and Split application of vermicompost at the time of land preparation and maximum tillering stage produced highest yield with B:C ratio 2.51 (Vermicompost commercial) and 2.82 (Vermicompost on farm)Six actinobacterial strains having antagonistic activity against rice sheath blight and bacterial leaf blight pathogens have been isolated under AAU R&D project. Actinobacterial strain 'Act 209' showed maximum 54% inhibition of *R. solani* and 30% inhibition of *X. oryzae* pv *oryzae*.
- Field trial of nutrient management in rice-rajmah cropping sequence revealed that significantly highest REY of the system was recorded in 75% RDF + Biofertilizer (Rhizobium & PSB) and lowest was observed in absolute control.
- Field trial on boron fertilization on rice showed significantly higher yield of rice in the treatment comprising 2 kg B/ha along with recommended dose of fertilizer and 0.25% B as Foliar Spray in PI & milk stage and significantly lowest was found in control.
- An experiment was conducted during kharif 2022 to study the comparative efficacy of botanicals and other extracts against rice stem borer. Among various treatments, Pongamia oil @ 5ml/l was reported to be effective in controlling rice stem borer followed by Pongamia oil @ 3ml/l and Agnihastra 5.0 % (Neem leaves, Ghomutra, Garlic, Green Chilly, Pepper, Jaggery, onion, tobacco and other natural herbs) respectively
- The results of the field trial conducted during kharif 2022 to study the impact of Aerated Vermicompost Tea in Management of Sheath Blight Disease of Rice revealed that lowest diseases incidence was observed in the treatment Seedling root dip + Spraying with 1:10 vermicompost to water ratio for EP of 24 hour followed by Seedling root dip + Spraying with 1:10 vermicompost to water ratio for EP of 48 hour.
- Demonstrations of BIPM of rice Dead heart (%), WEH (%) and LFDL (%) were significantly lower in BIPM and Chemical control plot than control. Whereas no significant difference in between BIPM and chemical control was observed in terms of Dead heart (%), WEH (%) LFDL (%) and Yield. BIPM and chemical

control plots recorded 4570 kg/ha yield and 4780.71 kg/ha yield which were 25.91% and 29.18% more yield than control.



Rice variety-Shatabdi

- Soil application of *Pseudomonas fluorescens* @20g/m² and *Bacillus subtilis* @20g/m²at sowing were found effective against *M.graminicola* in direct seeded rice
- Soil application of fluensulfone 2%GR @1.0 kg a.i./ha was found effective against *M*.graminicola, in transplanted rice when applied in nursery.
- Nursery treatment with Biofor pf-2 @20g/m² was found effective in reducing the population of *M.graminicola* and increasing yield by 12.13% in rice.
- Four fungal and 2 bacterial isolates were found effective against *M. Graminicola*

5.1.1.2 Wheat and Barley

The test var. DBW359 could not out yield any one of the check varieties. The check var. DBW252 (40.5 q/ha) (Code: NERI304) ranked top followed by two other check vars. HI1612 (Code: NERI301) and K1317 (Code: NERI302) both recorded grain yield of 40.2 q/ha. However, all the check varieties were statistically at par.



View of Wheat experiment

• Four common wheat varieties were tested against five standard checks in 4 RBD. The test var. PBW826 (Code: NETS106) ranked top with 42.3 q/ha followed by another test var. HD3388 (41.8 q/ha) (Code: NETS109), check vars. HD 3086 (41.5 q/ha) (Code: NETS 107) and HD 3249 (40.8 q/ha) (Code: NETS 101).



Wheat crop in the field

- Thirty-three common wheat varieties were tested against three standard checks in two replications. The test var. RAJ4567 (48.3 q/ha in 124 days) (Code: N135) out yielded all other test and check varieties followed by RAJ4568 (47.3q/ha in 118 days) (Code: N113). The best check var. HD 3086 (40.8 q/ha in 125 days) (Code: N111) ranked 5th.
- Five common wheat varieties developed through special marker assisted backcross breeding were tested and the check var. HD 2967 (39.4 q/ha in 136 days) ranked top followed by test vars. HD 3406 (33.9 q/ha in 131 days) and HD3411 (32.3 q/ha in 134 days).
- Among the Trombay wheat mutants, the test vars. TAW119 (47.3 q/ha in 106 days) ranked top followed by TAW182 (43.4 q/ha in 103 days), TAW228 (41.8 q/ha in 105 days).
- Out of 196 entries, 34 individual plants of 16 cross combinations were selected for further evaluation during *rabi*, 2022-23.
- Out of 50 entries maintained at CYMMIT International Nursery, 6 promising entries identified were: 2006, 2007, 2013, 2015, 2030,

and 2070 on ear length and lodging tolerance. However, no one was earlier in maturity (< 110 days).

A total of two hundred fifty-three (253) entries of Wheat were screened under Leaf Blight Screening Nursery during *Rabi* 2022-23. Among them, LBSN 18, LBSN 19, LBSN 91and LBSN 52 showed Resistant (R) reaction to leaf blight disease caused by *Bipolaris sorokiniani*.

5.1.1.3 Maize

• The trial on cropresidue management in traditional and emerging maize system in *rabi* revealed that the treatment with stubble incorporation + spraying with microbial consortia recorded the highest yield in rice- maize cropping sequence followed by zero tillage + residue retention + spraying with microbial consortia.



A view of Maize experiment

- The experiment on weed management in maize system in *rabi* recorded the highest grain yield (5267 kg/ha), B.C ratio (2.34) in treatment with atrazine 1000 g/ha (PE) *fb* Tembotrione @ 120 g/ha at 25 DAS, which has been appeared as zonal recommendation in rice maize cropping sequence.
- Moreover, the highest grain yield (6333kg/ ha), Net return (Rs.74500/ha) and B.C ratio (2.89) was recorded in treatment with 75% RDF through chemical fertilizers + 2 tonnes FYM/ha + Bio-fertilizer @50g/kg of seed + 2 foliar spray (0.5% ZnSO₄) was found significantly superior over the control and the technology has been recommended from multilocational trial for the year 2023-24.



Harvested cob

- Different entries of Extra early, Early, Medium and Late durations are being tested and following varieties performed to be the best during 2022-23: AVT I Late (1043): DKC 9226, AVT I Medium (1044): DKC 9224, AVT II Medium (1045):BH 417206, AVT I Early (1046): CP 999, Baby corn I-II-III (1064): JH 32434, Sweet corn (911): ISCH 1901, QPM (1066): QPMH 22-21
- BIPM against fall armyworm, *Spodoptera furgiperda* showed that there was no significant difference in yield and cob damage. The number of larvae per plant and percent plant damage was more in BIPM plots. whereas the number of predators per plant and percent egg parasitism was significantly higher in BIPM plots. The yield was comparatively higher in chemical control (31.72 qt/ha) than BIPM plots (30.71 qt/ha) but no significant difference in yield and cob damage.

5.1.2. Millet

- Finger millet variety AAU-GSG- MaruaDhan 1 was notified through Central Variety Release Committee
- Foxtail millet variety AAU-GSG- Cawn 1 was released through State Variety Release Committee

5.1.3. Pulses

• The survey revealed that higher levels of collar rot disease incidence was observed in North Karimganj block with mean disease incidence of 35.19% followed by Borkhola block of Cachar with 34.95% of disease incidence. Based on symptomatic observation it was identified as *Sclerotium* sp.

- One new greengram entry, viz., BCM 20-1 gave an exceptionally good grain yield of 1427 kg/ ha in comparison to the check variety SGC 16 (1278kg/ha) during summer, 2022. The variety also showed above 90 % synchronous maturity and resistance to all important disease and pests.
- One newly developed blackgram variety 'AAU SBC 50' has completed all the formalities including DNA profiling at NBPGR and ready for submission to SVRC for release and notification.



Blackgram variety SBC 50 (Recommended)

One new high yielding greengram variety *viz.*, SGC 25, which is found to be having the characteristics of synchronous maturity up to 95.0% was included in AICRP trials and MLT during kharif, 2022. An average yield of 1378 kg/ ha was obtained for the variety for consecutive 4 years in station trials.



Notified Greengram variety SGC 20 (Buroi)

- One new high yielding blackgram variety *viz.*, SBC 51, which is found to be having erect plant type with shining medium bold grains was included in AICRP trials and MLT during kharif, 2022. An average yield of 1438 kg/ha was obtained for the variety for consecutive 4 years in station trials.
- A blackgram entry KU 22-93 (1596 kg/ha) gave promising yield during kharif, 2022. The entry will be evaluated further.
- The highest grain yield (9 q ha⁻¹) was recorded under the treatment combination involving seed inoculation with *Rhizobium* and PSB each @ 50 g/kg, weed management using post-emergence herbicide propaquizafop 2.5 % + imazethapyr 3.75 %ME @ 125 g/ha at 15-20 DAS and foliar nutrition with two sprays of complex NPK (19:19:19) @ 0.5% at flower initiation and pod formation stages.
- Altogether seventy mungbean AVT entries were screened against major insect pests viz.,leaf folder, Nacoleia vulgalis, pod borer, Maruca testulalis and pod bugs, Riptortus pedestris and Nezara viridula during Kharif, 2022. Most of the entries viz., twenty six entries such as KME 22-02, KME 22-07, KME 22-11, KME 22-12, KME 22-13, KME 221-14, KME 22-15, KME 22-18, KME 22-20, KME 22-26, KME 22-28, KME 22-34, KME22-39, KME22-40, KME22-43, KME 22-48, KME 22-49, KME 22-51, KME22-53, KME22-55, KME22-57, KME22-58, KME22-59, KME22-61, KME 22-65 and KME 22-66 showed low incidence of leaf folder, low pod damage due to borer and bugs and gave higher yields.
- Altogether forty eight urdbean AVT entries were screened against major insect pests *viz.*, leaf roller, *Nacolea vulgalis*, pod borer, *Maruca testulalis* and pod bug. *Riptortus pedestris* and *Nezara viridula* during *Kharif, 2022*. Only nine entries *viz.*, UKE 22—2, UKE 22—5, UKE 22—9, UKE 22—10, UKE 22—16, UKE 22—17, UKE 22—24, UKE 22—36 and UKE 22—45 showed low incidence of pests, pod damage and gave higher yield
- Assessment of economic losses caused due to web blight disease of *Kharif* urdbean: Lowest Per cent Disease Intensity (PDI) of 9.28 with a

yield of 18 q ha-1 and B:C of 2.16 was found in moderately resistant variety (SBC 40) with disease management practice (Seed treatment with imidacloprid @ 5g/kg + foliar spray of Tebuconazole 50 % + Trifloxystrobin 25 % wg @ 0.75 g a.i/l and need based spray of insecticide.

- Assessment of economic losses caused due to diseases of *Kharif* mungbean: Lowest Per cent Disease Intensity (PDI) of 12.63 with a yield of 13 q ha-1 and B:C of 1.71 was found in moderately resistant variety (SGC 16) with disease management practice (Seed treatment with imidacloprid @ 5g/kg + foliar spray of Tebuconazole 50 % + Trifloxystrobin 25 % wg @ 0.75 g a.i/l) and need based spray of insecticide.
- Seven numbers of fungicides (*viz.*,Fosetyl AL @0.1%, Carbendazim 50WP @0.1%, Tebiconazole 25EC @0.1%, Propeconazole 25EC @0.1%, Azoxystrobin 13SC @0.05%, Hexaconazole @0.1%, Captan 50WP @ 0.25%) were evaluated against wilt disease of lentil. Among them seed treatment with Azoxystrobin 23 SC @0.05% recorded lowest disease incidence with increased yield over control



Notified Field pea variety SPC 101 (Xeuti)

Altogether 48 entries including checks of chickpea were evaluated in ALPHA design with three replications. The genotypes differed significantly among themselves. Highest seed yield was recorded by the genotype RG 2020-10 (1472 kg/ha) followed by GL 18149 (1451 kg/ ha), RKG 21-2 (1424 kg/ha), CSG 15-3 (1410 kg/ha), IG 2018-111 (1389 kg/ha), Phule G 181609 (1389 kg/ha) and GJG 1903 (1347 kg/ ha).

- Six genotypes including checks were tested and the genotypes differed significantly among themselves under late sown condition. Highest seed yield was recorded by the genotype GNG 2299 (NC) (1317 kg/ha) followed by BG 372 (NC) (1202 kg/ha) significantly out yielding the check GNG 2207 (1018 kg/ha).
- Eight ground nut genotypes were tested, and the genotypes differed significantly among themselves in respect of pod yield. The genotype TG 81 (3218 kg/ha) recorded the highest pod yield marginally higher than the best check TG 51 (3148 kg/ha). The trial will be repeated during rabi, 2022-23.
- Among the herbicide treatments, Topramezone @ 20.6 g a.i./ha at 21 DAS recorded significantly lower number of weeds and weed dry weight at 40 DAS. This was at par with all other Topramezone treatments.
- Foliar spray of 0.5% NPK (19:19:19) at preflowering and pod initiation stage recorded significantly higher seed yield which was at par with 0.5% NPK (17:40:0) spray at pre-flowering and pod initiation and Seed inoculation with Rhizobium, PSB and KSB each @ 50 g/kg seed at sowing as compared to other treatments.



View of Chickpea experimental field

- Pooled of 2 years data revealed that the chickpea crop receiving inorganic treatment of 100%
 RDF + Foliar application of DAP+ZnSO₄ at pre-flowering and pod development stages recorded higher seed yield followed by receiving organic treatment of FYM (@ 4t/ha) + foliar (Biophos+Biozinc) each @ 10 ml/lit at pre-flowering and pod development stages as compared to other treatments.
- Organic package of practices of Toria and Lentil were developed.

5.1.4 Jute and allied fibres

- *Capsularis* jute germplasm were evaluated for basal diameter, plant height and fibre yield.
- Three entries CIN 241 CIN 187 and CIN 196 were found to be superior for fibre yield.
- Evaluation of F7 Progenies were done and out of 21 lines, 6 superior lines were selected based on plant height & basal diameter.
- Successful crosses made for development of *olitorius* jute varieties with resistance to pests and diseases with 1 (Tarun X OIN-147) X Tarun;2. Tarun X WCIN 136; 3 (Tarun X OIN-149) X Tarun; 4 (Tarun X OIN 163) X Tarun.
- Moreover, F1 Seeds of Kkhyati X CIN-172, Kkhyati X CIN-173, JRC-532 X CIN-172 & JRC-532 X CIN 173 were bulked for evaluation in the next season
- MLT revealed that the JROP-9 (33.54 q/ha) was the yielder with no significant variation among the varieties.
- UBCJ-3 (33.14 q/ha) out yielded the best check JRC-517 (31.21 q/ha). BRCJ-6 (31.62 q/ha) was at par with UBCJ-3.
- Assessment of premature flowering resistance in tossa jute was assessed and varieties namely JROBA-3, JRONS -1 and check variety NJ 7005 were found to be most promising.
- Identification of high yielding *olitorius* jute varieties for leafy vegetables revealed that JROV-5 (95.8 q/ha) was the highest yielder for foliage yield. No significant variation among the varieties was found.
- Effect of variety on fibre yield and yield attributing characters of *capsularies* jute was

found statistically non-significant. Along with test varietyJRCP-7, Kkhyati was also tested. Though Kkhyati showed highest fibre yield of 30.29 q/ha but it was not statistically significant.



AAU developed jute variety Tarun

• Effect of variety on fibre yield and yield attributing characters of *olitorius* jute was found statistically non-significant. Along with test variety, JROP - 4, Tarun was also tested. JROP – 4 showed highest fibre yield of 20.08 q/ ha and Tarun yielded fibre yield of 19.05 q/ha. Application of fertilizer on fibre yield and yield attributing characters of *capsularies jute* was also found statistically non-significant.



Jute experiment on the field

- Application of 150% NPK on ST-TY + lime / dolomite application on 25% LR+ organic manure (equivalent to 5 t/ha of FYM) resulted the highest yield of 27.50 q/ha which was not statistically significant.
- Soils were acidic having p^H range of 5.45-5.5.50, silty clay loam texture and 1.30 -1.32 Mg/m³bulk

density.OC of the soils varies from 0.76 -0.83, av N ranges from 283.23 -328.00 kg N/ha, av P_2O_5 ranges from 12.16 - 13.08 kg/ha and av K_2O ranges from 147.72 - 161.42 kg/ha

- Jute + Red amaranthus inter cropping (broadcasting of Red amaranthus seed @ 10 kg/ha in inter row space of jute) resulted highest equivalent fibre yield of 37.93 q/ha. Pre emergence spraying of Pendimethalin 35% EC @ 525 g/ha (48 hrs of sowing with irrigation or sufficient rain) + one hand weeding (HW) at15 DAE showed lowest weed dry matter of 1.69 q/ha. Highest weed control efficiency of 56.37 % was found in Pre emergence spraying of Pendimethalin 35% EC @ 525 g/ha (48 hrs of sowing with irrigation or sufficient rain) + one hand weeding (HW) at15 DAE.
- Highest flax seed yield was obtained in flax and spinach (2:1). Lowest weed biomass was recorded in flax and Red amaranthus (2:1)
- 50% NPK + FYM @ 10 t/ha + PSB yielded highest green biomass of flax i.e. 82.40 q/ha
- Bihar Hairy Caterpillar was the major insect pest of jute during 2022-23. Stem rot and root rot were the major diseases of jute.
- Seed treatment with carbendazim 50 WP @ 0.1% + foliar spray of azoxystrobin @ 0.1% at45 DAS was found to be promising in managing wilt disease of flax.
- Seed treatment (carbendazim @ 2g/kg + imidacloprid 600 FS @ 4 g/kg) + spraying of spiromesifen240 SC @ 0.2% at 40 DAS + spraying of lamda cyhalothrin 5 EC @ 0.6 ml/l at 60 DAS and spraying of tebuconazole @ 0.15% at 60 DAS were promising yielding highest fibre yield of 29.40 q/ha.
- *Olitorius* germplasm JRC-412 (PDI 0.96) and JRO-129 (PDI 1.53) were found to be tolerant against root rot and stem rot.

5.1.5 Oil seeds

5.1.5.1 Rapeseed and mustard

• Trial on bio-management of rapeseed-mustard diseases revealed that the seed treatment with *Trichoderma harzianum* @ 10g / kg + foliar spray of *T.harzianum* @ 6g/l at 60 and 75 DAS

was found to be most effective with PDI of 21.37 against *Alternaria* leaf blight disease and yield of 13.87 q ha⁻¹.

- A total of three hundred ninety-seven (397) and eighteen (18) entries of Rapeseed-Mustard were screened against *Alternaria* blight and *Sclerotinia* stem rot disease respectively, during *Rabi* 2022-23. Among them, UND-22-42 & NDN-22-1 showed Moderately Resistant (MR) reaction to *Alternaria* leaf blight disease.
- Organic package of practices of Toria was developed.

5.1.5.2 Linseed

- Altogether 90 numbers of germplasm have been maintained as sole crop under breeding section in the station for evaluation mainly for yield, yield attributing characters and to use in hybridization during next season (2023-24).
- Effect of fertilizer in relation to seed yield was significant and significantly highest yield was (736.2 kg/ha) recorded with an increased fertilizer rate upto 100% RDF followed by 50% RDF (711.5 kg/ha). As regards to nutrient management through nano urea, highest seed yield was (730 kg/ha) recorded with two sprays of nano urea @3 ml/litre each at flowering and capsule development stage.
- Among the agro techniques for organic linseed production, the crop was heavily influenced by wilt disease. The significantly highest yield (253.7 kg/ha) was recorded in treatment receiving 33% of recommended N through FYM and 33% of recommended N through neem cake and foliar spray of vermi-wash (10% at branching, flowering, and capsule development stages)
- The combined application of micronutrients zinc and boron through soil had a significant effect on seed yield. The soil application of ZnSo₄ @ 25kg/ha with Borax @1.5 kg/ha recorded highest seed yield (804 kg/ha).
- Varietal difference in relation to seed yield was significant and significantly highest yield was recorded with an increased fertilizer rate upto 150% RDF in Variety T-397 (490.7 kg/ha) followed by Variety Shekhar (443.22 kg/ha)

5.1.6 Sugarcane

While studying the micronutrient requirement of the crop in the problem areas for improving the quality of cane juice, there was no observable difference in the crop growth due to application of different micronutrients. However, application of Zn is found to influence the quality of juice regarding sucrose content.



CoBln 19502(CoSe 95422 x CoS8436)

While studying the nutrient management under organic cultivation of sugarcane, it was revealed that application of compost at higher doses resulted crop growth. Brix and pol reading under various organic treatments were similar.



CoBln 19502(CoSe 95422 x CoS8436)

During 2022-23, three clones namely CoBln19501, CoBln19502 and CoBln 20501 were found promising and having significant advancement in yield and sucrose over both the local and zonal checks. The varieties were tested at North Central Zone and North East zone under IVT in this year 2023-24.



CoBln 19501(CoJ83 x Co 1148)

5.1.7. Vegetables

- Two technologies on BIPM of cow pea and cucumber was developed. The technology on cowpea was recommended by the technical committee meeting, kharif, 2023 of AAU to PoPas "Three sprays of *Verticiliumlacanni 1x10*⁸ *cfu* @ 5ml/lit of water was effective in reducing the aphid (*Aphis craccivora*) population upto 78.28% with a B:C of 1.74. First spray should be done at 15-20 days after germination followed by second and third spray after 15 days interval".
- Rajabari, Panjan, Deberapara and Chinatoligaon are found hot spots of *Meloidogyne incognita* in vegetables and fruit crops.
- *Heterorhabditis bacteriophora* was identified from Jorhat district Assam with a frequency of 5.0%
- Fifty germplasm of tomato were screened against *M. incognita* and all were found susceptible
- Soil application of neem cake @1t/ha + seed treatment with *B.subtilis* @10g/kg seed was found effective against *M.incognita* in cowpea. Neem cake was found to take major role.
- *Pochonia chlamydosporia* and *Bacillus pumilus* when applied at the time of planting and again

at 45 DAP, the root knot nematode *Meloidogyne incognita* can be managed in protected cultivation

• Application of Fluensulfone 2G @0.5kg a.i/ ha was found effective against *Meloidogyne incognita* in tomato

5.1.8 Fruit crops

5.1.8.1 Citrus

- AAU-CPCRS, Tinsukia presently maintaining 147 numbers of different citrus germplasms under AICRP (F) of which about 100 as primary collection and 47 as secondary collections. The IC numbers were obtained for about 41 germplasms.
- Total five numbers of entries namely Flame Grapefruit, NRCC Grapefruit- 6, Star Ruby, Red Blush, Marsh Seedless and Local check were evaluated. Out of these, Star Ruby, Red Blush, Marsh Seedless and Local check were fruiting. The experiment is in initial stage and is in progress.
- Out of all nine different entries, the AAUCPCRS-4 was recorded to be best performer in terms of yield (12.32 t/ha) along with fruit quality parameters viz TSS=10.11 Brix, Acidity=0.78%, Juice Content=53.34%, Ascorbic acid=31.76mg/100g and Hedonic scale score=9.7. The experiment is continuing.
- Three varieties namely Cutter Valencia, Mosambi and Sathgudi were evaluated. The fruit yield of Mosambi variety was 0.25t/ha in a year with quality recorded as TSS: 7.07 Brix, Juice content 29.17% and Ascorbic acid: 52.89mg/100g.
- Application of 1/6 of RDF for 1 to 6 years followed by application of 60% RDF after 6 years (A₃B₃)recorded maximum plant height (3.27m), and canopy volume (11.88 m³). Higher organic carbon and nutrient status were also found in treatment A₃B₃. Regarding quality parameters, TSS (8.5 °Brix) and maximum number of fruits per tree (228.3) were observed in treatment A₃B₃.
- Reduced spacing (500 plants/ha) with 75% inorganic source of N, 25% organic source of N and 100 % P and K (S_2L_1) recorded maximum canopy volume (28.88m³). Higher organic carbon and nutrient status (N= 348 kg/ha, P_2O_5 =

24.87 kg/ha, $K_2O = 183.8$ kg/ha) were also found in $S_2 L_1$ treatment.

- Treatment (T₄) having 75% Vermicompost (on N equivalent basis of RDF) + *Trichoderma harzianum* (30-40 ml/plant) + Azadirachtin (1% at 3-4 ml/litre as spray) + *Pseudomonus fluorescence* (30-40 ml/plant) was found effective for improved vegetative growth as compared to other treatments. **0.** Standardization of stage wise water requirement in Citrus Crop: Mandarin
- Although, no new insect-pest was recorded during 2022-23, one new natural enemy, Spider species, *Chilobrchys hardwickei* (Theraphosidae) was recorded and identified from Khasi mandarin ecosystem during 2022-23.
- Conventional lure (control) was found to be more effective in management of fruit fly in Citrus than Slow-release pheromone formulation.
- Five isolates of *Trichoderma* spp., two isolates of bacteria *viz., Bacillus* sp. and *Pseudomonas* sp. were recovered, which on evaluation against *Phytophthora* under *in vitro* condition by dual culture technique, showed percent growth inhibition of 79.33 to 62.78%. Among these isolates, TKaP1showed maximum percent growth inhibition of 79.33 % followed by BMop, Thkha, PBor, TkhP2, Twoi1 and Twoi2 where percent growth inhibition of *Phytophthora* was recorded as 70.99%, 69.83%, 67.85%, 65.98%, 63.76% and 62.78% respectively.
- A total 51 numbers of germplasm were collected from areas – Khamanpathar (Nonglai), Saru Dirak, Bor Dirak, Kakopathar, Kashijaan (Kakopathar), Pengeri, Dhola, Sadiya and Nagajanka (Jorhat).

5.1.9 Palms

 Among the extension activities performed during 2022-23 under AICRP on Palms, total four trainings were conducted on improved production technology of coconut at Hajo, Boko, Bijoynagar and Bamunigaon areas. Moreover, planting materials of Assam lemon (450 nos.), turmeric (250 kg) and coconut (700 nos.) were distributed among the farmers at Hajo areas under the programme SCSP of AICRP on Palms. One FLD on intercropping in coconut is also in progress at Singra under Boko sub-division.

5.1.10 Spices

4800 Arecanut seedlings, 3200 Assam Lemon cuttings, 3840 Black pepper cuttings, 4.0 q Turmeric rhizome, and 14 Battery operated spray machines were distributed to 241 farmers from 16 village clusters comprised of 4 clusters each from Goreswar, Hajo, Rani and Sonapur.

5.1.11 Agroforestry

 3750 seedlings of different timber tree and fruit trees species were distributed to tribal farmers and two exposure visits were also conducted under the Tribal Sub Plan (TSP/SCSP) component of AICRP on Agroforestry.



Gmelina arborea Plantation



Bamboosa sp. based agroforestry system

5.1.12 Medicinal and aromatic plant

• A sustainable essential oil production unit is established at AAU-SMAPRS, Buralikson where extraction of oil from distillation plant is in continuation. Near about 1.5 ha area is under citronella and lemon grass cultivation and expansion of the same is under progress. New plantation of *Homolomena sp* is also undertaken at the station.



Cultivation of lemongrass

5.1.13 Biological control of crop pests

• Collected 3 new species of prasitoids, 1 species of zoophytophagous predator and one species of parasitoid was identified as *Trathalaflavoorbitalis* (Cameron) (Hymenoptera: Ichneumonidae) and the predator was as *Nesidiocoris tenuis*.



Nesidiocoris tenuis

5.1.14 Biofertilizer

The liquid microbial consortia [Microbial consortia includes N-Fixer (Azospirillum sp)+ P-solubilizer (Paraburkholderia tropica)+Ksolubilizer (Bacillus proteolyticus) in INM in paddy resulted significant yield differences among the five INM treatments. Application of enriched compost (T5) (2.0t/ha) with substantial reduction (25% NPK; 15:5:10 kg/ha) of inorganic fertilizers could stabilized the paddy yield in an average of 4.35t/ha which is at par with 100% of NPK (60:20:40kg/ha) (T2) at 4.39t/ha. Application of Liquid biofertilizers exhibited 14% yield advantage over solid biofertilizers. The results of experiment demonstrated a significant yield difference with combination of organic nutrient (7 treatments) for rice.

Enriched compost @ 5.0t/ha or Azolla @ 0.5t/ ha combined with liquid consortia produces significantly highest yield (3.06 &3.14t/ha) over other treatments. Combined effect of Azolla @ 0.5t/ha + liquid consortia [Microbial consortia includes N-Fixer (*Azospirillum* sp)+ P-solubilizer (*Paraburkholderia tropica*)+Ksolubilizer (*Bacillus proteolyticus*) illustrate 4.43% yield advantage over Azolla @ 0.5t/ha + solid consortia.

5.1.15 Lac Insect

• A new host plant of *Flemingia semialata* is being cultivated at AAU-SMAPRS, at Buralikson to showcase lac cultivation in collaboration with Dept. of Entomology, AAU, Jorhat.



Infected cadaver of Megacopta cribraria

Experiments to study the various life parameters of *K. chinensis* in *F. semialata* for last 7 years (2016-2023) revealed that the average pre-sexual maturity period (50.14 days), duration of male emergence (93.16 days) and female longevity (193.16 days) were recorded highest in summer season than in winter.



Infected cadaver of Brachyplatys subaeneus

- The *I. fumosorosea* (MH414514.1) strain was also potent against the pupae of *E. amabilis*. Adult emergence from the pupae was found to be highest in the untreated control and a delay of adults' emergence with some deformities in their physical appearance were noticed in treatment with high dilution.
- The application of *I. fumosorosea* at 10⁷spore/ ml of water during monsoon, winter and summer crop was found to be effective in reducing mean percent population of predators *i.e. E. amabilis* over control which was *at par* with Fipronil 5% SC.
- Molecular characterization of the *Megacopta sp.* isolate, was carried out by using ITS rRNA. Hence the fungi has been conferred as *Fusarium oxyosporum* and its gene bank accession number was assigned as OP389110.

5.1.16 Agrometeorology

- Four rice varieties *viz.*, Mahsuri, Swarna Sub-1, TTB-404 and Ranjit Sub-1 were cultivated during the *kharif* 2022 under three different microclimatic regimes created by manipulating the date of transplanting of seedlings at an interval of 15 days, starting from 26th June to 27th July 2021.
- In case of Mahsuri, grain yield was highest when transplanted on 11th July (3628.25 kg/ha) and least under delayed transplanting condition *i.e.*, 27th July (2867.25 kg/ha). Similar result was observed in Swarna sub-1, Ranjit Sub-1 and TTB-404 also, having maximum yield when transplanted on 11th July. Overall mean grain yield was estimated highest in Ranjit Sub-1 (5313.17 kg/ha).
- Four cultivars of greengram *viz.*, SGC-16, SGC-20, IPM-02-3 and MH 241 were cultivated during the *kharif* 2022 following Split plot design under three different microclimatic regimes *viz.*, MR-I (11th Sept.), MR-II (28th Sept.) and MR-III (13th Oct.).
- Irrespective of varieties, crop sown during 28th September 2022 performed relatively well as

5.1.17 Gramin Krishi Mausam Sewa (GKMS)

• During pre-monsoon, monsoon, post-monsoon and winter, the ratio scores were 69.98, 65.24,

83.82 and 83.72 per cent respectively with an annual score of 74.14, which suggested good accurateness of the forecasts during 2022-23. Quantitatively, 68.34 per cent rainfall forecasts were found correct and usable on annual basis with highest accuracy during winter (95.15%) and lowest during monsoon (31.03%) with RMSE values of 1.42 and 20.81, respectively.

- Forecast of minimum and maximum temperature showed 93.5 and 73.6 per cent accuracy (*i.e.*, correct plus usable) with RMSE of 1.3 and 2.2, respectively.
- Verification of block level rainfall forecast for three developmental blocks (Jorhat, Titabor and Kaliapani) were also performed and their accuracy was compared over the conventional district level forecast for two consecutive years. Results indicated that, the per cent success along with the Ratio Score and Critical Success Index of the block level rainfall forecast was at par with the district level rainfall forecast.
- Seasonal usability percentage for maximum temperature was highest during post-monsoon season (86.9%) and least during monsoon season (43.4%). Similarly, in case of minimum temperature, the overall seasonal usability percentage was found maximum during post-monsoon season (90.2%), followed by winter (60.4%) and least during pre-monsoon (35.9%) season.
- Developed jute yield forecast models for 9 districts of Assam using SMLR technique during F1 (vegetative) stage. Coefficient of Determination (R²) values was found to be highest in Bongaigaon district and lowest in Kokrajhar district. Error percent was found to be lowest in Barpeta and Chirang district during 2020.

5.1.18 Soil arthropod pests

The technology on soil drenching of clothianidin 50 WDG @ 250 g/ha (125g *a.i.*/ha or 1g/2lit of water) during 2^{nd} fortnight of December for management of termites in tea has been approved in the Planery session of *Rabi* held on 5th November 2022. Clothianidin is a newer insecticide molecule which results in reduction of 77.02% tea bush infestation after 60 days of application making a net profit of Rs. 49,017.00/ ha/annum. • Farmers Participatory Approach for the adult management of white grub, *Lepidiota mansueta* was continued in the endemic villages of Majuli and altogether 55,400 beetles were collected and killed during April 2022.

5.1.19 Honey bees

• Recommended 5 honey bees, *Apis cerana* colonies /ha for effective pollination and yield of coriander

5.1.20 Agril. Acarology

- Crop loss assessment due to litchi mite, *Aceria litchii* was studied during last two years in the variety Bombay at Experimental Farm, Department of Horticulture, AAU, Jorhat. The avoidable yield loss or crop loss in litchi due to mite infestation was found to be 31.35 %.
- Among various organic treatments against litchi mite, *Aceria litchii* three sprayings of Azadirachtin 10,000 ppm @ 3 ml/l at 10 days interval (Commercial botanical) resulted 84.25 per cent control of mites after 30 days of first application and could be adopted as organic control of the pest.
- Mass production technique of the predatory mite, *Neoseiulus longispinosus* has been developed in *Amaranthus hybridus* as host crop on prey mite *Tetranychus urticae*.
- The efficacy of predatory mite, *Neoseiulus longispinosus* in control of mite pests of cucumber was studied under polyhouse condition in the year 2022-23 with different number of predators as treatments. A single release of predators @ 1:50 resulted 90.25 per cent mite reduction after 14 days of releasing predators.

5.1.21 Social Sciences

• Ownership pattern of Gramin Periodical Haats in Assam is heterogeneous. Majority of Gramin Periodical Haats in Assam are running by Anchalik Panchayat (46.10 per cent) while 18.91 per cent and 3.78 per cent rural periodical markets are owned by Zila Parishad and Development Blocks respectively. Apart from these, 31.21 percent Gramin Periodical Haats are owned by other private ownership.

- Out of the total market surveyed (423), 84.87per cent markets are found to be unregulated while the percentage of regulated market was 15.13per cent only.
- Only two types of rural markets exist in the state viz., retail market and wholesale cum retail markets. The majority of the gramin haats are held weekly (47.28 per cent), while 27.66 per cent and 21.51 per cent markets are found to be held daily and biweekly. The existence of fortnightly markets in rural areas is very small.
- Majority of the Gramin Periodical Haats in Assam are lacking basic facilities /amenities which need to be created/ improved. Only 13.24 percent markets have the permanent office and office building, while only in 4.73 per cent markets have notice board facility. On the other hand, 5.44 per cent markets have phone/ mobile/ email connectivity. Similarly drinking water, electricity, urinal /toilet and parking facilities are available only in 23.40 per cent, 14.66 per cent, 29.55 per cent and 11.35 per cent markets, respectively.
- Lack of electricity in the rural markets creates great difficulties for both buyers and sellers particularly in those markets which function during evening time. These markets function under kerosene lamp or diesel operated generators which increases the marketing cost.
- Market intelligence service is not effective. Traders are the main source of market information. The information supplied by traders is neither correct nor adequate. In all the Gramin Periodical Haats of Assam covered under the study, multi commodities /mixed commodities transaction is observed.
- The source of income of Gramin Periodical Haats is sitting charge or market fee collected from sellers of the commodities (wholesaler/retailer/ farmers). The major components of expenditures are market cleaner charge, cleaning equipment, market fee collector charge and maintenance charge.

5.2 Community Science

5.2.1 Muga Detection Kit

Muga detection kit was developed by the department of Textiles and Apparel Designing to

check the purity of Muga silk. The kit is ready for commercialization



Muga Detection Kit

5.2.2 Natural dyes

Four dyes namely natural Light Ash Brown, Caramel Brown, Chocolate Brown and Yellowish Brown Dye were developed by Department of TAD under AICRP-WIA and is ready for commercialisation at a cost of Rs. 100/50grams.

5.2.3 Food adulteration detection Kit

Department of Family Resource Management and consumer Science, College of Community science, AAU, Jorhat has developed Food adulteration detection Kit for detecting adulteration of day to day use food products. The kit is commercially available in the department.

5.2.4 Ready to cook iron rich soup & curry mix

Iron rich ready to eat soup and curry mixes were developed using locally available green leafy vegetables like Hatikhutura (*Amaranthus spinosus*), Madhusuleng (*Polygonum microcephalum*) and Ronga Morisha (*Amaranthus cruentus*) developed by the Department of Food Science & Nutrition. The cost of 100 gm packet of soup mix is priced at Rs.40 and Rs. 37 for curry mix.

5.2.5 Instant Beverage Mix

A functional food viz Instant Beverage Mix was developed using non dairy food ingredients with health benefit properties including hypoglycemic, hypolipidemic, Hypo-cholesterolemic and Hepatoprotective properties (ALT level) as well as thrombolytic properties was developed in the Department of Food Science & Nutrition

5.2.6 "PRATIKAR" Multi grain mix for Diabetes

PRATIKAR is a low GI food developed using functional food ingredients developed under AICRP-WIA in the Department of Food Science & Nutrition It is proven to lower the fasting blood glucose level, glycated haemoglobin level (HbA1c), blood Cholesterol, triglyceride, HDL,LDL and VLDL level.



Food adulteration detection Kit



Natural Caramel Brown Dye

5.2.7 Design and development of ecofriendly sanitary napkin

Plant extract of *Syzygium cumini* and *Nyctanthes arbortristis* leaves having antimicrobial properties was used to the sanitary napkin. The design was based on the conventional three layered design with top fluid transferable layer, absorbent layer and a barrier sheet.

The sanitary napkins were made in two different sizes viz. large and extra-large.

5.2.8 Millet based traditional snacks of Assam

Millet based traditional snacks of Assam was developed in the Department of Food Science & Nutrition. The developed products were high in protein, fibre, mineral compared to the traditional one. In vitro bioavailability of minerals was found to be high in millet based traditional recipes.

5.2.9 Intervention package for Children's education

Metacognition is the ability of learners to think and reflect about their learning which emerges as a vital skill set to teach students for effective learning. Deptt. Of HDFS developed a Metacognition based interventional package to promote actual learning away from rote learning which is largely present today.

5.3 Veterinary Science

During the report period i.e. April 2022- 31stMarch, 2023, sixty seven (67) numbers of externally funded/ institutional projects were in operation. Out of which twenty five (25) nos.of new project were implemented in 2022-23. Fourteen (6) projects were completed during the period. The Directorate is also acting as a nodal centre for TSP, SC/SP, RKVY& NEH Component of various ICAR Institutes. There are two outstations under the Directorate of Research (Vety) ,namely AAU-Zonal Livestock Research Station, Mandira and AAU-Goat Research Station, Burnihat, the activities of both the stations are looked after by this Directorate. The research activities of College of Fisheries, AAU, Raha and Lakhimpur College of Veterinary Science, Joyhing, North Lakimpur are also looked after by this Directorate.

Some of the significant research activities during the report period (2022-2023) are furnished below.

5.3.1 ICAR- AICRP on FMD

- Co-infection of Foot and Mouth disease virus serotype O and A detected in bovine for the first time
- The sero-surveillance against FMD is being carried out in 30 districts of Assam and the

DIVA test revealed overall seropositivity in 15.51% animals (n=1792).

Myocarditis is considered a fatal form of Footand-mouth disease (FMD) in suckling calves. In this study, primary investigation of the clinically FMD-suspected calves revealed the circulation of FMDV serotype O in Assam. All calves with myocarditis were under 2 months old, suggesting FMD-associated myocarditis is age dependent in suckling calves. Overall, this study reports the relevance of clinical and histopathological findings and biochemical markers in diagnosing FMD-related myocarditis in suckling calves.

5.3.2 ICAR-AICRP on Pig

- The herd strength at the beginning and at the end of the year under report was 101 and 126 respectively, irrespective of sex and age of HD-K75 (75% H) genetic group.
- A total of 485(259+226) 2nd & 3rd crop piglets were obtained during the year 2022-23.



HD-K75 Sow with Piglets

- A total of 384 (227+157) piglets were sold to 45
 farm families of the state including Pig Breeding
 Farm Lohit, Govt of Arunachal, KVKs of AAU,
 Biswanath Agriculture College, AAU, ICARNRC on Pig, Rani and 30-Sow unit of C.V. Sc,
 AAU, Khanapara. 24 (5+19) piglets were sold to
 the ICAR-MSP on Pig, AAU for strengthening
 the breeding stock (HD-K75) of MSP on pig,
 AAU Khanapara.
- The average litter size at birth, litter weight at birth, litter size at weaning and litter weight at weaning were found as 7.78 ± 0.57 , 8.16 ± 0.53

kg, 7.55 ± 0.49 and 82.58 ± 0.84 kg respectively. The average individual body weight at birth, at weaning, at 4 month of age and at 5 month of age were found 1.05 ± 0.62 , 10.88 ± 0.74 , 29.68 ± 0.80 and 41.22 ± 1.00 kg respectively.

- The overall Pre weaning mortality percentages were calculated as 1.35 (03) and 1.55 (04) for 2nd crop and 3rd crop respectively during the reporting year.
- The overall Post weaning mortality percentages for 2nd crop and 3rd crop were calculated as 2.71 (06) and 3.50 (09) respectively during the reporting year. However no mortality was recorded in adult pig of the farm.
- Dissemination of scientific knowledge on pig farming to farmers through acting as Resource Person for Institute level trainings on different aspects on Piggery Sector (10 nos.of training).

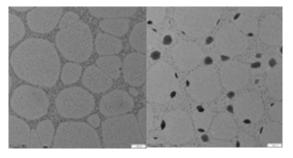
5.3.3 ICAR-Mega Seed Production (MSP)

- The herd strength under ICAR- Mega Seed Project on Pig was 102 (29 males and 73 females) and 198 (87 males and 118 females) at the beginning and at the end of the year respectively, irrespective of sex and age.
- A total of 440 piglets were born from 57 furrowing. The average litter size at birth and litter size at weaning were found as 7.71 ± 0.85 and 7.35 ± 1.10 respectively. A total of 300 weaned piglets were sold to 23 farm families of Kamrup, Sonitpur, Nalbari, Barpeta, NRC on Pig, Rani, Pig Breeding Farm Lohit District, Govt of Arunachal Pradesh and Directorate of Research (Vety) of the University.
- A total of 40 (21+19) piglets were died during pre weaning and post weaning periods of the year under report. The overall pre weaning and post weaning mortality per cent ages were recorded as 4.77 (21) and 4.75 (19) respectively.
- Prolific Sows are maintained up to 4th farrowing and attempt is made to achieve the target of piglet production by providing optimum management and care during pregnancy and pre-weaning periods. Unwanted and excess animals were disposed of by sale on live wt basis.
- To strengthen the breeding stock, 24 (05+19) HD-K75 breeding piglets were purchased from the ICAR-AICRP on Pig, AAU, Khanapara.

A total of 21 sows were inseminated in the project during the year. 18 gilt/sows were inseminated outside the farm *viz*. Sonapur and Baihata Chariali. The insemination programme was done in collaboration with the Department of ARGO under the DBT project entitled (i) Capacity building and awareness generation for enhanced productivity of pig through assisted reproductive biotechnology and conservation of biodiversity in North Eastern Region through community participation and (ii) Technology intervention in household piggeries for doubling farmers income by setting up rural transformation cluster.

5.3.4 AICRP on Post-Harvest Engineering Technology

- A technology for preparation of a readyto-eat functional probiotic meat spread was developed using *Lactobacillus acidophilus* and *Bifidobacterium animalis*. The shelf life of the probiotic added pork spread was found to be 42 days at refrigeration temperature. The probiotic count in the finished product was found to be in the range of 10^8 - 10^9 cfu/ g even after 42 days of storage. The laboratory animal trial was conducted in which probiotic was fed to laboratory mice for 28 days and it was found that there was absence of pathogenic *E. coli* and *Salmonella* in the GIT microbiota analysis
- Process protocol for development of a coating solution consisting of nanoemulsion of chitosan and Thyme essential particles for extension of shelf life of fresh meat has been developed. Chitosan gelatin coating incorporated with TEO-NPs effectively retarded the quality deterioration of fresh chicken by reducing pH changes, inhibiting lipid oxidation, and preventing microbial proliferation during cold storage at 4°C for 15 days.



Nano-emulsion of Thyme Essential Oil

- A project on surveillance and detection of antibiotic residues in meat and its mitigation using different types of radiation methods has been completed. A total of 261 pork samples collected from 3 different districts of Assam and 1 district of Meghalaya and were screened for presence of antimicrobial residues. Out of which only 3 samples were found to be suspicious for the presence of antimicrobial residues. Eighty (80) random samples (including 3 suspicious samples) were screened by UFLC and detected 3 positive samples for presence of antimicrobial residues (2-Oxytetracycline 1-Ciprofloxacin). and Fifteen (15) E. coli, 8 Salmonella spp and 41 S. aureus isolated from 88 pork samples and studied for antibiotic resistance against 12 different antibiotics which revealed resistance to 3,7 and 4 different antibiotics, respectively. The microwave method reduced Oxytetracycline, Tetracycline, Ciprofloxacin and Gentamicin residues in well done state by 68.90%, 67.64%, 71.43% and 67.92%, respectively.
- A mobile reinforced electrically operated clay pot smoker has been fabricated.
- The centre has transferred two nos. of technologies "AAU Vet Dog Loaf" and "AAU Vet Chicken Powder" to two entrepreneurs viz. M/s. S.H.Agrovet Clinics, Kailashpur, Kachari Garigaon, Jalukbari, Guwahati-14, Kamrup (M), Assam and M/s. Saikia Engineering and Traders, House no. 6, Batahghuli, Panjabari, Kamrup (M), Guwahati-37, Assam.

5.3.5 AICRP on Poultry Breeding

• A total of 785 numbers of indigenous adult male and female of 12 months of age are kept in the farm and their performances are under evaluation.



Kamrupa bird at farm condition

The performance of a flock of 150 nos. of PB-2 male procured from the DPR, Hyderabad is also studied.



Daothigir bird in farm condition

- A flock of 525 nos. of crossbred (PB-2 x Indigenous) have been maintained in the centre and their performance is studied.
- The performance of 1200 nos. of Dahlem Red birds procured from DPR, Hyderabad is evaluated.
- A flock of 923 nos. of Kamrupa have been kept in the centre of 12 months age and their performance is evaluated.
- Performance of a flock of 325 nos. of Daothigir birds procured from Kokrajhar district is under evaluation.

5.3.6. AICRP on Goat Improvement

Birth weight gain: The average birth weight of kids was found to be increased by 2.5%. (1.20±0.01kg in 22-2021 and 0.04 ± 1.23 kg in 23-2022).



Housing flock (nucleus herd)

- Multiple birth %: The Multiple birth was found to be 52.24% for the report period whereas it was 46.55% during the inception year (2009-2011).
- Dual system of door cum ladder of the goat shed was developed in the farmers' house and is being used by most of the farmers in the field units.

5.3.7. National animal disease epidemiology network (NADEN)

- A total of 25 different diseases including bacterial (n=8), viral (n= 12) and parasitic disease (n=5) have been encountered in the period 2022-2023.
- Among the bacterial diseases of ruminants and small ruminants Black Quarter, Enterotoxaemia and Leptospirosis have been encountered.
- No outbreak of Anthrax and HS has been reported during the period 2022-23 in Assam.
- Anatipestifer disease of duck was recorded in different districts of Assam.
- Among the viral diseases, CSF in pigs, PPR, Orf and Goatpox in goats and Rabies in Cattle were reported in the year 2019-20. CSF has been found to be the major killer disease in the swine population reaching an outbreak number of 6 in different districts of Assam. Out of 74 animals affected, 32 were died due to CSF.
- African Swine fever (ASF) in pig and Lumpy Skin Disease (LSD) in cattle showed a scattered but regular prevalence throughout the state of Assam.
- Goatpox is another important viral disease affecting the goat population. A total of 9 outbreaks were reported from different districts of Assam. Out of the 40 animals affected, 9 were died due to Goat Pox during the period of 2022-23.
- PPR has been reported from 3 districts of Assam *viz*. Kokrajhar, Kamrup (M) and Dhemaji with 6 outbreaks in total.
- Among the poultry viral diseases Duck Plague and Newcastle disease were encountered in the year 2022-23.
- 5.3.8 DBT Twinning project on "An integrated omics approach to characterize circulating Newcastle disease virus and intervention strategies to control Newcastle disease in North East India"

- Isolated both avirulent and virulent Newcastle disease virus (NDV) from wild birds which included hornbill, peacock, parrot and different species of owl and raptors such as the vultures and domestic poultry which included chicken, guinea fowl, turkey and Japanese quail. These isolates has been deposited to the repository of VTCC and 19 VTCC Accession No. has already been obtained. Class II NDV of genotype VII and XIII has been seen to circulate in the North Eastern region of India.
- Whole genome sequencing of a genotype VII NDV isolate from barn owl (VTCCAVA322) has been done (doi: 10.1080 /03079457. 2021. 1999388. PMID: 34709097).
- Created a NDV library which will give a head start in developing genotype-matched vaccine candidates against Newcastle disease (ND) of poultry.
- Thermostability and immunogenicity of NDV strains of different genotypes circulating in North Eastern region of Indiahas been studied. The results indicated the occurrence of genetically diverse NDV strains in wide range of hosts with disparate thermostability profiles. This will aid in improving ND control strategy especially in rural areas by augmenting rational vaccine designing with circulating immunogenic NDV strains that require decreased dependence on cold chain.
- Studied the potential spillover and epidemiological links of NDV between wild birds and domestic poultry which revealed the need for active surveillance of NDV in all bird species to prevent future NDV outbreaks.

5.3.9 Outreach programme on Livestock Related Environmental Pollutants, Contaminants & Toxicants (Monitoring of Drug Residues and Environmental Pollutants)

- Monitoring done for: 45 numbers of pork samples (Liver) collected from the markets of different pork stalls of Kamrup district of Assam for estimation of Oxytetracycline residue.
- 3 out of 45 samples were found to contain oxytetracycline residues. The residue levels were below the MRL values.
- 25 SC beneficiaries of Hekera, Mandira, Kamrup, Assam, were selected for distribution of 20 Kamrupa Chicks with medicines and feeds each.

• As per guidelines received, 10 nos of beef samples and 10 nos of poultry meat samples were collected and sent to Kolkata Centre for analysis in two batches (Dec 2022 and Feb 2023)

5.3.10 ICAR-Veterinary Type Culture Collection

- Detected Parrot borna virus serotype-4 for the first time in India and **developed a novel methodology for isolation of this virus in embryonated duck egg**.
- During the year 2022-23, received 11 accession number for submission of Newcastle disease virus strain (isolated from both domestic and wild bird) from ICAR-National Centre on Veterinary Type Culture Collection, ICAR-NRCE, Hisar, Haryana (Accession Number:

VTCCAVA328,	VTCCAVA329,
VTCCAVA330,	VTCCAVA331,
VTCCAVA332,	VTCCAVA333,
VTCCAVA334,	VTCCAVA335,
VTCCAVA338,	VTCCAVA339,
VTCCAVA340)	

- 5.3.11 Validation and translation of the vaccines as well as diagnostic technologies developed in Phase I of ADMaC
- 5.3.12 Sub Project 1: Validation, Regulatory compliance and translation of Vaccine and Molecular Diagnostics for Duck Plague
- Adaptation of DPV vaccine strain in different cell line *viz*. BHK, Vero is in progress
- Roller flask facility have been standardized for bulk production of Duck plague vaccine.



Bulk production of DPV vaccine in roller culture

- Standardisation of cryopreservation of chicken embryo fibroblast and its revival for use in vaccine production is in progress.
- Immunization trial in duckling is over, study on antibody response of DPV vaccine is in progress.

M1 2345678



Confirmation of DPV in the vaccine by PCR amplification of UL30

- 5.3.13 Sub Project 2: SWINOSTICS: A platform for development and validation of diagnostics of important pig pathogens in NE Region of India for commercial exploration
- Developed multiplex qPCR assay for simultaneous detection of ASFV, PCV2 and PPV
- Developed indirect ELISA for detection of CSFV E2 specific antibody
- Standardized indirect ELISA for detection of JEV specific antibody
- 5.3.14 Sub Project-3 : Validation and field testing of DIVA tests developed in ADMaC Phase-I project for surveillance of brucellosis in North Eastern region of India
- One hands-on-training was be provided by two scientific staff of ICAR-NIVEDI, Bangalore at DBT-ADMaC Laboratory, CVSc,AAU, Khanapara, Ghy-22, Assam for validation of cELISA kits, iELISA kits and Lateral flow assay.
- For field testing of diagnostic tests, a total of 2005 samples were collected from Cattle, Goat and pigs of 12 different district of Assam *viz.* Kamrup, Lakhimpur, Dhubri, Golaghat, Goalpara Karbi-Anglong, Dhemaji, Chirang, Darang, Baksa, Nagaon and Jorhat .

- Species wise 753 samples were collected from cattle, 365 from goat and 856 samples were from pig.
- RBPT was done 550 cattle and 230 goat and 100 pig samples .out of 550 numbers of cattle samples 49 came positive but all pig and goat samples were came negative.
- Indirect ELISA was also done for 395 numbers of by iELISA kit provided by ICAR-NIVEDI, Bangalore. Out of 395 samples 80 (20.25)were came positive in iELISA.
- 5.3.15 Sub Project 4: Upgradation and Implementation of Knowledge Based system (KBS) in NER of India (An extended activity of Advanced Animal Disease Diagnosis and Management Consortium (ADMaC)
- Data for Knowledge Based System (KBS)from 417 pig farms of 12 districts of Assam and Arunachal Pradesh by usingKnowledge Attitude and Practice (KAP) tool designed and developed with ICAR NIVEDI.
- 12 Pig diseases are selected based on their importance and prevalence among pig population North Eastern Region for further study.
- The field clinical signs of these disease are selected, verified, and scored using Likert scale with the help of ICAR NIVEDI.
- The relevant data for other disease like with Lumpy skin disease are collected which is helpful for deriving the economical loss due to the disease.

5.3.16 Modelling of indigenous diagnostics and immuno-potent vaccine candidates to combat African swine fever in India

- Samples from African swine fever suspected samples were screened from 8 states of North-East and sequencing and phylogenetic analysis reveals that the Genotype-II is in circulation in North-Eastern states of India.
- An indirect ELISA has been developed by using recombinant p30 protein to detect ASFV specific antibodies in serum samples. The indirect ELISA showed more than 95% sensitivity and specificity.

- Development of indirect ELISAs by using recombinant protein p54 and p72 is in progress.
- Development of a cocktail vaccine candidate consisting of NDV vector and recombinant protein is in progress.
- Transmission of ASFV from domestic pig to wild boar of Assam has been established and it was found that Genotype-II has been circulating in wild boars. Thus, there is a high probability that Genotype-II could become endemic in North-Eastern region of India



p30 based indirect ELISA

- 5.3.17 DBT "Establishment of a Consortium for One Health to address Zoonotic and Trans-boundary Diseasesin India, including the Northeast Region"
- For serological detection of antibodies against different zoonotic and transboundary diseases blood samples were collected from cattle, pig and goat species. From Assam a total of 1683 samples, from Arunachal Pradesh 302 samples and from Manipur 244 samples were collected.
- Serological test were performed by Indirect ELISA method to detect antibody against Swine influenza, African Swine Fever, Japanese encephalitis, PRRS in pigs. Q fever, LSD, Brucellosis and Tuberculosis in in Bovine, and antigen detection of Cryptosporidiosis in stool samples of bovines were performed.

5.3.18 Awareness for techno- economic empowerment of Pig Farmers in Dima Hasao district of Assam.

- Pilot survey completed
- Technical Liasion established with the State Department of Veterinary & Animal Husbandry and pig farmers
- Prepared and distributed farm literature to the farmers on advances in pig farming .

• Information delivery through social media established with WhatsApp group

5.3.19 Climate resilient goat kid production through assisted reproductive technology

- During the breeding season, the estrous cycle of 6 (six) nos. of goats (Assam Hill Goat X Betal cross) have been synchronized through hormonal intervention followed by artificial insemination.
- Nano zinc oxide along with feed & antioxidant including Vit. E and selenium are given to the experimental animals (6 nos. of Assam Hill Goat X Betal Cross) during peri-conception period & transition period respectively.
- All the 6 experimental goats have got pregnant (100% conception rate) and are continuing pregnancy as compared to the control group of goats showing 33.33 % conception rate (only 2 nos. conceived out of 6 nos. of goats). Five (5) nos. of pregnant goats (Experimental group) had given birth to kid within March and April month, 2023. The goat kids are being monitored time to time and their body weight are being recorded weekly.
- Few hemato-biochemical constituents in blood of the pregnant goats (experimental and control) are being estimated during first part of pregnancy and transition period. The physiological parameter of both the experimental and control animal & the ambient temperature and relative humidity are also being recorded periodically in order to assess the stress condition of the animals (goat).
- 5.3.20 ASTEC "Technology generation for value added Geese meat products and awareness for entrepreneurship development in Geese farming in Assam : an approach towards upgrading underestimated noble sector of poultry"
- Preparation of value added geese meat products *viz.* Geese nugget, geese sausage and Geese pickle. Geese nugget and geese sausage with 1 % and 2% incorporation of medicinal herbs namely *Curry* leaves, *Mashundhari* leaves and *Mejenga* leaves were prepared.
- Biochemical analysis of prepared value added geese meat products was carried out.

- Organized Training cum Awareness Camp on "Scientific geese rearing as well as entrepreneurship development" at Udalguri on 21.09.2022. A total of 30 numbers of geese farmers were awared about the profitable and scientific geese farming and motivated to rear geese.
- Successful completion of a daylong training cum demonstration programme on the topic "*Processing and value addition of geese meat*" at CVSc, AAU, Khanapara, Ghy-22 on 03.11.2022. A total of 20 geese farmers were given training and demonstration on the topic.
- Successful completion of a daylong training cum demonstration programme on the topic "Scientific slaughter of geese and by product utilization" at CVSc, AAU, Khanapara, Ghy-22 on 02.02.2023. A total of 20 geese farmers were given demonstration as well as hands on training on the topic.

5.3.21 Modelling of indigenous diagnostics and immuno-potent vaccine candidates to combat African swine fever in India

- A polymerase spiral reaction (PSR) assay has been standardized to detect ASFV genome in clinical samples and the process of validation initiated
- Whole genome sequencing of ASFV strains circulating in seven North-Eastern States have been completed and phylogenetic analysis revealed that all the strains belongs to genotype-II.

5.3.22 Samriddhi Poultry – "AN Innovative Approach for Economic Empowerment of Rural Women of Assam through Model Egg Village"

* "Samriddhi Poultry" was an innovative approach for economic empowerment of rural women of Assam initiated in Goriaghuli cluster of Dimoria Development Block of Kamrup (M) district. It was implemented through a joint initiative by Directorate of Research Vety., Assam Agricultural University and State Innovation and Transformation Aayog (SITA), Govt. of Assam. It targeted at to encourage small scale commercial layer farming for livelihood and nutritional security of households, empowerment of rural women and targeted at creation of Model Egg Village.After 2 years of interventions under the project 30 women beneficiaries could successfully take their farms eggs to the market. Overall achievements of the project could be summarized as:

- Capacity Building of rural farm women in scientific layer farming
- Bring infrastructural change in farm houses with little support and community participation.
- Add value to nutritional requirements of the farming households, especially in terms of protein requirements.
- Could considerably enhance annual agricultural income by contributing approximately 20-30% to it through sale of farm eggs.
- Financial empowerment of women leading to overall wellness of the family



A beneficiary of Samriddhi Poultry

5.3.23 Aquaculture diversification through murrel farming (Channa striatus) in cages for enhancing productivity in floodplain wetlands (beels) of Assam using local feed formulations

- Successfully reared murrel (Channa striatus) larvae (small fingerlings) in cement cisterns.
- Moderately successful in weaning murrel fingerlings from natural feed (small prawns/ fish, chicken viscera etc.) to supplementary feed (formulated).
- Procured and installed feed mill equipments (grinder and pelletizer) for preparation of formulated feed.

- Culture of advanced fingerlings in cages is going on at different stocking densities (SD), i.e., @ 10, 20, 30 no. /m3 in wetland.
- Prepared few formulations using local feed ingredients (e.g., mustard oil cake, rice bran, groundnut oil cake, maize flour, soybean meal, dry fish/ prawn powder, etc.) for feeding murrel in cages in collaboration with Scientist from ICAR, CIFRI RC, Guwahati.
- 5.3.24 Species & Stock validation of Mahseer species of genus Tor and Neolissochilus from Western and Eastern Himalayan region of India for its propagation and conservation
- Baseline information of Mitogenome sequences of Mahseer species were generated from Jia Bhoroli and Tissa which will help in determining mtDNA Diversity.
- Habitat mapping of the river and DNA Barcodes will help in initiating conservation measures in future.
- ATPase sequences generated for the *Neolissochilus* species from the Jia Bhoroli river will help in understanding their stock characterization.



Beetal bucks

5.4 Fishery Science

5.51 Fishery research

- Baseline information of Mitogenome sequences
 of Mahseer species were generated from Jia
 Bhoroli and Tissa which will help in determining
 mtDNA Diversity.
- Habitat mapping of the river and DNA Barcodes will help in initiating conservation measures in future.

- ATPase sequences generated for the *Neolissochilus* species from the Jia Bhoroli river will help in understanding their stock characterization.
- Conducted 4 Nos of Awareness programme in Mayong, Morigaon and Nagaon sensitizing 115 nos of fish famers of the state about the fish health management.
- Brought out a bilingual fish disease manual entitled "Fish Disease Diagnosis and Treatment Measures" for the fish farmers of the state.
- Four different Argulus Species have been identified through morphological and molecular techniques from the state (*Argulus foliaceus, A. siamensis, A. bengalensis* and *A. nobilis*).
- AAHL Lab funded by NFDB has been established based on the activities of NASPAAD Phase-I.
- Moderately successful in weaning murrel fingerlings from natural feed (small prawns/ fish, chicken viscera etc.) to supplementary feed (formulated).
- Culture of advanced fingerlings in cages is going on at different stocking densities (SD), i.e., @ 10, 20, 30 no. /m³ in wetland.
- Procured and installed feed mill equipments (grinder and pelletizer) for preparation of formulated feed
- Prepared few formulations using local feed ingredients (e.g., mustard oil cake, rice bran, groundnut oil cake, maize flour, soybean meal, dry fish/ prawn powder, etc.) for feeding murrel in cages
- Catalogued 180 indigenous fish species so far. First draft of the Directory of indigenous fin fishes of Brahmaputra and Barak Valley has been prepared and the final draft will be published at the end of the Project.
- Barcode generated for 100 indigenous fish specimens and another 80 species are going on.
- First record of 3 species namely *Garra* substrictorostris, Osteobrama vigrosis and *Glyptothorax distichous* in Brahmaputra River as a new distribution range.
- First record of a Blind eel from entire Northeastern biodiversity hot spot.
- Description of two new species belongs to the genus *Neonoemacheilus*.

- Successful breeding of *Macrognathus aral* and *Mystus cavasius*, *Mystus vittatus* was conducted.
- The project successfully domesticated and developed breeding protocols for indigenous species namely; *Cirrhinus reba*, *Labeo calbasu*, habitat breeding of *Chitala chitala*.



Breeding Chitala chitala.

- The prioritised species i.e. *Cirrhtnus reba*, *Labeo calbasu* and *Chitala chitala* are bred successfully and ranching programme was conducted in different water bodies of Assam for rehabilitation of natural population.
- The Experiment on culture of *Cirrhinus reba*, *Labeo calbasu* and *Chitala chitala* with Indian major carps is going on in earthen pond.
- 30 awareness camps in different zones of Brahmaputra and Barak valley is conducted in collaboration with Krishi Vigyan Kendra and Department of Fisheries.
- Two Zonal workshops in Upper Brahmaputra Valley and Barak Valley are conducted in conjunction with the mass awareness, breeding and rearing experiments conducted under the projects.
- Standardized of a low cost process protocol for extraction of fish oil from fish waste of retail market in Assam.
- Standardized of a process protocol for preparation of "Boneless Fish Slabs" from freshwater fishes.
- Quality of an indigenous traditional semifermented fish product "Namsing" prepared by Mising Communities of Assam evaluated.
- Microbial properties of Namsing: A traditional fermented fish product of Assam evaluated.
- Effects of *Lactobacillus plantarum* as starter culture in acceleration of preparation process of traditional fermented fish product *Shidal* studied

Extension Education

Assam Agricultural University, since its inception in 1969, has been extending outstanding contributions to the farming community of Assam and its adjoining North-Eastern states. The University caters to the needs of the farming community and the stakeholders in the agricultural and allied sectors of the North-Eastern region and has been playing a vital role in the socio-economic development of the region since its establishment. The Directorate of Extension Education (DoEE), AAU has been maintaining liaisons with the Assam State Department of Agriculture (ASDA) since its inception. The DoEE has also been maintaining linkages with other line departments of the NE states like Fishery, Veterinary & Animal Husbandry and Sericulture. The DoEE provides all necessary scopes for the adoption and dissemination of technologies developed/modified by AAU. The Directorate is also shouldering the responsibilities of giving training and technical guidance to the educated unemployed youth and farmers (including farm women) of the state in the field of improved livestock farming as a means of generating income for their livelihood. Efforts are also being made to sustain these activities through farm advisory services, on farm demonstrations, farmers' fairs etc. organized periodically by this Directorate. Apart from this, the Publication and Information wing of the Directorate regularly publishes Annual Reports, Newsletters, Farm Newspaper, and Extension Bulletins etc. Besides, the technologies generated in the University are disseminated through electronic and print media.

6.1. Mandates

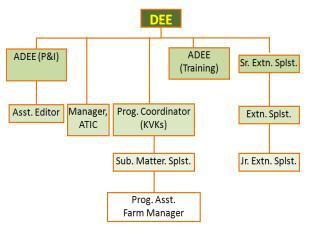
The mandates of the directorate are:

- Developing linkages between various govt. and non govt. organizations concerned with agricultural and allied extension programmes.
- Organizing need based training for extension functionaries, farmers, farm women, rural youth and SHG members.
- Advisory services to farmers.
- Functioning as a centre for collecting, storing and disseminating information to farmers and extension functionaries.

- Conducting demonstration for transfer of technology.
- Entrepreneurship development in agriculture and allied areas.
- Publication.

6.2. Organizational network

The organogram of the Directorate is presented in Figure 6.1.



The Organizational network of the Directorate of Extension Education

The network of different units/programmes under the Directorate comprises of-

- Krishi Vigyan Kendras (KVKs): There are 23 KVKs, one each in the districts of Baksa, Barpeta, Bongaigaon, Cachar, Chirang, Darrang, Dhemaji, Dhubri, Dibrugarh, Golaghat, Jorhat, Kamrup, Karbi Anglong, Karimganj, Kokrajhar, Lakhimpur, Morigaon, Nagaon, Nalbari, Sivasagar, Sonitpur, Tinsukia and Udalguri.
- Agricultural Technology Information Centre (ATIC).
- Agri-clinics and Agri-business Training Cell.
- Facilitation Centre for Medicinal Plants.
- Publication and Information.

6.3. Agricultural Technology Information Centre

6.3.1. Introduction

The role of appropriate information technology in disseminating information and technology to the

farmers or other end users is extremely vital. The important point is not only to generate the technology but also to ensure that the required information is delivered promptly to the farmers with negligible dissemination loss.

In the course of rapid agricultural development, the availability of improved varieties of cereals, oilseeds, pulses and other crops, breeds of livestock including poultry and fisheries, horticultural plant materials and improved management practices have made it possible to attain food self-sufficiency despite the population explosion. The farmers are always in search of quality seeds, planting materials and other inputs, diagnostic services, and information through printed, audio, video and electronic media and consultancy services.

The establishment of ATIC is intended to provide such facilities of information technology for dissemination to the farmers as a single-window delivery system. This service provides solutions to location-specific problems and makes available all the technological information along with technology inputs and products.

6.3.2. Need

The needs for establishment of such ATIC are:

- Providing diagnostic services for soil testing, plant and livestock health.
- Supplying research products such as seeds and other planting materials, poultry strains, etc. emerging from the institution for testing and adopting by various clientele.
- Disseminating information through published literature and communication materials as well as audio-visuals aids.
- Providing and opportunity to the institution to have resource generation through the sale of their technologies.

6.3.3. Objectives

The objectives for establishment of such a centre as single window system are:

• To provide a single window delivery system for the products and species available from the university to the farmers and other interested groups as a process of innovativeness in technology dissemination.

- To facilitate direct access to the farmers to the resources available at the university in terms of technology, advice, technology products etc. for reducing technology dissemination losses.
- To provide mechanism for feedback from the users to the university.

6.3.4. Facilities

6.3.4.1. Technological products

- Seeds of field crops, vegetable and other horticultural crops.
- Nursery plants of vegetables, fruits and ornamental plants.
- Bio-fertilizers.
- IPM-organic and bio-pesticides including NPV.
- Small Farm Implements.
- Tissue cultured plant materials.
- Processed products and by-products of cereals, oilseeds, pulses, vegetables, fruits, mushrooms including spawn, honey, milk, meat & fish etc.
- Poultry strains, livestock breeds, semen, fish seed etc.
- Agricultural equipments and drawing of designs.
- Vermi-culture and vermicompost.
- Vaccine/diagnostic kit.
- Microbial culture for milk and milk products.

6.3.4.2. Services

- Soil testing
- Seed quality testing
- Plants health clinic
- Veterinary/animal clinics for small and large animals
- Testing and calibration of agricultural equipments and implements
- Project profile and consultancy
- On-farm consultancy for farmers/orchardists

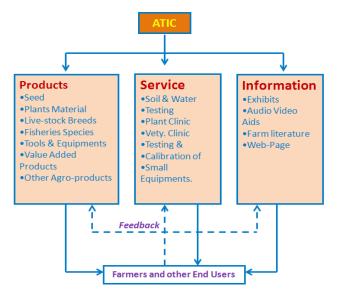
6.3.4.3. Information

• Farm literature-leaflets, pamphlets, journals/ magazines, booklets, manuals.

- Audio and Video cassettes of crops and other agri-related enterprises.
- Exhibits including dioramas, transparencies
- Specimen etc.

6.3.5. Functional Components of ATIC

The functional components of ATIC have been indicated in the Figure 6.2.



The Functional Components of ATIC

6.3.6. Farmers visits to the ATIC

Numbers of farmers		Total	
Male	Female	Total	
1597	1421	3018	

6.3.7. Technological inputs sold

ATIC has sold processed products like tea, green tea, black pepper etc. The products sold through ATIC in during 2022-23 are as given below.

Item	Item Value (Rs.)
Tea (CTC)	178960.00
Green Tea	9987.00
Total Sale Proceed	188947.00

6.3.8. Farm Advisory Services

Scientists involved in ATIC activities and other staff members of the university provide technical guidance to the farmers through individual, farm and home visits, personal contacts and correspondences. Similarly, farmers including farm women regularly visit for seeking guidance in agricultural technology, animal production, livestock management, sericulture, community science and other farm problems and they are attended by scientists/staff of the university. Scientists also respond to urgent calls on various farm problems encountered by the Departments of Agriculture, Veterinary, Fishery and Sericulture etc. A well-knit liaison also exists with different funding agencies such as NABARD, Nationalized Banks, DRDA etc.

6.3.9. Publication and Information

The Directorate of Extension has published several bulletins, newsletters, farm newspaper, booklets, folders, magazines, laboratory/training manuals etc. during 2022-23 as detailed below. All these publications have been printed at AAU Printing Press, Jorhat.

Publications	Nos.
AAU Newsletter	2
Ghare Pathare	24
Technical Bulletins	20
Course Manuals	18

6.3.10. Radio talk

During 2022-2023, altogether, 83 programmes were broadcasted through AIR.

6.3.11. Phone in Programme

Altogether 14893 nos. of Phone in/Help line programme/Kisan Mobile Advisories were conducted relating to Agriculture, Veterinary, Horticulture, Animal Husbandry, Fishery Science and Community Science.

6.3.12. Exhibitions

The Directorate participated in the 7th Assam International Agri-Horti Show-2022, held at Khanapara, Guwahati on 17th to 19th December, 2022.

6.3.13. Workshops/Group Meetings/ Trainings under Directorate of Extension

6.3.13.1. Educations

The Directorate of Extension Education also organized the following programmes at its Conference room.

6.3.13.2. Training Programmes

Sl. No.	Date	Title of the training programme	Organised by	Training For	No. of Participants	No. of KVKs involved
1.	19-20 April 2022	HRD training for SMS (Soil Science) – Recent Advances in Soil Science	DoEE, AAU, Jorhat	SMS (Soil Science)	18	18
2.	4-5 May, 2022	2-day Interface Programme of KVK Heads	DoEE, AAU, Jorhat	Head, KVK	23	23
3.	12-13 July, 2022	HRD training on Crop Management with special reference to Resource Conservation Technology	DoEE, AAU, Jorhat	SMS (Crop Management)	19	24
4.	19-20 July, 2022	HRD training on Recent Advances in Livestock and Fishery Science	DoEE, AAU, Jorhat	SMS/PA (Animal Science & Fisheries Sci.)	21	23
5.	26-27 July, 2022	HRD training for SMS/PA (Plant Protection) on Recent Advances in Plant Protection "Strategies of Plant Protection in Natural Farming"	DoEE, AAU, Jorhat	SMS/ PA (Plant Protection)	17	23
6.	29 July, 2022	HRD Training on Recent Advances in Social Science for SMSs and PAs	DoEE, AAU, Jorhat	SMS/PA (Social Science)	20	23
7.	19-23 Sept., 2022	Training on Realizing Agri- business potential through grassroot innovations &entrepreneurs development	DoEE, AAU, Jorhat (in collaboration with EEI, AAU)	Agripreneurs	30	-
8.	10-14 Oct., 2022	EEI Sponsored training Business Planning & Management of FPOs/FPCs	DoEE, AAU, Jorhat (in collaboration with EEI, AAU)	Board of Directors/ CEO of FPCs	30	-
9.	21-22 Oct., 2022	HRD Training Programme on Mentoring the Mentors for promotion of FPCs	DoEE, AAU, Jorhat	Heads of KVKs, AAU	23	23
10.	7-11 Nov., 2022	EEI Sponsored training on Export orientation in Agriculture/Horticulture	DoEE, AAU, Jorhat	Scientists/ SMS/ ADO	30	23
11.	23-24 March, 2023	HRD Training on Recent Advances in Horticulture	DoEE, AAU, Jorhat	SMS/PA/ FM(Hort.)	20	23

6.3.13.3. Review Meeting of KVKs

Sl. No.	Date	Title of the programme	Organised by	Participants	No. of Participants
1.	4-5 May, 2022	Review Meeting of KVKs	DoEE, AAU, Jorhat	Officials from DoEE, KVK Heads/SMSs	44
2.	22.10.2022	Interactive meet of the Hon'ble Vice Chancellor with Heads of KVKs	DoEE, AAU, Jorhat	Hon'ble Vice Chancellor, , Officials from DoEE, KVK Heads/SMSs	23
3.	01.11.2022	Discussion on Natural Farming & other KVK related issues (online)	DoEE, AAU, Jorhat	Officials from DoEE, KVK Heads/SMSs	23
4.	18.12.2022	Review Meeting of KVKs held at EEI, AAU, Guwahati	DoEE, AAU, Jorhat	Officials from DoEE, KVK Heads/SMSs	33

6.3.13.4. Workshops/Seminars

Sl. No.	Date	Title of the programme	Organised by	Participants	No. of Participants
1.	27.06.2022	Consultative Meet on Agriculture- based Sustainable Livelihood Generation for Rural Youth of Boro Kachari Welfare Autonomous Council (BKWAC)	BKWAC, Assam & DoEE, AAU, Jorhat	Farmers, Rural Youth from BKWAC and Scientists & Officials from AAU	90
2.	21-22 Oct, 2022	FPC convention	DoEE, AAU, Jorhat	FPO BODs, FPO Members	213

6.3.13.5. AAU Certificate Courses

One Post-graduate Diploma course (one year duration) on "Tea Production Technology & Smart Management" and one Certificate course (3 months duration) on "Tea Plantation Worker" were conducted with 19 and 11 nos. of trainees, respectively during the year 2022-23.

6.4. Krishi Vigyan Kendras

Assam Agricultural University presently has 23 Krishi Vigyan Kendras (KVKs) functioning directly under the Directorate of Extension Education. To achieve the set mandates, the KVKs are imparting trainings to the farmers, farm women, rural youths, extension functionaries, conducting Front Line Demonstration (FLD) and On Farm Trials (OFT). The KVKs also organized Field Day, *Kishan Mela*, Agri Expo, Exposure Visit, Farmers-Scientists Interaction, Awareness camp, PRA exercise. During 2022-23, 1220 numbers of scheduled training programme (on/ off campus) were conducted by all these KVKs where more than 31969 trainees participated. Technology dissemination is a major aspect of KVK and it was carried out through a number of FLDs and OFTs during 2022-23.

Table 6.4.1. Training Particulars during 2022-23

Name of KVK	No. of Training	Total
Baksa	57	1323
Barpeta	52	1447
Bongaigaon	53	1337
Cachar	61	1601
Chirang	61	1473
Darrang	35	977
Dhemaji	81	2264
Dhubri	34	851
Dibrugarh	70	1931
Golaghat	86	2223
Jorhat	47	1484
Kamrup	49	1444

Karbi Anglong	47	1096
Karimganj	53	1394
Kokrajhar	81	2037
Lakhimpur	51	1224
Morigaon	58	1459
Nagaon	27	688
Nalbari	26	678
Sivasagar	54	1464
Sonitpur	30	707
Tinsukia	30	705
Udalguri	77	2162
Total	1220	31969

Extension activities conducted by KVKs under AAU during 2022-23 includes advisory services, diagnostic visit, Field day under crop sector/interaction meeting under demonstrated enterprise, Group discussion with SHG members, Exhibition, Scientist visit to farmers' field, Animal Health camp, Farmers Seminar/ Workshop, Celebration of important days, Awareness programme, Lecture delivered as Resource person, Farmers-Scientist interaction, Method demonstration and telephonic conversation with farmers.

Table 6.4.2. On-Farm Testing's and Front LineDemonstrations during 2022-23

	OI	T	FL	D
Name of KVK	Target achieved	No. of farmers covered	Target achieved	No. of farmers covered
Baksa	13	44	17	112
Barpeta	17	48	18	85
Bongaigaon	12	40	33	621
Cachar	15	57	17	179
Chirang	11	37	20	125
Darrang	12	47	16	173
Dhemaji	19	57	47	800
Dhubri	13	33	16	52
Dibrugarh	11	35	14	128
Golaghat	17	47	21	170
Jorhat	11	23	17	82
Kamrup	22	67	37	309
Karbi Anglong	22	54	16	75
Karimganj	11	40	12	61

Kokrajhar	13	46	9	65
Lakhimpur	17	39	12	83
Morigaon	24	59	15	74
Nagaon	17	49	14	114
Nalbari	8	27	12	49
Sivasagar	15	42	17	145
Sonitpur	17	43	9	24
Tinsukia	10	32	14	87
Udalguri	16	217	34	406
Total	343	1183	437	4019

Most of the KVKs under AAU during 2022-23 performed the following flagship programmes of Govt. of India:

- Programme on Soil Health Card (*Swasth Dharaa Khet Haraa*)
- Programme on *Pradhan Mantri Fasal Bima Yojana*
- Programme on Skill India (Let's make India the Skill Capital of the World)
- Programme on Digital India (Connecting the unconnected with technology)
- Programme on *Pradhan Mantri* Lab to Land Programme
- Programme on Doubling Farmers Income
- Programme on TSP
- Programme on Sansad Adarsha Gram Yojana
- Programme on Swatchh Bharat Abhiyan
- Programme on Unnat Bharat Abhiyan
- Programme on Skill development under ASCI (Agricultural Skill Council of India) /DAC&FW.
- NARI (Nutri Sensitive Agricultural Research Innovation) programme
- Out-scaling of Natural Farming
- Amrit Sarovar Programme

6.4.1. Photographic representation of KVK activities

Photographs of some of the extension activities of the 23 *Krishi Vigyan Kendras* documented are shown in the next few pages.



OFT on varietal performance of colored Cauliflower KVK Baska



OFT on pest and disease management of *Olitorius* jute KVK Barpeta



Demonstration of Integrated Fish cum Pig farming KVK Bongaigaon



Demonstration on scientific cultivation of hybrid broccoli KVK Cachar



FLD on popularization of Hybrid maize variety KVK, Baska



Participatory Rural Appraisal KVK, Barpeta



Participatory Rural Appraisal KVK Bongaigaon



FLD on highly nutritious vegetable cauliflower KVK Cachar



Method Demonstration on preparation on natural farming KVK Chirang



Popularization of improved duck Indian Runner for livelihood KVK Darang



CFLD on INM in toria KVK Dhemaji



OFT on Srinidhi birds KVK Dhubri



OFT on performance of paddy variety Numali KVK Chirang



OFT on varietal performance of strawberry KVK Darang



FLD on Fodder production through cultivation of oat grass during rabi season KVK Dhemaji



Millet promotion through R & D activites KVK Dhubri



CFLD on rabi oilseed KVK Dibrugarh



Animal Health Camp KVK Golaghat



OFT on Performance evaluation of French bean var. Arka Sharath, KVK Jorhat



CFLD on rapeseed variety TS 38 KVK Karbi Anglong



FLD on Winter Rice Numoli KVK Dibrugarh



OFT on effective application of silicon in rice KVK Golaghat



FLD on ICM on Kharif sesamum KVK Jorhat



FLD on rice-based double cropping KVK Karbi Anglong



OFT on effect of silicon application in rice KVK Karimganj



Value added Products of Mushroom KVK Kokrajhar



CFLD on rabi oilseed (toria var. ts – 67) KVK Lakhimpur



FLD on polarization of white pekin duck KVK Morigaon



FLD on Nutrient management of rajmah KVK Karimganj



Promotion of Millet (Foxtail millet) through R&D activities, National Millet Mission KVK Kokrajhar



Induce breeding of indigenous minor carps like Gonius, Calbasu etc using hapa KVK Lakhimpur



FLD combined effect of zinc and boron on rice-toria sequence KVK Morigaon



Demonstration of Exotic Vegetables under NEH KVK Nagaon



Demonstration of climate resilient technology -raised bed cultivation of ridge gourd KVK Nalbari



Evaluation of Toria -millet cropping sequence KVK Sivsagar



Method demonstration on tomato ketchup preparation KVK Sonitpur



FLD on Popularization of Pumpkin Hybrid var EW 137 KVK Nagon



FLD on Papaya var Lunar KVK, Nalbari



OFT on combined effect of Zinc and boron in rice toria cropping sequence KVK Sivsagar



FLD on Integrated fish cum duck culture KVK Sonitpur



OFT on Combined effect of zinc and boron on hybrid rice KVK Tinsukia



FLD on Popularization of high yielding multiple diseases resistant tomato variety Arka Abhed KVK Udalguri

6.5. Extension Activities by the Constituent Colleges

Apart from the Directorate Extension Education the teachers and scientists of the Constituent Colleges of the university were also involved in extension activities.

6.5.1. College of Agriculture

6.5.1.1. Department Agril. Economics and Farm Management

- Dr. Horindra Gogoi, Asstt. Professor, Agricultural Economics & FM, CA, AAU, Jorhat
 - Organised training programme "Capacity Building Programme on Administrative and Financial Management for Board of Directors, Chief Executive Officer and Accountant of Farmers Producers' Company(FPC)" sponsored by CBBO, AAU, Jorhat Unit on 25-05-2022 at Deptt. of Tea Husbandry & Technology, AAU, Jorhat.



FLD on popularization of medium duration ricepulse cropping sequence KVK Tinsukia



OFT on French bean KVK Udalguri

- Provided consultancy services on existing plan of activities and future plan on Rabi vegetable production and marketing of *Kachadhali FPC* and *North West Jorhat FPC* under CBBO, Jorhat unit and .
- As a resource person delivered lecture in Synthesis meeting of North West Jorhat FPC organized on 19th July,2022 at Alengmora on the topic 'The role of Board of Directors and members for proper functioning FPC'

Dept. of Agril. Engineering

- Ms K. Choudhury ,Jr. Scientist, AICRP-IWM , Department of Agricultural Engineering, AAU, Jorhat
 - delivered a radio talk at AIR Jorhat on the topic "Bhumi Sangrakhanar Bhumika" on 05-05-2022.
 - participated in Farmers Day, 2022 at SMAPRS, AAU, Buralikson on 14.12.2022

6.5.1.2. Department of Agrometeorology

6.5.1.2.1. Extension activities under GKMS

- District Agromet Advisory Bulletins (English & Assamese) prepared and disseminated: 88Nos. each for 7 districts.
- District Agromet Advisory Bulletins prepared using Agromet DSS and disseminated through MEGHDOOT App (English & Assamese): 131Nos. each for 7 districts.
- Block Agromet Advisory Bulletins prepared using Agromet DSS and disseminated through MEGHDOOT App (English & Assamese): 131Nos. each for 5 Blocks of Jorhat.
- 25 nos. of impact based forecast (IBF) & Agromet Advisories Bulletin prepared and disseminated
- Agromet Advisory Bulletins were bi-weekly (every Tuesday and Friday) uploaded in the IMD website (imd.agrimet.gov.in) on real time basis.
- Agromet Advisory Bulletins prepared and disseminated to the farmers via AIR (Dibrugarh & Jorhat), KVKs, Research Stations, ADOs, Whatsapp group and over phone.
- Issued Extended Range forecast with a lead time of two weeks to the farmers on every Tuesday and Friday.
- Daily meteorological data for the month of April, 2022 to March, 2023 were recorded and uploaded in the IMD website on real time basis.
- On the occasion of World Meteorological Day, organized a Farmers Awareness Programme (FAP) on the "Impact of weather in Agriculture and role of Agromet Advisory Services" on 23.03.2023 at Khamjonia Gaon, Kasukhat Gaon Panchayat, Titabor.
- Participated in the Farmers Day held at RARS, AAU, Titabor, for publicizing the services offered under GKMS for the farming community.

6.5.1.2.2 Extension activities under AICRPAM and AICRPAM-NICRA:

- Prepared and disseminated Micro level Agromet Advisory Service bulletin among the farmers of the selected NICRA village in Golaghat district.
- Weekly updating of information in crop weather Outlook online forum was done for dissemination of agro meteorological information. .

- Acted as a guest lecturer for Self-finance Training Programme for Agricultural Input Dealers at KVK Golaghat on 22nd June, 2022.
- Organized one training cum awareness programme on "Scientific fish farming and management of fisheries under changing climate scenario" on 6th July, 2022 in NICRA village of Golaghat district.
- Organized one training cum awareness programme on "Scientific rearing of farm animals and poultry bird" on 4thAugust, 2022 in NICRA village of Golaghat district.
- Participated in Farmers Fair for showcasing agro meteorological tools and implements in one day exhibition on behalf of the Agrometeorology department at RARS Titabor on 9th November, 2022.
- Visited farmers field under NICRA project on 21st, 24thand 28thNovember, 2022; for crop information collection and discussed on various project related activities. Micro level AAS bulletin was disseminated amongst the contact farmers.
- The PI (AICRPAM) participated as a "Resource person" in "Self-Finance Training Programme for Agricultural Input dealers of Assam" at KVK, Golaghat on 28th Dec., 2022.

6.5.1.2.3. Extension activities under FASAL:

- Templates were prepared for Jute yield forecast at vegetative stage (F1) for 9 districts of Assam using historical yield and weather data collected from respective meteorological stations and thereafter sent to MNCFC for further evaluation.
- Templates were prepared for *Kharif* Rice yield forecast at vegetative (F1) stage using historical yield and weather data collected from respective meteorological stations and thereafter, crop yield estimates were generated using statistical regression technique for 27 districts of Assam. The templates along with the forecast models were sent to IMD, RMC and MNCFC during end of September for further dissemination.

6.5.1.3. Department of Agronomy

Dr. I.C. Barua, Principal Scientist

- Delivered radio talk on "Bihut bybohar huwa sak –paat xomuhor ouxodhi gunagun: ati porjalochana-I" on 16th April, 2022 in AIR, Dibrugarh, Assam
- Delivered radio talk on "Bihut bybohar huwa sak –paat xomuhor ouxodhi gunagun: ati porjalochana-I on 17th April, 2022 in AIR, Dibrugarh, Assam
- Acted as Resource person in Weed management training to agricultural input dealers organized by KVK, Kamrup on 25.06.2022
- Acted as Resource person in Weed management training to agricultural input dealers organized by KVK, Golaghat on 17.06.2022.
- Provided advisory services to NECTAR (Northeast Centre for Technology, Application and Research, Guwahati on MAP farming in Assam
- Acted as Resource person in the Training of Agricultural Input Dealers at KVK, Golaghat on 31.12.2022:
- Dr. K. Kurmi, Professor, Agronomy
 - Provided training and method demonstration on "Vermicompost production technology" at AAU, Jorhat.
 - Provided Training and method demonstration on "Vermicompost production technology" at Gandhia Gaon, Assam.
 - Organized and acted as resource person in the Awareness Programme on "Region specific agroforestry" among the 30 numbers of farmers of Parbatia village at Surabhi Dairy Cooperative Society, Parbatia , Jorhat under the National Campaign on Azadi ka Amrit Mahotsab on 29.06.2022.
 - Method demonstration on Preparation of enriched compost and vermicompost on 09.06.2022 in Dhemaji district, on 10.06.2022 in Mokakchang district, Nagaland and on 16.06.2022 in Charaidew district

- Dr. K. Pathak , Professor and Head
 - Delivered radio talk on "Selection of suitable *sali* rice varieties according to land situation" on 08.05.2022 at AIR Jorhat.
 - Acted as Co-Chairman in the Technical Session "Operational Issues and Challenges of the FPC" in the FPC ORGANIZED BY Directorate of Extension Education held on 21st and 22nd October, 2022 at AAU, Jorhat.
- Dr. R. Dutta, Assoc. Professor, Agronomy, delivered lecture on "Production technology of *kharif* pulses" in the training organized by APART AWP 2022-23 on 23.06.2022 at AAU, Jorhat.
- Dr. S. Kalita Assistant Professor, Agronomy, delivered lecture on "BMP for paddy" on training organized by APART AWP 2022-23 on 23.06.2022 at AAU, Jorhat

6.5.1.4. Department of Sericulture

The Faculties of the department have participated with exhibition stall in the Farmers Fair at Buralikson, Golaghat, and acted as resource person in the Farmer interaction session.

6.5.1.5. Department Animal Husbandry and Dairying

Faculties participated in the exhibition and got 2nd best participator in 33rd Krishak Divas organized by Regional Agriculture Research Station, Titabor, AAU on 09.11.2021

6.5.1.6. Department Entomology

6.5.1.6.1. AICRP on Honey bee

- Dr.M.K. Deka, Pr. Scientist
 - Delivered a radio talk on importance of world bee day and scientific bee keeping at AIR, Jorhat on 17.05.2022.
 - Conducted an educational visit for the students of SASRD, Nagaland on 23.5.22.
- Partha P.G. Das, Jr. Scientist delivered radio talk on the topic "Insect pest of banana and their integrated management" at AIR, Jorhat on 16.3.23..

- Dr. Simantini Borkotoki, Asst. Professor
 - Delivered radio on the topic "Exploration of Sting less bee for scientific bee keeping" at AIR, Jorhat on 16.3.23.
 - Imparted training on Apiculture and distributed inputs of bee keeping at Namti, Sivsagar, Assam sponsored by ICAR, New Delhi
 - Imparted training on Apiculture and distributed inputs of bee keeping and celebrated the world bee day at Rohmaria, Dibrugarh, Assam on 20.05.2022.

6.5.1.6.2. AINP on Vertebrate Pest Management

- As a part of management of Macaca mulatta, nets especially green nets were supplied and erected in the farmers field at Neul gaon village to see the impact of nets as physical barrier against Macaca mulatta.
- Field training cum method demonstrations were conducted at Bekajan on 12-07-2022 to aware the farmers about the application of rodenticides, bait preparation, bait placement, burrow baiting, bait stations, precautions to be taken at the time of rodenticides application ,how to prepare local bamboo chitika .
- Field training cum method demonstration were conducted at 20-07-2022 at Upor temara among the farmers to sensitize them regarding rodent problem in the post flood situations.
- Field training cum method demonstrations were conducted at Dhonkuloion 22-08-2022 to aware the farmers about the application of rodenticides, bait preparation, bait placement, burrow baiting, bait stations, precautions to be taken at the time of rodenticides application, preparation of local bamboo *chitika* in *kharif* rice.
- Field training cum method demonstration was conducted on different rodent management techniques in *kharif* rice among the farmers at Dighalipam on 31-08-2022 to sensitize on rodent problem in the post flood situations.
- Method demonstration was conducted on use of baiting techniques and local traps as a part of integrated rodent pest management at Neul Gaon.

- Field demonstration on different rodent control measures in rice-vegetables cropping system was conducted at Dhonkuloi.
- Training programme on monkey damage and their management in homestead gardens was conducted at Natun Melang.
- Method demonstration on integrated rodent management in rice-vegetables cropping system was conducted at Uporbahphala
- Training programme on monkey damage and their management in homestead gardens was conducted at Balijan.
- Method demonstrations on rodent pest management in vegetables crops was conducted at Dighalipam
- Training programme on monkey damage and their management in crop ecosystem was conducted at New Melang.
- Method demonstration on integrated rodent management in rice-vegetables cropping system was conducted at Neul Gaon

6.5.1.6.3. AICRP on Biocontrol

• Training and large scale demonstration was done with 150 beneficiary farmers at Namdang Gohain Gaon, Sivsagar .

6.5.1.7. Department Extension Education

- Dr. Utpal Barman, Professor created and uploaded YouTube Academic video to AAU streaming
 - Multi- Media on "Factors of rate of adoption of Innovation".
 - Inverted Pyramid Style of News Writings: An Introduction. 25 May, 2022. https:// youtu.be/pjeEeZgtkhY
 - Just remembering how I started and finished an online class. 21 May, 2022. https:// youtu.be/j3OUactdRM8
 - Consultative Group for International Agricultural Research-An Introduction. 18 May, 2022. https://youtu.be/ ZRR3ZRmkc4I
 - Two Definitions of Journalism. 4 May 2022. https://youtu.be/29uk3PQ719o
 - Newspaper and Magazines as communication media, meanings,

differences and functions. 11 May 2022 .https://youtu.be/VCQhuLiSUTs

- The Best Kept Secrets About Success Story- How One Can Write It. 25 May 2022. https://youtu.be/BoWLRmzHvlo
- Types of Entrepreneurs,7 Jun 2022,https:// youtu.be/guOtA9oOKxE
- Personal Characteristics of Entrepreneurs24 Jun 2022, https://youtu.be/AkQXon6iE9w
- Procedure for writing a feature article for newspaper24 Jun 2022 ,https://youtu.be/ XkWcwHzzduI
- Marketing for Enterprise https://youtu.be/ E5TTWOrmIzs 29 July 2022
- Editorial Mechanism of Newspaperhttps:// youtu.be/Zuq2cEkqH0Q28 July 2022
- Gender Issues in Entrepreneurship Development https://youtu.be/ mOEgTmilUFo 27 July 2022
- Market Survey-An Introduction https:// youtu.be/Ss9ickARTr4 21 July 2022.
- Research Ethics- An Introduction https:// youtu.be/euycS1CVOYU 16 July 2022
- Khadi and Village Industries https://youtu. be/4Yo63T0NfRg 9 July 2022
- PROFITABLE AGRI –ENTERPRISE IN INDIA: AGRO-PROCESSING INDUSTRIE

https://youtu.be/HtsE4okPRew 6 July 2022.

- 'Participatory Tools for DataCollection'. Uploaded to AAU streaming https://www.youtube.com/ watch?v=1WuI1qAR5UI&t=123s. Created on 4th Nov 2022
- 'Types of news stories' at AAU streaming https://www.youtube.com/ watch?v=6YNcwwzga2s&t=126s .Uploaded on 20 Dec,2022
- Sathik bajaarar tathyaihe dib krrisakak ucit mulya at AAU streaming Uploaded on 06 Dec 2022.

- Incentives and Content theories of motivation- a brief orientation. YouTube educational video for EE-112: https://www. youtube.com/watch?v=0WdJmNtgMYw. Uploaded on 20/01/2023.
- Educational YouTube video on 'Status and Prospects of FPC inAssam' http://youtu.be/ wWUaF1Cxiv8. by Dr. Utpal Barman
- **Independence Day, 2022** was celebrated in the Department of Extension Education, FA from 13th August, 2022 to 15th August, 2022 and an essay-writing competition was organized for the students of the department as a part of the celebration

6.5.1.8. Department Tea Husbandry and Technology

• 64 students (3rd Year B.Sc. Agri) of SASRD, Nagaland University visited the THT department, TPU and EGPC on 6/05/2022. The faculty members of the department conducted an interaction session with the student group.

6.5.2. Veterinary Science Extension (Directorate of Extension Education, Khanapara)

- 6.5.2.1. The Directorate of Extension Education, Assam Agricultural University, Khanapara participated/ organized following exhibitions/ trainings during 2022-23
- The ADEE, AAU, Khanapara participated in exhibition "Vibrant North East" held from 25th to 27th August, 2022 at Khanapara, Guwahati organized by the Centre for Rural Development, New Delhi.
- Organized North East level Officers' Training on "Advance Techniques on Management and Marketing of Poultry" from 5th to 9th September, 2022 sponsored by Extension Education Institute(EEI), NE Region, Assam Agricultural University(AAU), Khanapara at the Directorate of Extension Education(ADEE), Assam Agricultural University(AAU), Khanapara.
- Organized North East level Officers' Training on "Recent Advances in Post-Harvest and Value Addition of Piggery" from 7th to 11th

November, 2022, sponsored by EEI, AAU, at the ADEE, AAU, Khanapara(Fig.2).

- Organized North East Officers' Training on "Small Livestock Management Techniques for NE Region" from 5th to 10th December, 2022 sponsored by EEI, AAU, Khanapara at the ADEE, AAU, Khanapara.
- Organized State level HRD Training on "Recent advances in Livestock and Fishery Science" on 19th& 20th July, 2022, sponsored by EEI, AAU, Khanapara at the ADEE, AAU, Khanapara.
- Organized State level Veterinary Officers' Training on "Recent advances in Commercial Poultry Farming, Farm Automation & Management" from 13th to 15th July, 2022, sponsored by A.H. & Veterinary Department (AH&Vety), Government of Assam(GoA) at the ADEE, AAU, Khanapara.
- Organized State level Veterinary Officers' Training on "Recent advances in use of ultrasound machines as diagnostic tool, advances in disease diagnosis, treatment and surgical intervention" from 22nd to 26th August, 2022 sponsored by AH&Vety, GoAat the ADEE, AAU, Khanapara.
- Organized State level Veterinary Officers' Training on "Recent advances in use of ultrasound machines as diagnostic tool, advances in diseasediagnosis, treatment and surgical intervention"from 19th to 23rd September, 2022 sponsored by AH&Vety, GoAat the ADEE, AAU, Khanapara.
- Organized State level "Financial Training for Senior/ Mid level Officers (DDOs)" from 12th to 14th October, 2022 sponsored by AH&Vety, GoAat the ADEE, AAU, Khanapara.
- Organized State level "Financial Training for Senior/Mid level Officers (DDOs)" from 19th to 21st October, 2022 sponsored by AH&Vety., GoAat the ADEE, AAU, Khanapara.
- Organized State level "Financial Training for Senior/ Mid level Officers (DDOs)" from 1st to 3rd November, 2022 sponsored by AH&Vety, GoAat the ADEE, AAU, Khanapara.
- Organized State level "Financial Training for Senior/ Mid level Officers (DDOs)" from 16th to 18th November, 2022 sponsored by AH&Vety, GoAat the ADEE, AAU, Khanapara.

- Organized State level training on "Empowering Women through Capacity Building in Good Dairy Farm Management" from 25th April to 29th April, 2022 sponsored by National Commission for Women (NCW), New Delhi at the ADEE, AAU, Khanapara.
- Organized State level training on "Empowering Women through Capacity Building in Good Poultry Farm management" from 9th to 13th May, 2022 sponsored by NCW, New Delhi at the ADEE, AAU, Khanapara.
- Organized State level training on "Empowering Women through Capacity Building in Good Piggery Farm Management" from 23rd May to 27th May, 2022 sponsored by NCW, New Delhi at the ADEE, AAU, Khanapara
- Organized State level training on "Empowering Women through Capacity Building in Good Poultry Farm Management" from 6th to 10th June, 2022 sponsored by NCW, New Delhi at the ADEE, AAU, Khanapara.
- Organized Regional level training on "Scientific management of Pig Farm" from 23rd to 25th March, 2023 sponsored by Dima Hasao A.H. & Veterinary Department, GoAat the ADEE, AAU, Khanapara (Fig.4).
- Organized Regional level training on "Scientific Management of Goat" from 13th to 15th December, 2022, 2022 sponsored by Dima Hasao A.H. & Veterinary Department, GoA at the ADEE, AAU, Khanapara.
- Organized Regional level training on "Scientific Management of Goat" from 20th to 22nd December, 2022 sponsored by Dima Hasao A.H. & Veterinary Department, GoA at the ADEE, AAU, Khanapara.
- Organized Regional level training on "Scientific Management of Goat" from 5th to 7th January, 2023 sponsored by Dima Hasao A.H. & Veterinary Department, GoA at the ADEE, AAU, Khanapara.

6.5.2.2. Extension activities of various departments and societies

6.5.2.2.1. Department of Extension Education

Department of Extension Education organized Participatory Extension Activities for UG and PG Students. The month long extension activities were marked by conducting Participatory Rural Activities in 3 different locations in Bamungaon and DakhinSingra Sundarisal. village of Kamalpur Development Block, Kamrup Rural District for the students with their proactive involvement as a part of their academic requirement in Extension Education. In these activities knowledge about rural people and their resources were explored through different PRA methods like Social Mapping, Resource mapping. Time Line, Transect Walk etc. These methods help in assessing the rural situation before initiating any extension and development programme. This was followed by a day long Treatment cum Vaccination Camp the three locations where PRA was conducted.A group of 21 teachers from different disciplines of Veterinary Science, UG & PG students participated in the camp where 713 animal including cattle, buffalo, goat and poultry birds were vaccinated against Black Quarter, HS, PPR and Duck Plaque. Other than this, 1189 livestock and poultry birds were examined and treated for different ailments. A farmer-scientist-interactive session was also organised in the premises of SundarisalNadiparSatra where Dr. B.N. Saikia, Dean, FVSc, AAU acted as the Chief Guest.

6.5.2.2.2. Department of Veterinary Epidemiology & Preventive Medicine and Department of Veterinary Clinical Medicine, Ethics & Jurisprudence, CVSc, AAU, Khanapara

 Department of Veterinary Epidemiology & Preventive Medicine and Department of Veterinary Clinical Medicine, Ethics & Jurisprudence, C.V.Sc., AAU, Khanapara in association with ICAR Outreach Programme sponsored by NRCM Hyderabad organized village extension camps at Dima Hasao and KarbiAnglong District from 19th to 22nd May, 2022, village extension camp at KarbiAnglong Districton 2nd&3rd November, 2022, and at Dima Hasao District (16th&17th March, 2023).

6.5.2.2.3. The Assam Agricultural University Teacher's Association (Veterinary Faculty) The AAUTA (VF) organized flood relief cum animal treatment camp at Rangia(1.7.2022), animal treatment cum vaccination camp at Teteliguri village, Kamrup (25.3.2023) and at Athiabari village, Sipajhar (13.11.2022).

6.5.2.2.4. Blue Cross Society

• The Blue Cross Society, CVSc, AAU, Khanapara organized flood relief cum animal treatment camps at Kampur, Nagaon District (11.06.2022), Changsari, Kamrup District (15.07.2022), and at Garukhuti, Darrang District (17.07.2022).

6.5.2.2.5 . Veterinary Clinical Complex

The VCC organized 7 flood relief camps at Morigaon, Raha, Kampur, Bejera, Nalbari, Rangia and Kamalpur.

6.5.2.2.6. Department of Veterinary Pharmacology & Toxicology

• The Department of Pharmacology and Toxicology organized a chick distribution programme under SCSP (ICAR) fund Outreach Proraggem (ORP) on "Monitoring of Drug Residue and Environmental Pollutants" (MDR & EP) at Mandira, Hekera-781 127, Kamrupcampus of AAU on 16th March, 2023. A total 25 SC beneficiaries was selected for distribution of 20 Kamrupa chicks with medicines and feeds each.

6.5.2.2.7. Department of Animal Nutrition

Following faculties of the Department delivered lectures/attended in various extension camps organized by different organizations

- Dr. Robin Bhuyan delivered extension talk on
 - "Nutritional requirement for lactating dairy animals." Organized by ADEE, AAU, Khanapara on 27th April, 2022.
 - "Nutritional management for feeding of different categories of pigs" organized by Director DARPAN, at Shilpgram, Panjabari, Assam on 21st October, 2022.
 - "Formulating of ration for better feed efficiency in commercial layers" organized by Director, SAMETI, Guwahati on 29th October, 2022.

- "Formulating of cost effective ration for small livestock & use of unconventional feed resources" organized by ADEE, AAU, Khanapara on 5th December, 2022.
- "Formulating of cost effective ration for Goat & use of unconventional feed resources" organized by ADEE, AAU, Khanapara on 15th and 22nd December 2022 and 5th January, 2023.
- "Formulating of ration for pigs with different low cost feed ingredients" organized by Director, SAMETI, Guwahati on 10th January, 2023.
- "Use of unconventional feed resources" organized by ADEE, AAU, Khanapara on 21st, 24th and 28th February,2023; 10th,14th and 17th March, 2023.
- "Nutritive values of different Fodders available in Assam and seasonal availability" organized by ADEE, AAU, Khanapara on 27th February 2023.
- "Low cost feeding of pig with locally available resources" organized by ADEE, AAU, Khanapara on 24th March, 2023.
- Dr. G. Saikia
 - Delivered extension talk on "Scientific feeding & computation of ration for different categories of pig" organized at AAU, Khanapara on 24th May, 2022.
 - Delivered extension talk on "Feeding & economic in feeding pigs" organized at Director, SAMETI, Guwahati on 18th November, 2022.
 - Delivered extension talk on "Cost effective ration for different categories of Dairy Cattle" organized at ADEE, AAU, Khanapara on 20th&23rd February, 9th, 13th, 16th, 21st and 27th March 2023.
 - Delivered extension talk on "Nutritive value of feed and fodder" Organized at AAU, Khanapara on 28th March, 2023.
 - Attended "Free animal health check- up cum treatment camp at Ghunahuti flood affected area of NothLakhimpur" Organized by

Associate Dean, LCVSc, AAU, Joyhing, North Lakhimpur, on 5th July, 2022.

- Attended "Day long village extension camp in Kamalpur Development Block of Kamrup District, Assam" Organized by Dean, CVSc, AAU, Khanapara, on 11th February, 2023.
- Dr. Papori Talukdar
 - Attended an awareness camp in connection with World Elephant Day held at Assam State Zoo, Guwahati, on 12th August,2022.
 - Participated an extension cum health check-up camp of camped elephants in connection with World Elephant Day on 21st August,2022at Orang National Par, Darrang.
 - Acted as resource person for three days training programme on "Management & breeding of high yielding breeds of cattle (Gir&Sahiwal)" organized by SAMETI, KrishiBhavan campus, Khanapara held from 27th to 29th September, 2022.
 - Participated in extension camp for International Women's day organised by IAWV (Assam chapter) on 8th March, 2023 at village Maloibari, Khetri.
 - Participated a day long village extension camp at 3 different locations under Kamalpur Development Block, Kamrup District on 11th February, 2023.
 - Acted as resource person on a training programme on "Exposure training programme to dairy farmers including members of DCS on feed and fodder development" in collaboration with NLM, Assam under AH and Vety. Dept., Assam on 20th& 25th February, 9th 13th& 16th March 2023,
- Dr. M. Joyswal acted as resource person on a training programme on "Empowering women through capacity building in good dairy farm management" on the topic of Ration formulation of different categories of dairy animal" at CVSc, Khanapara, AAU held from 25th to 29th April, 2022.



Hon'ble Minister Srijut Atul Bora at the CVSc stall of the Vibrant North East from 25th to 27th August, 2022



Participants in a training on women empowerment sponsored by NCW



Vaccination of Cattle during the camp



Distribution of medicines for treatment of animals



Chick distribution programme under SCSP (ICAR) fund ORP on MDR & EP at Mandira, Kamrup district

6.5.3. College of Community Science Extension

6.5.3.1. Mass media approach: Radio talk

- Dr. Sayanika Borah, Assistant professor, EECM delivered radio talk on "World food day" at AIR, Jorhat on 16th Oct. 2022.
- Dr. Luna Dutta Baruah, Assistant professor, FSN delivered radio talk on "Milletor Gurutwa paripusti aru Swasthya Samandhita Upakarita" at AIR, Jorhat on 14th Nov. 2022
- Dr. Priyanka Nath, Assistant professor, FSN delivered radio talk on "Importance of Millets" and "Parisrami Mohilar Pustikor Khadya Talika" at AIR, Jorhat on 19th Feb. and 21st March 2023 respectively.
- A radio seminar was organized in the Department of HDFS in collaboration with AIR, Jorhat on the occasion of International Women's Day on 8th March 2023 and broadcasted in the same day by AIR, Jorhat. A series of Lectures were delivered by the faculty members of the department.
- Dr. Toslima sultana Begum, Assistant professor, HDFS delivered radio talk on "Hu shaysthar babe Adarsha Paripusti bagisar Gurutta" on 29th Dec., 2022 at AIR-Dibrugarh.
- Dr. Nabaneeta Gogoi, Professor, TAD delivered radio talk on "Swa niyujita Hastat Silpor Mulya Hangjujan aru Baisitrakaranor Gurutta" on 17th March 2023, at AIR-Jorhat.
- Mrs. Smita Bhuyan, Assistant Professor, TAD delivered radio talk on "Hayshyar Aborjonar Punar Bybaharere Krikhirota Mohilar Bahan Khyam Udyugik Bikakh" on 16th March 2023, at IR-Jorhat

• Dr Bijoylaxmi Bhuyan, Assistant Professor Dept. Of FRMCS participated in a radio discussion programme on "self employment opportunities for villagers' 28th March 2023 at AIR-Dibrugarh.

6.5.3.2. Farmer's Fair and Exhibition:

- Participated in an exhibition on the occasion of Farmers' Day at AAU-Assam Rice Research Institute, Titabor on 10th January, 2023 to publicize the various services provided by the College.
- Participated in the Famers' Fair organised at AAU-Sugarcane ,Medicinal and Aromatic Plants Research Station, Buralikson on 14th December,2022.

6.5.3.3. Celebration of Important days:

- International Women's Day 2023 was celebrated by the faculty of Community Science, Assam Agricultural University on 9th March as part of Golden Jubilee celebration(2022-23) of the Faculty .This year's theme was "Digital Innovation and technology for gender equality". A lecture on "Occupational stress, Technoference and Dementia risk" was delivered by Dr.Dipjyoti Bora, Assistant professor, JMC&H, Jorhat. About 70 participants (Faculty and students) participated and interacted with the speaker.
- Dept of Food Science and Nutrition, College of Community Science, AAU, Jorhat celebrated World Food Safety Day (7th June'2022) on the theme "Safer food, better health" with the activities: i)Slogan writing competition (Topic: Food safety and human health) among UG students ii)Essay writing competition (Topic: Safer food for better health) among PG students.
- Dept of Food Science and Nutrition, College of CommunityScience, AAU, Jorhatincollaboration with AICRP - Women in Agriculture- Jorhat Chapter and Nutrition Society of India- Jorhat celebrated "World Food Day" on the theme: "Leave No One Behind" on 17th October 2022 at CCSc. An exhibition was organized where different technologies developed under the Post Graduate Programme and AICRP along with "Nutri Clinic", booth for nutritional assessment were displayed.Booth on "Fix My Plate", "Food

pyramid" and Nutri- games were also set up. The exhibition was inaugurated by Hon'ble Vice Chancellor of AAU, Jorha.

- Dept of Food Science and Nutrition, College of Community Science, AAU, Jorhat celebrated of World Heart Day with display of wall magazine with latest information about the theme and topic. National seminar on "Fix your plate: for sustainable health" on 29th September'22 at Dept of Food Science and Nutrition, College of Community Science, AAU, Jorhat
- Dept of Food Science and Nutrition, CCSc, AAU observed International Year of Yoga on 21st June 2022.
- Dept of Food Science and Nutrition, CCSc, AAU celebrated National Dress Day on 6th March 2023 by Department of Textiles & Apparel Designing, C. C. Sc., AAU, Jorhat-13, Assam

6.5.3.4. Awareness programme

- Department of Food Science and Nutrition, CCSc, AAU, Jorhat organized an Awareness session on importance of Breastfeeding and complementary feeding among mothers of young children and preschool children on the theme " Step up for Breastfeeding: Educate and Support" on the occasion of World Breastfeeding Week celebration (1st to 7th August) on 1st August'2022 at CCSc, AAU, Jorhat.
- Department of Food Science and Nutrition, CCSc, AAU, Jorhat in collaboration with Farm to Food NGO organized Nutrition awareness cum exhibition programme at Dahotia Girl's High School on the occasion of Celebration of National Nutrition Month (September) on 22/09/2022 at Dahotia Girl's High School, Jorhat.
- Deptt. Of HDFS, CCSC, AAU, Jorhat, observed International Day of disabled person on 3rd Dec 2022 at Barbheta public LP, ME and High school, Barbheta, to create awareness among children on Inclusive Education and 'The Causes of Disability'. The programme was attended by around 50 numbers of students from Class IX and teachers of the school which made the programme a great success.

6.5.3.5. Training programmes for the rural mass

- One day training on Community nutrition was organized by Purba Bhartati educational trust, Jorhat in collaboration with Department of Extension Education and Communication Management, Faculty of Community Science, AAU, Jorhat on 20/08/2022 at Conference hall AAU, Jorhat.
- Department of Food Science and Nutrition, CCSc, AAU, Jorhat in collaboration with Farm to Food NGO organized a training for SHGs on value added products from locally available resources on the occasion of Celebration of National Nutrition Month (September) on 27/09/2022 at CCSc, AAU.A total of 20 numbers of participants participated in the training.
- A day long training programme on ergonomically designed tool for women farmer was organised by Department of Family Resource Management and Consumer Science on 23/11/22.at Mudoijan village. Training was designed to make people aware about importance of using ergonomically designed tools in different farm and home activities to reduce drudgery. The programme was conducted under AICRP for women in agriculture component.
- Department of Family Resource Management and consumer Science organised ten days training programme on "Application of ergonomics in farm mechanization" from 3rd January 2023 to 12th January 2023. The training was financially supported by Assam Agribusiness and Rural Transformation Project (APART), Guwahati. A total of twenty two (22) participants from different parts of North Eastern Region have participated in the training program. Programme was conducted both off line and hybrid mode. Apart from faculties of different departments of Assam Agricultural University, eminent speaker from IIT Guwahati, NID, Jorhat, Central Institute of agricultural Engineering (CIAE) Bhopal, North Eastern Regional Institute of Science Technology (NERIST) Nirjuli, Arunachal Pradesh acted as resource person for the training programme.

- Dept of Food Science and Nutrition, College of Community Science, AAU, Jorhat in collaboration with Govt. of Assam organized One day hands on Training on "Mainstreaming Millet consumption at indigenous level for our healthy life" on 9th March, 2023 in collaboration with sub component of APART-JAAPIA, Jorhat .A total of 31nos. of beneficiaries were present in the training.
- Training on vermi-compost production was organized by department of Extension Education and Communication Management, CCSC, AAU, Jorhat on 09/03/2023 at Hilikhabari Gaon, Titabor, Jorhat, Assam.
- A hands on training on millet based products under AICRP-WIA was organized by Dept. of Food Science and Nutrition, College of Community Science, AAU, Jorhat on 15th March, 2023. Total beneficiaries present in the training were 25 nos.
- Department of Extension Education and Communication Management ,CCSC, AAU, Jorhat organized a four (4) days training programme on Food processing at Hilikhabari Gaon, Titabor, Jorhat, Assam from 17/03/2023 to 21/03/2023.
- Dept of Food Science and Nutrition, College of Community Science, AAU, Jorhat and KVK Nagaon organized a Skill Development training for 18 beneficiaries on 28th March, 2023 at KVK, Nagoan.

6.5.3.6. Method demonstration:

- Department of Food Science and Nutrition, CCSc, AAU, Jorhat organised Junior chef 1.0 demonstration cum competition among VIII-XII standard students from 3 different schools on account of Celebration of National Nutrition Month (September) on 16th September,2022.
- Department of Family Resource Management and consumer Science organised a method demonstration programme on compost making at Bharolua High School, Teok On 20th December,2022 for creating awareness among school children to keep our environment clean recycling degradable waste.

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Observation of International Women's Day, 2023 by CCSc.



Training programme on Food processing at Hilikhabari Gaon, by CCSc.



Training on application of ergonomics in farm mechanization by CCSc.



Training on Entrepreneurship development by CCSc.

6.5.4. College of Fisheries

- Total fifteen (15) no. of training were conducted at Nagaon, Lakhimpur, Golaghat, Barpeta, Goalpara, Morigaon, Sonitpur and Nagaon districts of Assam with 1000 participants/ farmers.
- Ten (10) awareness camps were organized in Nagaon and Morigaon districts with a total of 500 participants.
- Three(3) technologies *viz*. Preparation of Hygienic Dry Fish, Preparation of Fish Pickle; and Multiple Stocking and Multiple Harvesting of Fish were demonstrated at 26 units in 15 districts of Assam.

6.5.5. Biswanath College of Agriculture

- A training programme on "Pest and disease management of Potato was conducted at Kumalia on 23.6.2022 with 20 participants.
- A training on "Production Technology for Rabi Crops" was conducted at Maralgaon on 24.06.2022with 20 participants.
- A training on "Scientific rearing of Goat" was conducted at Disiri on 1.7.2022 with 26 participants.
- Training on "Cultivation of Rabi crops" was conducted at Maralgaon on 9.11.2022 with 29 participants.
- Demonstration on banana sucker selection and planting method of banana sucker was conducted at Jakaipelua,Lakhimpur on 27.7.2022 with 13 participants.
- Demonstration on banana sucker selection and planting method of banana sucker was conducted at Borbali,Lakhimpur on 28.7.2022 with 20 participants.
- Method Demonstration on the Bordeaux mixture and Bordeaux paste preparation was conducted at NICRA adopted village, Jakaipelua and Borbali North Lakhimpur on 24.01.2023 with 27 participants.
- Method demonstration on fertilizer application in coconut was conducted at NICRA adopted village,Lakhimpur on 22.2.2023 with 23 participants.

6.5.6. Lakhimpur College of Veterinary Science, Lakhimpur

- Faculty members of LCVSc, AAU, Joyhing, North Lakhimpur visited affected animals of Sri Sri Ganga Gaushala of Karibil Bangali under Helem Revenue Circle on 20th April, 2022 for diagnosis and treatment and also performed PM and collection of sample as per the request of Sub Division AH & Vety. Officer, Biswanath Chariali.
- A Rabies Awareness Programme was conducted to a team of 80 students and 5 teaching staff from Ghunakhuti HS School in LCVSc, North Lakhimpur Campus on 23rd April, 2022.
- Hands on training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 26th April- to 2nd May, 2022.
- Hands on training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 6th -10th May, 2022.
- Training programme on Student Mobilisation Initiative Learning through Exposure (SMILE) organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with IGSSS, North Lakhimpur from 19th -21st May, 2022.
- A day long training programme on "Commercial dairy farm management for entrepreneurship development" was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Godrej Agrovet Limited, Guwahati on 18th May, 2022.
- Training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 22nd -26th May, 2022.
- A two days hands on training programme on Scientific pig husbandry and its marketing

strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with 24 No. Ranganadi Constituency, Mising Autonomous Council, Gugamukh, Assam during 28th to 29th May, 2022.

- A training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam during 30th May-3rd June, 2022.
- Training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 9th -13th June, 2022.
- Hands on training programme on "Scientific poultry farming and its marketing strategies for entrepreneurship development" was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 17th -19th June, 2022.
- Training programme on "Scientific goat farming and its marketing strategies for entrepreneurship development" was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 2nd -4th July, 2022.
- Post Flood Free Animal Health Check-up cum Treatment Camp was organised on 5th July, 2022 at Jamuguri, 1 No. Santipur of Ghunasuti of Lakhimpur district by LCVSc, AAU, Joyhing, North Lakhimpur.
- Post Flood Free Animal Health Check-up cum Treatment Camp on 6th July, 2022 at 2 No. Bamunijan of Lakhimpur district was organized by LCVSc, AAU, Joyhing, North Lakhimpur.
- Post Flood Free Animal Health Check-up cum Treatment Camp on 12th July, 2022 at Pub-Sagolikata, Lakhimpur district was organized by LCVSc, AAU, Joyhing, North Lakhimpur.
- Post Flood Free Animal Health Check-up cum Treatment Camp on 13th July, 2022 at

Ghagarmukh Kolakhuwa, Lakhimpur district was organized by LCVSc, AAU, Joyhing, North Lakhimpur.

- Four days hands on training programme on "scientific livestock and poultry husbandry and its marketing strategies for entrepreneurship development" was organized by LCVSc, AAU, Joyhing, NL in collaboration with IGSSS, North Lakhimpur from 16th-19th July, 2022.
- Post Flood Free Animal Health Check-up cum Treatment Camp on 22nd July, 2022 at Maghnowa Rangati, Bihpuria, Lakhimpur district was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with IGSSS, North Lakhimpur.
- Post Flood Free Animal Health Check-up cum Treatment Camp on 23rd July, 2022 at Majordoloni Kholihamari, Bihpuria, Lakhimpur district was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with IGSSS, North Lakhimpur.



LCVSc team visit at Sri Sri Ganga Gaushala for diagnosis and treatment of infected animals



Training on organized by LCVSc, AAU, Joyhing, North Lakhimpur



Post Flood Free Animal Health Check-up cum Treatment Camp by LCVSc, AAU, Joyhing, Lakhimpur

- Faculty members of LCVSc, North Lakhimpur participated as Resource person in Workshop on MAC Livelihood Mission for executive members and General members on 5th-7th August, 2022.
- A training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 20th -24th August, 2022.
- Hands on training programme on Scientific pig husbandry and its marketing strategies for entrepreneurship development was organized by LCVSc, AAU, Joyhing, North Lakhimpur in collaboration with Mising Autonomous Council, Gugamukh, Assam from 29th August-2nd September, 2022.
- Animal Health Check-up cum vaccination camp was organised by IGSSS, Lakhimpur in collaboration with LCVSc, AAU, Joyhing, North Lakhimpur on 21st September, 2022 at Bardalani, Dhemaji.
- LCVSc, Joyhing participated in animal health checkup cum treatment camp organised in association with IGSSS and State Veterinary Dispensary, Bordoloni at Simoliguri Karsola Gaon Bordoloni, Dhemaji on 13th October, 2022. More than 1000 livestocks were checked up for health and treatments were done accordingly.
- Free pet animal health camp was organized by LCVSc, AAU, Joyhing, North Lakhimpur on 13th November, 2022.

- Faculty members of LCVSc, AAU, Joyhing, North Lakhimpur acted as resource person in the training programme on scientific rearing of goat/pig/poultry organised by District Animal Husbandry & Veterinary Department, Govt. of Assam, Lakhimpur from 27th – 29th December , 2022.
- Faculties of LCVSc, AAU, Joyhing, North Lakhimpur acted as resource person in awareness programme on ccientific rearing of goat organised by Dindoyal College, Dudhnoi, Goalpara on 10th January, 2023.
- Faculty of LCVSc, AAU, Joyhing, North Lakhimpur visited Army Camp at Dinjan, Tinsukia on request of RVC Unit of Dinjan Militiary Station and conducted sterilisation and treatment of 53 nos. of street dogs on 13th-14th February, 2023.
- A day long awareness programme of rural women for empowerment and gender equality was organised by Women Cell, LCVSc, AAU, Joyhing, North Lakhimpur. In this occasion, a "Free Animal Health Check-up cum Treatment Camp" was was organized by AAUTA (VF), LCVSc unit in collaboration with AAUTA (VF), Khanapara.on 11th March, 2023 at Ram Mandir Field and Bajbari High School, Lakhimpur.
- Three days long exposure tour for 4th year students of LCVSc along with faculty from 17th-19th March, 2023 organised by Deptt. of Extension Education, LCVSc in collaboration with Biswanath Wildlife Division, Kaziranga Tiger Reserve, Biswanath Chariali, Assam and Deptt. of A.H. & Vety. Deptt, Biswanath, Assam at fringe villages of Kaziranga 6th Edition, Biswanath, Assam. The activities included Field level exercise on Participatory Rural Appraisal (PRA), Free Vaccination cum treatment camp, interaction with the Forest officials regarding wild life management and field visit to Kaziranga 6th Edition.

6.5.7. College of Horticulture & FSR

- Dr. HS Datta acted as a resource person in Krishi Darshan on 25th April,2022.
- Dr. HS Datta acted as a resource person at SAMETI,Sikkim during 23-26 August,2022.

- A Barooah acted as resource person in the training 'Emerging Management strategies for climate Smart Agriculture at SCS college of Agriculture, AAU Dhubri, on 9.11 .2022.
- R. Buragohain acted as a Resource person in the training "Export orientation of Agriculture/ Horticulture" at AAU, Jorhat on 9.11.2022
- S. Choudhury acted as a resource person in a training on 21.07.2022 organized by EEI (NE Region) Jorhat and delivered lecture on the topic "Processing of Ginger and Jack fruit".

6.5.8. Sarat Chandra Sinha College of Agriculture (SCSCA)

- The faculties of SCSCA, Dhubri
 - Acted as resource person in 110 nos. of training for Agro-input Dealers organized by KVK, Dhubri, Bongaigaon, Barpeta and Kokrajhar during 2022-23.
 - Imparted training on "Scientific management of Bee Colonies" and "Collection Storage, Primary Processing, Packaging and Quality management of Honey and other Bee products" on 06.04.2022, organized by Institute of Cooperative Management, Guwahati in collaboration with KVK, Chirang.
 - Imparted training on "Balanced fertilizer application" on 21.06.2022, organized by KVK, Dhubri.
 - Imparted training on "Warehousing development and regulation for farmers and traders' organized by WDRA, Govt of India on 30.06.2022.
 - Imparted training on "Washing or killing, drying, grading, factors affecting shelf life, small and large scale storage of ginger, chilli, potato etc." on 18.03.2023, organized by KVK, Dhubri.
 - Imparted training on "Youth leadership and community development" on 14.01.2023, organized by NYK, Dhubri, Ministry of Youth Affairs and Sports, Govt. of India.
 - Imparted training on "IDM in rice" on 09.02.2023, organized by ATMA, Dhubri for Extension functionaries.

- Involved in MLT on sugarcane variety Kakodonga allotted by AAU-SMAPRS, Buralikson.
- Performed diagnostic field visit on "Attack of rodent" at Asharikandi, Alomganj, Dhubri on 29.04.2022, and Chaffy grain due to mixed seed and also infestation of stem borer at Geramari pt.1, Alamganj, Dhubri on 11.05.2022.
- Organized Kisan Mela on the occasion of "Kisan Bhagidari Prathamikata Hamari campaign" at SCSCA, AAU Dhubri on 26.04.2022.
- Acted as resource persons in animal health camp in the flood affected areas of Simlabari Part-I and Gaurangtari of Dhubri district organized by KVK, Dhubri on 05.07.2022 and 6.07.2022, respectively.
- Acted as resource person in 2 nos of farmers scientist interaction, organized by KVK, Dhubri.



Faculties of SCSCA Dhubri participating as resource person in Animal health camp in the flood affected areas of Simlabari Part-I,Dhubri

- G. K. Upamanya and K. Das delivered radio talk on Disease and pest control on "*SALI DHAN KHETI*", broadcasted by All India Radio, Kokrajhar on 16.05.2022.
- K. Das delivered radio talk on "Prevention of pest and diseases in paddy cultivation", broadcasted by All India Radio, Kokrajhar on 28.08.2022.
- G. K. Upamanya delivered radio talk on "Plant protection in winter vegetables" broadcasted by All India Radio, Kokrajhar on 25.08.2022.

- G. K. Upamanya delivered radio talk on "*Fagun Mahar Krishi Karyasuchi*" broadcasted by All India Radio, Kokrajhar on 19.11.2022.
- B. Saikia delivered radio talk on "Botore kidore Krishikhetrot prabhab pelai" broadcasted by All India Radio, Kokrajhar on 19.12.2022.
- B. Saikia delivered radio talk on "Botoror agoli botora pradanot adhunikikaran" broadcasted by All India Radio, Kokrajhar on 10.02.2023.
- G. K. Upamanya participated as resource person in "Live phone-in programme" on "Plant protection in *Sali* rice" broadcasted by Doordarshan Kendra, Guwahati on 01.06.2022
- G. K. Upamanya participated as resource person in "Live phone-in programme" on "Integrated plant protection measures in winter vegetables" broadcasted by Doordarshan Kendra, Guwahati on 26.10.2022.
- P. Sharma delivered radio talk on "Discussion on prevention of pest and diseases in paddy cultivation", broadcasted by Kokrajhar radio center on 28.08.2022.
- P. Sharma delivered radio talk on "Safe handling of pesticides", broadcasted by Kokrajhar radio center on 11.03.2023.
- P. Das delivered radio talk on "UDVIDJAT ARU KRISHAK ADHIKAR SURAKSHA AAIN 2001" broadcasted by Kokrajhar radio center on 20.12.2022.
- P. Das delivered radio talk on "BOIGYANIK PADDHATIRE MORAPATOR KHETI" broadcasted by Kokrajhar radio center on 16.02.2023.
- P. Sharma participated as resource person in "Live phone-in programme" on "Scientific management of Sali rice" broadcasted by Doordarshan Kendra, Guwahati on 28.09.2022.

6.6. Directorate of Research (Vety.), AAU, Khanapara

 Organised skill development training programme on Pig Production & Pork Processing for Entrepreneurship Development" at CVSc, Khanapara, Ghy-22 from 15th to 17th March, 2022.

- A hands on training on "Production, Processing and Value addition of Meat and Meat Products" was organised from 27th to 28th March, 2022, in collaboration with Regional Agricultural Research Station, Gossaigaon.
- One day training programme on "Processing and Value Addition of Geese Meat" was organized on 3rd November, 2022. A total of 20 geese farmers were given training and demonstration on the topic.
- A daylong training cum demonstration programme on the topic "Scientific slaughter of geese and by product utilization" was organised at CVSc, AAU, Khanapara, Ghy-22 on 02.02.2023. A total of 20 geese farmers were given demonstration as well as hands on training on the topic.

6.7. Directorate of Research ((Agri), AAU, Jorhat

6.7.1. AAU-ARRI, Titabar

- Successfully produced 1400 quintals of certified seeds of rice varieties developed by AAU, Jorhat in PPP mode.
- Imparted training on cultivation technology of rice to students, College of Agriculture, Meziphema, Nagaland on 5th May, 2022
- Imparted training on post harvest machineries under APART on 19th May, 2022
- Radio talk delivered at AIR, Jorhat on Sali dhannar Unnat Paricharjya on 28th July, 2022.
- As one of the members of the diagnostic team to enquire about the reasons of early flowering of rice variety Ranjit, visited different farmers' field of Gualgaon, Farkating, Uriamghat of Golaghat district on 12th September, 2022.
- Plant clinic was done at Merapani, Golaghat on 5th November, 2022.
- Actively participated in organisation of Farmers' Fair, 2022 on 9th November held at RARS, AAU, Titabar.
- Organized 2 days training programme on scientific storage methods of paddy on 30-31st March, 2023 at AAU-ARRI, Titabar under the ICAR- IRRI collaborative project on Rice value chain, value addition, post-harvest management.

- Conducted large scale demonstration of one newly released rice variety Surma Dhan throughout the state of Assam in collaboration with all the 23 KVKs under AAU, Jorhat.
- Conducted On Farm Trial of two promising Rajmah lines in all the six agro-climatic zones of Assam.
- Formed a new Farmer Producer Company (FPC), Bojalbari FPC Ltd. at Bojalbari vaillage under Bughchung Development Block.

6.7.2. AAU-ZRS, Shillongani

- Delivered lecture on in a Training programme on "Improved production technology of boro rice" on 25.12.2023 to farmers of AlengisatraKolongpar (village under AGAG).
- Lecture delivered as resource person on "Suitable cropping system for the existing agroecological situation" in the Self Financed Input Dealers Training Programme, organized by KVK, Nagaon on 07.02.2023.
- Lecture delivered as resource person on 'Cropping system approach and Farming system approach in rain-fed areas'" in the Self-Financed Input Dealers Training Programme, organized by KVK, Nagaon on 07.02.2023.
- Conducted Two Days Training Programmeof Training of Trainers on "Seeding to harvesting, drying, storage and processing" on 13.12.2022 to 14.12.2022.
- Conducted One Day Training Programme on 12.01.2023 at Seminar Hall of AAU-ZRS, Shillongani.
- During Boro season Field Daycum crop cuttingprogramme were conducted at different villages of Nagaon district under APART.
- During Sali Season Field Daycum crop cutting programme were conducted at the different villages i.e., Jaramari, Dolibari, Bhomoraguri, Sologuri, PutaniKumargaon, Jengoni, Telia Phaukata of Nagaon district under APART.\ Conducted Focus Group Discussion on 02.06.2022district under APART.
- Conducted Grand Harvest Programme at RaidongiaPhulaguri on 19.11.2022 in presence of different dignitaries of Nagaon and Jorhat districtdistrict under APART.

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- Lecture delivered as resource person on 'Seed treatment Importance and procedure' in the Self-financed Input Dealers Training Programme, organized by KVK, Nagaon on 15.02.2023.
- Lecture delivered as resource person on 'Production & Packaging of vermicompost'' in a training programme organized by National Institute of Technology, Arunachal Pradesh at Raidongia village, Nagaon on 14.03.2023.
- Acted as a Resource person in Awareness campaign om Millet under Assam Millet Mission 2022-23 organized by DAO, Nagaon on 20/08/2022 at Bishnu Mandir, Darangial, Nonoi.
- Acted as a Resource person in Awareness campaign om Millet under Assam Millet Mission 2022-23 organized by DAO, Nagaon on 22/08/2022 at Herapati G.P. conference Hall.
- Acted as a Resource person in Awareness campaign om Millet under Assam Millet Mission 2022-23 organized by DAO, Nagaon on 23/08/2022at Batadrava Research center, Bordua.
- Acted as a Resource person in Awareness campaign om Millet under Assam Millet Mission 2022-23 organized by DAO, Nagaon on 23/08/2022 at Luit poria FPC, Sologuri, Dhing.
- Acted as a Resource person in Awareness campaign om Millet under Assam Millet Mission 2022-23 organized by DAO, Nagaon on 24/08/2022 at Training Hall, DAO, Nagaon.
- Acted as a Resource person in Awareness campaign om Millet under Assam Millet Mission 2022-23 organized by DAO, Nagaon on 24/08/2022, SDAO office, Raha.
- Acted as a Resource person in self-finance inputs dealers of Nagaon on 25/09/2022 organized by KVK, Nagaon.
- Acted as a Resource person in Model Millet project inauguration programme sanctioned by NABARD at Community Hall, Beltola Bazar, Kaki by GUS on 21/01/2023.
- Acted as a Resource person in self-finance inputs dealers of Nagaon on 06/02/2023 organized by KVK, Nagaon. Topic: Contingency crop planning for raifed area.

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- Acted as a Resource person in self-finance inputs dealers of Nagaon on 06/02/2023 organized by KVK, Nagaon. Topic: Rainwater Harvesting.
- Acted as a Resource person in "One week Entrepreneurship development programme"" on 13/03/2023 organized by NIT, Arunachal Pradesh. Topic: Organic Farming/ Organic fertilizers.
- Acted as a Resource person in "One week Entrepreneurship development programme" on 25/03/2023 organized by PIU of CBBO, HRS, Kahikuchi. Topic: Entrepreneurship Developments of FPO's.
- Acted as a Resource person on GKMS at DAO, Hojai organized by GKMS, AAU-ZRS, Shillongani on 29.03.2023.
- Involved as invited resource person for 15 days self financed training programme for Agricultural Input Dealers of Assam organized by KVK, Kamrup, Kahikuchi, Guwahati -17 and KVK, Nagaon – 02 respectively.
- Involved in organizing internship programme for soil testing (including get acquaintance with Soil Laboratory of AAU - ZRS, Shillongani, Nagaon besides method demonstration on soil sample collection for laboratory analysis) of 3rd semester and 5th semester students of BVoc in Herbal Processing Technology, ADP college, Nagaon.
- Involved in field visit to RARS, AAU, Shillongani crop demonstration and vermicompost demonstration unit as organic waste management measure by class IV – V students and teachers of Chillonani Muktab on 11.01.2023 as a part of Environment Science course curriculum.
- A total of 15 FLDs on chickpea varieties 'GNG 2207' under rice fallow condition was conducted in Nagaon, Karbi Anglongand Hojai districts districts during *Rabi*, 2022-23 under AICRP on Chickpea.
- Conducted Post Harvest Training and Demonstration on Sali and Boro season under APART.
- Conducted Rice Value Chain Demonstration on 11.07.2022 at the village Tetelisara Grant district under APART.
- Demonstration on Maize, Cauliflower, Pea, Blackgram were conducted at different blocks of Nagaon district under APART.

- FLD Demonstration on Mustard, Blackgram, Pea was conducted at farmer's field under AAU Stand Alone Activities under APART.
- A total of 60 **FLDs** on Linseed variety 'T-397' was conducted in Nagaon, Karbi Anglong and Morigaon districts during *Rabi*, 2022-23 under AICRP on Linseed, whereas, 30 FLDs as Relay crop, 10 FLDs as Pure crop irrigated and 20 FLDs as pure crop Rainfed in rice fallow areas of the districts.
- FLD in spring mungbean on full package technology was conducted in 10 ha area.
- FLD in *Kharif* mungbean on full package technology was conducted in 20 ha.
- FLD in *Kharif* urdbean on full package technology was conducted in 20 ha.
- FLD in field pea on full package technology was conducted in 15 ha.
- FLD in field pea on full package technology was conducted in 15 ha.
- FLD in lentil-rice fallow was conducted in 10 ha.
- Seed production cum demonstration programme on toria variety, 'AAU TS 38 was conducted in 20 ha.

6.7.3. Project Implementation Unit, Cluster Based Business Organisation (PIU-CBBO), AAU – HRS, Kahikuchi

The Programme Implementation Unit (PIU) of CBBO, Assam Agricultural University located at HRS Kahikuchi, has been coordinating the activities pertaining to the formation and promotion of 25 FPOs in 11 districts of the state under the Central Sector Scheme on "Formation & amp; Promotion of 10,000 FPOs". Out of the 25 FPOs promoted by CBBO-AAU from the financial year 2020-21, 20 FPOs have been financed by NABARD while 5 FPOs are financed by NCDC. The PIU has been playing a proactive role in the registration of these 25 FPOs as well as facilitating the release of FPO Management Cost and Equity Grant support for them. Under the financial support of APEDA, the PIU has also organized three day capacity building training programmes in eight locations of the state in the area of FPO cum business management for the Board of Directors, CEOs and shareholder members of the FPOs. The PIU has also facilitated the preparation of business plans for FPOs and the conduct of baseline survey cum diagnostic study for each FPO. Further, during the financial year 2022-23, 25 additional FPOs have been allotted by NABARD to AAU for their formation and promotion across 14 districts of the state. The PIU has been guiding the local CBBOs for their registration and handholding and till March 2023, nine (09) FPOs have already been registered. The PIU has been attending the review meetings conducted by NABARD & NCDC for furnishing up to date information regarding the status of the promoted FPOs to the implementing agencies. It has also been representing AAU in the state level SLCC meetings.



Training and Extension programme under PIU – CBBO, AAU-HRS

Extension Education

6.7.4. Local CBBO, HRS, AAU, Kahikuchi

Under the centrally sponsored scheme on "Formation of 10,000 FPOs/FPCs," the local Cluster Based Business Organization under Horticultural Research Station, AAU, Kahikuchi played significant role in promotion and formation of four numbers of Farmers Producers Company/Organizations in Goalpara district of Assam. Two FPCs supported by NABARD namely Nasiriba, with primary commodity Banana was established at Rongjuli block with 120 nos. of shareholders and Urpad, with primary commodity Pineapple was formed at Balijana Development block with 114 nos. of shareholders. While, NCDC supported two FPOs, Maa Banabashi with primary commodity Oil Palm in Kuchdhuwa block with 128 shareholders and Aya Baikho with primary commodity Black rice in Krishnai block with 101 shareholders.

6.7.5. Aamar Gaon Aamar Gaurav (AGAG) programme under AAU – HRS, Kahikuchi

- During the reporting period four numbers of awareness programme were conducted in the month of September and October at Sonapur, Rani, Hajo and Goreswar with active participation of around 200 farmers form selected village clusters under AGAG.
- Four numbers of demonstration programme on summer Marigold, Gladiolus and Tuberose at selected village clusters namely Bahupara, Ganapati, Kulhati & Pakorkona were also conducted with the support from AICRP (Floriculture).



Extension activities under AGAG, AAU-HRS



Extension activities under AGAG, AAU-HRS

6.7.6. Assam Agribusiness and Rural Transformation Project (APART), AAU – HRS, Kahikuchi

- A total of 165 multi–component demonstrations of Winter rice (Sali paddy) were undertaken in Goalpara district during 2022-23, covering an area of 133.5 ha, with the active involvement of 340 beneficiary farmers. The average demo yields recorded were 4.7 t/ha against Ranjit Sub-1, 4.9 t/ha against Bahadur Sub-1, 4.7 t/ha against Swarna Sub-1 and 4.2 t/ha against Binadhan 11
- A Varietal Crop Cafeteria was also introduced at Goalpara district where all total 10 varieties viz., HYV, PQR varieties and also some local varieties were transplanted together. A participatory varietal field day was also conducted where the farmers assessed performance of all the varieties
- Altogether 188 multi-component demonstrations of summer rice (Boro/Early Ahu paddy) variety Binadhan-11, Binadhan-19 are being conducted during 2022-23 in Goalpara district, covering an area of 56.95 ha with the active involvement of 233 beneficiary farmers. Cropping system demonstrations on Mustard, Lentil and Maize were also conducted along with Boro/early Ahu Paddy. Altogether 19 cropping system demonstrations were conducted during 2022-23 involving 19 beneficiary farmers
- In 2022-23, 8 training programmes and 5 demonstrations on Sali Paddy were organised in the broad areas of paddy value chain machinery, quality paddy seed production, post-harvest machinery, stress-tolerant rice varieties, resource efficient crop establishment methods etc. On Boro Paddy, a total of 6 training and 2 demonstrations programmes were organised. During the period under reference, 15 field days were organised at different rice fields of Goalpara district, with the participation of around 700 farmers.

• During the year 2022-23, On Farm Trial (OFT)s and Front Line Demonstration (FLD)s were also conducted under AAU standalone activities on different crops like Blackgram, Mustard, Tomato, Cabbage, Cauliflower, Banana etc. covering an area of 23.125 ha with 45 beneficiaries.



Demonstration Programme on Winter Rice under APART, AAU-HRS



Demonstration Programme on Cabbage under APART, AAU-HRS



Demonstration Programme o Rice Varietal Cafeteria under APART, AAU-HRS



Training Programme under APART, AAU-HRS

6.7.7. Field activities under AICRP on Spices

• Quality planting materials viz., 3200 Assam Lemon cuttings, 4800 Arecanut seedlings, 3840 Black pepper cuttings, 4.0 q Turmeric rhizome, 25000 Gladiolus corms, 10000 TC Gerbera, 60000 Tuberose bulbs and 14 Battery operated spray machines were distributed among the farmers of 16 selected village clusters of AGAG with the active support from AICRP (Spices) & AICRP (Floriculture).

6.7.8. Extension activities under AICRP on Floriculture

- For promotion of livelihood through floriculture, two numbers of demonstrations in cluster at Rani (Bahupara & Ganapati) and two numbers at Hajo (Kulhati & Pakorkona) on Gladiolus, summer Marigold and Tuberose were conducted.
- Training on "Production techniques and value addition of tuberose and gladiolus for commerce in Assam" was conducted for the flower growers of greater Hajo area of Kamrup district under TSP programme wherein, a total of more than 40 nos. of beneficiaries participated and implements like shovel, spade, tree planter, hand hoe, sickle, budding & grafting knife, secateurs, pruning shears, agro shed nets, UV film, grafter, gladiolus corms (25,000), marigold rooted cuttings (40,000), TC gerbera (10,000), tuberose bulbs (60,000), fertilizers (6q – Urea, SSP & MOP) distributed among the participants.
- Disseminated low-cost bamboo-based polyhouse technology under the module "Protected cultivation of offseason vegetables with focus on GAP based production technology" in three Aspirational districts *viz.*, Udalguri, Goalpara and Dhubri of Assam. A total of 30 nos. of beneficiaries were covered under the module. UV Film, Mulch film, Insect proof net and Micro drip system were distributed among the beneficiaries of protected cultivation in three Aspirational districts of Assam.
- Twelve vegetable clusters were developed from twelve FPCs in six districts namely Kamrup, Darrang, Morigaon, Jorhat, Golaghat & Majuli with 2 clusters per district. All total 12 trainings were organised for twelve clusters in six different districts at their corresponding FPC locations,

with a total of 240 participants. The production of seed and vegetative propagule of indigenous vegetables namely Ridge gourd var. Satputi, Lai (*Brassica integrifolia*) var. Kajoli, Brinjal (*Solanum melongena*) var. JC-1, Kon Bilahi (*Solanum pimpinellifolium*) var. AAUJ KB-1 is underway at the Horticulture Experimental Farm, AAU Jorhat.

Capacity building programme on end to end production technology of turmeric under GAP and Organic mode along with propagation and market linkage were organised to disseminate the knowledge and technology among the turmeric growers of different location of the state. A total of five numbers of three-day training programme on Production technology of turmeric under both GAP and Organic mode were conducted at AAU-HRS, Kahikuchi wherein a total of 150 numbers of farmers/growers were trained in the topics like Importance of Cucurmin containing turmeric varieties, modern Agro-techniques, Plant health management, pre and post harvest techniques, harvest indices, management of market and distribution in Assam etc.

6.7.9. Extension activities at AAU-ZRS, Lakhimpur

Under APART programme, demonstration programmes on Head2Head, WDSR and LCD were conducted in 85 ha area with stress tolerant rice varieties, viz. Ranjit Sub-1, Bahadur Sub-1, Swarna Sub-1 and Bina Dhan-11 benefitting 156 beneficiaries under Lakhimpur, Telali, Karunabati, Naboisa and Boginadi Block during the Sali, 2022. A Crop Cafeteria was conducted at AAU-ZRS experimental farm with 24 varieties. During Rabi 2022, FLDs on Mustard (var. DRMR 150-35), Pea (var. Arkel) and OFTs on Blackgram (var. IPU-02-45) and Cabbage (var. BC-90) were conducted covering 20 nos. of beneficiaries. Boro paddy demonstrations covering 42 ha area with 121 number of beneficiaries were conducted. During the year 2022-23, 10 nos. of Field Day on Sali paddy, 5 nos. of Field Day on Mustard and 2 nos. of Field Day on Pea were conducted at different locations of the district. Training programmes on Post-Harvest Machineries, Best Management Practices and ICMD Grand Harvest programme were organised.

- Under DRMR-AAU Collaborative programme, 100 nos. of demonstrations on Toria (var. TS-38) covering 10 villages of Lakhimpur district were conducted. Three input distribution programmes were conducted at AAU-ZRS, North Lakhimpur while one input distribution-cum-training programme was conducted at Rangabhumi, Dulia Baruah gaon, Dhakuakhana on 10th November, 2022 where 25 farmers participated in the programme.
- Under ICAR-AINP on VPM project, training on rodent management in Sali paddy was organized on 03/09/2022. An awareness meeting on Barn owl conservation and its impact in agroecosystem organized on 31/10/2022. Input distribution programme of toria and implements was organized on 09/11/2022. Training on integrated bird and pest management in toria was conducted on 10/11/2022. Awareness meeting on recent advances in vertebrate pest management was organized in 26-12-2022. A Farmer-Scientist interaction programme was organized on 17-02-2023. World Sparrow Day was celebrated on 20/03/2023. Input distribution of vegetable seeds, fertilizers and rodent management implements to farmers on 20/03/2023.



Field Day organized by RARS,North Lakhipur

6.7.10. Extension activities at AAU-ZRS, Karimganj

• Scientist from AAU-ZRS, Kaimganj has either attended & delivered lecture or acted as resource person in 32 numbers of training and awareness programme organized by various stakeholders during 2022-23.

6.7.11. Extension activities by AAU-SMAPRS

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• Involved in various extension activities viz., conducting 13 one day farmers training programme in different villages, two farmers exposure visit, organized on field day at vill. Sonalipather, Telisal, Golaghat on 28.3 2023, organized farmers fair and conducted the Farmers-Scientist interaction programme at the Sugarcane, Medicinal and Aromatic Plants Research Station, Buralikson on 14.12. 202, participated in the farmers Fair at RARS, Titabor and acted as resource person in the farmers scientist interaction programme on 9.11.2022 and also conducted 22 numbers of FLDs in different districts of Assam involving 22 beneficiaries.

6.7.12. AICRP on Biocontrol

• Altogether 16 farmer's trainings were conducted on biological control of crop pests and diseases across the state of Assam . Moreover, distributed small farm implements, neem oil, vermicompost, traps, lures etc. among 430 numbers of farmers of Majuli, Jorhat, Dhemaji, Baksa, Karbi Anglong and Sibsagar district under TSP programme during 2022-23.



Material distribution among trainees after training programme under TSP at Baksa

6.7.13. Fishery Research Centre, AAU, Jorhat

- Participated in various training programmes as resource persons, participated in exhibitions on the occasion of Farmers ' Day at RARS Titabar.
- Radio talks were recorded and broad cast from AIR Jorhat.
- Consultancy service/ advisory service for farmers and entrepreneurs, support services in the form of quality fish seed, vermicompost,

planting material and other inputs for farmers were provided.

- *In situ* demonstrations of integrated farming, fish seed production were conducted.
- Students from different institutions viz. Nagaland University, Nagaland, Bahona College, Jorhat, DR College, Golaghat, JB College, Jorhat, DKD College, Dergaon, N.N. Saikia college, Titabar, Jorhat Normal School, Jorhat visited the centre as part of their academic programme.School student groups under Chief Ministers' Gyanjyoti programme, Environmental study programme and other educational tour programme visited the centre as part of their tour. A total of 1511 nos of farmers visited the centre during the report period.



Farmer's group from Nagaland visiting FRC, AAU

6.7.14. Lac Project

All total three numbers of trainings on Scientific lac culture & two OFT (Evaluation of native entomopathogenic fungi against *Eublemma amabilis*) and trainings regarding "Biopesticide application for management of *E. amabilis*" at farmers fields were conducted during the year.

- A training was conducted at Deodhai village, Amguri block, Sivasagar on 24th September, 2022 with 23 numbers of farmers regarding "Scientific lac culture".
- A stakeholder's meet was organized on 10th November, 2022 regarding "Export potential in Agriculture/Horticulture" & farmers were trained up on scientific lac cultivation & its export potential.
- Training was conducted at KVK, Diphu on 24th November, 2022 with 15 numbers of participants

Extension Education

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(selected youth) on "Scientific lac culture" with the objective of entrepreneurship development .

On farm trial & a training on Bio-pesticide (*Isaria fumosorosea*) application for management of *E. amabilis* was conducted on 15th and 21st November, 2022 at two locations (Langardang & Terang Nokor) of West Karbi Anglong.



Training on Scientific lac cultivation & its export potential at AAU, Jorhat

6.7.15. Extension activities under Soil Arthropod Pests

• An awareness programme on white grub and input distribution to beneficiary groups of farmers under TSP programme was conducted on 28th September, 2022 in Majuli, Assam.

6.7.16. Extension activities under AICRP on Nematode

- Four farmers' trainings were organized at Golaghat, Jorhat and Karbi Anglong district of Assam with 149 beneficiaries
- An exposure visit of farmers was organized on 17.10.2022. In this event, 50 farmers visited the Department of Nematology and experiment field.
- During the year, 100 kg biopesticides, 30 nos. of Falcon kits and 117 Knapsack sprayers were distributed among 117 TSP farmers at Upor Deori, Telixal, Harihajan and Uriamghat.

Developmental Activities

7.1. College of Veterinary Science, Khanapara

College of Veterinary Science, Khanapara carried out following infrastructure development activities during2022-23.

- Development work at EEI Bldg. (a) and Construction of 11/0.4 KV 100 KVA sub-station at EEI building at CVSc, AAU, Khanapara with an amount of Rs. 10,41,835.00.
- Construction of approach road in front of the PG hostel (Repairing of other works) at CVSc, AAU, Khanapara at a cost of Rs.2,16,119.00 Under ICAR Development Grant.
- Construction of RCC drain with RCC slab in front of Teachers staff quarter to temporary girls' hostel at CVSc, AAU, Khanapara with an amount of Rs. 5,38,770.00 under the of University receipt.
- Construction of AAU Guest House cum Agri Business Centre at AAU, Khanapara with an amount of Rs.99,72,114.00 under Govt. of Assam 35 grant (2021-22).
- Re-construction and extension of the existing garage along with construction of store room at CVSc, AAU, Khanapara at a cost of Rs. 13,65,497.00.
- Repair and renovation of toilet blocks (gents and ladies) at Dept. of Epidemiology and Preventive Medicine maintenance at CVSc, AAU, Khanapara with an amount of Rs.1,96,911.00 from University receipt.
- Repair renovation of the qtr no. 1/B-60 including new septic tank at CVSc, AAU, Khanapara with an amount of Rs. 1,16,657.00 from University receipt.
- Repair/renovation of class-Iqtr. at CVSc, AAU, Khanapara with an amount of Rs. 1,66,360.00 from University receipt.
- Repair/renovation of class-I qtr. at CVSc, AAU, Khanapara with an amount of Rs. 1,32,826.00 from University receipt.

- Construction of EEI building (1st floor) at CVSc, AAU, Khanapara with an amount of Rs. 46,53,201.00 from head of EEI NE Region .
- Repair/renovation of guest house no. 1 at CVSc, AAU, Khanapara repair/renovation of kitchen and dining hall in the main hostel (E/W) at CVSc, AAU, Khanapara with an amount of Rs. 1,95,796.00 under R/F A/C guest house.
- Repair/renovation of kitchen and dining hall in the main hostel (E/W) at CVSc, AAU, Khanapara with an amount of Rs. 3,71,959.00 under P/L a/c Dean.
- Petty repairing works of class-I staff quarter at CVSc, AAU, Khanapara with an amount of Rs. 39,433.00 from University receipt.
- Repairing of temporary girls hostel at CVSc, AAU, Khanapara with an amount of Rs. 11,46,783.00 from University receipt.
- Repairing and renovation of gr-III staff qtr. at CVSc, AAU, Khanapara with an amount of Rs. 1,92,434.00 from University receipt.
- Emergency repairing of submersible pump and accessories situated at park indoor stadium, college field, AT hostel at CVSc, AAU, Khanapara with an amount of Rs. 83,390.00 from University receipt.
- Repair renovation of the main hostel (W/W) at CVSc, AAU, Khanapara with an amount of Rs. 5,01,881.00 under ICAR development (D/W) 2022-21.
- Repair/renovation of qtr. No. 1/D-91 at CVSc, AAU, Khanapara. (Electrical works) with an amount of Rs. 97,840.00 from University receipt.
- Emergency breakdown repairing of college auditorium and DPPs' office, DG set, providing flood light at Dept. of Vet. Biochemistry & repairing of main panel board at ADSW at CVSc, AAU, Khanapara with an amount of Rs. 97,154.00 from University receipt.
- Urgent repairing of lavatory blocks of the KBR Hostel (1st and 2nd floor) for accommodation of fresh students at CVSc, AAU, Khanapara with an amount of Rs. 2,76,865.00 from University

receipt.

- Providing luminaries geyser, street lights at VC camp residence & ADSW office & LT line clearance works in front of poultry farm at CVSc, AAU, Khanapara with an amount of Rs. 91,694.00 from University receipt.
- Replacement of luminaries at Dean Conference room also in Deptt. Of Surgery & radiology and chemical earthling at Dept. of Pathology at CVSc, AAU, Khanapara with an amount of Rs. 96,702.00 from University receipt.
- Repair/renovation of Dept. of Pharmacology & Toxicology at CVSc, AAU, Khanapara with an amount of Rs. 88,164.00 from University receipt.
- Construction of canteen of clinics TVCC CVSc, AAU, Khanapara with an amount of Rs. 4,97,105.00 from University receipt.
- Load security bill to newly constructed EEI Building at AAU, Khanapara with an amount of Rs. 1,81,740.00 under EEI ,NE Region grants.
- Laying of new 3 phase underground cable connection at Vet. field submersible pump at CVSc, AAU, pump at CVSc, AAU, Khanapara with an amount of Rs. 98,230.00 under ICAR Development (D/W) 2021-22.
- Repair/renovation of class-I qtr. at CVSc, AAU, Khanapara with an amount of Rs. 1,86,901.00 from University receipt.
- Development and beautification of EEI new building campus at CVSc, AAU, Khanapara with an amount of Rs. 24,38,483.00 under EEI NE Region grants .
- Providing audio system & wall paneling for aquas treatment in conference hall installation of DG set panel board CC TV installation electrical works at AAU, Khanapara with an amount of Rs. 7,71,007.00 under EEI NE Region grants.
- Extension of vet. clinic ICBP road TVCC CVSc, AAU, Khanapara with an amount of Rs. 3,05,174.00 under 35 GIA.
- Construction of EEI building (1st floor) at CVSc, AAU, Khanapara with an amount of Rs. 32,60,156.00 under EEI NE Region grants.
- Repair renovation of Hon'ble VC's cabin at administrative building at CVSc, AAU, Khanapara with an amount of Rs. 4,29,327.00

from university receipt.

- Urgent maintenance works at Microbiology and Pharmacology Dept. VC camp residence and canteen at CVSc, AAU, Khanapara with an amount of Rs. 41,006.00 under ICAR Development grants.
- Repair/renovation works of o/o the ADSW at CVSc, AAU, Khanapara with an amount of Rs. 95,043.00 from university receipt.
- Electrical renovation of academic cell at CVSc, AAU, Khanapara with an amount of Rs. 1,58,457.00 from university receipt.
- Repair renovation of KBR hostel at CVSc, AAU, Khanapara with an amount of Rs. 14,69,868.00 from PL A/C Dean
- Construction of 30 nos. of poultry shed at LRS, Mondira with an amount of Rs. 7,44,459.00
- Development works at EEI building at AAU, Khanapara with an amount of Rs. 28,15,352.00.
- Repairing of waiting room and w/s connection from overhead tank to Girls hostel at CVSc, AAU, Khanapara with an amount of Rs.4,91,963.00 under ICAR Development (D/W) 2021-22.
- Urgent maintenance works of GRS, Burnihat with an amount of Rs. 53,769.00 under the AICRP of improvement of Goat.
- Construction of septic tank & cattle farm approach road of qtr no I/D 96 at CVSc, AAU, Khanapara with an amount of Rs. 78,138.00 under R/F A/C DPP Jorhat.
- Construction of boundary wall at GRS, Burnihat 7,95,614.00 from University receipt.
- Construction of brick drain from the hill side in front side at gr-III staff qtr. at CVSc, AAU, Khanapara with an amount of Rs. 96,137.00 under R/F A/C Campus development Dean Esstt.
- Repair/renovation of AICRP on PHET at Dept. of LPT, CVSc, AAU, Khanapara with an amount of Rs. 4,82,423.00 under AICRP on PHET.
- Replacement of old PSC pole with steel tumber pole in front of Dept. of Microbiology at CVSc, AAU, Khanapara with an amount of Rs. 68,621.00 from university receipt.
- Repair/renovation of AICRP on PHET Dept. of

LPT, CVSc, AAU, Khanapara with an amount of Rs. 4,82,423.00 under AICRP on PHET.

- Repair/renovation of gr-III staff qtr at CVSc, AAU, Khanapara with an amount of Rs. 2,20,336.00 from University receipt.
- Providing audio system ent. Wall paneling for acoustic treatment in conference hall installation of DG panel board CC TV works (Electrical works) at EEI, Khanapara with an amount of Rs. 9,76,610.00 under EEI, NE Region (D/W) grants.
- Providing audio system ent. Wall paneling for acoustic treatment in conference hall installation of DG panel board CC TV works (Civil) at EEI, Khanapara with an amount of Rs. 11,32,328.00 under EEI ,NE Reason (D/W) grants.
- Construction RCC drain in front of smart class room of LPT Dept. at CVSc, AAU, Khanapara with an amount of Rs. 18,45,267.00 with grants from Govt. of Assam.
- Construction of paver block road in front of LPM building at CVSc, AAU, Khanapara with an amount of Rs. 9, 26,683.00 with grants from Govt. of Assam.
- External painting of Dean's Admin. Building at CVSc, AAU, Khanapara with an amount of Rs. 9,61,602.00 from University receipt.
- Face lifting of PG hostel (new) at CVSc, AAU, Khanapara with an amount of Rs. 9,11,664.00 from P/L A/C Dean.
- Repair/renovation of internal bituminous road of college campus from AT hostel to main entrance , and from main entrance to rotary in front of Dean's Administrative Building at CVSc, AAU, Khanapara with an amount of Rs. 14,48,746.00 from University receipt.
- Provision of water supply to laboratory (Extension education and Pharmacology Dept.) at CVSc, AAU, Khanapara with an amount of Rs.54,721.00 under ICAR Development grant.
- Painting of Physiology Dept. (ground floor) at CVSc, AAU, Khanapara with an amount of Rs.96,954.00 under ICAR Development grant.
- Repairing and face lifting of Physiology Dept. (ground floor) at CVSc, AAU, Khanapara

with an amount of Rs. 97,546.00 under ICAR Development grant.

- Converting the office of the PPVFRA into VIP shits at CVSc, AAU, Khanapara with an amount of Rs. 17,83,100.00 under University receipt.
- Construction of Auditorium at AAU, Khanapara with an amount of Rs. 23,95,932.00 under 35 GIA 2020-21.
- Urgent repairing of Air condition of Director of Clinic chamber and laboratory of TVCC, CVSc, AAU, Khanapara with an amount of Rs. 83,290.00 under University receipt.
- Supplying fitting and fixing street lights from college main gate to VC camp residence at CVSc, AAU, Khanapara with an amount of Rs.1,96,848.00 from University receipt.
- Providing flood light and illumination of main hostel (w/w) at CVSc, AAU, Khanapara with an amount of Rs.80,454.00 under ICAR Development grant 2020-21.
- Supplying fitting of LED sheet lights & illumination of main hostel (e/w) at CVSc, AAU, Khanapara with an amount of Rs.69, 809.00 under ICAR Development grant 2020-21.
- Supplying fitting and fixing of flood light sheet light at KBR hostel and providing illumination of Girls' hostel no.1 at CVSc, AAU, Khanapara with an amount of Rs.91,037.00 under ICAR Development grant 2020-21.
- Repairing of water supply tank of Girls' hostel no.1 at CVSc, AAU, Khanapara with an amount of Rs.6047.00 under University receipt.
- Modification of the room of thee HoD, Dept. of Poultry Science at CVSc, AAU, Khanapara with an amount of Rs. 1,19,724.00 under 32 GIA 2022-23.
- Prevention maintenance of 315 KVA sub-station situated at TVCC complex at CVSc, AAU, Khanapara with an amount of Rs. 1,04,486.00 from University receipt 2022-23.
- Repair/renovation of PPV & FRA Guwahati branch at old DPP office at CVSc, AAU, Khanapara with an amount of Rs. 1,93,413.00 from University receipt 2022-23.
- Furniture & fixture for VIP suite at NEC guest

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house at CVSc, AAU, Khanapara with an amount of Rs. 5,90,000.00 from University receipt.

- Cleaning the water pipe line using compressor machine & w/s works at girls hostel no-1 & new girls hostel at CVSc, AAU, Khanapara with an amount of Rs. 64,097.00 under ICAR Development grant 2020-21.
- Repair/renovation of Academic cell at CVSc, AAU, Khanapara with an amount of Rs. 2,49,979.00 under ICAR 2020-21 (SCSCA).
- Construction of box culvert drain near staff qtr. at CVSc, AAU, Khanapara with an amount of Rs.1,94,742.00 under ICAR (D/W).
- Extension of ICBP road vet. clinics to ADMAc building at TVCC, CVSc, AAU, Khanapara with an amount of Rs.2,07,030.00 with grants from Govt. of Assam.
- Wiring and excavation of earthen drain at GRS, AAU, Burnihat with an amount of Rs. 1,40,000.00 under University receipt.
- Repair/renovation of colony LP School installation of electrical necessities & ceiling fan for smart class room, animal house &Vet. Biochemistry at CVSc, AAU, Khanapara with an amount of Rs.87,804.00 under University receipt.
- Providing fitting & fixing of tube light, bulb etc. at Girls' hostel no-1, AT hostel at CVSc., AAU, Khanapara with an amount of Rs.83,862.00 from University receipt.
- Providing fitting of ceiling fan at cow shed of ILF ©, temporary girls' hostel & LED light at new girls' hostel at CVSc, AAU, Khanapara with an amount of Rs.66,667.00 from University receipt.
- Providing flood light at college volley ball court & ceiling fan at Dean's residence, security room at CVSc, AAU, Khanapara with an amount of Rs.96,128.00 from University receipt.
- Floor tiles provision in the office of the ADSW at CVSc, AAU, Khanapara with an amount of Rs. 96,538.00 from University receipt.
- Painting of the ADSW office at CVSc, AAU, Khanapara with an amount of Rs.50, 104.00 from University receipt.

- Repair/renovation of 6 nos. toilet & 6 nos. bathroom at ground floor of e/w main hostel at CVSc, AAU, Khanapara with an amount of Rs.6, 83,950.00 from University receipt.
- Face lifting of front area along with *Swahid bedi* & old admin building at CVSc, AAU, Khanapara with an amount of Rs.1,66,410.00 from University receipt.
- Construction of parking area behind the new admin. Building at CVSc, AAU, Khanapara with an amount of Rs. 7,65,956.00 from University receipt.
- Construction of AAU Guest house cum agribusiness centre at AAU, Khanapara with an amount of Rs.2,46,18,792.00 with funds from Govt. of Assam.
- Emergency storm damage repairing of HT & LT line at CVSc, AAU, Khanapara with an amount of Rs.96,837.00 under ICAR Development grant 2019-20..
- Construction of septic tank at PG hostel at CVSc, AAU, Khanapara with an amount of Rs. 2,37,907.00 under ICAR Development grant 2020-21.
- Construction of ICBP road from Admin. office to guest house at CVSc, AAU, Khanapara with an amount of Rs.7,62,807.00 under 35 GIA.
- Providing new chemical earthling at Vet. Clinical Complex at CVSc, AAU, Khanapara with an amount of Rs.81,708.00 from P/L A/C of Dean FVSc.
- New underground cable laying with supplying of decorative lights at water jousting of *Swahid bedi* & flag hosting area for Platinum Jubilee Celebration at CVSc, AAU, Khanapara with an amount of Rs.89,024.00 from P/L A/C of Dean CVSc.
- Construction of boulder boundary wall raising height of brick boundary wall at pig farm at CVSc, AAU, Khanapara with an amount of Rs.8,12,673.00 under 35 GIA.
- Development of fishery based integrated farming system models for livelihood & income generation of farmers at CVSc, AAU, Khanapara with an amount of Rs.71,37,817.00 from Fishery based integrated farming system.

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- Repair/renovation of internal bituminous road college campus from AT Hostel to main entrance gate, and from main entrance to rotary in front of Dean Admin. Building at CVSc, AAU, Khanapara with an amount of Rs.5,35,633.00 from University receipt.
- External painting of Dean Admin building at CVSc, AAU, Khanapara with an amount of Rs.2,98,837.00 from University receipt.
- W/s connection for labs at LPT Dept. at CVSc, AAU, Khanapara with an amount of Rs. 1,55,483.00 under AICRP on PHET 2022-23.
- Emergency w/s repairing works at Physiology Dept. around Bio technology Dept. and main hostel (boys) at CVSc, AAU, Khanapara with an amount of Rs. 82,543.00 from University receipt.
- Construction of experimental animal house at CVSc, AAU, Khanapara with an amount of Rs.11,67,223.00 from the project 'Generation and evaluation of a live vaccine against porcine circo virus infection of swine'.
- Repair/renovation of staff qtr no.1/c-83 at CVSc, AAU, Khanapara with an amount of Rs. 3, 42,131.00 from University receipt.

7.2. Biswanath College of Agriculture, Biswanath

- Repairing/ renovation & modernization of undergraduate classroom at academic Block "B" at BNCA with an amount of Rs.16,17,750.00
- Construction of girls' hostel at BNCA with an amount of Rs. 1,78,20,000.00 under state plan.
- Lump sum turnkey contract on design, build, installation, commissioning and operation of an integrated plant for the production and marketing of agricultural bio-inputs (bio-fertilizers & biopesticides) for 5 years at BNCA with an amount of Rs. 14, 84, 00,000.00 under NEC.
- Construction of main entrance gate with a security guard room at BNCA with an amount of Rs.16,02,902.00
- Providing granite stone in the surface of the main gate at BNCA with an amount of Rs.4,16,683.00
- Construction of chain link fencing, irrigation setup and agroshade net house under establishment of germplasm centre at BNCA with an amount of Rs. 10,00,800.00

- Installation of flood light at volleyball court at BNCA with an amount of Rs. 3,06,000.00
- Construction of toilet shed near indoor stadium cum canteen at BNCA campus with an amount of Rs. 2,00,000.00 under revolving fund.
- Supplying of solar street light at BNCA with an amount of Rs. 2,01,600.00

7.3. College of Horticulture and FSR, Nalbari

- Academic Complex (PG building) is under construction
- Construction of one Examination Hall has been completed.
- Construction of one Teachers Quarter has completed.
- Construction of six Staff Quarters (including Grade IV quarters) has been completed.
- Construction of one guest house and boundary wall is under construction.
- Works on Internal Roads are in progress.

7.4. College of Fisheries, Raha

- Constructed Boy's Hostel with the funding of Govt of Assam (Rs. 80,00,000.00) is under progress.
- Completed the construction of Watch Tower at Fish Farm with an amount of Rs. 10,00,000.00 funded by Govt. of Assam.
- Wet Laboratory funded by Govt. of Assam (Rs.1,25,00,000.00) is under construction.
- Fencing around Fish Farm funded by Govt. of Assam (Rs. 35,00,000.00) is under construction.

7.5. LCVSc, Lakhimpur

Under RKVY

- Construction of Feed Mill completed with an amount of Rs 6 lakh.
- Construction of Brooder cum hatchery completed with an amount of 5.5 lakh.
- Construction of Water supply system completed with an amount of 3 lakh.
- Construction of 2 nos. grower cum layer completed with an amount of 24.15 lakh.

- Construction of 8 nos. pig sty completed with an amount of 18 lakh.
- Under State grant
- Construction of Indoor stadium cum canteen completed with an amount of Rs 2.00 crores.
- Construction of Administrative building is in progress with an amount of Rs 2.80 crores.
- Construction of Guest House is in progress with an amount of Rs 1.70 crores.
- Deep tube well completed with an amount of Rs 7.47 lakh.

7.6. SCS College of Agriculture, Dhubri

• Multimedia high tech language laboratory with necessary hardwares and software (SANAKO) was setup.

7.7 Research Stations:

7.7.1. AAU-ARRI, Titabar

- Museum, Farmers Training and Office Building are under construction (under State Grant) at AAU-ARRI, Titabar.
- Formalities for construction of a Medium Term Storage Facility for rice germplasm have been initiated at AAU-ARRI, Titabar.

7.7.2. CPCRS, Tinsukia

• Modular Tissue Culture Lab, Screen House(6nos), Cryo- Gene Bank, Fertigation Unit, Creation of Water House & Delivery System at CPCRS, Tinsukia are in progress.



Completed Examination Hall of College of H & FSR, Nalbari



Completed Feed Mill of LCVSc, Lakhimpur



Completed quarters of College of H & FSR, Nalbari



Completed Brooder cum hatchery of LCVSc, Lakhimpur



Completed Pig sty of LCVSc., Lakhimpur



Completed Grower cum layer of LCVSc, Lakhimpur



Language Lab at SCSCA, Dhubri

Dignitaries Visit

• Hon'ble Governor of Assam and the Chancellor of Assam Agricultural University His Excellency Gulab Chand Kataria visited AAU on 26 March, 2023.



Visit of His Excellency Shri Gulab Chand Kataria, Hon'ble Governor of Assam on 26 March, 2023.

• The consulate general of Bhutan, Jigme Thinlye Namgyal, visited the AAU-NEATEHUB-incubator on 27 April 2022 along with a business delegation. The delegates met the Vice-Chancellor of Assam Agricultural University, Dr Bidyut C. Deka.



The consulate general of Bhutan, Jigme Thinlye Namgyal (third from left) with Vice-Chancellor Dr. Bidyut C. Deka and Registrar Mr. Tapan Kr. Gohain during a presentation.

• Hon'ble Minister of Agriculture Sjt. Atul Bora visited AAU-Assam Rice Research Institute, Titabar on the occasion of foundation day on 26 November 2022



Hon'ble Minister of Agriculture Sjt. Atul Bora on the occasion of foundation day of AAU-Assam Rice Research Institute, Titabar on 26 November 2022

8.1. College of Agriculture

- Dr. R.C. Agrawal Deputy Director General (Education) Division of Agricultural Education, ICAR, New Delhi Visited EGPC, AAU on 2 April 2022. An interaction session was held in the presence of all statutory officer and In charge, EGPC, AAU Mr. M. Gogoi.
- Padmashri Jadav Payeng, Mr. V.B. Singha, ACF and Mr, Kabin Bora, Ranger Padmashri Jadav Payeng Mr. V.B. Singha- ACF Mr, Kabin Bora- Ranger Under CMIPP, a tree planting programme was organised at TPU, Department of THT, AAU, Jorhat on 9 August 2022.
- Dr. Prabhat Kumar, Horticulture Commissioner and his team visited on A programme of planting of Cocoa sapling at EGPC, Dept. Of THT, AAU was organized on 28 August 2022.
- Dr. Sudarsana Poojari, Senior Scientist, Brock University, Ontario, Canada Visited Experimental Garden for Plantation Crops, AAU on 20 September 2022.
- Mr. Jayanta Kakoti, Guwahati Tea Auction Centre along with delegates Amy Dubin Nath, Cathy Roadh, Gary Reeng and Amancha Nuvelk, Former Secretary Visited the Department of Tea Husbandry & Technology and EGPC, AAU on 14 October 2022. An interaction session was held in the presence of all faculty members.

- Prof. M. Suhoib, JMI, New Delhi Visited the EGPC, AAU on 7 January 2023.
- Prof. Nitin P. Gulkone, VJTI, Mumbai, Visited the EGPC, AAU on 7 January 2023.
- Mr. Ramen Deka and Ex. MP of Lok Sabha, Vice Chairman, State Innovation and Transformation Aayug(SITA), Govt. of Assam, Dispur, Visited the Department of Agricultural Economics and Farm Management, AAU, Jorhat on 14 September 2022 for reviewing the SITA funded project.
- Dr. Prabhat Kumar, Horticulture Commissioner, Ministry of AFW, Govt of India, visited Dept. of Entomology and Dept. of Plant Pathology on 24 August 2022.



Visit of Dr. Prabhat Kumar, Horticulture Commissioner, Ministry of AFW, Govt of India on 24 August, 2022

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• Dr. D. N. Dutta, Retd. Dean, College of Agriculture, visited Dept of Entomology and Dept. of Plant Pathology on 17 December 2022.



Visit of Dr. D. N. Dutta, Retd. Dean, College of Agriculture on 17th December, 2022

• Dr. Homecherian, Director, DASD, Visited the experimental plot under AICRP on MAP & Betelvine on 23 August 2022 and reviewed all the ongoing experiments



Visit of Dr. Homecherian on 23 August 2023

 Mr. Kamakhya Prasad Tasa, Honourable MP Rajya Sabha visited Dept. of Entomology and Dept. of Plant Pathology on 21 October 2022.



Mr. Kamakhya Prasad Tasa, Honourable MP Rajya Sabha visit on 21 October 2022

• Dr. Gopal Iyengar, Advisor, MoES, New Delhi visited Dept. of Agricultural Meteorology on 12 May 2022.

Dr. K. K. Singh, Head, Agromet Division &
Additional Director General/ Scientist 'G',
IMD, MoES, New Delhi, India visited Dept.
of Agricultural Meteorology on 20 December 2022.



Visit of Dr. Gopal Iyengar on 12 May 2022



Visit of Dr. K. K. Singh on 20 December 2022

Mr. Mrinal Sharma, Assistant Director (W.Sc.),
Directorate of Plant Protection, Quarantine and
Storage, Govt. of India visited department of
Agronomy on 29 November 2022.



Visit of Mr. Mrinal Sharma on 29 November 2022

8.2. College of Veterinary Science

- Dr. S. S. Mazumdar, Professor and Former Director, NIAB, Hyderabad visited department of Veterinary Microbiology, CVSc on 22 April 2022
- Dr Sashi Gujar, Dalhousie University, Halifax, NS, Canada visited department of Veterinary Microbiology, CVSc on 22 April 2022.
- Dr. Mark Hovari, Consultant ILRI. He visited as OIE Representative for reviewing ASF Diagnosis facilities on 29 April 2022.
- Dr. Daniel Beltrán-Alcrudo, Technical Advisor (Animal Health). He visited as OIE Representative for reviewing ASF Diagnosis facilities on 29 April 2022.
- Dr. Marius Masulis. Consultant ILRI.He visited as OIE Representative for reviewing ASF Diagnosis facilities on 29 April 2022.
- S. M. Deshpande, VentriBio, GM visited department of Veterinary Microbiology, CVSc on 13 January 2023.
- OIE Representatives visited the DBT-ADMaC for reviewing ASF Diagnosis facilities



The Visiting OIE team at ADMaC



The DDG-DAHDF, Director- ICAR-NIHSAD visiting DBT-ADMaC facilities

- DDG-DAHDF, Director-ICAR-NIHSAD visited
 DBT-ADMaC facilities visited department
 of Advanced Animal Disease Diagnosis and
 Management Consortium (ADMaC) on 8 July
 2022
- Students from Kerala Veterinary and Animal Sciences University visited department of Advanced Animal Disease Diagnosis and Management Consortium (ADMaC) on 31 October, 2022
- Scientists from LUVAS visited department of Advanced Animal Disease Diagnosis and Management Consortium (ADMaC) on 12 December 2022



Scientists from LUVAS at ADMaC

- Team of Professors from Bangladesh visited department of Advanced Animal Disease Diagnosis and Management Consortium (ADMaC) on 30 August 2022
- Dr. Manoj Kumar from Hester Biosciences Ltd. department of Advanced Animal Disease Diagnosis and Management Consortium (ADMaC) on 15 February 2023



Visiting Professors from Bangladesh



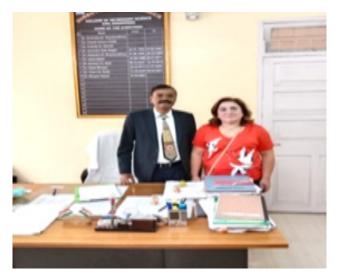
Dr. Manoj Kumar from Hester Biosciences Ltd.

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- Dr. Rafiqul Islam, Professor, Sylhet Agricultural University, visited the VCC and handed over a letter of appreciation to Dr. Bhupen Sarma, Director, VCC, CVSc, Khanapara for excellent clinical training of internee students of Veterinary Faculty of Sylhet Agricultural University, Bangladesh. Dr. Islam praised the faculties of VCC for their dedication of teaching by which their students were immensely benefitted.
- The VCC facility was visited by Dr. Felisbina Queiroga, Associate Professor of University of Portugal on 20 February 2023. Dr. Queiroga is a Board Member of the World Small Animal Veterinary Association. She highly appreciated the VCC facility with special remarks on the surgery of pets. She also lauded the efforts of the VCC clinicians.



Dr. R. Islam, Professor, Sylhet Agricultural University handing over a letter of Appreciation to Dr. Bhupen Sarma, Director, VCC



Dr. Felisbina Queiroga, Associate Professor of University of Portugal visiting the VCC on 20 February, 2023

8.3. Lakhimpur College of Vety. Science

Mr. Atul Bora, Hon'ble Minister of Agriculture and AHD, Govt. of Assam along with Mr. Pradan Baruah, Hon'ble MP, Lakhimpur Constituency along with Mr. Manab Deka, Hon'ble MLA, Lakhimpur along with state and AAU officials on 30 October 2022 visited LCVSc campus for Foundation Stone laying ceremony of Administrative Building and Guest House.



Foundation stone laying ceremony by Sjt Atul Bora, Hon'ble Minister of Agriculture & AHD of Administrative Building and Guest House on 30 October 2022

8.4. College of Community Science

Amy Dubin Nath, New York, USA, Gary Roach, Texas, USA, Cathy Roach, Texas, USA and Amanda Mueller, Colorado, USA and Jayanta Kakati, Guwahati, visited Department of Textiles & Apparel Designing, College of Community Science, AAU, Jorhat for observing diversified products from non-conventional fibers on 14 October 2022.



Visit of Amy Dubin Nath, New York, USA & others on 14 October 2022

 Dr. G.M. Subba Rao, Deputy Director & Head, Nutrition, Information and communication and

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health education, NIN, ICMR, Hyderabad visited as Guest faculty to deliver talk on" Nutrition, Communication and Behavioural Research" 4 December 2022 to 6 December 2022.



Dr. G.M. Subba Rao, Deputy Director & Head, delivering talk on 4 December 2022

- Dr. Pushpa B. Khadi, Emeritus Professor (HAG), Former Dean (College of Community Science) Retired Professor and Head, Department of HDFS, University of Agricultural Sciences, Dharwad visited Department of Human Development and Family Studies, College of Community Science, AAU, Jorhat as a Resource Person for 'Skill Development Training on Psychometric Tests for Human Development Professionals' held from 20 March 2023 to 27 March 2023.
- Dr. Basavaraj M Khadi, former Dean (Post Graduate Studies), University of Agricultural Sciences, Dharwad, Director, Central Institute for Cotton Research (CICR) also visited, Deptt. Of HDFS ,CCSc AAU, Jorhat On 20 March 2023



Dr. Basavaraj M Khadi being felicitated on 20 March 2023

Prof. Debkumar Chakrabarti, Prof. (RTD.) Indian
Institute of Technology, Guwahati, Assam, Dr.
Baljeet Singh, Director, APART, Guwahati, Dr.
K. N. Dewangan, Professor, NERISI, Nirjuli,
Arunachal Pradesh, Dr. Dipankar Borauh,
Faculty, National Institute of Design, Jorhat, Sri
Montu Das, DDM, NABARD, Majuli & Jorhat
visited the department of Family Resource
Management and Consumer Science, CCSc
AAU, Jorhat to act as a resource person for
the training programme on "Application of
ergonomics in farm mechanization" was held
from 3rd January to 12 January 2023.



Prof. Debkumar Chakrabarti acting as resource person 12 January 2023

Finance

The University received its financial resources from various sources like State Government, ICAR, GOI and internal source of the University. During 2022-23 financial year, the University received an amount of Rs. **53096.05532** lacs from these sources of which

around 90 per cent was received under Revenue head and the rest under Capital head and internal head. State Government contributed the maximum (around 80 per cent) to this fund followed by ICAR and others (Table 9.1).

Receipt	State G.I.A	ICAR Grants	GOI & Others	Internal Receipt	Total	
Revenue	39814.24870	6997.54853	1147.82944	-	47959.62667	
Capital	2833.01000	671.11170	598.55295	598.55295 -		
Internal Receipt	-	-	- 1033.75400		1033.75400	
Total	42647.25870	7668.66023	1746.38239	1033.75400	53096.05532	

*All data are provisional and unaudited

Appendix I

Important Policy Decisions

Some important policy decisions have been taken during 2022-2023 in the meetings of Academic Council and Board of Management of the University, envisioning bringing positive impact on the education, research, extension activities and administration of the University are listed below.

240th Academic Council: 07.04.2022

• Introduction of Ph D programme in Fish Processing Technology in the College of Fisheries, AAU, Raha with an annual intake of 2 (Two) from the next Academic session.

242nd Academic Council: 06.08.2022

- Operational Guidelines for commissioning of Open Distance Learning (ODL)
- Operational Guidelines for commissioning of Research Centre for Wildlife Health and Research, CVSc, AAU, Khanapara.

243th Academic Council: 23.09.2022

- Reservation under Prime Minister's Special Scholarship Scheme for the students of J &K and Ladakh under supernumerary quota created by Govt. of India. Total No of seats (four in Agriculture, three in Horticulture, two in Community Science and One in Fishery Science.
- As recommended by the 4th National Steering Committee (NSC) Meeting of NAHEP, reservation of 5% seats on paid basis for Ph D programmes under Agricultural Universities for industry sponsored candidates, who have at least three years experience in R & D activities in private industries, in mutually agreeable terms subject to fulfilment of eligibility norms within the existing number of seats allotted for Ph D programmes.

Emergent Academic Council: 01.11.2022

- Approval for the revised guidelines of Career Advancement Scheme/Direct Recruitment of faculties including statutory officers
- Post-facto approval for AAU Guidelines for Intellectual Property Management and Technology Transfer/Commercialization.

Approval for Guidelines to select students for IDEA Programme of Management: 19.04.2022

244th Academic Council: 03.01.2023

- Common format for AAR and Academic and Research Audit.
- Approval for 54 different courses under AAU-ODL programme for its implementation from February 2023 in a phased manner.

258th Board of Management: 19.04.2022

- The Board approved for signing of Memorandum of Understanding (MoU) between Directorate of Economics & Statistics, Ministry of Agriculture and Farmers Welfare, Govt. of India and Assam Agricultural University for implementation at CCS, AAU, Jorhat subject to the concurrence of the Govt. of Assam as per the recommendation of the committee constituted for the purpose
- The Board approved the nomenclature of the teachers in AAU, in the light of the UGC guidelines and within the ambit of AAU Teachers' Service Regulations is changed to Professor, Associate Professor and Assistant Professor with immediate effect, irrespective of the principal areas of their work (Teaching, Research, Extension, Administration and other activities).
- The nomenclature of the position of Chief Scientist in Research Stations accordingly is changed to Professor and Head of the Station concerned.
- The Board approved the rationalization of teaching and non-teaching posts under various establishments of Assam Agricultural University
- The Board approved the empanelment of AAU as CBBO under NABARD for promotion of FPC/FPO in Assam.
- The Board approved establishment of Centre for Wildlife Health and Research at College of Veterinary Science, Khanapara.

- The Board approved the launching of Open Distance Learning (ODL) Programme under AAU to offer Certificate, Diploma and such other courses as per the need of stakeholders
- The Board approved the institution of Dr. Gitesh Ranjan Das Memorial Research Award in Plant Breeding and Genetics to be sponsored by the family members of Late Dr. Gitesh Ranjan Das as per the modalities approved.
- The Board approved the recommendations of the screening cum evaluation committee for promotion of the teachers to the rank of Assistant Professor Stage-2 (28 nos.) and Assistant Professor Stage-3 (23 nos.) under Career Advancement Scheme (CAS).
- The Board approved Matching grant of Rs.1 Crore of AAU, Jorhat NEATEHUB in five equal instalments over a period of time as proposed by NITI Aayog against the financial grant of Rs.10 Crore by the NITI Aayog
- The Board approved the creating of Eco system for internship and start up for AAU students – For developing Entrepreneurship among AAU students from 2nd year onwards w.e.f. 2022-23 session.
- The Board approved the proposal to undertake the visit to explore the possibilities of arranging dual degree programme and such other activities in collaboration with different Universities of Greece and other European Countries.
- The Board approved for appointment of Superintendent Engineer in the Office of the Directorate of Physical Plant, AAU.
- The Board approved the name of Hon'ble member Shri Abhijit Baruah, Premier Cryogenics, Maniram Dewan Path, Krishna Nagar, Chandmari, Guwahati-781003 as a representative of the Board of Management in the Finance Committee.

259th Board of Management: 24.06.2022

• Board recommended the amendments in the Act and Statute of the University and decided to forward the proposal for clausewise amendments of the Act and Statute to the Government of Assam for approval.

- The Board approved the Logo for AAU Brand "AAU Select" to use in all products/ services with a tagline "We nurture we grow".
- The Board approved the guidelines for students' internship as recommended by the Academic Council.
- The Board approved the enhancement of Grade Pay of Grade IV employees from 2400/- to 2500/- w.e.f. 01.01.2016 based on the Govt. notification.
- The Board approved the renaming of AAU ARIS Cell as Agricultural Knowledge Management and Information Technology (AKMIT) Cell in the light of notification issued by Directorate of Information & Publication of Agriculture, ICAR.

260th Board of Management: 27.09.2022

- The Board approved the recommended amendments of AAU service rules as presented and same be placed before the Hon'ble Governor and Chancellor of the University and the Government for its final approval.
- The Board accorded Post Facto approval for the new nomenclature of the faculty of Home Science as Faculty of Community Science as recommended by the 5th Deans' Committee.
- The Board accorded Post facto approval for introduction of new Degree Programme under the Faculty of Community Science as B.Sc. (Hons.) in Food Nutrition & Dietetics with effect from August, 2019 session.
- The Board approved the Logo Tagline for AAU Brand "AAU Select" as modified "We nurture, we serve" from "We nurture, and we grow".
- The Board approved the introduction of M. Tech. Agril. Engineering programme in Soil and Water Conservation Engineering under the Faculty of Agriculture, Jorhat, AAU.
- The Board approved for signing of Memorandum of Understanding (MoU) between Assam Agricultural University and ICLARM (Worldfish) subject to vivid observations/ examinations of the clauses/provisions of the MoU signed between Indian Council of Agricultural Research (ICAR) and ICLARM (Worldfish).

• The Board recommended the proposal for renaming of the Research Stations of Assam Agricultural University as detailed below for consideration of the Government.

Existing Name	Proposed Name			
Citrus Research Station, Tinsukia	AAU-Citrus and Plantation Crops Research Station, Tinsukia			
Sugarcane Research Station, Buralikson	AAU-Sugarcane, Medicinal and Aromatic Plants Research Station, Buralikson			
Horticulture Research Station, Kahikuchi	AAU-Horticulture Research Station, Kahikuchi			
Goat Research Station, Burnihat	AAU-Goat Research Station, Burnihat			

Commodity Research Stations:

Regional Agricultural Research Stations:

Existing Name	Proposed Name			
Regional Agricultural Research Station, Shillongani	AAU-Zonal Research Station, Shillongani			
Regional Agricultural Research Station, North Lakhimpur	AAU-Zonal Research Station, North Lakhimpur			
Regional Agricultural Research Station, Gossaigaon	AAU-Zonal Research Station, Gossaigaon			
Regional Agricultural Research Station, Diphu	AAU-Zonal Research Station, Diphu			
Regional Agricultural Research Station, Karimganj	AAU-Zonal Research Station, Karimganj			
Regional Agricultural Research Station, Titabar	AAU-Assam Rice Research Institute, Titabar			

Livestock Research Station

Existing Name	Proposed Name				
Livestock Research	AAU- Zonal Livestock				
Station, Mandira	Research Station, Mandira				

- The Board approved the Innovation, Startup and Entrepreneurship Policy (ISEP), 2022 as presented with the inclusion of the Registrar, AAU as one of the Members in the Governing Body.
- The Board approved the proposal for the establishment of Centre of Excellence on Organic Farming under the University with the modified name as 'Centre of Excellence on Natural and Organic Farming' at the premises of Biswanath College of Agriculture (BNCA), AAU, Biswanath Chariali.

261st Board of Management: 30-01-2023

- The Board accorded its approval for shifting of College of Horticulture & Farming System Research (CH&FSR) presently running at the Jorhat campus of the University to its newlybuilt campus at Nalbari which had already been inaugurated by Hon'ble Chief Minister of Assam on December 6, 2022.
- The Board has approved the Post facto approval on the actions taken by the Vice-Chancellor in respect of abroad journey undertaken by AAU officials (as placed) from time to time. Considering the urgency, the Board empowered the Hon'ble Vice-Chancellor, AAU to purchase one (1) ambulance to meet the requirement of College of Horticulture and Farming System Research, AAU, Nalbari in anticipation of the approval from the Govt. of Assam. The Board further empowered the Hon'ble Vice-Chancellor to initiate the process of inviting EOIs for one (1) LMV for the use of the college on hiring basis. The Vice-Chancellor is also empowered to hire one more pool vehicle as and when required basis.

Appendix II Extension Education Institute

Institute (EEI) is a Regional level institute with the main mandate of providing capacity building to Middle level extension functionaries of the Departments and Organizations of agricultural development, particularly in the discipline of Extension Education. The Department of Agriculture and Farmers' Welfare (DA&FW), Ministry of Agriculture & Farmers' Welfare (MoA & FW), Govt. of India has established four EEIs for four regions of the country: EEI (Southern Region) at Hyderabad, Andhra Pradesh, EEI (Northern Region) at Nilokheri, Haryana, EEI (Western Region) at Anand, Gujarat, and EEI (NE Region) at Jorhat, Assam. EEI (NE Region) was established in 1987 at Assam Agricultural University (AAU), Jorhat to cater to the need of capacity building of the extension functionaries of the NE states.

It has been relocated to Guwahati since July 2022. It functions under the administrative control of Assam Agricultural University (AAU), Jorhat on the basis of annual *Memorandum of Understanding (MoU)* between the Department of Agriculture and Farmers' Welfare (DA&FW), Ministry of Agriculture& Farmers' Welfare (MoA & FW), Govt. of India, New Delhi and AAU, Jorhat. The Department of Agriculture and Farmers' Welfare (DA&FW), Ministry of Agriculture& Farmers' Welfare (MoA & FW), Govt. of India provides the fund for the institute under its Non-Plan Budget Head.

The Operational area of EEI (NE Region) covers nine states which include, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and West Bengal. The EEI Management Committee is the apex body of the institute. The Vice Chancellor, Assam Agricultural University is the Chairperson of the Committee and the Director, EEI is the Member Secretary. The Management Committee meeting is generally held once or twice in a year to review the performance of the institute, and to make policy decisions for its effective functioning. The Director of the Institute is responsible for managing its programmes and dayto-day management and administration. The Director works under the administrative control of the Vice Chancellor, AAU.

Vision of the Institute

Achieving excellence as a premier institute in facilitating capacity building of extension functionaries for sustainable development of agriculture in NE states of India.

Mission of the Institute

- Developing competencies of extension personnel in providing professional extension service to farming community.
- Enhancing effectiveness of extension systems in planning, implementation, monitoring and evaluation of programmes and projects for sustainable agricultural development.
- Developing and improving approaches, methodologies, tools and techniques relating to training and extension education.

Mandate of the Institute

- To develop competencies of middle level extension functionaries of client departments and organizations on application of advanced concepts, approaches, methodologies, tools and technologies of agricultural extension.
- To build capacity of extension personnel for efficient dissemination of frontline agricultural technologies.
- To facilitate extension systems and personnel in planning, implementation, monitoring and evaluation of agricultural development programmes and projects.
- To provide demand-driven consultancy services to agriculture and allied departments in planning, implementation, monitoring and evaluation of agricultural development programmes and to address issues relating to extension management.
- To carry out Action Research in agricultural extension and training in order to bring improvement in approaches, methodologies, tools and techniques of training and extension education.

The Annual Training Calendar of EEI (NE Region) includes two types of training programmes:

- a) **On-Campus programmes:** The programmes are organized at the institute. These programmes are usually organized for extension functionaries of the client states.
- b) Off-Campus programme: The programmes are organized in any of the client states other than Assam. The idea of organizing an **Off-Campus** course is to develop KAS of a group of officers of one or more departments of a particular client state on a need based training area.

The institute conducted 39 training/workshops out of 40 training/ workshops targeted during 2022- 23. Out of 39 training/workshops, 33 were conducted in offline mode and 6 were conducted in online mode. Among the training/workshops conducted during the year, 16 were **On-Campus**, 21 were **Off-Campus**, 1 **Collaborative training programme with MANAGE, Hyderabad and** 1 **Regional Workshop.** The targeted number of participants was 1170 while a total of 1267 participants attended the programmes. Thus, the percentage of seat utilization in the programmes of the year was 108.29 per cent

Type of Programmes	Nos. of Programme		Participants		% of seat utilization	
Type of Frogrammes	Target	Achievements	Target	Achievements	70 of seat utilization	
On – Campus	16	16	480	498	103.75	
Off- campus	21	21	630	672	106.67	
Regional Workshop	1	1	30	36	120	
Skill Development Training	1	0	-	-	-	
Collaborative training programme with MANAGE, Hyderabad	1	1	30	61	203.33	
Total	40	39	1170	1267	108.29	

Table : On-Campus and Off-Campus, Collaborative training programme with MANAGE, Hyderabad

On-Campus programmes conducted during 2022- 23

During 2022-23, the institute conducted 16 numbers of **On-Campus** training programmes in which 498 personnel participated while the targeted number of participants was 480. The details of the On-campus training programmes conducted during 2022-23 are shown in the following Table.



Training on "Efficacy of FPO-Extension Methods and Tools was organized by EEI (NE Region), Jorhat during May 31-June 04, 2022

Table: On-campus training/workshops programmes conducted during 2022-23

SN	Course Title	Training Type	Duration	No of targeted participants	No. of participants attended	Percentage of Seat utilization (%)
1	Formulation of Business Plan and Entrepreneurship Competencies for Agri Start- ups	Executive Development	May 09-13, 2022	30	27	90.00
2	Efficacy of FPO: Extension Methods, Tools and Challenges	Executive Development	May 31- June 04, 2022	30	33	110.00

3	Digital Marketing and Export Orientation of Specialty Commodities	Management Development	June 21-25, 2022	30	46	153.33
4	Post-harvest management and value addition of horticultural crops	Management Development	July 18-22, 2022	30	39	130.00
5	Training Methods and Training Management	Management Development	Aug 08-12, 2022	30	28	93.33
6	Advance techniques on management of Poultry and marketing of Poultry	Executive Development	Sept 05-09, 2022	30	30	100.00
7	Data Analysis using Spread Sheet and other accessible software for Extension Functionaries	Executive Development	Sept 19-23, 2022	30	26	86.67
8	Realizing agri-business potential through grass root innovations and entrepreneurship development	Executive Development	Sept 19-23, 2022	30	30	100.00
9	Business Planning & Management of FPOs/FPCs	Executive Development	Oct 10-14, 2022	30	30	100.00
10	Natural Farming and Agro- Tourism	Executive Development	Oct 11-15, 2022	30	31	103.33
11	Production and Marketing of Bio-Inputs for Entrepreneurship Development	Executive Development	Nov 01-05, 2022	30	30	100.00
12	Export orientation of Agriculture/ Horticulture	Executive Development	Nov 07-11, 2022	30	30	100.00
13	Recent Advances in Post- harvest and Value-addition of Piggery	Executive Development	Nov 07-11, 2022	30	30	100.00
14	Small Livestock Management Techniques for NE Region	Executive Development	Dec 5-9, 2023	30	30	100.00
15	Application of Artificial Intelligence, Remote Sensing, GIS Application and Drone applications for Agril. Development	Management Development	Jan 31- Feb 04, 2023	30	28	93.33
16	Promotion of Natural Farming in NE Region	Management Development	Feb 21- 25,2023	30	30	100.00
	Total			480	498	103.75

Collaborative Training Programme with MANAGE 2022- 23

SN	Course Title	Training Type	Duration	No of targeted participants	No. of participants attended	Percentage of Seat utilization (%)
1.	Issues and Challenges in Formation, Management and Implementation of FPOs	Management	Nov 16-19, 2022	30	61	203.33

Off-Campus programmes conducted during 2022- 23

The institute conducted 17 numbers of Off-campus courses in offline mode and 4 numbers of Off-campus courses in online during the year 2022- 23 covering 9 states viz. Assam, Tripura, Nagaland, Sikkim, West Bengal, Arunachal Pradesh, Manipur, Mizoram and Meghalaya. the participation of officers in all the 21 nos. of off-campus programmes was encouraging. The total number of participants in the 21 off-campus courses were 672 while targeted number of participants was 630, and thus, the overall percentage of seat-utilization was 106.67 per cent.



"Hydroponic Agriculture Technologies and Micro Irrigation" during May 24-27, 2022 at SAMETI Nagaland.

SN	Course Title	Training Type	Duration (4 days)	States	No. of targeted participants	No. of participants attended	Percentage of seat utilization (%)
1.	Hydroponic Agriculture Technologies and Micro Irrigation	Executive Development	May 24- 27, 2022	SAMETI, Nagaland	30	40	133.33
2.	Training skills and tools for Online mode of Training	Management Development	June 07- 10, 2022 (online)	SAMETI, West Bengal	30	25	83.33
3.	Training skills and tools for Online mode of Training	Management Development	June 07- 10, 2022 (online)	SAMETI, Assam	30	24	80.00
4.	Supply Chain Management of Horticultural Crops in NE Region	Management Development	June 14- 17, 2022	SAMETI, Assam	30	31	103.33
5.	Soft Skills for Extension Professional	Management Development	July 05- 08, 2022	T-SAMETI, Tripura	30	30	100.00
6.	Production and Marketing of Bio-inputs for Entrepreneurship Development	Executive Development	July 26-29, 2022	MAMETI, Meghalaya	30	30	100.00
7.	Methods and tools for Monitoring & Evaluation of Development Project	Management Development	Aug 02-05, 2022	SAMETI, Arunachal Pradesh	30	35	116.67

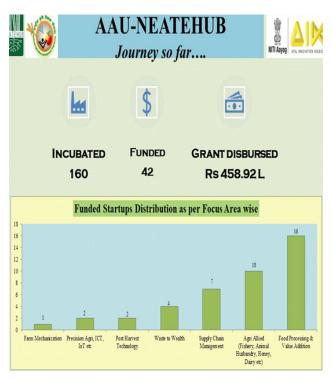
Off-campus training/workshops programmes conducted during 2022-23

8.	Post-harvest management and value addition of horticultural crops	Executive Development	Aug 23- 26,	SAMETI, Sikkim	30	30	100.00
9.	Formulation of Business Plan and Entrepreneurship Competencies for Agri Start- ups	Executive Development	Aug 30- Sept 02, 2022 (online)	SAMETI, Mizoram	30	45	150.00
10.	Extension Approaches for Marketing and Export of Agricultural Products	Management Development	Sept 27- 30, 2022	SAMETI, Arunachal Pradesh	30	31	103.33
11.	Efficacy of FPO -Extension Methods and Tools	Executive Development	Oct 19- 22, 2022	SAMETI, Assam	30	30	100.00
12.	Advances in seed production technology for potential crops	Executive Development	Nov 08- 11, 2022 (online)	SAMETI, Mizoram	30	26	86.67
13.	Women in Agriculture: Gender friendly tools and Nutritional Security	Management Development	Nov 09- 12, 2022	SAMETI, Manipur	30	30	100
14.	Export Orientation in Agriculture & allied sectors	Executive Development	Dec 06- 09, 2022	SAMETI, Nagaland	30	30	100
15.	Current Extension Approaches for Transfer of Technology	Management Development	Dec 13- 16, 2022	SAMETI, Manipur	30	32	106.67
16.	Efficacy of FPO -Extension Methods and Tools	Management Development	Jan 03- 06, 2023	T-SAMETI, Tripura	30	30	100.00
17	New Dimension in Agricultural Extension Management	Management Development	Jan 18- 21, 2023	MAMETI, Meghalaya	30	30	100.00

18	Geographical Indication and Patenting of Products: Importance, process in Agriculture	Executive Development	Feb 07- 10, 2023	SAMETI, West Bengal	30	50	166.67
19	Mainstreaming Farm Women for Agricultural Development	Management Development	Feb 21- 24, 2023	SAMETI, Sikkim	30	31	103.33
20	Methodology for Preparation of Strategic Research Extension Plan	Management Development	March 14-17, 2023	SAMETI, Mizoram	30	30	100.00
21	Development of Extension Management skills following ASA	Management Development	March 27-30, 2023	SAMETI, Tripura	30	32	106.67
	Total				630	672	106.67

Appendix III AIC–AAU Incubator

(North East Agriculture Technology Entrepreneurs Hub - NEATEHUB)



The Assam Agricultural University's Incubator for startups and entrepreneurs, popularly known as North East Agriculture Technology Entrepreneurs Hub (NEATEHUB), is an "Atal Incubation Centre" of NITI Aayog, the Government of India. The Assam Agricultural University set up the incubator as a Section 8 company under the aegis of AAU Jorhat, to facilitate startups and entrepreneurs in agriculture and allied agriculture sectors in the North-East region. NEATEHUB is also a 'Knowledge Partner under the RKVY-RAFTAAR scheme' by the Department of Agri Cooperation & Farmers Welfare, Govt. of India and is handholding the functioning of three incubators in the NorthEast–one each in Arunachal Pradesh, Mizoram and Tripura.

So far, NEATEHUB has completed 9Cohorts in which over 160entrepreneurs have been incubated and nurtured through a structured business programme. Out of these, 42 have received grant funding,totaling approx. Rs.4.58 Cr. NEATEHUB 'Incubation Program' aims to identify young entrepreneurs at various stages of their development (ideation/ prototype development/ early stage to growth stage)

and provide the much-needed mentoring support and industry exposure to facilitate them to develop a viable business proposition. So far, NEATEHUB has completed 9Cohorts in the pre-seed and seed stage from the various sub-sectors under Agri and allied sectors such as Digital Agriculture, Food Processing, Supply Chain Management (SCM), Biotechnology, Farm Mechanization, Agri to waste management, Farming as a Service (FAAS), Protected Cultivation, Quality Input, Bamboo Craft, Bio-flocs, Agro Tourism, drone technology for agriculture, etc.

NEATEHUB offers physical co-working space for startup and entrepreneurs in its Jorhat campus where over 12,000 sq. feet of area have a professional plugand-play infrastructure. It also brings in industry linkages and networking, training and business coaching, technology transfer and IP portfolio management, legal and quality assurance services, seed funding and access to investment. It is aone-point contact for angel investors, mentors, corporate and VC funds interested in investing in agri businesses in the North-East Region of India.

Activities of NEATEHUB during 2022-23

1) The North-East Agriculture Technology Entrepreneurs Hub (NEATEHUB) - an Atal Incubation Centre at the Assam Agricultural University (AAU), distributed cheques amounting to Rs.1.51 Crores to 17 Agri startups of the incubator in a function organized at the incubator on Wednesday, 20th April 2022.

The grant funding was given under the Rastriya Krishi Vikas Yojana- Remunerative Approaches for Agriculture and Allied Sectors Rejuvenation (RKVY-RAFTAAR) Scheme.

The entrepreneurs selected from the incubator for the Idea and Startup stages were from the Isanya and Saranya Incubation Programmes, respectively, from the 2021-22 batches. Incubatees from Isanya received pre-seed funding of up to Rs.5 lakhs. In contrast, startups from Saranya received maximum grants of up to Rs.20 lakhs. The chief guest for the cheque

distribution ceremony was Dr Jayanta Deka, Dean-Faculty of Agriculture, AAU. The Special guest for the event was Dr Prasanna Pathak, Director of Extension Education, Assam Agricultural University. The CEO of NEATEHUB, Dr K. Karthikeyen and Dr Danish Tamuly, Director on Board of NEATEHUB, were also at the event.

Dr Jayanta Deka and Prasana Pathak handed the cheques to the selected entrepreneurs. Speaking on the occasion, Dr Prasana Pathak congratulated the entrepreneurs on their achievements and for choosing a risk-ridden path like entrepreneurship. He praised NEATEHUB for providing state-of-the-art facilities for the startups and becoming a beacon in Agri entrepreneurship in NER.

Dr Jayanta Deka, at his address, encouraged entrepreneurs to become job creators in the immediate future to address the unemployment problem. Besides, he emphasized the need to develop a conducive environment for entrepreneurship for students at the entry into university level.

Earlier, Dr Danish Tamuly, in his welcome address, underlined the need for technology-based innovation in the north-eastern region, for which NEATEHUB was providing adequate support and exposure. Dr K. Karthikeyen offered a vote of thanks to the participants. NEATEHUB established in 2019 at the AAU Jorhat campus and currently handholds three incubators in NER–one each in Pasighat (Arunachal Pradesh), Lembucherra (Mizoram) and Agartala (Tripura).

The selected entrepreneurs from Isanya are Gautam Hazarika (Bornoi Organics Pvt. Ltd), Dr Syed Alimaz Hussain (Moreish Duck), Dipjyoti Deka (Milliamps Automation), NgamnomJoham(Food Stride), Dhruba Jyoti Deka (Indiluv), Chinmoyee Rajkumari (Hyfood), Hemango Bora (Pure Seed Agro Products) and TongramBijayashanti Devi (Sanajing Sana Chambal). The incubatees selected under Saranya are BahnimanKakati (Teaorb Services LLP), Parikshit Borkotoky(Kraftinn Home Décor India Pvt. Ltd), Dr Asim Zubair (Alia Biosys), Pranab Jyoti Barman (Earthly Fresh), Dr WahengbamBembee Devi (Bee Manufacturing Enterprises), Tinashe Momin, (Tinash Agro Industries), Satyajit Bora (Maitrayee Tea), Manjib Sharma (Manohar Agro Solutions LLP) and Bijoy Kumar Gogoi (Nebdh Plow Pvt. Ltd.).



2) NEATEHUB organized Agriideatronix1.0- a competition which aimed at nurturing young talent interest in integrating technology for solving realworld problems faced in agri and allied agri domain, particularly in the North-East Region of India. And, to take it to the younger minds, the incubator organized a series of online sensitization programs in partnership with different institutes of the region. Several sessions took place at Assam Don Bosco University, Royal Global University, Kaziranga University, University of Science and Technology, Meghalaya, Kakojan College, Gauhati University, Tezpur University, etc. These sessions targeted mostly the technical students from these institutions where the officials from NEATEHUB and OlatusSystems walked the students through the application process, and explaining the problems faced in the north-eastern region need localized solutions.

3) A group of female entrepreneurs from the Charaideo and Sivasagar districts of Assam visited the incubator on 2 April 2022 for an exposure visit. These entrepreneurs were mainly from the food processing and value addition sector. They discussed with the officials of NEATEHUB the scalability of their enterprises and how the incubator can facilitate them. Ever since the inception of NEATEHUB, the incubator has been trying to work with entrepreneurs at different



levels to strengthen the overall entrepreneurship ecosystem. While these entrepreneurs are not in the category of a startup, the intent behind holding these exercises is to create micro-level entrepreneurs who not only elevate their economic conditions but, through their ventures, generate employment as well.

In connection with 75 years Azadi Ka Amrit 4) Mahotsav, NEATEHUB (KP-AAU-Incubator, Jorhat), organised Kisan Bhagidari, PrathamiktaHamari, farmers connect Programme on 26 April 2022 at Krishi Vigyan Kendra premises, Assam Agricultural University, Jorhat. The Programme was presided by Chief Guest, Hon'ble Former Vidhan Sabha Speaker and serving Jorhat MLA Dr Hitendranath Goswami; Hemanta Kalita, former MLA, Titabar constituency; Ashok Kumar Barman, Deputy Commissioner Jorhat (received best DC award from Hon'ble Prime Minister of India on 24 April 2022); Dr.Bidyut C Deka, Hon'ble Vice Chancellor; Dr Prasanna Pathak, Director, Extension Education; Dr Ruma Bhattacharyya, Dean, College of Community Science and Dr Sanjoy Barthakur, PC and Head, KVK, Jorhat.



5) The consulate general of Bhutan, Jigme Thinlye Namgyal, visited the incubator on 27 April 2022 along with a business delegation. The delegates were accompanied by the Vice Chancellor of Assam Agricultural University, Dr B.C. Deka, and Registrar Tapan Gohain (ACS). During the visit, Dr Danish Tamuly, Director on the Board of NEATEHUB, gave a brief presentation on the activities of NEATEHUB. The consulate general was on a visit to AAU to discuss agri education and research prospects. Besides, he also expressed a desire to create a conducive atmosphere for startups and businesses between the countries to increase trade and asked the incubator to play a pivotal part in it.



6) It gives us immense pleasure and a sense of pride when the work of our startups is appreciated. And periodically, ourentrepreneurs give us the opportunity to experience that. Agro origin, a food processing and value addition startup established by Abhinav Shyam, received the best startup for food processing innovation at the 7th India Industrial fair Udyam 2022 organized in Guwahati between 22 to 25 April. Besides Vedamani Devi, the founder of Vedam Agro, also received "IWIL India Impactmaker in North East India" on 23 April 2022, the Indian women in the Industrial League gave the award. Both the startups are working in the food processing and value addition sector with special emphasis to northeast India.



7) Atal Innovation Mission (AIM), NITI Aayog organized an event on 28 April 2022 at Ambedkar International Center, New Delhi, as part of Azadi Amrit Mahotsav- India @75. The event brought together top dignitaries, including cabinet ministers, institutions, industrialists, startups, student innovators, mentors, and other critical stakeholders from AIM and the innovation ecosystem for interactions and networking through various sessions and panel discussions. AIC-AAU Incubator (NEATEHUB) took part in the event

as Dr K. Karthikeyen, CEO, NEATEHUB and Its incubatee, Ms KhayiwonShangh, Founder of Ngayam foods Manipur, were invited to exhibit her products at an exhibition organized by Atal Innovation Mission (AIM), NITI Aayog on the occasion.



8) A group of forty-plus students from the Institution's Innovation Council of (Kakojan College) visited the incubator on 2 May 2022 to learn about different project ideas and operational mechanisms in agribusiness. During the visit, AngiraSarmah, Admin & Finance officer of NEATEHUB, gave the students a brief presentation on the "Opportunities and Scope of Agri Startups in NER and role of an incubator". Besides, the students interacted with startups incubated at NEATEHUB and learned a few things about the functionality of a startup. They were demonstrated some products of startups in the incubator. Later, they were taken to the Assam Agricultural University Museum to showcase the university's contribution towards promoting agriculture in the state of Assam.



9) Dr Danish Tamuly, Director on Board of NEATEHUB, took a "Business Relationship Management" session on 10 May 2022 under a training program titled "Formulation of Business Plan and Entrepreneurship for Startup " organized by Extension Education Institute, Assam Agricultural University. The training program started on 9 May and ended on 13 May 2022. Agri Officials from across Northeast India took part in the training program. The session of Danish Tamuly aimed to capacity build the Agri officer's understanding of startup culture. So that once they have learned it, they can promote the culture in their respective states.



10) It's always good to have a high-octane discussion with people from the same field. As often, these interactions bring new ideas to the forefront. Well, it was one such occasion where officials working in Agriculture and allied services from across the northeast visited the incubator on 10 May 2022. They had discussions with the officials of NEATEHUB regarding planning business plans for Agri etc. Dr K. Karthikeyen, CEO of NEATEHUB, gave them a brief presentation about the functionality of an incubator in the agri-business space. The presentation was highly interactive, as the challenges and prospectsof the participants echoed both.



11) It was a pleasure to showcase the products of the incubatees of NEATEHUB to Dr Jitendra Singh, Minister of State (Independent Charge) for Science, Technology and Earth Sciences, during the launching of the first I-connect (connecting research with industry) program of the Central Government at CSIR-NEIST, Jorhat on May 12, 2022. Dr Jitendra Singh lauded the efforts and activities by entrepreneurs from the North East and acknowledged that NER is the new kid on the startup block. He suggested that, in the

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future, organizing an exclusive mega event in Delhi would garner a lot of attention and awareness about the niche products from north-eastern startups.



12) Kaustoov Gopal Goswami, the co-founder of Dreams Hive Private Limited, won the Young Innovative Entrepreneur Award North East in the Assam Biotech Conclave -2022 organized by Guwahati Biotech Park on 21st and 22nd May 2022. The award was presented to the entrepreneur by Honorable Union Minister of Education and Skill Development and Entrepreneurship Dharmendra Pradhan, Honorable Chief Minister of Assam Dr HimantaBiswa Sharma. Honorable Minister Health and Family Welfare, Science and Technology and Information and Technology dept. Govt. of Assam Keshav Mahanta, Member of Parliament Queen Ojah, was present during the event as well. Dreams Hive Pvt. Ltd is an incubatee of NEATEHUB and has received funding of 3 lakh under the RKVY-RAFTAAR scheme.



13) A group of post-graduate students and PhD scholars from the Depts of Genetics and Plant Breeding and Entomology, along with faculty members from

SASRD, Nagaland University, visited NEATEHUB on 23 May 2022 for an educational study tour. Dr Danish Tamuly, Director on Board NEATEHUB, interacted with the group and briefed them about the activities in NEATEHUB. Besides, they also interacted with Agri startups housed in the incubator. There was a discussion held between the faculties of Nagaland University and officials of NEATEHUB, where the delegates from the university sought help from the incubator to popularize entrepreneurship among its students.



14) Dr Danish Tamuly, Director on Board NEATEHUB, was invited as chief guest to deliver a speech on "science popularization initiative" organized by Rongdoi High School, Jorhat on 26 May 2022. Following the initiative, the school authorities organized a science exhibition where the students displayed exemplary scientific zeal with their innovations, which Dr Tamuly inaugurated. During his speech, Dr Tamuly emphasized the importance of science in our day-to-day lives and asked the students to instil a scientific mindset and start with identifying the local problems they face in their homes or villages.

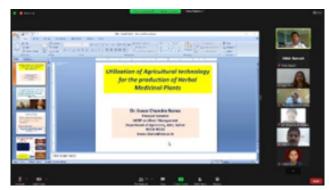
15) A session on "Company formation, registration and compliance" was taken by CA Abhishek Sharma on 31 May 2022 for the entrepreneurs of NEATEHUB. There are many reasons entrepreneurs need to register their startup as a company. First, because it gives the startup an edge in the market, assuring its legal protection and lowering the tax burden through limiting liability and company registration is the stage in the startup world which serves the company in these factors. Repeatedly, NEATEHUB has been organizing sessions like these for its incubatees to enhance and develop its entrepreneurs.

16) Since its inception, the incubator has been trying to arrange for funding for its startups through Govt funds, angel investors, venture capitalists or CSR funding. And a team from YES Bank comprising

Partha Pratim Goswami, President & Segment Head - Govts. Bank YES Bank visited NEATEHUB on 2 June 2022. The delegation had discussions with CEO NEATEHUB regarding collaboration with the incubator to support the entrepreneurs.



17) A webinar on "Herbal Utilization of Agricultural Technology for the production of Quality Herbal Medicinal Plants" was organized by NEATEHUB in collaboration with the School of Pharmaceutical Sciences, USTM, on 7 June 2022. The webinar started with a welcome address from Pro Vice-Chancellor USTM, Prof. B.K. Das. After which, the keynote address was delivered by Dr K. Karthikeyen, CEO of NEATEHUB. Jayita Das, Asst. Professor, USTM introduced the speaker to the audience. It is to be mentioned that the speaker for the webinar was Dr I. C Barua, Principal Scientist, AICRP -Weed Management, Assam Agricultural University, who discussed several aspects of utilizing of Agri technology in the production of medicinal plants; he also highlighted which plants are more native to the north-eastern region and how to build entrepreneurship opportunities around it. The informative event saw nearly 200 students and entrepreneurs across the northeast.



18) NEATEHUB (AIC-AAU Incubator), Jorhat and Kakojan College signed an MOU on 30 June 2022 at an event held at Kakojan College in Jorhat. The MoU defines the intent for mutually collaborating

by utilising the expertise and services offered by both parties to support students pursue innovation and entrepreneurship. It focuses on encouraging and supporting startups by providing incubation services and product development in Agri and allied sectors, besides giving technical mentorship for conducting R & D leads to business ventures. The ceremony started with a welcome address by Mr Rajdip Bora, Asst. Professor. In her speech, Dr RuprekhaBordoloi, PrincipalKakojan College, emphasised the benefits students would derive from this collaboration. Dr Karthikeyen, CEO of NEATEHUB, also expressed optimism that such partnerships will go a long way in creating entrepreneurs and solving community-level problems. Dr BijoylakshmiNeog, and other faculty and students, attended the event. Dr KshirodSaikia, Asst Professor, offered a vote of thanks.



19) NEATEHUB, in collaboration with BIO-NEST- IASST, organized a webinar on 5 July 2022. The topic for the webinar was "Know-how of commercializing Nutraceuticals and Functional foods" by Dr Madhumita Barooah, Professor, Dept. of Biotechnology, Assam Agricultural University. Dr K. Karthikeyen, CEO of NEATEHUB, delivered the inaugural speech. In her talk, Dr Barooah defined



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Nutraceuticals and stated the differences between dietary supplements and functional foods. She gave a scenario of the nutraceutical market in India and emphasized the development steps and business strategy for producing functional foods for the market. She also gave know-how on acquiring nutraceutical licenses, branding techniques, and schemes that support nutraceutical development in India. 40 participants attended the session.

20) A training session on Entrepreneurship Development Program was organized by the Dept. of family resource management and consumer science, College of community science, Assam Agricultural University, on 5 July 2022. Following the event, a session on Innovation in Agriculture for entrepreneurship development was taken by Dr Danish Tamuly, Director on Board of NEATEHUB, in the learning centre of the incubator. The training was sponsored by NAHEP, and the target group was the sixth-semester students at the university.

21) SurujChetia, an innovator turned entrepreneur from Assam, received a patent for his innovative MUGA thread-reeling machine from the patent office. SurujChetia is the founder of the startup Aicheng Innovation and Research Pvt. Ltd. The advanced reeling machine is electric& manually operated for Muga, Mulberry, and Tassar yarn reeling. It can reel both Digh and Bani quality yarn, and it is a low-cost & productive design for every grass level reeler, weaver & Muga farmer. Compared with the traditional reeling method, it can work five times more. Only one person can operate this machine,but the conventional way required a minimum of two people for reeling. On this machine, one person can spin approximately 100-175 grams of yarn (500-650 nos. cocoon) daily. An expert operator can reel string with two-reel together at the same time. Chetia has also been honoured as a grassroots-level innovator by the government at an exhibition held in Gandhinagar, Gujarat, in the presence of former president of India, Ram Nath Kovind. During his innovation, he received support from the National Innovation Foundation, and presently, his startup, Aicheng Innovation and Research Pvt. Ltd, is incubated with NEATEHUB (An AIC- AAU Incubator).

22) A workshop on the Basics of 3D printing was jointly organised by NEATEHUB and Haveli Research and Development Pvt. Ltd from 11 to 14 July 2022 in the robotics lab of the incubator. The workshop was sponsored by the Directorate of Post-Graduate Studies, Assam Agricultural University. The workshop's objectives were to introduce rapid prototyping and hands-on experience with a tool like a 3D printer and 3D design software to convert innovative ideas into real-life models quickly. The participants in the workshop were faculty members from different depts of AAU.



23) Dr Danish Tamuly, Director on Board, NEATEHUB, gave a lecture on "Recent Innovations in Agriculture in Assam" on 15 July 2022 under Impact Lecture Series organized by Institution Innovation Council, Biswanath College. At the same event, Assistant Professor of Assam Agricultural University, Ms Gargi Sharma, delivered a talk on "Understanding the role of Intellectual Property Rights in Agricultural Entrepreneurship. The lecture was part of many activities of the incubator where it is trying to ignite the zeal of entrepreneurship among students right at the grassroots level.

24) Dr Danish Tamuly, Director on Board, NEATEHUB, acted as a resource person in a training session organized for Subject Specialists and Programme Assistants in the disciplines of Agril Economics, Agril Extension and Community Science under AAU, KVKs on 29 July 2022. The training session was organized by the Directorate of Extension Education, AAU, Jorhat. In his session, Dr Tamuly covered the topic "Innovative fixes for a frugal solution in North- Eastern region". The venue for the event was the seminar hall of NEATEHUB. These training programs are an enriching experience for the trainees to help them with the different KVK programs at the field level.

25) Dr K. Karthikeyen, CEO, NEATEHUB, was invited to take a session on "Angel Investment / VC funding opportunities for early-stage entrepreneurs" on July 21, 2022, organized by Institution Innovation Council, The Assam Kaziranga University. It was

organized in collaboration with institutions like Dibrugarh University Institute of Engineering and Technology, Biswanath College, St. Edmunds College, St. Joseph University, and Manipur Technical University. The session saw faculties, primarily students from all these institutions, learn the nuances of the business ecosystem.

26) In an attempt to have an active role in handholding Atal Tinkering Labs, an orientation session was organized by NEATEHUB (An AIC- AAU Incubator) for the teacher in charge of Atal Tinkering Labs from Jorhat District on 28 July 2022. The session saw 19 teachers from 10 ATL schools in Jorhat. The session was held in the seminar hall of NEATEHUB. The incubator CEO, Dr K. Karthikeyen, and Director, Dr Danish Tamuly, addressed the teachers. They briefed them about the activities NEATEHUB can plan with these ATLs to create grassroots-level innovators. It is to be mentioned that an ATL aims to foster curiosity, creativity, and imagination in young minds; and to teach skills such as design mindset, computational thinking, adaptive learning, physical computing, etc.



27) Horticulture Commissioner Dr Prabhat Kumar (Ministry of Agriculture and Farmers Welfare, Govt of India) visited the incubator on 24 August 2022. He was accompanied by Dr Sanjib Sharma and Dr Bikash Hazarika from Assam Agricultural University. During his visit, Dr Danish Tamuly, Director on Board of



NEATEHUB, summarised the Commissioner about the activities of NEATEHUB. Besides, he took the Commissioner for a walk around the incubator to showcase the facilities and startups housed in the incubator.

28) NEATEHUB and Kaziranga University signed an MOU on 2 September 2022 at an event organized in the conference hall atKaziranga University. The event saw officials from NEATEHUB and statutory officers from Kaziranga University. The MOU aims to establish channels of communication and cooperation that will promote and advance their respective operation within the organizations. The purpose of this MOU is to encourage and support startup, incubation, and development of innovation-led business ideas in Agri and Allied sectors. Providing technical mentorship for conducting R & D leads to entrepreneurial ventures in agriculture and allied areas per mutually agreed terms and conditions. Besides, the university will identify business proposals on science, pharmacy & allied sectors, and related technologies/ businesses from its students for short-listing and incubation at NEATEHUB. Both parties will review submissions, and, finally, the selected students will be allowed to access incubation support at NEATEHUB as per the terms and conditions. Overall, promoting entrepreneurship in Agri and allied sectors and popularizing it among students is the prime motive behind signing the MOU.



29) A training program on "Realizing Agri-Business Potential through grassroots innovations and entrepreneurship" was organized by the Directorate of Extension Education, Assam Agricultural University, in collaboration with NEATEHUB. The training was held from 19 to 23 September 2022 and was sponsored by the Extension Education Institute. The event saw representatives from 12 districts from Assam, and a few turned out from the neighbouring state of Meghalaya as well. The participants were primarily

farmers, grassroots innovators, and entrepreneurs. The idea behind the training program was to give participants an idea about the know-how of running a business. For instance, if someone is an entrepreneur, what is required for going to the next level or how can add value to their products increase the income by manifolds? What does it take to become eligible for incubation? Many aspects were touched in the five days. The participants had sessions with industry experts and business mentors.

30) NEATEHUB organized a poster-making competition for the ATL students of Bahona Boys High School, Jorhat, Assam, on 1st November 2022. The competition was organised to ignite young minds, to foster creativity and imagination, computational thinking and adaptive learning. Since the inception of the Atal Tinkering Lab in the school, this is the first such event. The theme of the poster-making competition was "innovative solutions for solving local community problems". The event saw thirteen teams from the school, and each team comprised five students from classes six to ten. The groups presented posters on various solutions for road safety in hilly areas, an earthquake alarm, floating houses flood affected areas, and creating biodiesel from moss, among a few.

Dr K. Karthikeyen, CEO of NEATEHUB, and other officials represented the incubator at the event. Shri PunaramSaikia, Headmaster of the school, addressed everyone present and acknowledged the support received from the AIC-AAU Incubator for the ATL. During the competition, all the group leaders presented their ideas and thoughts to the jury. For instance, the concept of road safety in a hilly area came from a student who witnessed an accident during travel.

Acknowledging their efforts, the best five ideas were selected and handed over certificates and a small gift as a prize from NEATEHUB. The boys surprised everyone with their innovative mindset and excellent



oratory skills. In the coming days, NEATEHUB plans to organize such events for other ATLs of Jorhat, besides planning to arrange a training program for the teachers-in- charge of ATLs on the operation of 3D printers and handling other equipment in the ATLs.

31) The student ready program of Assam Agricultural University, an ambitious plan of the university to create student entrepreneurs, was launched on 16 November 2022. in the seminar hall NEATEHUB in the presence of Honourable VC of AAU Dr B.C. Deka and other statutory officers of the university. NEATEHUB designed and implemented the curriculum for the program and it targets the 2nd year undergraduate students. Through the program, students will learn about entrepreneurship from industry experts. Besides, the program will encourage the students to take up entrepreneurship as a profession by the time they complete their graduation.



32) A group of students from the Atal tinkering lab of Bahona Boys High School visited the incubator on 10 November 2022. During their visit, they interacted with the in-house entrepreneurs of NEATEHUB. Besides, they presented their ideas to the officials of NEATEHUB Dr. K. Karthikeyan and Dr Danish Tamuly, CEO and Director on Board of incubator interacted with the students. They were shown videos of successful entrepreneurs of the incubator. Later, they were taken to the tea processing unit of Assam Agricultural University and also to the university's museum. The idea behind such events is to instil the seed of entrepreneurship at a young age among the students.



33) A group of farm families from the Udalguri district (Assam) visited the incubator today (8 December 2022). They were part of the 2000 farm families created in the district with the help of KABIL, an NGO which promotes the livelihood of the rural poor in remote areas. These entrepreneurs will disseminate the teachings to their peers that they received during their exposure visit to the university. During their brief stay at the incubator, a session based on prospects of entrepreneurship and offerings of NEATEHUB was taken by the Director on board Dr Danish Tamuly in which he also highlighted how a farmer in due of course of time can take up entrepreneurship.

34) A start-up of NEATEHUB (An AIC-AAU Incubator) Esah Tea, established by young entrepreneur Bijit Sharma launched its micro plastic free tea bags in the capital city of UAE in the Abu Dhabi International Food Exhibition (06-08 December 2022). The plastic tea bags evade harmful substances which are present in contemporary plastic tea bags. Besides the tea bags, the start-up has launched its various tea varieties as well. The startups present a range of single-origin organic tea blends that are carefully curated to rejuvenate and revive mind and body with natural healing qualities tea leaves sourced from 150 plus local gardens and marginal tea growers.



35) A delegation of students and dignitaries which included Dr SandeepaKanitkar, Chairperson and Managing Director, Kan Biosys, Pune, Dr Purnima Sharma, Chief Executive Officer, Biotech Consortium India Limited, New Delhi along with Dr Madhumita Barooah, professor, Dept Agril Biotechnology, AAU visited the incubator on 16 December. During the visit, the delegates interacted with our in-house startups. The dignitaries were part of a workshop on "Agritech Industries and Startups for innovation in agriculture

with career prospects for students of agricultural universities of the country "organized by the DBT-North east centre for agricultural biotechnology, Assam Agricultural University.



36) NEATEHUB 28 December 2023 welcomed it's the first cohort for the pre-incubation program under AIC. It organized the onboarding session via online mode, where the startup founders and officials of NEATEHUB were present. The CEO and Director on Board of NEATEHUB welcomed the entrepreneurs and emphasised the need for a pre-incubation session. The Director on Board in his speech hoped that can provide the guidance which will help these startups to survive and scale. Later, the startup founders introduced themselves and their startups. The startups for this cohort are Juhaal, Resolin Technologies, Mangxho, ButaAxom, BazaariFunde, The Sage.

37) It always feels good when the startups associated with us scales new heights. It was another such occasion when one of our startups Easy Haat launched their products at the ongoing North East Krishi Kumbha at the ICAR complex for the NEH region, Umiam, Meghalaya. The products were officially launched by Hon'ble Minister of Agriculture & Farmers Welfare Narendra Singh Tomar. Easy HaatPvt. Itd is a company which produces ready to cook/ ready to eat delicacies native to north-eastern India. In the krishiMahakumbhheld 4 to 6 January 2023 they launched two new products titled "Haahko" and "Sabek" which basically is a duck curry and tender jackfruit curry.



NEATEHUB

Appendix III

38) NEATEHUB (an Atal Incubation Centre and agribusiness incubator of Assam Agricultural University) invited applications for the seventh batch of Isanya (Idea-stage Incubation Program) and the sixth batch of Saranya (Start-up Incubation Program) from startups working in the sectors of Climate change/ Agritourism/ Sustainable development / Biosciences/ Allied Agriculture/ Precision agriculture/ Agri-logistics. "Isanya 7.0" program aims at supporting idea-stage entrepreneurs up to "product /MVP/ Prototype stage" and maximum grant-in-aid is up to Rs.5 lakhs. "Saranya 6.0" aims at supporting early-stage startups from "Product to Market Traction" stage and maximum grant-in-aid up to Rs.10-25 lakhs. It is the first time the incubator has sought startups from climate change / sustainable development/ agritourism, etc.

39) NEATEHUB organized a sensitization session in The Assam Kaziranga University on 10 February 2023. The session intended to create awareness in the students for applying in the ongoing Isanya 7.0 and Saranya 6.0 application programs. The session was taken by officials of NEATEHUB AngiraSarmah and Nibir Akash Baruah. During the session, the officials explained about the application process and shared success stories of the past entrepreneurs and what NEATEHUB offers as an incubator. The idea behind such sessions in educational organizations is to create young entrepreneurs to help them become independent and channel their creativity into creating something of their own. 40) The RKVY-RAFTAAR Innovation & Agri Entrepreneurship Cell, DA & FW, Ministry of Agriculture & Farmers Welfare hosted the PM kisan Samman Sammelan on 17 and 18 October 2022 at IARI Mela Ground Pusa New Delhi. The event was inaugurated by Hon'ble Prime Minister of India Narendra Modi. The event focused on fostering an exchange of ideas between various key stakeholders, including central & Govt. Officials, startups, from wider ecosystem, incubators, FPOs, farmers from across the country, including all KPs and RABIs of RKVY-RAFTAAR program. Team NEATEHUB, which comprised the officials and seven startups, took part in the event. The event brought together over 13,500 startups and close to 1500 agri startups. The Sammelan witnessed the participation of researchers, policymakers, and other stakeholders. In relation to the event, they also organized an exhibition where 300 startups took part. The startups which took part were from precision farming, postharvest & value addition, allied agriculture, waste to wealth, farm mechanization, etc. For NEATEHUB Kraftinn home décor, Tea orb, Esah Tea, Bright crop organics, Chamuah engineering, Indiluv, Tinash Agro Industries took part in the exhibition.





41) NEATEHUB (an AIC- AAU Incubator) organized a poster-making competition on 13 February 2023 for the ATL students of Bhakatpomua High School, Jorhat, Assam. The intent was to ignite young minds to foster creativity and imagination, computational thinking, and adaptive learning. Since the inception of the Atal Tinkering Lab in the school, this is the first time such an event is being held.

The theme for the poster-making competition was "innovative solutions for solving community problems". Each team comprised five students, from Classes Six to Ten. The groups presented posters on providing solutions like some interesting areas such as 'obstacle robot for governing speed for vehicles', 'adaptive device in spectacles for blind', 'smart dustbin (sensor based)', 'solar tracking system (sensor enables the panel to turn in direction of sunlight), 'home security systems', 'efficient sewage management system'. Mrs. Afifa Sultana, headteacher of the school, addressed the audience and acknowledged the support received from the AIC-AAU incubator Jorhat for its ATL. Dr K. Karthikeyen, CEO of NEATEHUB, and other officials represented the incubator at the event.

During the competition, all the group leaders presented their ideas & thoughts and deliberated well before offering a particular solution. For instance, the inspiration for the solar tracking system came from the personal experience of a student. As a gesture of appreciation, they handed all the ideas certificates and a token prize on behalf of NEATEHUB. The students surprised everyone with their innovative mindset and excellent oratory skills. In the coming days, NEATEHUB plans to organize a prototype making competition for these ideas exhibited in the poster competition.



42) NEATEHUB organized a MoA signing event for its startups incubated under the AIC pre-incubation programme. The event was held on 14 February 2023 at the incubator's seminar hall. Apparently, this is the first batch of incubatees under the AIC preincubation

program. It is a small batch of comprising six startups. On the day of the event, Dr karthikeyen CEO NEATEHUB welcomed the incubatees, whereas Dr Danish Tamuly Director on Board briefed the startups about the program. NEATEHUB invited a few of its former incubatees to share their experience. MonalishaBorthakur (Founder AmbyGold) and ParikhshitBorkotoky (Founder Kraftinn Home Decor) shared their experience and their entrepreneurial journeys. An ice-breaking session followed it for the new incubatees. Later, they signed the MoA formally. The event ended with a vote of thanks from AngiraSarmah, AFO.



43) SarujChetia an incubatee of NEATEHUB and an innovative entrepreneur, has been selected to receive the prestigious Big grant from BIRAC (Bio technology Industry Research Assistance Council) under Dept of Biotechnology, union Ministry of Science and Technology. They have awarded the grant for Chetia's patented technology "a reeling apparatus and method thereof" which is basically an electric and manually



Appendix III NEATEHUB

operated design for Muga Mulberry and Tassar Yarn reeling. Chetia in his entrepreneurial journey has been supported by many organisations like a-idea, ICAR NAARM, NEATEHUB and he expresses gratitude towards them. Chetia is the founder of Aicheng Innovation and research Pvt. Limited and is incubated under Isanya (pre-seed) incubation program.

44) The "Northeast Conclave 2023 climate- resilient livelihoods" was organized by Ashoka, Ashoka Fellows and SDS (Sesta Development Services) on 17 February 2023, at NEDFi house, Guwahati. The IKEA foundation supported the conclave, whereas Tata Institute of Social Sciences, Guwahati and NEATEHUB (an AIC-AAU Incubator) were the knowledge partners. It aimed to bring together the stakeholders to engage in an immersive dialogue around climate resilient and contextually relevant livelihoods. Further, it intended to bring forth examples of exemplary public- private partnerships, scalable value chains that catalyse sustainable growth in the region and serve as platform to celebrate, connect and create collaborations.

The event started with a welcome address by Parag Baruah, Managing Director, SDS followed by the ceremonial lighting of the lamp by the chief guest Krishna Baruah, ACS, State Mission Director, ASRLM and Chief operating officer, Ashoka Manoj Shettigar.

From there on, the technical sessions started the first one being Climate Change: Livelihood challenges in Northeast India, the session comprised Krishna Baruah, State Mission Director, ASRLM, Dr Jaideep Baruah, Director ASTEC, Dr Kamal Kumar Tanti, Director, CECAF, Rituraj Phukan, Indigenous People's Climate Justice Forum and Mrinal Gohain, ActionAid Association and was moderated by Dr Razdan Sarim Rahman, Assistant professor, TISS. As it concluded, another session on "Climate change adaptation and sustainable livelihood strategies" began. Moderated by Saurav Malhotra, Rural Futures-Cofounder and Designer, Balipara Foundation, the panellists Pranjal Baruah, Ashoka Fellow, Vishal Mukhia, Director SIRD Sikkim, Sanjoy Hazarika, Managing Trustee, C-NES, Megha Phansalkar, Founder, TISSER Anil Kumar Verma, Executive Director, PRAN shed light on various aspects of the issue. The third session was on "Co-creating an enabling ecosystem for NER towards climate resilient livelihoods" moderated by Olee Bora, General Manager NeDFi and panelists for the

session were Dr K. Karthikeyan, CEO NEATEHUB, Ramakrishna NK, Co-founder & MD, RANGDE Ajay Barah, Executive Director, ICCO and Manish Goswami, Assistant Editor, The Assam Tribune. The event concluded with a technical session on "Scaling up adaptation action: way forward to climate resilient livelihood". Kangkana Goswami moderated the Climate Change: Livelihood challenges in Northeast India session, which included Krishna Baruah, State Mission Director, ASRLM, Mita Nath Bora, Member, Assam State Youth Commission, Arijit Sharma, Team Leader, Incubation & Acceleration, CIIE-CO, Samir Bordoloi, Secretary General, Spread NE, ArponBhattacharjee, Project Officer BTR (TRIF). Pradeep Ramavath J, Associate Professor, TISS were the panellists. As the event ended, the participants expressed the interactions would enable in creating a climate resilient ecosystem in the region.



45) DigantaSaikia incubatee of NEATEHUB under the AIC pre-incubation program is conferred with the "Most Promising Innovative farmer," at the "Regional Livestock poultry show -2023 organized by Animal husbandry and veterinary department, and Assam livestock and poultry corporation ltd held from 15 to 17 February 2023 at khanapara, Guwahati. Diganta is the founder ofManxho a startup based out of Khowang, Moran. The startup brings to the table northeast India's smoked based productstraditionally slow wood smoked. Besides, they offer pickles and some ready to eat products, condiments which enhance the flavour and aroma of the dishes.



46) Director on Board of NEATEHUB, Dr. Danish Tamuly was invited as a resource person for a training program on "Development of SeedEntrepreneurship for career prospects of youth inAssam" on 14 March 2023 at the IDA Seminar Hall. The event was organized by Seed Science and Technology Program& AICRP on Seed, Department of Plant Breeding and Genetics and was sponsored by National Agricultural Higher EducationProject (NAHEP). The event was held in accordance with Platinum Jubilee year of College of Agriculture, Assam Agricultural University, Jorhat. The training was imparted to the undergraduate and the post-graduate students of the university.



47) A group of students and professors from N.N Saikia college, Titabor Jorhat, visited the incubator on 20 March 2023. The students who visited the incubator were undergrad students of basic sciences. They were brought in the incubator to understand entrepreneurship and take it up as a profession. The students were apprised about the activities of the incubator and the incubation programs of the incubator and briefed about the prospects of entrepreneurship in India in the current scenario. During the visit, they also interacted with the in-house startups of the incubator. For instance, they had detailed discussion with the employees of InnotechAgropostikam regarding possibilities of entrepreneurship in mushroom and its value addition.



Appendix IV Veterinary Clinical Complex

The Veterinary Clinical Complex (VCC), CVSc, AAU, Khanapara has been providing veterinary teaching, diagnosis and treatment services/facilities. The following activities of the VCC are reported during the period 2022-2023:-

Revenue earned and deposited

A total Rs. 1,15,51,660/- (Rupees One Crore fifteen Lakhs fifty one thousand six hundred sixty only) was earned during the reporting period and was deposited to Dean's A/C.

• Total case registered:

A total 36746 nos. of case was registered during the period.

• Internship Training:

Internship training was provided to students from the following foreign countries/NE states:-

- Students of Sylhet Agricultural University, Bangladesh - 1 month.
- Students of CVSc & AH, CAU, Mizoram 1 month.
- Students of Tripura Veterinary College 15 days
- Trainings imparted:

Various trainings were imparted to different category of technical persons:

- Training of State Vet.Doctors on ultrasound, echocardiography and X-ray for 2 groups of 20 veterinary doctors for 7 days in each group.
- Training to Small Animal Practitioners of Assam
 1 day
- Training to Paravets from SDRF- 10 days
- Celebration of important days
- The VCC organizedWorld Veterinary Day(Fig.1), Zoonoses Day and World Rabies Day
- Flood relief camp
- The VCC organized total 7 flood relief camps at various districts of the state Exposure visits
- A one day exposure visit was conducted for the internee students from Pookode Veterinary College, Kerala.

VCC

Appendix IV

• Service provided

Various diagnosis and treatment service were provided to the patients brought by following state and central agencies:

- Assam Police
- \blacktriangleright Air Force
- ➢ Assam Rifles
- Central Industrial Security Force
- Sashastra Seema Bal
- Border Security Force
- Central Reserve Police Force
- National Disaster Response Force
- Police Academy,Shillong



Celebration of World Veterinary Day at the VCC



Flood relief camp organized by VCC

- Ambulatory clinics
- Ambulatory clinics of 4thyear class was conducted at various places, i.e., Hajo, Kamalpur and Halogaon for teaching students and for the benefit of farmers of rural areas.
- Training of internee and regular classes
- Internee students training and conducting regular classes of 3rd and 40' year students.
- Lab analysis facilities and clinical research to PG students of different departments
- The VCC is providing lab analysis facilities to PG students of different departments of the CVSc, Khanapara.
- VCC is also providing cases for clinical research for PG students of College of Veterinary Science.

VCC

Appendix V

Advanced Animal Disease Diagnosis and Management Consortium (ADMaC) under the Department of Veterinary Microbiology, CVSc, AAU, Khanapara

10.1.The ADMaC (DBT Sanction Order No.NER/LIVS/11/2012 dtd.24.04.014)

The North Eastern Region is the most vulnerable part of India for incursion of any pathogens due to sharing open international borders with five neighbouring countries. However, there seems to be little preparedness to handle any imminent danger of any trans-border or emerging diseases including diseases of zoonotic origin. Considering the above fact, the DBT, Govt. of India came forward to handle any such extra ordinary situation by launching a project entitled "Advanced Animal disease Diagnosis and Management consortium (ADMaC)" in the year 2014 at an estimated outlay of Rs36.2562 crore. The three local Institutes selected were Assam Agricultural University, Guwahati Campus, ICAR-NEH, Barapani in Meghalaya and Central Agricultural University, Mizoram. The state Animal Husbandry and Veterinary Department of all eight states of the North eastern regions were also incorporated as stake holders of the project. Four National Institutes like ICAR-NIVEDI, Bengaluru, ICAR-NIHSAD, Bhopal, ICAR-NRC Equine /Type Collection Centre, Hissar and ICAR-NRC on pigs, Rani, Assam were incorporated as knowledge partner for developing modern diagnostic test and imparting training for developing skilled man power.

During its nine years of its existence the project was able to reach the expected goal of establishing infrastructure, developing a team of skilled man power and batteries of diagnostic reagents, vaccines and disease information technologies. In order to strengthen the infrastructure facility, the DBT established a state of the art animal disease diagnostic centre at Guwahati at a cost of **Rs 5.00 crore**. Two existing laboratories, one at ICAR-Barapani and another at CAU-Aizwal were renovated. A BSL-3 laboratory at a cost of **Rs 5.00crores** was established at Guwahati centre. All total 32 state disease diagnostic laboratories were renovated and furnished with minimum essential equipment.

In order to improve the core competence of the manpower involved in animal disease diagnosis, a good number of young scientists, field veterinarians, para –vets, project assistant, technical assistant were trained either in National Institutes or in Assam Agricultural University. The DBT also supported to produce 13 Ph.D. and 37 M.V.Sc. graduates.

The collaborative research finally contributed a lot in the field of disease diagnosis and control. The biological resource generated includes a large number of important pathogens from various species of animal which are preserved safely in Veterinary Type culture centre, Hissar and at all three core Labs. Besides, serum and tissue repository are also maintained. In the field of information technology, a web site (www. cvscadmaclab.org.in) was developed. Again, GPS based disease maps of important animal diseases were generated and disease data were authenticated with the help of meta-analysis. Worth mentioning scientific contribution includes development of two cell culture adopted vaccines against classical swine fever and duck plague, 7 ELISA based diagnostic kits, 9 PCR in house assays. Besides 38 existing diagnostic tests were optimized /improved. All the products /tests mentioned above were supplied to the field laboratories for field validation. In the field of knowledge sharing, the project was able to contribute one book, 5 laboratory manuals, and 83 research articles. In addition, 3 patents were applied for authentication. Another diagnostic kit is ready for release. A good number of scientific abstracts were also presented. The project was also successful in creating a linkage with end users. For easy communication with the farmers a Mobile App named "ADMaC" was developed which was loaded

with some necessary information/photograph for symptomatic diagnosis and appropriate action to be taken by farmers. A pig disease diagnosis app also developed and information is available in https:// play.google.com/store/apps/details?id=com.nivedi. myapplication .The other beneficiary of the project is various Govt. Departments including *Krishi Vigyan Kendras*. Valuable wild animals at the State Zoo, Assam were saved due to timely detection of Canine Distemper and immediate adoption of preventive measures suggested by ADMaC centres. The diffusion point for incursion of novel diseases is located in the North Eastern part of India because of the porous borders. ADMaC provided the stepping stone for fulfilling the one health concept and for making the NER well equipped to restrict entry of transboundary diseases. The success story of the project has already been highlighted in the DBT-website.

Considering the strategic geographical location of Assam, it is necessary to have a systematic diagnostic platform. Further, efficient vaccine manufacturing technologies using available potent candidates must be in place to meet up requirements of the livestock farming community in NER. Keeping these in view, a research facility equipped with advanced equipment and competent manpower is set up in the name of **Advanced Animal Disease Diagnosis and Vaccine Research (ADVaRC)** under the Department of Veterinary Microbiology, College of Veterinary Science, A.A.U, Khanapara.



(ADVaRC) under the Department of Veterinary Microbiology, CVSc, AAU, Khanapara.

10.2. Revenue generation

The ADMaC generated a total Rs. 10,57,524.00.00 during the year 2022-23 from different heads which have been presented in Table -10.

Sl. No.	Head	Amount deposited
1.	Vaccine	Rs 55,650.00
2.	Diagnosis	Rs 7,41,170.00
3.	Short-term training	Rs. 1,20,000.00
4.	Bank interest	Rs 1,40,434.00
Grand total		Rs. 10,57,254.00

Table -10: Revenue generated by ADMaC during the period 2022-23

ADMaC

Appendix VI

AAU Open and Distance Learning (AAU-ODL)

The Open and Distance Learning (ODL) mode of education is a new initiative by Assam Agricultural University (AAU-ODL) and was launched on 18th August 2022 with the establishment of its directorate at Guwahati (Khanapara) campus of AAU. The objective of AAU-ODL is to democratize agricultural education and its skill irrespective of age, caste, class, gender and region. It has also been expected that this new venture will help in offering education on agriculture holistically to them who have been deprived from accessing higher education due life circumstances. As a part of academic curriculum, there are three levels of courses viz. diploma courses of one year duration for professional graduates in agricultural sciences including Agriculture, Veterinary, Fishery and Community sciences; certificate courses of 3-6 months duration for farmers, entrepreneurs, educated



Launching of AAU-ODL by Hon'ble Minister of Agriculture



Learners of broiler farming course during practical



Hon'ble Vice-Chancellor of AAU Dr. Bidyut C. Deka with the learners of mushroom production technology course at the Deptt. of Plant Pathology, AAU, Jorhat

youths, rural women etc and the short-term training courses of 10-30 days duration for anyone having a minimum educational qualification. Altogether 56 course modules have been selected of which the self learning materials have been prepared.

The advertisement for the first admission cycle of learners for the courses on Broiler Farming, Mushroom Production Technology, Biofertilizer production for Entrepreneurship Development and Pig Farming was issued on 7th February, 2023 and the classes were commenced on 9th March, 2023. The total numbers learners enrolled in the first batch was 112 out of which because of short duration of course 72 numbers of learners registered in broiler farming and mushroom production technology successfully completed the course.



Successful learners of broiler farming course with dignitaries



Learners of mushroom production technology course at production unit of Degaon



Learners of mushroom production technology course after certificate distribution ceremony with Dr. Ashok Bhattacharyya, Director of Research (Agri), Dr. J. Deka, Dean, CA, Dr. A Das, DPGS and others at the Deptt. of Plant Pathology, AAU, Jorhat

Appendix VII Ongoing Projects

Sl. No	Name of the Scheme	Funding Agency	In-Charge				
	Externally Funded Research Projects in operation during 2022-23						
Facult	Faculty of Agriculture						
Α	All India Coordinated Research Project (AICRP)						
1	AICRP on Agro Forestry	ICAR	Dr. Kusum Kr. Deka				
2	AICRP on Agro Meteorology	ICAR	Mr. Kuldip Medhi				
3	AICRP on Biological Control	ICAR	Dr. Anjumoni Devee				
4	AICRP on Chick pea	ICAR	Dr. Pabitra Kr. Bordoloi				
5	AICRP on Dry land Agriculture	ICAR	Dr. Pallab Kr. Sarmah				
6	AICRP on Fruits (CRS)	ICAR	Dr. Raaj K. Kakoti (i/c)				
7	AICRP on Fruits (AAU, Jorhat)	ICAR	Dr. Bhabesh Deka				
8	AICRP on Farm Implements & Machinery	ICAR	Mr. Manash J. Barooah				
9	AICRP on Floriculture	ICAR	Dr. Sunil Kr. Borah				
10	AICRP on Forage Crops	ICAR	Dr. Seuji Bora Neog				
11	AICRP on GM crops (Banana)	ICAR	Dr. Prasanta Das				
12	AICRP on Honey Bee	ICAR	Dr. Mukul Kr. Deka				
13	AICRP on Integrated Farming System	ICAR	Dr. Kalyan Pathak (i/c)				
14	AICRP on Irrigation Water Management	ICAR	Dr. Chinmoy K. Sarma				
15	AICRP on Linseed	ICAR	Dr. Jyoti Rekha Hazarika (i/c)				
16	AICRP on MULLARP	ICAR	Dr. Hiranya Kr. Bora				
17	AICRP on Medicinal & Aromatic Plants (Betelvine)	ICAR	Dr. Bikash Hazarika				
18	AICRP on Mushroom	ICAR	Mr. Apurba Das				
19	AICRP on Maize	ICAR	Mr. Nabajyoti Bhuyan				
20	AICRP on Micro & Secondary Nutrients and Pollutant Elements in Soils and Plants	ICAR	Dr. Samiron Dutta				
21	AICRP on Nematode	ICAR	Dr. Bina B. Gogoi				
22	AICRP on NSP & STR	ICAR	Dr. Prakash Borah				
23	AICRP on Potato	ICAR	Dr. Mitul Saikia				
24	AICRP on Palm	ICAR	Dr. Jogesh Ch. Nath				
25	AICRP on Post Harvest Engineering Technology	ICAR	Dr. Abhijit Bora				
26	AICRP on Rice	ICAR	Dr. Safiqul Hussain				
27	AICRP on Rapeseed Mustard	ICAR	Dr. Pankaj Kr. Devchoudhury				
28	AICRP on Soybean	ICAR	Dr. Idrish Ali Sheikh				
29	AICRP on Sugarcane	ICAR	Dr. Tulsi P. Saikia				
30	AICRP on Spices	ICAR	Dr. Kusum Kr. Deka				
31	AICRP on Small Millets	ICAR	Dr. Sunil Kr. Paul				
32	AICRP on Tuber Crops	ICAR	Dr. Sheriful Alam				
33	AICRP on Vegetable	ICAR	Dr. Sailen Gogoi				
34	AICRP on Wheat	ICAR	Dr. Pabitra Kr. Bordoloi				
35	AICRP on Weed control	ICAR	Dr. Khagen Kurmi				

	Faculty of Community Science					
36	AICRP on Women In Agriculture	ICAR	Dr. Moloya Gogoi			
B.	Network Projects					
37	AINP on Agricultural Acarology	ICAR	Dr. Sahidur Rahman			
38	AINP on Bio-fertilizer	ICAR	Dr. Dhruba J. Nath			
39	AINP on Economic Ornithology (VPM)	ICAR	Dr. Prabal Saikia			
40	AINP on Jute and Allied Fibres	ICAR	Dr. Prasanta Bharali			
41	AINP on Soil Test Crop Response	ICAR	Dr. Kulendra N. Das			
42	AINP on PFDC	ICAR	Dr. Pradip Mahanta			
43	AINP on Rodent Control (VPM)	ICAR	Dr. Ratul Kr. Bora			
44	AINP on Whitegrubs & Soil Arthropods	ICAR	Dr. Arup Sarma			
45	Network Project "Conservation of Lac Insect Genetic Resources"	ICAR-National Institute of Secondary Agriculture, Ranchi	Dr. Purnima Das			
	c Research Projects					
Ongo	ing Research Project					
46	Molecular dissection of Défense against Sigatoka infection in Banana Exploitation of Musa germplasm of Northeast for development of Sigatoka-resistant hybrid	DBT, GOI	Dr. Priyadarshini Bhorali			
47	Biotechnological Interventions through RNAi approach for Management of Banana Bunchy Top Virus (BBTV) in Northeast Region of India	DBT, GOI	Dr. Palash Deb Nath			
48	Development of Citrus Tristeza virus (CTV) resistant elite mandarin genotypes through RNAi approach to revive citrus industry in North East India	DBT, GOI	Dr Palash Deb Nath			
49	Study of diversity of Rice in KarbiAnglong district of Assam: Implication for biodiversity conservation under changed climate condition	G. B. pant National Institute of Himalayan Environment and Sustainable Development	Dr. Ranjan Das			
50	Introgression of phosphorus stress tolerant and multiple disease resistance genes into rice through marker assisted selection	DBT, Govt of India	Dr. Akashi Sarma			
51	Improved mechanization in post harvest to reduce losses and improve quality	IRRI, Philippines	Dr. Pradip Ch. Dey			
52	Building Climate resilience of Indian Small- holders through sustainable intensification and Agro-ecological farming systems to strengthen food and nutrition security	NIBIO-funded project	Dr. Sanjay Kr. Chetia			

	Strenghtening AAU's Capacity for Research	Rashtriya Krishi Vikas Yojana	
53	on Organic Farming" (Development of Biofertilizer and Biopesticide Production Unit)	(RKVY)_Govt. of India	Dr. Dhruba Jyoti Nath
54	Quality improvement of 'Til Pitha', a traditional rice product of Assam	DST, GOI	Dr. Barnali Baruah
55	Morphometry, soil erodibilty and productivity potential of flood prone Brahmaputra basins of Dhemaji district using remote sensing and GIS	Indian Space Research Organization (ISRO)	Dr. Bipul Deka
56	Upliftment of tribal population of Golaghat district of Assam through bio-input based organic ginger production	DST-GoI	Dr. Lohit Ch. Bora
57	Detection of Mushroom Toxin using Nanoparticle based Sensor.	DBT	Dr. Robin Ch. Boro
58	Accelerated Genetic Gain in Rice (AGGRi- Alliance)-Marginal Environment (ME)_Non stress and Stagnant Flooding (SF)	IRRI, Phillipines	Dr. Sanjay Kr. Chetia
59	Direct Seeded Rice Consortium (IRRI_ICAR Collaborative Project)	IRRI-ICAR	Dr. Kalyan Pathak
60	Analysis of Holocene climate and vegetation around Tsomgo Lake, Sikkim: implications from a high-altitude region in Eastern Himalaya and comparison with the Western Himalaya.	DST, GoI	Ruchika Bajpai Mohanty
61	Strengthening the onion seed chain in Assam through standardization of seed production technology utilizing the rain shadow belts of Karbi Anglong district of Assam	Assam Science Technology and ASTEC, GoA, Guwahati	Dr. Tulshi Pd. Saikia
62	Image capturing of pests/ diseases in crop/ livestock for purpose of developing artificial intelligence (AI) based Mobile APP	NAHEP Com 2A, IASRI	Dr. Palash Deb Nath
63	Suitability classification for construction of rainwater harvesting system through application of RS and GIS for efficient irrigation water management in Lumbajong and Langsomepi block of Karbi Anglong district	ASTEC, GoA, Guwahati	Kabyasree Choudhury
64	Integrated Development of Turmeric Sector in Northeastern and Bundelkhand Region through Sustainable Technological Interventions for Improvement of Productivity, Quality and Post Harvest Processing Technology under Good Agricultural Practices (GAP) and Organic Production System	DBT, GOI	Dr. Pradip Mahanta
65	Development of Superior haplotype based near isogenic lines (Haplo-NILs) for enhanced Genetic gain in rice	IRRI-DBT, MST, GoI funded	Dr. Sanjay Kr. Chetia

66	Mainstreaming rice landraces diversity in varietal development through genome wide association studies: A model for large – scale utilization of gene bank collection of rice	DBT, GOI	Dr. Sanjay Kr. Chetia
67	Survey of Rural Primary Markets (Gramin Periodical Haats) in Assam	State Innovation and Transformation Aayog (SITA),Ghy.	Dr. Riaz Ali Halim
68	Status of municipality solid waste generation in Biswanath Chariali and Strategies of Solid- Waste Management for Biswanath Chariali Municipal Area	Deputy Commissioner, Biswanath District, Government of Assam	Dr. Pallab Kr. Sarma
69	Expansion of Biotech KISAN Hub Activities in three Aspirational Districts (Udalguri, Goalpara and Dhubri) of Assam	DBT, GOI	Dr. Sarat Saikia
70	In vitro Propagation of banana cv. Malbhog through Embryogeni Cell Suspension	APART, World Bank	Dr. Salvinder Singh
71	Network Project for Establishment of disease- free elite Khasi mandarin and Sweet Orange genetic stocks through shoot tip grafting (STG) and mass production of quality planting material for North-eastern states of India	DBT, GOI	Dr. Raaj Kr. Kakoti
72	"Phytochemical Characterization and Nutritional Profiling of Germplasm Diversity of Citrus Species Existing in North East Region"	DBY, Govt of India	Dr. Ananta M. Baruah
73	Phytochemical characterization and nutritional profiling of germplasm diversity of Citrus species existing in North East Region	DBT, GOI	Dr. Raaj Kr. Kakoti
74	Collection, Conservation and Morpho- Phenological characterization of Citrus Germplasm of North Eastern Region	DBT, GOI	Dr. Raaj Kr. Kakoti
75	Utilization of Citrus Microbiome in Rejuvenating Khasi Mandarin Plants affected by important citrus diseases	Department of Biotechnology, GoI	Dr. Popy Bora
76	Harnessing Endophytes and Arbuscular Mycorrhizal Fungi from Citrus Microbiome for Plant and Soil Health Management in North East India	DBT, GOI	Dr. Anjuma Gayan
77	Exploiting chemical ecology for IPM: Deciphering the phyto-semiochemicals involved in Insect-Plant interactions of major crop pests of North East Region-India	DBT, GOI	Dr. Sikha Deka
78	Exploiting chemical ecology for IPM: Deciphering the phyto-semiochemicals involved in insect plant interactions of major crop pests of North East Region-India	DBT, GOI	Dr. Badal Bhattacharyya

79	Exploiting chemical ecology for IPM: Deciphering the phyto-semiochemicals involved in Insect-Plant interactions of major crop pests of North East Region-India	DBT, GOI	Dr. Raaj Kr. Kakoti
80	Biochemical and molecular characterization of leaf folder (Cnaphalocrocis medinalis) resistant mutant line through mutation breeding (Under AAU-BARC MoU Project : Field trials of Trombay mutants radiation based improvement of the crops and post harvest management)	BRNS	Dr. Purnima Das
81	Genome wide association mapping for identification of novel genes/QTLs of Bao rice population of Assam for deep water tolerance and nutritional quality trait" Project Code:BT/ PR40838/NER/95/1668/2020	DBT, GOI	Dr Dhiren Chowdhury
82	Determinants of Unsustainability of Rural Agro-based Business Ventures in the Plain Tribal Pockets of Lower Brahmaputra Valley Zone of Assam for Leveraging Tribal Entrepreneurship	Dept. of Welfare of Plain Tribes & Backward Classes, Govt. of Assam	Dr. Jayanta Kr. Sharma
83	Geo surveillance of Agromet Field Units under Gramin Krishi Mausam Seva (GKMS) for effective delivery of Agromet Advisory Services.	NESAC, Shillong	Dr. Prasanta Neog
84	Doubling Farmer's Income Through Cultivation Of A High Value Fruit Crop- Dragon Fruit In Kokrajhar District	NABARD	Dr. Vinod Upadhyay
85	Management of Fusarium wilt in NER Banana using ICAR-FUSICONT Technology	DBT, GOI	Dr. Popy Bora
86	Augmentation of income of small tea growers of Assam through production and marketing of specialty tea	North-East Centre for Technology Application & Reach, New Delhi	Dr. Gautam Kr. Saikia
87	Genome wide association studies for agronomic and nutritional traits in rice using Multiparent Advance Generation Intercross (MAGIC) population developed from Assam rice	SERB, GOI	Dr. Jyoti Lekha Borah
88	One_IRRI_Network Project	IRRI, South Asia Rice Breeding Hub, Hyderabad	Dr. Dhiren Chowdhury
89	Multi-institutional approach on development of technology driven bio-input production clusters for mass production of biofertilizers and biopesticides for promotion of eco-friendly farming with collateral development of bio- entrepreneurship in vegetables, spices and small tea growers of North East Region of India for better livelihood	DBT, GOI	Dr. Bharat Ch. Nath

	Network project for establishment of disease		
90	free elite Khasi Mandarin and Sweet Orange genetic stocks through STG and mass production of QPM for NE states of India	DBT, GOI	Dr. Sarat Saikia
91	Collection, Conservation and Morpho- phenological Characterization of Citrus Germplasm of North Eastern Region	DBT, GOI	Dr. Sarat Saikia
92	Utilization of Citrus Microbiome in Rejuvenating Khasi Mandarin Plants affected by important citrus diseases.	DBT, GOI	Dr. Madhumita Barooah
93	Integrated approaches towards addressing sustainable agriculture among SC/ STpopulation with special reference to Jhum cultivators of Karbi Anglong district of Assam	Department of Science & Technology, Govt. of India	Dr. Madhumita Barooah
94	Collaborative R & D Work on Agriculture under BARC-AAU MoU on "Field Trials of Trombay Mutants, Radiation based Improvement of the Crops and Post-Harvest Preservation".	Bhabha Atomic Research Centre (BARC), Department of Atomic Energy, Govt. of India	Dr. Debojit Sarma
95	Preparation of Commercial Potting Mixture	AAU, Jorhat	Dr. Sunil Kr. Borah
96	Catalyzing Complementary Olericulture in Assam, Arunachal Pradesh and Nagaland for Livelihood Security by Provisioning Quality Seed and Seedling of Commercial and Indigenous Vegetables Generated through Hi Tech Mini Plug Nursery and Conventional Means and Promotion of Bio- Enterprise	DBT, GOI	Dr. Sarat Saikia
97	An approach for enhancement of Muga silk worm production in Assam	State Innovation and Transformation Aayog	Dr Palash Deb Nath
98	Morpho-physiological biochemical and genotypic evaluation of farmers; black rice variety: Upendra Rice	DST	Dr. Sanjay Kr. Chetia
99	Morpho-Chemical evaluation, purification and development of production package of Khamti Lahi accession of Arunachal Pradesh	Govt. of Arunachal Pradesh	Dr. Sanjay Kr. Chetia
100	Assessment of Citrus species of Assam of Agro-climatic zones	ASBB	Dr. Purnima Pathak
101	Development of Citrus Diagnostics and Certification Centre in NER	DBT, GOI	Dr. Priyabrata Sen
102	Expressing herbivore danger signal-associated receptor-like kinase genes, HAKs, in chickpea to mediate resistance to <i>Helicoverpa armigera</i>	DST	Dr. Sumita Acharjee
103	Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) Hub at CAU, Pashighat (East Siang, West Siang, Lower Dibang Valley, Namsai and Jorhat	DBT, GOI	Dr. Rudra N. Borkakati

104	Development of sustainable agricultural practices for biotic and abiotic stress management in conventional and organic tea plantations	DBT, GOI	Dr. Popy Bora
105	Characterization and mapping of Char areas of Assam using Geospatial Techniques for planning strategies of crop management and improving livelihood security	Govt. of Assam	Dr. Dilip Kr. Patgiri
106	Sustainable rural livelihood through scientific bee keeping in hill districts of Assam	DBT, GOI	Dr. Manha Bathari
107	Establishment Of Large-Scale Mushroom Spawn Unit To Empower Tribal Women Through Oyster Mushroom Cultivation	BTC, Kokrajhar	Dr. Vinod Upadhyay
108	Establishment of Natural Farming and Organic Agriculture under (R&D)	Govt. of Assam	Dr. Kalyan Pathak
109	Exploring the genetic regulators of suberin and HCAA pathway for imparting broad-spectrum tolerance in tomato against soil-borne vascular pathogens and drought	Science and Engineering Research Board (SERB)	Dr. Anurag Kashyap
110	Popularization and Commercialization of the Soybean crop in NEH Region	GoI, IISR- GRANT-NEH	Dr. Munmi Borah
111	Establishment of large-scale mushroom spawn unit to empower tribal women through oyster mushroom cultivation	Bodoland Territorial Council (BTC)	Dr. Vinod Upadhyay
112	Generating high-depth genomics information for the Himalaya-rice cultivars for improving nutritional quality and stress tolerance	DBT, MST, GoI	Dr. Sanjay Kr. Chetia
113	Millet Promotion Through R&D Activities	Agriculture Department, Govt. of Assam	Dr. Sunil Kr. Paul
114	Processing and value addition of millet for nutrition and livelihood security under the Project "Millet promotion through R&D activities in Assam "	Govt. of India	Dr. Premila L. Bordoloi
115	Establishing efficient platform for genetic engineering in Indian Tea	DBT, GOI	Dr. Salvinder Singh
116	Evaluation, seed multiplication and maintenance of some promising induced mutants of moisture deficit stress tolerant Indian Mustard	BARC-BRNS	Dr. Ranjan Das
117	Detection of crop responses to elevated CO2 and temperature, drought, light and submergence stress using close range hyperspectral, thermal imaging in an advanced physiological tool	DST, GOI	Dr. Ranjan Das
118	Development of quality nucleus stock production unit of honeybee	National Bee Board, NBHM	Dr. Mukul Kr. Deka
119	Assessment of edaphic factors to combat citrus decline in Assam using Geospatial Technology	ISRO Govt of India	Dr. Marami Dutta

120	GIS mapping of char areas of Assam using geospatial Techniques for planning strategies of crop management and improving livelihood security-Phase I	Govt. of Assam	Dr. Dilip Kr. Patgiri
121	Germplasm screening, in vitro regeneration and molecular interaction study in response to Potato Virus Y in Bhut jolokia (<i>Capsicum</i> <i>chinense</i> jacq.)	DBT, GOI	Dr. Ratna Kalita
122	Development of ready to use tablet formulation of antimicrobial essential oils for eco-friendly management of crop pathogens by spray application	DST	Dr. Anurag Kashyap
123	Genetic Improvement of rice for biotic and abiotic stresses using molecular breeding especially drought, submergence, BB and Blast diseases; "DBT-North East Centre for Agricultural Biotechnology (DBT-NECAB): Phase- III"	DBT, GOI	Dr. Sanjay Kr. Chetia
DBT-N	Projects NORTHEASTCENTREFORAGRICULTURALE NECAB PHASE-III)	BIOTECHNOLOGY	Co-ordinator Dr. Bidyut Kr. Sarmah
	Programme I: Genetic improvement of rice for abiotic and biotic stress tolerance using molecular breeding, especially drought, submergence, bacterial blight, and blast disease Programme II: Development of insect resistance chickpea varieties protected against	DBT	Dr Mahendra K. Modi Dr Sumita Acharjee
124	Helicoverpa armigeraProgramme III: Elucidation of acid and itsassociated stress tolerance mechanism in soilbacteria: Towars increasing the efficiency ofagricultural production in acid soil of NortheastIndia		Dr. Mahumita Barooah
	Programme Iva: Isolation of novel strains to develop efficient Biofertilizers		Dr. Rajen Barauh
	Programme IVb: Isolation of novel microbial strains from NE region to develop bioinputs to support organic agriculture		Dr. Poppy Bora
125	A study on transcriptional reprogramming in plastids of pigeon pea induced due to simulated herbivory.	DBT	Dr. Sumita Acharjee
126	Development of Citrus diagnostics and Certification in NER	DBT	Dr. Priyabrata Sen
127	"Germplasm characterization, genomics analysis and gene discovery for yield, metabolite and stress tolerance in tea"	DBT	Dr. Priyabrata Sen Dr. Ramenrda Nath Sarma
128	"Establishing efficient platform for genetic engineering in India Tea"	DBT	Dr. Salvinder Singh

	University Funded projects		
	Faculty of Agriculture		
Tł	neme I: "Generation of Processes & Products for		
	Farming Community and Agriprene	urs	
129	Development of organellar genome-specific simple sequence repeat (SSR) markers in Rice (<i>Oryza sativa</i>).	AAU R & D	Dr. Aiswarya Baruah
130	Development of actinobacterial binoculants for organic deepwater rice cultivation in Assam	AAU R & D	Dr. Nripen Kr. Gogoi
131	Comprehensive Characterization of Decaffeinated Tea Waste (DCTW) and Its Enrichment for Utilization in Crop Nourishment and Remediation of Industrial Pollution	AAU R & D	Dr. Seema Bhagowati
132	Development of plant based insecticidal formulation for management of stored grain pests	AAU R & D	Dr. Anjumoni Devee
133	Application of the gut microbes of Greater Wax Moth (<i>Galleria mellonella</i>) as efficient plastic polymer-degraders	AAU R & D	Dr. Basanta Kr. Borah
134	Development of varieties suitable for direct seeded condition of Assam	AAU R & D	Dr. Jyoti Lekha Borah
135	Encapsulation of nanoparticles (copper and zinc) for smart delivery in agriculture	AAU R & D	Dr. Pranjal Kr Kaman
136	Development of a Mobile Application and Agro-climatic Atlas for Climate Smart Agriculture in Assam	AAU R & D	Dr. Rajib Lochan Deka
137	Development of Prodigiosin Encapsulated particles For Agricultural Disease Management	AAU R & D	Dr. Robin Ch Boro
138	Exploring soil microfauna for bioremediation of pesticide contaminated soils of certain vegetable and tea growing areas of Assam	AAU R & D	Dr. Sudhansu Bhagawati
139	Bioprospecting of wild edible mushroom flora of Assam for nutraceutical properties	AAU R & D	Dr. Supriya Sharma
	Theme II: "Need-based Technology for the St	akeholders"	
140	Development of bacterial nanocellulose film from agro-wastes for application as green antimicrobial food packaging material	AAU R & D	Dr. Anurag Kashyap
141	Reclamation of the contaminated agricultural lands due to coal mining activities in Assam	AAU R & D	Dr. Bhabesh Gogoi
142	Bitterness-oriented germplasm screening and preservation of Assam lemon (<i>Citrus limon</i> Burm.) juice	AAU R & D	Dr. Manashi D. Purkayastha
143	AI based Robotic Seed Drill for Small and Hilly Farms of North East India	AAU R & D	Dr. Pankaj Baruah
144	Development of climate resilient millet based cropping system	AAU R & D	Dr. Pranjit Sutradhar

145	Functional food for human consumption from rice bran	AAU R & D	Dr. Priyanka Das
146	Differential expression of gene for grain aroma at post harvest stages and identification of ideal condition for aroma retention for Assam aromatic rice	AAU R & D	Dr. Sharmila Dutta Deka
147	Green-synthesis and utilization of nanoparticles extracted from black pepper (Piper nigrum) for the management of pulse beetle (Callosobruchus chienensis L.)	AAU R & D	Dr. Surajit Kalita
148	Spinning type water remover in green tea manufacturing	AAU R & D	Mr. Diganta Kr. Bora
Facult	y of Community Science		
Them	e I: "Generation of Processes & Products for th	ne Benefit of	
Farmi	ng Community and Agripreneurs"		
149	Rural Tourism for Sustainable Livelihood Security	AAU R & D	Dr. Mayuri Bora
	Theme II: "Need-based Technology for the St	akeholders"	
150	Value addition of Grand Nane (G9) Banana: For entrepreneurship development	AAU R & D	Dr. Mamoni Das
151	Resilience –an approach of life skill for quality life	AAU R & D	Dr. Rupjyoti Bhattacharjee
152	Mobile application for identification of 'Red flags' in child development	AAU R & D	Dr. Tulika Borah
	nally Funded Research Projects in operation in nary Science and Fishery Science during 2022-	-	
Facult	y of Veterinary Science		
153	AICRP on Epidemiological studies on FMD	ICAR & State	Dr. Rajeev Kr. Sharma
154	AICRP on Pigs	ICAR & State	Dr. Arundhati Phookan
155	Mega Seed Production of Pig under AICRP on Pig	ICAR	Dr. Arundhati Phookan
156	AICRP on Post Harvest technology(Meat and Meat products)	ICAR	Dr Saurabh Kr. Laskar
157	AICRP on Poultry Breeding	ICAR	Dr. Niranjan Kalita
158	AICRP on Goat Improvement	ICAR	Dr. Farzin Akhtar
159	National Animal Disease Epidemiology Network (NADEN)	ICAR	Dr. Durlav Pd. Bora
160	Outreach programme on Ethno Veterinary medicine in XI (Five Year Plan with effect from 2007-08 to 2001-12).	ICAR	Dr. Chandana Choudhury Baruah
161	Outreach programme on Livestock Related Environmental Pollutants, Contaminants & Toxicants (Monitoring of Drug Residues and Environmental Pollutants)	ICAR	Dr. Dulal Ch. Roy
162	Veterinary Type Culture	ICAR National Research Centre on Equines	Dr Pankaj Deka

163	Generation and Evaluation of a live vectored vaccine against porcine circo virus infection of swine.	DBT	Dr. Nagendra Nath Barman
164	Validation and field testing of DIVA tests developed in ADMaC Phase-1 project for surveillance of Brucellosis in North Eastern region of India.	DBT-NERBPMC	Dr. Durlav Prasad Bora,
165	Validation, regulatory compliance and translation of Vaccine and Molecular Diagnostics for Duck Plague	DBT-NERBPMC	Dr. Durlav Prasad Bora
166	Upgradation and Implementation of knowledge based system (KBS) in NER of India (An extended activity of Advance Animal Disease Diagnosis and Management Consortium (ADMaC)	DBT-NERBPMC	Dr. Nagendra Nath Barman
167	SWINOSTICS : A platform for development and validation of diagnostics of important pig pathogens in NE Region of India for commercial exploration.	DBT-NERBPMC	Dr. Pankaj Deka
168	Modelling of indigenous diagnostics and immune potent vaccine candidates to combat African Swine Fever in India	DBT-NERBPMC	Dr. Nagendra Nath Barman
169	Modeling of indigenous diagnostics and immune potent vaccine candidates to combat African Swine Fever in India	DBT-NERBPMC	Dr. Lukumoni Buragohain
170	Generation of Multivalent Vector Vaccine against Lumpy Skin Disease in Cattle and Evaluation of its Immunogenic Potency	ASTEC	Dr. Biswajyoti Borah
171	SAMRIDDHI POULTRY "An Innovative Approach for Economic Empowerment of Rural Women of Assam through Model Egg Village	SITA	Dr. Mihir Sarma
172	Establishment of a Consortium for one health to Zoonotic and Transboundary Diseases in India, including the Northeast Region	DBT	Dr. Nagendra Nath Barman
173	Awareness for techno-economic empowerment of Pig farmers in Dima Hassao District of Assam,	ASTEC	Dr. Monosri Johari
174	Design and development of a low-cost domestic device for rapid detection of bovine subclinical mastitis	ASTEC	Dr. Abhijit Deka
175	Development of a Recombinant subunit vaccine against Swine pasteurellosis and evaluation of its immune protective efficacy	ASTEC	Dr. Deep Prakash Saikia
176	Promoting advance research and capacity building in biotechnology & allied disciplines through manpower training, mentoring and sharing of infrastructure developed under the Advanced-Level State Biotech Hub	DBT	Dr. Prabodh Borah

177	Development and evaluation of multiple antigenic peptide-based diagnostic assays for detection of Babesiagibsoni in dog targeting GPI-anchored protein.	ASTEC	Dr. Deep Prakash Saikia
178	Technology generation for value added Geese meat products and awareness for entrepreneurship development in Geese farming in Assam: an approach towards upgrading underestimated noble sector of poultry	ASTEC	Dr. Arundhati Phookan
179	Development of a nano zinc fortified herbal mix for increased productivity in goats	ASTEC	Dr. Jumi Dutta
180	Application of Molecular, Microscopic and Untrastructural Techniques on study of body hair for Species Identification of Wild Animals of Assam.	ASTEC	Dr. Munmun Sarma
181	Toxicity studies and evaluation of anti- inflammatory and anti-arthritic activity of Shunthigugglu (<i>Trifala shodhita</i>) in rats	Central Council for Research in Ayurvedic Sciences., Ministry of Ayush, GoI	Dr. Pritam Mohan
182	Exploration of the pharmacological potency of Myricaesculenta in the management of inflammation and myocardial infarction	DBT-ALSTB Hub (under Micro Grant)	Dr. Luit Moni Barkalita
183	Evaluation of Dicholorophenol indophenol (DCIP) method and development of a suitable DCIP-based testing algorithm for screening haemoglobin E carrier from Assam	DBT-ALSTB Hub (under Micro Grant)	Dr. Luit Moni Barkalita
184	Development of autologous endophytic bacterial consortium to enhance seed germination and growth promotion of Kopou Phool (<i>Rynchostylis retusa</i>), the state flower of Assam	DBT-ALSTB Hub (under Micro Grant)	Dr. Luit Moni Barkalita
185	Development of earthworm-microbe formulation for management of refinery sludge	DBT-ALSTB Hub (under Micro Grant)	Dr. Luit Moni Barkalita
186	16 rRNA-based metagenomic analysis of the skin and gut microbiome of healthy and diseased catish, clariasbatrachus (Linn	DBT-ALSTB Hub (under Micro Grant)	Dr. Rupam Dutta
187	Therapeutic Application Of Canine Mesenchymal Stem Cells In Clinical Cases Of Spinal Cord Injury	DBT-ALSTB Hub (under Micro Grant)	Dr. Chandan Kr Singh
188	Fortification and utilization of aquatic plants through suitable conservation methodology to encourage resource use efficiency.	DBT-ALSTB Hub (under Micro Grant)	Dr. Papori Talukdar
189	Setting up of animal feed production units in the North East India	NEC, Ministry of DoNER, GoI, Shillong	Dr. Ashim Kumar Saikia Dr. Mridusmita Sonowal
190	Awareness for techno-economic empowerment of pig farmers in Dima Hassao District of Assam	ASTEC	Dr. Monosri Johari

191	Epidemiological survey on haemoprotozoan parasites and Mycoplasma suis in pigs of Lakhimpur and Dhemaji district of Assam	NLM, DAHD, Govt. of India	Dr. Gautam Bordoloi
192	Establishment of piggery and poultry units for production of certified piglets and chicks for capacity enhancement of farmers and entrepreneurship development	RKVY	Dr. Sanjib Khargharia
193	Establishment of Professional Training Institute at LCVSc, AAU, Lakhimpur	Rashtriya Gokul Mission	Dr. Aditya Baruah
194	Preparation of oral phytochemical formulation for respiratory and gut diseases of poultry	ASTEC	Dr. Sanjib Khargharia
	rsity Funded projects		
	ty of Veterinary Science e I: "Generation of Processes & Products for th	na Ranafit of	
	ng Community and Agripreneurs"	ic benefit of	
195	Climate resilient goat kid production through assisted reproductive technology	AAU R & D	Dr. Champak Barman
196	Antibody engineering to develop rapid and cost-effective diagnostics for detection of canine distemper virus (CDV) and canine parvovirus (CPV) infections	AAU R & D	Dr. Dipak Deka
197	Development of Farmers/ veterinary professional friendly mobile application in regards to Animal Health Sector	AAU R & D	Dr. Ditul Barman
198	Development of a pheromone based spray for enhancing reproductive efficiency of dairy cattle of Assam	AAU R & D	Dr. ManjyotiBhuyan
199	Biotechnological interventions for improving the nutraceutical value of agro-industrial by- products to enhance its utilization in ruminants.	AAU R & D	Dr. Papori Talukdar
200	Development of designer eggs for boosting layer industry and entrepreneurship development in North-east region	AAU R & D	Dr. Reema Saikia
201	Capacity building and doubling the income of the local pig rearers through assisted reproductive technology in the North Bank of Brahmaputra	AAU R & D	Dr. Arunoday Das
202	Study on chemical biology approach for early detection of pregnancy in pigs	AAU R & D	Dr. Sanjib Borah
	Theme II: "Need-based Technology for the St		
203	Development of a polyherbal formulation for control of tick infestation in goats	AAU R & D	Dr. Deepa Lahkar
204	A novel composition of enriched banana silage as non-conventional feed for cattle	AAU R & D	Dr. Dipak Kr. Sarmah
205	Development of a marketable Probiotic Consortium for Poultry	AAU R & D	Dr. Luit Moni Barkalita
206	Development of a cost effective peptide-based indirect ELISA for sero-monitoring of African swine fever	AAU R & D	Dr. Lukumoni Buragohain

207	Development of a rapid diagnostic kit for early detection of bovine uterine infection in field condition	AAU R & D	Dr. Manjyoti Bhuyan
208	Development of a Portable Neonatal Intensive Care Unit for Newborn Puppies	AAU R & D	Dr. Manna Baruti
209	Development of cost-effective oral vaccine against necrotic enteritis	AAU R & D	Dr. Shantanu Tamuly
210	Development of indigenous point-of care diagnostics for <i>Peste des Petits Ruminants</i> (PPR)	AAU R & D	Dr. Sophia Gogoi
Facult	y of Fishery		
211	National Surveillance Programme for Aquatic Animal Diseases	National Bureau of Fish Genetic Resources (NBFGR)	Dr Binod Kalita
212	Assessment of Environment, Health and Ichthyofaunal Biodiversity of Tirap and Tissa Rivers of Arunachal Pradesh and Promotion of Fish Centric Supplementary Livelihood Options through a Participatory Approach	National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest and Climate Change, Govt. of India.,	Dr. Rajdeep Dutta
213	Network programme on Mahseer - Species & Stock validation of Mahseer species of genus Tor and Neolissochilus from Western and Eastern Himalayan region of India for its propagation & conservation	ICAR-Directorate of Coldwater Fisheries Research, Bhimtal, Uttarakhand	Dr. Rajdeep Dutta
214	Scientific Conservation Programme of Indigenous Fish (SCOPIF) – Current Status of Ichthyofaunal Diversity in Brahmaputra and Barak Valley of Assam and Creation of Live Gene Bank	Govt. of Assam	Mr. Bipul Phukan
215	Trial study for fermentation of Aquaculture feeds & its impact on digestibility, feed uptake & pond environment (Consultancy project)	German Development Cooperation, GIZ	Dr. Sarada Kanta Bhagabati
216	Transboundarymicroplastics contaminations in Fish & Aquatic food chain along River Brahmaputra	Asia-Pacific Network for Global Change Research	Dr. Rajdeep Dutta
Unive	rsity Funded projects		
	e I: "Generation of Processes & Products for thing Community and Agripreneurs"	ne Benefit of	
217	Aquaculture diversification through murrel farming (<i>Channa striatus</i>) in cages for enhancing productivity floodplain wetlands (beel) of Assam using local feed formulations	AAU R & D	Dr. Pabitra Kr. Saharia
	Theme II: "Need-based Technology for the St	akeholders"	
218	Refinement and commercialization of Induce breeding, larval rearing and grow out technology of <i>Sperata seenghala</i>	AAU R & D	Mr. Sangipran Baishya





Assam Agricultural University অসম কৃষি বিশ্ববিদ্যালয়