Change is the mood today. Everything is changing. Whether the change is for good or bad has become irrelevant. In this changing environment, everybody is trying to fit in to explore a better and brighter self, society, science and business. The key driver of this change is the Information Technology and the tech-savvy mindset of the young and older generations alike. Should therefore, the way we do and teach agriculture in our universities and fields also change? The answer will definitely be in affirmative.

In this changing environment, innovation has become the buzz word - agri-innovation in our case. Agri Start Ups have brought in commerce and business into agriculture and allied sectors necessitating thereby a paradigm shift in our knowledge delivery and agri-skill injection processes. When, for example, we have perfected quality bio-fertilizer production technology, company like California Safe Soil transformed the wasted food from supermarkets into low cost liquid fertilizer with a claim that the process is 720 times more efficient than composting which normally takes 2-3 months time. Europe and China have launched a project named iSQAPER (Integrated Soil Quality Assessment for Agricultural Productivity and Environment resilience) to develop a Soil Quality APP (SQAPP) linking soil and agricultural Management practices to soil quality indicators. This tool is expected to provide a direct and convenient way to advise the farmers on the best management practices to be followed by them region-wise. EIO Dynamic is a company helping dairy farmers to diagnose undetected udder infections using multispectral imaging on iPad like devices which can be mounted on a milking machine. Farmer Edge Start Up is using satellite imagery and precision technology to help growers identify, map and manage farm land variability. Similarly, Indigo Agriculture has developed a database linking machine learning and data analytics that can detect which type of microbe is best to promote yield and is now selling seeds coated with those microbes to farmers to enhance plant growth and yield. Plenty company is utilizing machine learning, Artificial Intelligence (AI) and crop science to optimize yield, freshness and taste. Israel based start up - Taranis, a precision agriculture company is using data science and learning algorithm to help farmers manage crops in millions of acres. TL BioLab is providing genomic testing of beef and dairy cattle using microarray technique and is offering cloud based herd management software. Trace - Genomics is a machine learning start up that uses genomic sequencing technology to work with farmers to identify pathogens in the soil to prevent crop diseases and optimize yield. There are several others in India who are using technology to make a difference in farming attracting the farmers and other stakeholders to embrace technology in what is called Future Farming. What has caught my attention is that almost none of these companies have agriculturists in the starting team. The question is why? Is agriculture slipping away from agriculturists? If yes, why again?

In the backdrop of the above, has not a time to not only revisit but also completely overhaul our agri-education system come? Yes, it has indeed come. The kind of knowledge and information we disseminate to our pupils through the existing course curriculum and the very method of lecture delivery have to change and change from technology embracing point of view. Our system will have to open up its door to IT professionals, mathematicians, engineers, MBA personnel and the likes over and above the core faculties to teach agriculture. In this era of gradual but almost steady corporatisation of agriculture, research linkage with corporate bodies will be a must. A must shall also be a change over in the mindset of the faculties to accept the surfacing changes and mould themselves accordingly if agriculture is not to confront jeopardy.

We pursue a course-heavy semester system of education. Could we lighten the courses deleting the outlived ones and replacing them with the ones that our
students have to master up for their survival and sustainability of agriculture in this changing world. We now have to have disciplines like Artificial Intelligence, strengthened bioinformatics and data analytical discipline, discipline for precision farming and scaling up resource productivity, agri-veterinary-fishery start up incubator facilities and the likes and accordingly the courses and skilling facilities for them. Our ELP units were conceptualised keeping the changes in view and they are now to be further value added and little recast to accommodate the upcoming trends. A time has come to convene the VI Dean’s Committee meeting at the earliest to deliberate and discuss the issues emanating from the current mode of innovative agriculture and to orient our course curriculum accordingly so that the country can produce the expected kind of agri-human resources from its agricultural universities. It is good to know that Indian Agricultural Universities Association (IAUA) is organising a global conference on agricultural education at New Delhi from November 23rd, 2018 with the objective of sharing global experience in agri-education. We may take certain carry home threads from there and use the same to suit our environment and system.

(K M Bujarbaruah)

AAU students shined in Cornell University, New York, USA

Cornell University and Sathguru Management Consultants had hosted a short course on International Agriculture & Rural Development, (IARD 602/402) during October 2017 at Cornell University, Ithaca, New York.

A group of seven post graduate students from Assam Agricultural University along with Dr. Aditi Smith Gogoi, Asstt. Professor, Dept. of Tea Husbandry and Technology attended the IARD programme which was held from Oct. 1-15, 2017 at College of Agriculture and Life Sciences, Cornell University, Ithaca, New York.

The programme comprised of both classroom teaching and field visits. Under the field visits, the students were exposed to various farming systems and rural entrepreneur and then followed by group discussions to develop newer ideas in related fields. The AAU team performed very well in all the programmes and were highly admired with a complimentary remark ‘AAU students did a very good job and you made us proud’ from Professor K.V. Raman, Assoc. Director (Special Projects), International Programs & International Professor of Plant Breeding (Adjunct), College of Agriculture & Life Sciences, Cornell University.

AAU signs a Patent Licensing Agreement with Herbal Medicinal Research Centre, Jorhat, Assam

AAU officially signed a patent licensing agreement to transfer one of its technologies to Herbal Medicinal Research Centre", Bahona, Jorhat, Assam under the initiatives of IPR cell, AAU, Jorhat on Nov. 29, 2017.

Dr. C. Choudhury Barua, Dr. A. Chakrabarty, Dr. I. C. Barua, Dr. R. Sharma, Mr. A. Deka and Ms. S. Pegu developed and patented the said technology on "Wound healing" vide Patent no. 270519 dated 29.12.2015

On behalf of AAU, Dr. G. N. Hazarika, DR (Agri), signed agreement. This agreement solidifies the commitment for production and commercialization of the said herbal wound healing product on mutually agreed terms and conditions.
HE the Governor, Assam Visited AAU

HE the Governor of Assam, Prof. Jagdish Mukhi visited Jorhat campus of the University on Nov. 14, 2018 and called upon the AAU scientists and faculty to make it one of the 10 best universities in the country during a function held at Dr. M. C. Das Memorial Auditorium.

He further said, "I have been told that AAU is of course one of the best universities and is one among the top universities of the country. Many awards have been given to this University as well as to the Vice-Chancellor. We have to see that productivity of farmers increases. But farmers' income is not increasing because of many untold reasons in spite of increase of yields and production. Cost of cultivation has gone up and this is something that the government must look into."

Prof. Mukhi lauded the research work done in AAU and said that the research work must yield technologies to boost up production and market economy.

Dr. K. M. Bujarbaruah, Hon'ble Vice-Chancellor, AAU during his welcome address spoke about the major activities which had taken place in the University and about the financial strain being faced by the non-teaching staff of the University. Mr. Arpan Saikia, Registrar of the University proposed the vote of thanks.

Prof. Mukhi also visited Horticulture Orchard, Fishery Research Centre, Tea Husbandry Estate, Bio-fertilizer Unit and Dept. of Biotechnology.

Workshop on Agri Clinic and Agri Business Centre Scheme

A district level workshop on "Agri Clinic and Agri Business Centre Scheme" was held on Mar. 28, 2018 at IDA Seminar Hall, AAU, Jorhat. The workshop was organised by NABARD in collaboration with Directorate of Extension Education, Assam Agricultural University. Dr. M. Neog, Associate Director of Extension Education (Training) welcomed the dignitaries and participants. Mr. K. Vaiphei, District Development Manager, NABARD, Jorhat explained the objectives of the workshop followed by the inaugural address by Dr. D. K. Borah, Dean Faculty of Agriculture. In his inaugural speech, Dr. Borah mentioned the workshop to be an apt one and explained the need of such workshops for encouraging the students to be real agri-entrepreneur in future. Participating in the workshop Dr. P. K. Neog, Director, EEI, AAU, Jorhat assured all possible help and cooperation from his side to the students in opening up the Agri Clinic and Agri Business Centre. Mr. Samir Bordoloi, Agri-entrepreneur, in his presentation shared his journey of becoming a successful agri-entrepreneur and the ways of profitable entrepreneurship venture. The details of ACABA Scheme was briefed by Mr. K. Vaiphei, DDM, NABARD. Assistant Managers from IDBI bank, Mr. S. Howkip and Mr. Tonoy Das were also present in the workshop along with representative of SBI, Martina Das who discussed at length about the bank credit system. The Head of the departments of Agril Economics & Farm Management, Soil Science, Agriculture Engineering, Plant Pathology were also present in the workshop. A total of 56 students of ELP programme participated in the workshop. The workshop ended with vote of thanks from Mr. K. Vaiphei, DDM, NABARD, Jorhat.
SPECIAL FEATURES

3rd National Youth Convention at AAU, Jorhat

The 3rd National Youth Convention on "Transforming Agriculture for Agripreneurship and Employment Opportunities: The Youth Perspective" was organized jointly by Indian Council of Agricultural Research, Assam Agricultural University and All India Agriculture Students' Association (AIASA) at AAU, Jorhat on Feb. 23-24, 2018.

Hon’ble Chief Minister of Assam Shri Sarbananda Sonowal graced the inaugural ceremony as Chief Guest. The inaugural ceremony was also attended by Sjt. Kamakhya Prasad Tasa, MP, Jorhat constituency; Sjt. Pradan Baruah, MP, Lakhimpur constituency and Rituparna Baruah, MLA, Lahowal constituency; Dr. K. M. Bujarbaruah, Hon’ble Vice-Chancellor, AAU, Jorhat; Mr. R.P. Singh, Patron, AIASA; Sonika Priyadarshini, President, AIASA and a host of others.

Inaugurating the convention, Sjt. Sonowalji stated that use of modern technology and equipment, and skill development can transform the agriculture sector and create job opportunities for the youth in the state”. He also said that the CMSGUY (Chief Minister’s Samagra Gramya Unnayan Yojana) is the government’s initiative to realise the Prime Minister’s vision of doubling farmers’ income by 2022. He also added “Agriculture is the backbone of our economy. I urge the youth of the state to take advantage of the various schemes of the government, and programmes on capacity building and skill development. One should explore the huge potential in agriculture and agri-business sectors”.

Citing a strong linkage of the Indian society with agriculture, Chief Minister Sonowal said, “Rishi and Krishi are the edifice of our culture and economy without which our existence will become meaningless. “Therefore, we should give adequate importance to agriculture and agriculturists for us to tread the future journey of our existence,” he said.

Synchronising with the programme the Chief Minister also conferred award to different personalities in recognition to their excellence in different fields of agricultural practices.

Dr. E. G. Silas Award

The sumptuousness of College of Fisheries, Assam Agricultural University, Raha, in the dome of imparting quality education and nurturing talent, once again has been appreciated nationally. The signature of laurels, this time, brought by its outgoing Bachelor of Fisheries Science (B.F.Sc.) student Mr. Aditya Baruah by bagging the Dr. E. G. Silas Award. Mr. Baruah came out as the 3rd Best Fisheries Graduate of India which was declared in October, 2017.
70th Annual Meeting of the Indian Phytopathological Society and National Seminar

The 70th Annual Meeting of the Indian Phytopathological Society (IPS) and a National Symposium on "Plant Health Management: Embracing Eco-Sustainable Paradigm" was held from Feb. 15-17, 2018 at AAU, Jorhat, Assam. In the inaugural session, Dr. K. M. Bujarbaruah, Hon'ble Vice Chancellor, AAU graced the occasion as the Chief Guest while Dr. C. D. Mayee, former Chairman, ASRB, and Dr. A. N. Mukhopadhyay, former Vice Chancellor, AAU, were present as Guests of Honour. The other special guests were Dr. K. Subbarao, Prof., University of California, Davis; Dr. N.K. Krishna Kumar, former DDG (Hort.), ICAR and Dr. P.K. Chakraborty, ADG (PP&B), ICAR.

While addressing the house, the dignitaries expressed their concern on indiscriminate use of chemicals in agriculture and proposed to evolve devices to modify the current scenario of plant disease management. A key event was organized to exchange MoU between IPS and the publication house Springer which is considered to be a milestone in the history of IPS and Ms. M Kapila, Senior Editor, Springer was felicitated during the inaugural session. Altogether more than 300 delegates participated in the event from length and breadth of the country as well as abroad. Four numbers of keynote lectures were delivered by eminent personalities like Dr. A.N. Mukhopadhyay, Dr. K.Subbarao, Dr. S.S. Chahal and Dr. M.K. Bhattacharyya. The Presidential lecture was delivered by Dr. B. N. Chakraborty. At the beginning of the session Dr. K. C. Puzari welcomed the delegates, while Dr. Dinesh Singh briefed about different activities of IPS. The Director of Research (Agri), AAU, Dr. Ashok Bhattacharyya, the Organizing Secretary, offered the vote of thanks.

One of the flagship programmes of IPS, Prof. M.J.Narasimhan Academic Merit Contest was organized in which 13 contestants participated and Mr.V.Kavi Sidharthan, Ph.D. student from IARI was selected as the recipient of the prestigious award for the year 2018. Another event for the APS travel grant contest was also organized and five contestants were nominated for their final selection by American Phytopathological Society.

The Symposium was organized under 10 different sessions with a special session on wilt disease management. In addition another special session on strengthening HRD in Plant Pathology was also organized wherein the gap in HRD in plant pathology was thoroughly discussed and the future strategies devised.

Participation in National SAPI Quiz by students of FVSc, AAU, Khanapara

The Dept. of Veterinary Physiology, College of Veterinary Science, AAU, Khanapara, Guwahati in collaboration with the Society for Animal Physiologists of India (SAPI), East Zone organised the 5th SAPI Institutional Quiz on Oct. 21, 2017 and also organized the SAPI East Zone quiz on Nov. 3, 2017. Miss Bhaswati Kalita and Miss Prachi Singh, both students of 3rd year UG class secured first position. The team from CVSc, AAU, Khanapara secured first position in the zonal level quiz followed by WBUAFS (second position) and OUAT (third position). The team from CVSc, AAU Khanapara, being the winner of East Zone competition, participated in the National SAPI quiz held at Veterinary College, Nandi Nagar, Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar. The National SAPI Quiz was conducted concurrently with the XXVI Annual Conference of Society of Animal Physiologist of India (SAPI) and National Symposium from Dec. 21-22, 2017. The organizer gratefully acknowledged AAU authority for kind part-financial support and permission to organize the prestigious event at FVSc, AAU, Khanapara.
49th Annual National Conference of Nutrition Society of India (NSI) organised

The 49th Annual National Conference of Nutrition Society of India (NSI) was organised at Dept. of Food Science and Nutrition, Faculty of Community Science, AAU on Nov. 2-4, 2017. The conference highlighted the North East Region biodiversity in re-exploring and rejuvenating the region specific flora and fauna for better food and nutrition security.

Mr. Ram Muivah, IAS, Secretary of North Eastern Council, Shillong, graced the inaugural function as chief guest and stated that NE region had trends of ethnic food which was rich in nutrition, compatible to culture and ethnicity of the Northeast and naturally organic.

Dr. K. M. Bujarbaruah, the Hon’ble Vice-Chancellor, AAU said that quality of food people consume was important in order to address lifestyle issues. "By 2030 we should address issues like hunger, malnutrition and obesity. Indian Green Pool Centre has been recognized as the 12th mega biodiversity area of the world. Across the globe there are 2.60 lakh flowering and non-flowering species, of which India has 18.8 per cent. Globally there are 17,000 fish species out of which 2,700 are in India alone. So we are rich in fish biodiversity too," he said.

Dr. V Prakash, the Vice-President of International Nutrition Society said, agriculture technology had advanced tremendously and could provide whatever was needed for food crops with particular composition. "We hope, in future, agriculture will be able to answer the nutrition problem of the country," he said. He also added, "We are on the threshold of facing a calamity called climate change. The climatic change will affect food production."

More than 450 participants from different states of the country including Bihar, West Bengal, Jharkhand, Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Orissa, Punjab, Rajasthan, Delhi, Maharashtra, Haryana, Chandigarh, Manipur, Meghalaya, Assam and Kerala participated in the knowledge festival.

Technology and machinery demonstration MELA

Under the aegis of All India Co-ordinated Research Project (AICRP) on Post-harvest Engineering & Technology and Farm Implements and Machinery, a "Technology and Machinery Demonstration MELA" was organised in the premises of Dept. of Agricultural Engineering, Assam Agricultural University, Jorhat. Dr. K. M. Bujarbaruah, Hon’ble Vice-Chancellor, AAU, Jorhat while inaugurating the MELA emphasised on the benefits of mechanization of agriculture and appealed the farmers to embrace suitable technologies and machineries for better economic return. He lauded the effort by ICAR though AICRP on PHET and AICRP on FIM in organizing such an event across India.

Apart from demonstration of different innovations of post-harvest technologies and farm implements of the two research projects, several business houses dealing in agricultural processing machines as well as farm implements participated in the MELA. Active participation of university teachers, scientists and students made the MELA a great success.

Dr. A. Borah, PI & Research Engineer AICRP on PHET and Er. M. J. Barooah, PI. AICRP on FIM elaborated on the different projects and programmes being conducted under the schemes.
Important meetings attended by the Vice-Chancellor

- Attended the Selection Committee meeting at CAU, Imphal on Oct. 7, 2017
- Attended Input distribution ceremony at KVK, Barpeta & TSP village on Oct. 10, 2017
- Attended BoM, AAU at Khanapara on Oct. 11, 2017
- Attended meeting with team of Netherlands at Khanapara on Oct. 12, 2017
- Attended Academic Council Meeting of CIFE, Mumbai on Oct. 14, 2017
- Attended Alumni meet at College of Fisheries, AAU, Raha on Oct. 28, 2017
- Attended High Level Committee meeting of ICAR at KAB-II, New Delhi (7th Pay Review Committee of UGC/ MHRD in ICAR) on Oct. 31, 2017
- Attended Farmers' Fair at Titabor on Nov. 7, 2017
- Attended National Seminar at Khanapara on Nov. 8 & 9, 2017
- Attended High Power Committee meeting at ICAR in Delhi on Nov. 15, 2017
- Attended 42nd Convention of Vice-Chancellors of IAUA at Maharana Pratap Univ. of Agri & Tech at Udaipur, Rajasthan on Nov. 17, 2017
- Attended 2nd day Programme of Vice-Chancellors Convention at Udaipur on Nov. 18, 2017
- Attended State level workshop on Soil Health Card at Khanapara on Nov. 20, 2017
- Attended the Inaugural Ceremony of Annul College Meet of BNCA on Nov. 22, 2017
- Attended Farmers' Fair at Sugarcane Research Station, Buralikson on Nov. 23, 2017
- Attended meeting with HE the Governor of Assam & the Chancellor of AAU at Raj Bhawan, Guwahati on Nov 30, 2017
- Attended the Achiever’s Award Distribution Ceremony of Sadin-Pratidin group at Srimonta Sankardev Kalakshetra on Dec. 3, 2017
- Attended Seminar on Agriculture (organized by State Innovation and Transformation Aayog) at Admn Staff College, Guwahati on Dec. 8, 2017
- Attended assessment committee of ICAR- CIARI at Liason office, Sati Lake (Kolkata) on Dec. 9, 2017
- Attended meeting with the Ambassador of Netherlands at Khanapara on Dec. 12, 2017
- Attended Meeting with Agricultural Entrepreneurs at Nalbari on Dec. 13, 2017
- Attended High Power Committee meeting at ICAR. New Delhi on Dec. 28, 2017
- Attended the Inaugural Ceremony of 5th Assam-International Agri-Horti Show at Chowkidingee ground, Dibrugarh on Jan.5, 2018.
- Meeting with Vice-chairman, SITA on Jan. 6,2018
- Attended the Agri-Horti show at Chowkidingee ground on Jan.8, 2018
- Attended the inaugural session of International Seminar at NERI WALM (Tezpur) as key-note speaker on Jan.18, 2018.
- Attended meeting of Krishak Adhikar Suraksa Samiti (KASS) at Baksa on Jan. 20, 2018
- Attended Public meeting at Khanapara field on Jan.21, 2018
- Attended High Power Committee meeting of ICAR at Delhi on Jan. 23, 2018
- Attended meeting at BNCA & attended a Farmer’s meeting at Yuba Kisan Mohoisal at Bihpuria on Feb. 2, 2018
- Attended inaugural ceremony of Advantage Assam-Global Investor’s Summit at Sarusajai in Guwahati on Feb. 3, 2018
- Attended Advantage Assam- Global Investors Summit on Feb. 4, 2018
- Attended XX RAC meeting of ICAR-Indian Veterinary Research Institute, Izatnagar on Feb.13, 2018
- Attended meeting with the Vice-chairman of NITI Aayog at Hotel Taj Vivanta, Khanapara.
- Attended the Annual Conference of vice-chancellor of Agricultural universities at NASC complex, New Delhi on March 7 & 8, 2018
- Attended Indo-French Knowledge Summit on Higher Education & Research at Pravashi Bharatiya Kendra, New Delhi on March 10, 2018
- Attended the 10th Research Advisory Committee (RAC) meeting of ICAR-National Institute of Veterinary Epidemiology and Disease Information (NIVEDI), Bangalore on March 12, 2018
- Attended awareness meeting on Protection of Plant Varieties and Farmers Right Act-Live Telecast by P.M at Meleng Fesual village & attended convocation at Kaziranga University on March 17, 2018
Biosafety Capacity Building Workshop

Assam Agricultural University in collaboration with Biotech Consortium India Limited (BCIL), organized a State Level Biosafety Capacity Building Workshop at its Jorhat campus on Feb. 10, 2018 with help from the United Nations Environment Program - Global Environment Facility (UNEP-GEF) Phase II Capacity Building Project on Biosafety, which is being implemented by the Ministry of Environment, Forest & Climate Change (MoEFCC), Govt. of India.

About 125 participants attended the one-day workshop, including university faculty and students, officials from the State Department of Agriculture, extension personnel from KVKs, as well as tea growers and farmers..

The workshop was inaugurated by Dr. K.M. Bujarbaruah, Vice Chancellor of AAU. He observed that modern biotechnology has immense importance not just in the agricultural sector, but also in various other fields. Research and development initiatives in agricultural biotechnology need to be continued, with safety ensured at every stage in accordance to regulatory requirements for societal acceptance.

Dr. B. K. Sarmah, ICAR National Professor and Director of the DBT-AAU Center, welcomed the participants and thanked MoEFCC for supporting the workshop. He emphasized the necessity of extensive biosafety awareness programs for key stakeholders.

Dr. Vibha Ahuja, Chief General Manager of BCIL, stated that the workshop is aimed at disseminating project outcomes developed under the Phase II Capacity Building Project on Biosafety.

Dr. D.K. Borah, Dean of the Faculty of Agriculture at AAU, complimented the efforts made by MoEFCC in organizing this state level capacity building workshop to generate awareness about biosafety issues related to GM crops.

In his keynote address, Dr. B. Sesikeran, Chairman of the Review Committee on Genetic Manipulation (RCGM) and Former Director of the National Institute of Nutrition (NIN), emphasized the need for scientists to communicate their research, thus creating awareness and facilitating acceptance of GM crops in the country.

Celebration of World Disability Day

AICRP Child Development Component celebrated the World Disability Day by organizing a day long awareness camp on “Early Identification of Disability of Children” in Peerakota, Bharalua Gaon on Dec. 8, 2017. The programme started at 11 AM with a welcome speech by Dr Mala Handique, Principal Scientist, AICRP-CD Component. The programme was attended by 90 numbers of rural women and children. The inaugural speech was delivered by Dr Krishna Baruah, Research Associate. Mrs. Sayera Rahman, Principal of Prerona, Pratibandi Sishu Bikash Kendra, Cinnamora, Jorhat was invited as the chief guest in this programme. She deliberated a lecture on early identification of disability and also organized some special games among children. Prizes were distributed to the winners and participants were offered token gift.
World Soil Day organized

Krishi Vigyan Kendra, Jorhat organized the World Soil Day at the Dr. M. C. Das Memorial Auditorium of the Jorhat campus of AAU which was supported by the Ministry of Agriculture & Farmers Welfare, Govt. of India, and Ministry of Agriculture, Govt. of Assam, on Dec. 5, 2017.

Hon’ble State Agriculture Minister, Sjt. Atul Bora as chief guest of the occasion stated that the new agricultural policy for Assam will be introduced soon and will come into force after the winter assembly session. Sjt. Bora also stated that due to globalization and climatic change, the fertility of the soil was reducing along with the production capacity, so to hike the productivity rate and to ensure food security, farmers of the State had to go for multiple cropping by using seeds of high-yield varieties, without using pesticides and herbicides for more production. He said that in Punjab and Haryana the yield and production rate remained stagnant due to decrease in soil fertility because of excessive use of pesticides and herbicides as the farmers took part in the 1st Green Revolution. So Prime Minister Narendra Modi decided to issue Soil Health Cards to the farmers throughout the country.

Sjt. Kamakhya Prasad Tasa, MP, Jorhat Constituency called upon the farmers to make good use of Assam Agricultural University for income-generating schemes like double cropping and for quality seeds that give bumper production. He also urged the Ministry of Agriculture to give training to the government agricultural officers in university on new mode of farming and latest technology so that they could convey the same to farmers.

Hon’ble Vice-Chancellor, AAU, Dr. K. M. Bujarbaruah said that people did not put importance to soil but soil should be treated as a pregnant woman who had to be given all suitable kinds of vitamins, iron and minerals.

On World Soil Day, a total of 1,700 farmers were issued Soil Health Card by KVK, Jorhat.

World Soil Day, 2017 was also observed by other KVKs under AAU on Dec. 5, 2017 in their respective districts. Various agricultural technologies were showcased in the exhibition for public viewing and Soil Health Cards were distributed.

World Fisheries Day, 2017

The World Fisheries Day was celebrated on Nov. 21, 2017 at College of Fisheries, AAU, Raha. A day-long awareness programme on “Conservation of Germplasm and Scientific Fish Culture” was organized which was attended by about 40 fish farmers of Nagaon district. Dr. K. K. Tamuli, Dean (i/c), C.F.Sc., AAU, Raha addressed the gathering and encouraged the fish farmers for proper adoption of scientific fish culture. An interaction session was held at the end of the day among fish farmers and teachers of the college. Md. Jehirul Islam, a progressive fish farmer of Juria area of Nagaon was felicitated in the programme. The awareness camp was co-ordinated by Dr. P. C. Bhuyan, Dept. of Fisheries Extension, Economics and Statistics, AAU, Raha.
ACHIEVEMENT

* A Patent has been Published by Dr. A. Borah, Res. Engr. & Er. K. Hazarika, Project Scientist Entitled : Development of a Natural draft gas fired tea dryer for small tea growers of Assam. CBR No. 15290, Application No. 201631030241.

* Ms Abhilisa Mudoi, a post graduate student of Dept. of Entomology has been awarded the prestigious DST-INSPIRE Fellowship for pursuing higher studies leading to Ph.D. degree for the year 2017-18.

* Dr. (Mrs.) Jinamoni Saikia, Professor, Dept. of Human Development and Family Studies, Faculty of Community Science, attended an international training course on "Early Childhood Education for Children with Special Needs" organized by Israel's Agency for International Development Cooperation, Ministry of Foreign Affairs in Haifa, Israel from Nov. 20 to Dec. 07, 2017.

* Mr. Dipanjan Kashyap, Assistant Professor (MBA-Agri Business Management), Dept. of Agricultural Economics, Faculty of Agriculture Assam attended APO training course on 'Sustainability Assessment of Agribusiness Enterprises' organized by Small and Medium sized Enterprise Promotion and Development Office, Ministry of Industry and Commerce, Vientiane Capital, Lao PDR from Sep. 25-29, 2017 and presented a country paper on 'Agripreneurship Development as a Tool to uplift Indian Agriculture'.

* Dr. Priyanka Das, Professor, Dept. of Biochemistry & Agricultural Chemistry has presented a key note paper in the National Conference of Agribusiness Potential of Assam, held at Assam Agricultural University, Jorhat from 30-31st January, 2018.

* Mr. Dipanjan Kashyap, Assistant Professor (MBA-Agri Business Management), Dept. of Agricultural Economics, Faculty of Agriculture has been adjudged as Best Trainee in ICAR-Winter School Programme on 'Developments in Organic farming in Tropical Islands of India' organized by ICAR-Central Island Agricultural Research Institute, Port Blair from Nov. 7-27, 2017.

* Dr. G. C. Bora, Principal Scientist, Dept. of Plant Breeding & Genetics, AAU, Jorhat has bagged the national 'Research Excellence Award' for the year 2017. The award was conferred by the Samagra Vikash Welfare Society, in a national conference held at Baba Saheb Bhim Rao Ambedkar Central University, Lucknow on Feb. 10-11, 2018.

* Dr. Pranati Das, Professor and Head, Dept. of Food Science & Nutrition, College of Community Science received Excellence in Research Award, 2017 of Samagra Vikash Welfare Society and Babasaheb Bhimrao Ambedkar University, Lucknow.

* Dr. Mamoni Das, Professor, Dept. of Food Science & Nutrition, College of Community Science received Excellence in Teaching Award, 2017 of Samagra Vikash Welfare Society and Babasaheb Bhimrao Ambedkar University, Lucknow.

* Mr. Dipanjan Kashyap, Assistant Professor (MBA-Agri Business Management), Dept. of Agricultural Economics, Faculty of Agriculture has been adjudged as Best Trainee in ICAR-Winter School Programme on 'Developments in Organic farming in Tropical Islands of India' organized by ICAR-Central Island Agricultural Research Institute, Port Blair from Nov. 7-27, 2017.

* Dr. Priyanka Das, Professor, Dept. of Biochemistry & Agricultural Chemistry has presented a key note paper in the National Conference of Agribusiness Potential of Assam, held at Assam Agricultural University, Jorhat from 30-31st January, 2018.

* Mr. Rupak Jena a Ph. D student from Dept. of Nematology, Assam Agricultural University, Jorhat has been selected for Scientist B by Agricultural Scientists Recruitment Board, ICAR, New Delhi for 2017 batch.

* Dr. A. Baishya, Chief Agronomist, AICRP - IFS, AAU, Jorhat visited Indira Gandhi Krishi Vishwa Vidyalaya (IGKVV), Raipur, Chhatisgarh as a member of the monitoring team of Indian Institute of Farming System Research (IIFSR), Modipuram, Merrut for monitoring research works under AICRP on IFS, ECF, NPOF experiments and TSP activities of AICRP -IFS, IGKV, Raipur from Feb. 26-28, 2018.
Netherlands Ambassador to India visited C.VSc., Khanapara

An Economic Mission of the Netherlands to Assam, led by the Ambassador of the country to India, Nepal & Bhutan, His Excellency, Alphonsus Stoelinga visited Assam Agricultural University, Khanapara campus on Dec. 12, 2017 to have a discussion with the Hon'ble Vice-Chancellor, Dr. K.M. Bujarbaruah about possible research collaboration and scholar exchange between AAU and the leading Universities of the Netherlands

During the discussion, the Vice-Chancellor highlighted the possible areas of collaboration in the field of agriculture and animal sciences including horticulture and post-harvest technology, floriculture, water resource management, dairy development, hydroponics, etc. H.E. the Ambassador of the Netherlands stated that education is a new focus area for their country for initiating global collaboration and they believe, India and Netherlands can gain a lot together through mutual exchange and research. He also stated that the Dutch educational standard has been accepted worldwide as top notch, however, it has not yet been explored enough yet by the Indian students/scholars. He hoped that a few areas of mutual interest may be selected and collaborative ventures may be initiated immediately to find solution to some important problems and issues being faced by the state in agriculture and animal husbandry sectors.

Later in the afternoon, the visiting team led by H.E. the Ambassador had an interaction with the students of the Faculty of Veterinary Science wherein they explained how the students can access the Netherlands for their higher studies.

Horticultural Show & Competition

The 30th Horticultural Show & Competition was organized by the Dept. of Horticulture, Assam Agricultural University, Jorhat on Feb. 22, 2018. More than 550 farmers from different places of Assam like Sivasagar, Golaghat, Titabar, Sonari, Pavoi, Tezpur, Bokakhat, Kaziranga, Jorhat participated in the various sections (fruits, vegetable, mushroom, cut flower, potted plant, flower arrangement, nursery, jam, jelly, marmalade, pickle, salad, juice, etc.) of the competition. The show and competition was inaugurated by Hon'ble Vice Chancellor, Dr K.M. Bujarbaruah. The event ended with the prize distribution ceremony.

Students from Bangladesh attend Internship training at CVSc, Khanapara

A group of 28 students accompanied by a teacher in-charge from Sher-e-Bangla Agricultural University, Dhaka, Bangladesh visited College of Veterinary Science, AAU, Khanapara from Dec. 2-16, 2017 for 15-days internship training at the Veterinary Clinical Complex. This was the first batch of students from the University to join such internship training at CVSc, Khanapara after the signing of MoU between the Faculty of Animal Science & Veterinary Medicine, Sher-e-Bangla Agricultural University, Dhaka and Faculty of Veterinary Science, Assam Agricultural University, Khanapara for bilateral collaboration and student exchange a few months ago.

During their stay in the campus, the students also visited various Departments and farms of the Veterinary Faculty to have exposure to the facilities and practical training in various aspects.
Agriculture Education Day Celebrated

A prize money debate on “Today’s Technology is Sufficient for Doubling the Farmer’s Income of Assam within 5 years” and essay competition on “Vision 2030 for Indian Agriculture” was organized amongst the students of Assam Agricultural University encompassing three colleges viz., College of Agriculture, College of Horticulture and College of Sericulture on Dec. 3, 2017 in order to celebrate the ICAR sponsored “Agriculture Education Day”.

The Dean, Faculty of Agriculture, Dr. D. K. Borah inaugurated the debate competition and delivered a welcome speech and explained the significance of the day and encouraged the students for participation in the debate competition.

Cash prizes were awarded to the winners by the Dean, Faculty of Agriculture, and Dr. A. K. Bhattacharyya, Professor, AAU, Jorhat. While delivering his concluding remarks, Dr. Borah expressed his sincere thanks to ICAR and the organizers and explained how the students should involve in the debate, the logics against and for the motion and the debating protocol that should be followed by a good debater.

Similar events were also organized at B.N. College of Agriculture, Biswanath Chariali; SCS College of Agriculture, Dhubri and Sugarcane Research Station, Buralikson.

Rashtriya Ekta Divas (National Unity Day) held at AAU

The ‘Run for Unity’ was organised at AAU, Jorhat Campus on Rashtriya Ekta Divas (National Unity Day) to commemorate the birth anniversary of the first Home Minister and Deputy Prime Minister of India, Sardar Vallabhbhai Patel on Oct. 31, 2017. The mass run participated by students and NSS volunteers as well as the University teachers was flagged off by Dr. D. K. Bora, Director of Students’ Welfare, AAU, Jorhat. During his brief address to the gathering before flagging off, Dr Bora highlighted the significance of the day reminding about the rich heritage of Unity in Diversity in the country and the vision of Sardar Patel known as the ‘Iron Man’ and the ‘Architect of Modern India’.

In the afternoon, a brief programme with a talk on Sardar Patel was organized for the students and the National Unity Day Pledge was administered amongst the University students by the NSS Programme Officers.

Annual Parting Social 2018

The Annual Parting Social - 2018 was celebrated by the College of Veterinary Science, Khanapara on Jan. 19-20, 2018. The elegant function was presided over by the Dean, Dr. R.N. Goswami, where Hon’ble Vice-Chancellor Dr. K.M. Bujarbaruah was the chief guest and Sjt. Mukti Gogoi, IAS, Commissioner & Secy., Govt. of Assam, Dept. of Animal Husbandry & Veterinary was the guest of honour. Sjt. Pulak Mahanta, ACS, Addl. Deputy Commissioner, Kamrup (Metro) was the distinguished guest. The programme ended with cultural nite.

FISHCOL MEET, 2017

The 29th Annual College week (FISHCOL MEET, 2017) was organized from Nov. 27-30, 2017. The students of the College took active part in different games and sports, cultural and literacy competitions. At the end of the FISHCOL Meet, an open session was organized. Dr. K. M. Bujarbaruah, Hon’ble Vice Chancellor, AAU, Jorhat was the Chief Guest and Dr. K. K. Deka, Hon’ble Vice Chancellor, Mahapurusha Srimanta Sankaradeva Viswavidyalaya was the guest of honour. The session was presided over by the Dean (i/c), C.F.Sc., AAU, Raha. Prizes were distributed among the winners of different events of FISHCOL MEET, 2017.
Rural Appraisal and Extension Programme of C.VSc., Khanapara

The month-long Participatory Rural Appraisal (PRA) programme conducted by the Dept. of Extension Education, C.VSc., AAU, Khanapara came to an end on Mar. 30, 2018 with a day-long Treatment cum Vaccination Camp at Alenga, Domora Pathar and Borkuchi village in Dimoria Development Block of Kamrup district. A group of 28 teachers, 93 UG students and 13 PG students under the leadership of Dr. A. Borgohain, Professor and Head, Dept. of Extension Education, participated in the camp. A total of 612 cattle were vaccinated against Foot and Mouth disease. Moreover, 1702 other livestock and poultry birds were also treated against different ailments.

Vice-Chancellor, AAU distributed Piglets to the tribal farmers

Hon’ble Vice-Chancellor, Assam Agricultural University Dr. K. M. Bujarbaruah distributed 70 nos. of piglets to 35 nos. of tribal farmers belonging to Bodo tribe in Gamiriguri village of Barpeta District under the Tribal Sub plan sponsored by ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, Bengaluru (NIVEDI) in a meeting held on Oct. 10, 2017. He also distributed area specific mineral mixture packets developed by Assam Agricultural University and feed packets.

The Hon’ble Vice-chancellor in his speech expressed that the Assam Agricultural University has been taking similar projects in different parts of Assam and emphasized on establishment of Pig Seed Production Centre, considering its high demand in this region.

Refresher Training Programme on Artificial Insemination

A Refresher Training Programme of Veterinary Officers from East Siang Dist. of Arunachal Pradesh on Artificial Insemination in Cattle and Buffalo was organized by the Directorate of Extension Education, AAU, Khanapara in Collaboration with Deptt. of Animal Reproduction, Gynaecology and Obstetrics, C.VSc., AAU, Khanapara from Nov. 13-22, 2017. A total of 10 officers from Arunachal Pradesh participated in the programme to acquaint with the latest technological advancement in the field of Artificial Insemination.
RESEARCH

**Indigenous cattle & duck registered as breed**

Indigenous cattle of Assam have been registered as breed. They are named as Lakhimi cattle and the accession number is: INDIA_CATTLE_0200_LAKHIMI_03041. Local duck of Assam have been registered as a new breed of duck by the ICAR National Bureau of Animal Genetic Resources, Karnal, Haryana. They are named as Pati duck and the Accession number is: INDIA_DUCK_0200_PATI_11001. This is the only registered duck breed in the entire India. The certificate for registration was awarded by Hon'ble Minister for Agriculture Sri Radha Mohan Singh at a function held at ICAR, New Delhi on Jan. 10, 2018.

Lakhimi cattle of Assam are distributed in entire state and reared for milk and draught purposes by local people. Total population is about 79 Lakhs. Animals are small sized, horned and have relatively short legs. Coat colour is variable, mainly brown and grey. Hump is medium sized and the backbone is slightly curved. Udder is small and bowel shaped. Bullocks are excellent draught animals especially for pulling cart and for plough, especially in the muddy fields. Lactation milk yield ranges from 270 to 375 kg.

Pati ducks are reared in backyard production system in rural areas of Assam. Estimated population is 18.21 lakhs. These are squat in posture. Plumage is dark brown in drakes with greyish black head, tail with black and white feathers. Ducks are solid brown. A white ring may or may not be present at neck in both sexes. The bill, shank and feet are predominantly yellow. Pati ducks are used for egg and ritual sacrifices. The average body weight is 1.58 kg.

**AICRP-IFS Centre, AAU, Jorhat upgraded**

AICRP-IFS Centre, Jorhat under AAU, Jorhat has been upgraded to Advance Farming System Research Centre by Indian Institute of Farming System Research (IIFSR), a wing of Indian Council of Agricultural Research (ICAR), entrusting the responsibilities of North Eastern region in greater sense. Considering the diversity of farming systems in the North Eastern region that supports livelihoods of many and pioneer works executed with success by the AICRP-IFS Centre, Jorhat, AAU, in farming system research in Assam state, IIFSR has proposed and consequently approved the establishment of Advance Farming System Research Centre at AICRP-IFS Centre, AAU, Jorhat having facilities for estimation of Green House Gas, Farming System modelling etc. The expectation behind the move is to help in designing updated science based farming systems for the region.

**RECENT ADDITIONS TO THE RESEARCH PROJECT POOL**

<table>
<thead>
<tr>
<th>Title of the Project</th>
<th>Principal Investigator</th>
<th>Funding Agency</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development, standardization and dissemination of cultivation packages of medicinal plant of commercial importance in foot hill region of eastern Himalaya</td>
<td>Dr. Hemen Choudhury</td>
<td>NMPB, Ministry of Ayush, GoI</td>
<td>30.55 lakh</td>
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<tr>
<td>Establishment of Field gene bank and micro propagation unit for medicinal plant genetic resources of North East India</td>
<td>Dr. M. K. Sarma</td>
<td>NMPB, Ministry of Ayush, GoI</td>
<td>37.50 lakh</td>
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<tr>
<td>Mainstreaming agricultural biodiversity conservation and utilization in agricultural sector to ensure ecosystem services and reduce vulnerability</td>
<td>Dr. D.J. Nath</td>
<td>UN Environment-GEE</td>
<td>3.20 lakh</td>
</tr>
<tr>
<td>Resource use planning for sustainable agriculture and Policy imperative for promoting value chains of agricultural commodities in India.</td>
<td>Dr. Nivedita Deka, Dr. R. K. Sarma</td>
<td>ICAR_NIAP</td>
<td>33.62 lakh</td>
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<td>Production of healthy planting materials of orange (Citrus reticulata Blanco) and Assam Lemon (Citrus limon (Linn. Burmann) through budwood certification programme and its distribution to growers in Assam and other Northeastern states.</td>
<td>Dr. A. C. Borbora</td>
<td>GOI- DBT</td>
<td>29.98 lakh</td>
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<tr>
<td>In silico screening of aldehyde based novel inhibitor for Plasmodium Haemoglobinase.</td>
<td>Trisha Rajguru Borah &amp; Dr. Rajdeep Dutta</td>
<td>GOI- WOS</td>
<td>6.14 lakh</td>
</tr>
<tr>
<td>Empowerment of the rural women through capacity building in improved biotechnological innovation and application</td>
<td>Dr. Kanta Bhattacharjee</td>
<td>ICAR- IVRI</td>
<td>48.39 lakh</td>
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<tr>
<td>AINWP on Gastro-Intestinal Parasitism</td>
<td>Dr. Rajdeep Dutta</td>
<td>NMHS</td>
<td>65.00 lakh</td>
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Training on Linseed at RARS, Shillongani

ICAR sponsored training programme on "Increasing area and production of Linseed in Rice fallows" was held on Mar. 28-29, 2018 at RARS, Shillongani for ADOs, AEAs and Input Dealers of Nagaon district. The inaugural session was chaired by Mr. K. C. Talukdar, JDA (CZ) and Dr. P. K. Singh, PC, AICRP on Linseed graced the occasion as Guest of Honour. Altogether 24 trainees participated in the programme. In the valedictory function, Dr P. K. Das, Chief Scientist distributed the certificate of participation to the trainees. The programme ended with vote of thanks proposed by Mr. U. K. Borah.

Skill development training on "Green Waste Management for Entrepreneurship Development"

A seventeen day long skill development training programme on "Green Waste Management for Entrepreneurship Development" for women and youth was held from Nov. 21 to Dec. 7, 2017 at the Dept. of Family Resource Management and Consumer Science, College of Community Science, organized by DBT funded project on "Management of Green Waste for Economic Benefit and Women Empowerment". A considerable number of enthusiastic trainees learnt to prepare products from water hyacinth, palm leave sheath and briquettes from bio waste for entrepreneurship development. Director of Extension Dr. H. C. Bhattacharyya; Dr. Dipti Bora, Dean, College of Agriculture; Dr. S. Kaur, Dean, College of Community Science; Dr. Ruplekha Borah, Head, Dept. of FRMCS and Heads of other departments of College of Community Science were present in the inaugural function of the workshop.

Awareness-cum-Training Programme on Quality Seed of Wheat

A day-long awareness-cum-training on quality seed production of wheat for adoption of new varieties was held on the Mar. 12, 2018 at RARS, Shillongani. About 50 farmers from Nagaon, Morigaon, Hojai districts and a good number of officers from the State Dept. of Agriculture attended the programme. While welcoming the dignitaries and farmer participants, the Chief Scientist of the Station Dr. P. K. Das delivered at length about the activities and achievements of Station on various crops including wheat. In his address, Dr. N. Deka, Head, KVK, Nagaon encouraged the farmers to undertake wheat cultivation using quality seeds. Dr. Rajkumar, Principal Scientist from the ICAR-Indian Institute of Wheat & Barley Research, Karnal, Haryana thanked the Station for allowing to organize the programme and also praised the association of the station in development of various technologies including varieties of wheat.
Training cum Exposure tour of Field Functionaries (Paravets)

The Directorate of Extension Education, AAU, Khanapara organized 4 nos. of training cum exposure tour of field functionaries (Paravets) of 5 days duration. The first batch training commenced during Jan. 8-12, 2018 and the fourth and final batch training programme was commenced from Feb. 6-10, 2018. 20 nos. of Paravets participated in each batch. Thus a total of 80 field Paravets working under Govt. of Sikkim completed the Training cum Exposure Tour Programme.

Exposure Tour of Progressive Farmers of the State of Sikkim

The Directorate of Extension Education, AAU, Khanapara in collaboration with Dept. of Animal Husbandry, Livestock, Fisheries and Veterinary Services, Govt. of Sikkim organized 2 nos. of Exposure Programmes for the Progressive farmers of the state of Sikkim to enhance the productivity for sustainable economic growth through Livestock sector. The 1st programme of 5 days Exposure trip of Progressive Farmers commenced w.e.f. Mar. 13-18, 2018 where 20 Progressive Farmers participated. The 2nd Exposure Programme commenced w.e.f. Mar. 20-24, 2018. A total of 40 Progressive Farmers of which majority were women participated in the programmes.

Capacity building and skill development training on piggery

The Dept. of Extension Education, F.V.Sc, Khanapara in association with Indian Institute of Entrepreneurship, Govt. of India, Guwahati conducted five training programmes (3 days each) between Jan. 9 - Mar. 9, 2018. One of the trainings was conducted on "Capacity building and skill development training programme on piggery" at remote areas of Kokorajhar district with progressive pig farmers. Rest four trainings were on "Pig farmer orientation cum exposure visit" for scientific pig rearing in the department. The training programmes were designed to cover health care management, feeding management, breeding and housing management. While in training, the farmers were exposed to pig farms under ICAR-AICRP on Pig, ICAR-Mega Seed on Pig, AAU, Khanapara and NRC on Pig, Guwahati and several private pig farms around Guwahati. Dr Atul Borgohain, Prof.& HOD, Dept. of Extension Education and Dr. Sadananda Payeng, Asstt. Prof., Dept. of Extension Education were Course Director and Course Co-coordinator, respectively.

NEWS FROM ATIC

Farmers' visit: A total of 2175 farmers visited ATIC and were provided advisory services. Products sold: Paddy seeds of different HYV, vegetables, Biofor-PF, tea, jaggery, etc. were sold.

ATIC continues to be an active collaborator in Gyan Yatra Programme of Govt. of Assam