Chapter-4

STATUS REPORT

B-1. ASSAM AGRICULTURAL UNIVERSITY, JORHAT

An accredited university of ICAR, Assam Agricultural University (AAU), Jorhat, established in 1969 has grown to a premier institute, not just for the state and the North Eastern Region, but also for the country as a whole. This year, the University has figured in the list of 100 top universities of the country in a study conducted by Career - 360. It is also worth mentioning that only 5 agricultural universities including AAU figured in this list.

As on date, the university has four faculties with 6 constituent colleges *i.e.* three in Agriculture and one each in Veterinary, Fishery and Home Science Faculties. Two more colleges *viz.* Lakhimpur College of Veterinary Science and College of Horticulture are coming up soon. In addition to these colleges, the University has 6 Regional Agricultural Research Stations (RARS) and 5 commodity research stations (CRS) and 20 Krishi Vigyan Kendras (KVK) and 1 Extension Education Institute (EEI). With these faculties, research stations, KVKs and the EEI, the university is imparting agricultural education up to doctorate degree level, conducting agricultural research (both in conventional and frontier area), disseminating evolved and validated technologies and imparting training to both farmers and officers.

1. Education

1.1 Course Curricula

The new UG & PG course curricula approved by the ICAR are being implemented in the constituent colleges of the University excepting in the Faculty of Veterinary Science where course curricula approved by the Veterinary Council of India is followed. The new UG course curriculum is relatively more skill and practical oriented than the earlier curriculum as it include few experiential learning and hands on training programmes besides RAWE programme. In agriculture, 7 experiential learning programme are in operation while in Home Science and Fishery Science 5 and 1 similar programmes are in operation. Besides these, 9 different certificate courses have been introduced in agriculture and home science.

1.2 Intake and Output

The trend of admission seekers in different courses in the University from the year 2005-06 is presented in Table 1.1. As would be seen from the Table 1.1, the number of admission seekers over this period has increased three fold with major increase being recorded from 2010-11. During 2010-11 and 2011-12, 625 and 632 students were newly admitted as shown in Table 1.2 and 1.3.

Table 1.1: Trend of admission seekers for undergraduate programmes since 2005-06 to 2012-13

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Total No. of	813	628	706	944	848	1174	1719	2181
application received								
Total No. of candidates	751	587	636	860	774	1086	1502	2071
found eligible								

Table 1.2: Students newly enrolled and passed out during 2010-11

Colleges	Back	nelor	Ma	Master		Degree	To	otal
	Deg	gree	Deg	gree	Progra	amme		
	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed
		out		out		out		Out
College of	170	137	116	51	35	2	321	190
Agriculture, Jorhat								
Biswanath College	30	16	-	-	-	-	30	16
of Agriculture,								
Biswanath Chariali								
College of Vety	100	95	55	45	29	2	184	142
Science,								
Khanapara								
College of Home	43	31	19	2	8	-	70	33
Science, Jorhat								
College of	20	17	-	-	-	-	20	17
Fisheries Raha								
Total	363	296	190	98	72	4	625	398

Table 1.3: Students newly enrolled and passed out during 2011-12

Colleges	Bachelor's			Master		Ph.D. Degree		otal
	Deg		Degree					
	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed
		Out		out		out		Out
College of Agriculture,	175	122	112	57	40	4	327	183
Jorhat								
BNCA, Biswanath	30	12	13	-	-	-	43	12
Chariali								
College of Veterinary	104	86	46	23	26	4	176	113
Science, Khanapara								
College of Home	45	19	9	11	12	-	66	30
Science, Jorhat								
College of Fisheries	20	12	-	-	-	-	20	12
Science, Raha								
Total	374	251	180	91	78	8	632	350

1.3 Total Students on Roll

Altogether 1629 and 1787 students were on roll in the University during 2010-11 and 2011-12, respectively (Table 1.4 and 1.5), of which more than 50 per cent were female.

Table 1.4: Total students on roll in different colleges of the University during 2010-11

Constituent	Back	nelor	Ma	ster	Ph.D.	Degree	To	otal
C0lleges	Deg	gree	Deg	gree				
	Total	Girl	Total	Girl	Total	Girl	Total	Girl
College of Agriculture, Jorhat	532	327	173	105	42	31	747	463
Biswanath College of	79	7			-	-	79	7
Agriculture, Biswanath Chariali								
College of Veterinary Science,	468	301	81	49	33	12	582	362
Khanapara								
College of Home Science,	115	100	29	27	10	8	154	135
Jorhat								
College of Fisheries Science,	67	24		-	-	-	67	24
Raha								
Total	1261	759	283	181	85	51	1629	991

Table 1.5: Total students on roll in different constituent colleges during 2011-12

Colleges	Back	nelor	Ma	ster	Ph.D.	Degree	То	tal
	Deg	gree	Deg	gree				
	Total	Girl	Total	Girl	Total	Girl	Total	Girl
College of Agriculture, Jorhat	555	332	205	110	64	47	824	489
BNCA, Biswanath Chariali	87	12	12	4	-	-	99	16
College of Vety Science,	452	167	101	47	55	20	608	234
Khanapara								
College of Home Science, Jorhat	131	98	26	20	21	19	178	137
College of Fisheries Science, Raha	74	27	4	ı	-	ı	78	27
Total	1299	636	348	181	140	86	1787	903

1.4 Fellowship Awarded and Achievement of Students

During 2010-11 and 2011-12, 30 and 27 students of the University received fellowships of different agencies of which 10 and 13 were ICAR Junior Research Fellowship, 8 and 3 ICAR Senior Research Fellowship and 12 and 11 DBT Fellowship, respectively apart from good number of state merit scholarships awarded to the students.

One of the M.Sc. (Agri) students, Ms Maitry Paul, bagged 2nd best prize of Association of Indian Universities for her presentation of a project on "Mild strain identification and cross protection against Citrus Triesteza virus (CTV) disease and citrus greening disease (CGD) for sustainable management of citrus die back" in Student Research Convention 'ANWESHAN' held at Tata Institute of Social Science, Mumbai on 20-22 March, 2013. Another significant achievement has been selection of Dr. Soumya Kanti Kar, an MVSc student for a PhD position in the Wageningen University, Netherland through online interview.

1.5 Publication

The teachers and scientists of the college published altogether 629 and 728 research papers and articles of different kinds during 2010-11 and 2011-12, respectively as detailed in the Tables 1.6 and 1.7.

Table 1.6: Publications of teachers of the University during 2010-11

Particulars of Publication	Number o	f publication	on in const	ituent colle	ges and uni	versity
	C.V.Sc	CA	BNCA	CFSc	CH.Sc	Total
Research paper in journal	83	48	8	2	13	154
Research abstracts in journal	26	-			5	31
Research abstracts in	102	10	-	4	2	118
proceeding						
Books	2	5	1	7	-	15
Book Chapter	8	12			1	21
Practical manual	53	10		19	-	82
Popular articles	53	-	8		13	74
Technical bulletin	6	23	4		16	49
Others	46	30		4	5	85
Total	379	138	21	36	55	629

Table 1.7 Publications of teachers of the University during 2011-12

Publication	Nur	nber of p	ublications	from const	ituent colle	eges
	C.V.Sc	CA	BNCA	C.F.Sc	H.Sc.	Total
Research paper in journal	106	61		2	8	177
Research abstracts in journal	34	-	5	4	3	46
Research abstracts in	120	10	20		6	156
proceeding						
Books	8	8		2		18
Book Chapter	4	43		2	5	54
Practical manual	72	42		6	7	127
Popular articles	53	24	10	3	3	93
Technical bulletin	11	11	4		12	38
Others	2	10		6	1	19
Total	410	209	39	25	45	728

1.6 Human Resource Development

A large number of teachers as given in the Tables 1.8 and 1.9 were deputed for attending the regional/national/international level training/workshop/seminar etc during 2010-11 and 2011-12.

Table 1.8: Teachers deputed for attending training, seminar, workshop etc. during 2010-11

Training, seminar, conference	Teach	ers (No.) a	attending tra	aining, sem	inar, work	shop etc.
attended	CA	BNCA	CVSc	CHSc	CFSc	Total
International level training	1	-	1		ı	2
National level training	1	2	5	1	1	9
Regional level training	1	-	8	5	ı	13
International level seminar	1	-	4	1	ı	4
National level seminar	2	-	19	4	ı	25
Regional level seminar	ı	-	4	1	ı	4
International level conference	ı	-	11	1	ı	11
National level conference	1	-	29	-	-	30
Regional level conference	ı	-	7	2	ı	9
International level workshop	-	-	1	-	-	1
National level workshop	3	5	11	2	ı	21
Regional level Workshop	-	-	1	-	3	4
Others	1	-	7	-	-	8
Total	8	7	108	14	4	141

Table 1.9: Teachers deputed for attending training, seminar, workshop during 2011-12

Training, seminar and	Tea	chers (No	.) attendin	g training, se	eminar, wo	orkshop
conference	CA	BNCA	CVSc	CHsc	CFSc	Total
International level training	1	-	19		-	20
National level training	7	3	5	1	2	18
Regional level training	12	-	1	5	-	18
International level seminar	2	-	18	1	-	21
National level seminar	6	-	2	3	-	11
Regional level seminar	ı	-	9	ı	-	9
International level conference	3	-	11	2	-	16
National level conference	ı	-	2	ı	-	2
Regional level conference	2	-	1	ı	-	3
International level workshop	1	-	10	ı	-	11
National level workshop	3	5	4	2	-	14
Regional level Workshop	15	-	1	8	-	24
Others	-	-	-	2	-	2
Total	52	8	83	24	2	169

1.7 Training/Seminar/Workshop Organized

The University organized large number trainings/workshops/seminars during the period under review (Table 1.10 and 1.11).

Table 1.10: Training, seminar, workshop organized by the colleges during 2010-11

Particulars of Events		Trainin	ıg, seminar, v	workshop etc	c organized (N	lo)
	CA	BNCA	CVSc	CHSc	CFSc	Total
National level training		-	9	-	-	9
Regional level training	49	2	7	2	9	69
National seminar	-		10	-	-	10
Regional seminar	-	-	-	-	-	-
National conference	-	-	4	-		4
Regional conference	-	-	-	-	-	-
National workshop	-	-	1	-	-	1
Regional workshop	2	-	-	1	-	3
Others	2	-	19	-	2	23
Total	53	2	50	3	11	119

Table 1.11: Training, seminar, workshop organized in the colleges during 2011-12

Events		Training, so	eminar, work	shop etc. or	rganized (No	0.)
	CA	BNCA	CVSc	CHSc	CFSc	Total
National level training	3	-	10	-	1	13
Regional level training	50	2	5	7	2	66
National seminar	-	1	8	-	-	9
Regional seminar	-	-	1	-	1	1
National conference	2	-	2	-		4
Regional conference	-	-	0	-	-	-
National workshop	-	-	3	-	-	3
Regional workshop	-	-	0	1	1	1
Others	_	-	3	2	3	8
Total	55	3	32	10	5	105

1.8 E-learning

Live lecture capture is going on in the College of Agriculture and they are published in the U-Tube for augmenting the learning process of the students of Faculty under the Agricultural Innovation Progamme (AIP), a collaborative programme of AAU with the Cornel University, USA. To supplement the teaching-learning process the course contents are uploaded through Online Learning and Teaching (OLAT) Software in the University Server. These e-learning technologies have broken the class room barrier and the students can learn their lessons anytime, anywhere.

1.9 New programmes launched

In the following two disciplines new programmes were started

- 1. PhD in Veterinary Biochemistry, Tea Husbandry and Technology
- 2. M.Sc (Agri) in Seed Science and Technology

2. Research

The research activities in agriculture are being undertaken in different departments of the constituent colleges as well as in 6 Regional Agricultural Research Stations (RARS) and three Commodity Research Stations (CRS) *viz.*, Citrus Research Station, Tinsukia;

Sugarcane Research Station, Buralikson and Horticultural Research Station, Kahikuchi. The research activities in veterinary and fisheries are conducted primarily in the departments of the constituent colleges. There are, however, two research stations to conduct research in livestock and one centre for research in fisheries. Almost all the KVKs have the manpower and facilities to conduct participatory and on-farm research in these fields. The research programs in Home Science are carried out by the Departments as well as through the KVKs. The research stations and the departments of the constituent colleges have reasonably good laboratory and field facilities for executing the research activities.

2.1 Agriculture

At present, a total of 118 research projects including 44 ICAR sponsored All India Coordinated Research Projects (AICRP)/All India Network Project (AINP) and 74 ad-hoc projects sponsored by different agencies like ICAR, DBT, DST etc. are in operation in the Faculty of Agriculture.

Research Achievements

- ❖ The University has, so far, developed more than 80 crop varieties which include the promising varieties like Ranjit, Bahadur in rice; Pratap in greengram; TS-36, TS-38 in toria; Tarun in jute; Dhansiri, Lohit in sugarcane; JC-1 and JC-2 in brinjal etc.
- ❖ In the last two years, the university could release a total of 15 university bred crop varieties of which 9 were in rice, 1 in jute, 1 in sugarcane, 2 in coconut, 1 in ricebean and 1 was in colocasia.
- ❖ The University has established itself as one in the elite club of universities/institutes to exhibit its capability in gene technology. The university has successfully generated the transgenic Bt-chickpea lines resistant to pod borer and transferred the same to M/S Mahyco, India's leading Seed Company, for further testing and commercialization.
- ❖ One more accomplishment of significance was the establishment of AAU-DBT Centre with funding of Rs 35 crore from DBT to promote research in the frontier areas of science.
- ❖ Besides the above, few important accomplishments of the University during the last two years are
 - Development of a rice breeding line TTB 103-21-1 (Mulagabharu derived from Jaya/Mahsuri) with 135 days duration and tolerance to blast, brown spot and sheath blight diseases for growing in double cropped areas.
 - Development of four rice varieties viz. TTB 303-18-3 (4.76 t/ha), TTB 303-2-23 (5.11 t/ha), TTB 303-1-26 (4.66 t/ha) and TTB 303-1-42 (4.84 t/ha) suitable for water logged situation of Assam.
 - Development of one more breeding line TTB 404 (135 days) for double cropped areas of Assam which is now under on farm testing.
 - Generation of information in regards to long term sustainability of nutrient use.
 - Demonstration of the worth of BIPM in controlling rice pests.
 - Demonstration of the positive effect of biofertilizer on pulse productivity.
 - Establishment of efficacy of biopesticides and IPM against pulse insects.
 - Development of breeding lines in jute.
 - Establishment of efficacy of microbial consortium for retting of jute.
 - Development of management practices against citrus canker.

- Confirmation of biennial life cycle of white grub *L. mansueta* and understanding on biology and feeding behavior of the pest.
- Identification of 96 species of birds belonging to 31 families in agricultural landscape of Assam that include Eurasian Tree sparrow (Passer montanus) and House sparrow (Passer domesticus).
- Construction of low cost nest boxes designed for beneficial omnivorous birds, mainly to be occupied by House sparrow, Eurasian Tree sparrow, Great Tit, Magpie Robin and Spotted owlet.
- Identification of five indigenous phosphate solubilizing bacteria (PSB) based on their potential phosphate solubilizing abilities.
- Standardization of surface drainage requirement of kharif season crops like greengram, sesamum, and maize.
- Standardization of irrigation requirement through drip irrigation system for high value crops like Assam lemon, banana, capsicum and garlic.
- Irrigation scheduling for the crops like hybrid rice, cabbage, tomato, brinjal, chilli, Assam lemon, carrot, coriander, broccoli, gladiolus, Indian mustard (after rice harvest) and sugarcan.
- Analysis of quality aspects of ground water in relation to arsenic and floride for studying suitability for irrigation in different localities of Jorhat and Tinsukia district.
- Use of remote sensing and GIS for ground water mapping in Jorhat district.

2.2 Home Science

Four research projects including the AICRP on Home Science with 5 components are in operation in the Faculty of Home Science.

Research Achievements

Few significant research accomplishments have been - development and commercialization of Assam mix - a promising weaning food, nutritional fortification of several traditional recipes, development of women-friendly farm-tool "Kuhuna" for drudgery reduction and standardization of methods for extraction of natural dyes from locally available plants etc. Few of the significant achievements during the period under review are as follows:

- Weaving chair for fly shuttle weavers was ergonomically designed with provision of back support and drawer underneath for keeping weaving accessories. The working heart rates while weaving in conventional seat and improved chair were found to be 98.36 b.min⁻¹ and 90.44 b.min⁻¹ respectively indicating reduction of physiological workload and hence enhancing comfort as well as efficiency of the fly shuttle weavers.
- Laboratory scale production of rice beer was standardized and suitable varieties were identified.
- For Value addition of under-utilized non-degradable natural resources, Polyethylene Laminated fabric and for the under utilized degradable farm waste, Banana fiber were used for making folders, note books, visiting cards, etc. for entrepreneurial development.

2.3 Veterinary

Currently, a total of 31 research projects including 8 ICAR and DBT sponsored AICRP/AINP projects are in operation in the Faculty of Veterinary Science.

Research Achievements

The University developed improved pig breed with 87.5 % Hampshire inheritance, goat breeds with 75 % beetal blood, developed DNA fingerprinting of Swamp buffalo to establish its closeness to riverine buffalo, standardized MOET (Multiple Ovulation Embryo Transfer) protocols and developed Cell culture vaccine for Swine Fever which is now being mass produced in PPP mode among many important accomplishments. Few of the significant achievements during the period under review are as follows:

- Rations for pre weaned piglets, grower and lactating sows have been developed.
- Microsatellite based characterization of indigenous pigs, goats is in progress.
- Cell culture adapted lapinized vaccine virus at different passage level and 43 CSF virus isolates from Assam and other N.E. states were lyophilized and kept in the virus repository.
- Production and characterization of monoclonal antibodies against CSF virus antigen was done for the first time in the country.
- Among the various extracts of *Esholtzia communis.*, *Elsholtzia communis* ethanol water extract exhibited potent adaptogenic activity in various models of adaptogenic study. The extract showed the presence of diterpenes, phenolics, steroids, triterpenes, flavonoids, tannin.

2.4 Fishery

There are altogether 8 research projects in operation in the faculty.

Research Achievements

Few important accomplishments in fishery research have been development of crop-fish-live-stock based integrated farming system models, seed production of Cat-fish magur (*Clarias batrachus*) and development of low cost fish-feed under the trade name "Sushama". Some of the salient research findings under these projects are as follows:

- Studies on culture and breeding of three small fish species viz. A. mola, N. notopterus, M. Vitatus under small pond condition revealed that N. notopterus was the most suitable one for culture under small pond condition.
- Different integrated fishery based farming systems have been developed and demonstrated at FRC farm for the benefit of the fish farmers of N.E. Region visiting the Centre.

3. Extension Education

The Directorate of Extension Education (DoEE), a constituent unit of Assam Agricultural University, Jorhat aims at raising the farm level production/ productivity through the efficient transfer of need based and demand driven technologies emphasizing on entrepreneurship development and capacity building of stakeholders engaged in the development of the agricultural sector. The mission of Directorate of Extension Education is "Reaching the Unreached and Touching the Untouched" for agricultural development in the state.

The Directorate conducts advanced training programmes for scientists/ officers in specialized fields and also organizes workshops, exhibitions etc. One certificate course on Apparel Designing and Construction was completed in 2012. The Directorate publishes AAU Newsletter quarterly and the farm magazine 'Ghare Pathare' fortnightly. The Agricultural Technology Information Centre (ATIC) provides facilities of information technology for dissemination to the farmers as a single window delivery system. This service includes both providing solution of location specific problems and making available all the technological information along with technology inputs and products. In the last five years 11071 farmers visited the ATIC.

The Directorate has taken up various extension activities like training, FLD, OFT etc. through the KVKs to develop knowledge and skill on improved agricultural technologies among the farmers. During the last five years 115543 farmers/ farm women/rural youth and extension fuctinoaries were trained up through 4334 nos. of training programmes. One hundred and thirty six (136 nos.) of vocational training on nursery management, fruits and vegetable preservation, repairing of farm implements, mushroom cultivation, apiculture, dairy, poultry, piggery, fishery, tailoring, sericulture etc. were organized. Besides training, 1001 FLDs and 653 OFTs were conducted in the farmers fields. Area expansions under HYV of rice, toria, lentil, blackgram, pea and jute have increased overall production. Due to enhanced seed production by AAU, seed replacement rate has increased from 10% to 60% in rice in the XI Plan period.

Flagship Program

AAU has launched an ambitious programme named 'Technology Showcasing' through KVKs in 2010 with the objectives to showcase the latest cost effective production technology in farmers field to produce quality seeds of cereals, oilseeds and pulses in a participatory mode with the farmers in an attempt to bridge seed requirement gap. In the last two years the seeds produced under this programmes were as follows:

Year	Area(Ha)	Seed Production (MT)
2010-11	1100	Rice: 6000, Toria: 90
2011-12	1200	Rice: 6250, Toria: 280

The programme has brought visibility of KVKs as well as the University as a whole in the state. The impact of this programme is reflected in a recent decision of the Finance Dept. of Govt. of Assam that the state should procure HYV seeds only from AAU when it is in a position to supply the same.

In 2012, the state of Assam was ravaged with three flood waves resulting into a loss of paddy seedlings in the affected areas. The KVKs located in the flood affected districts of Assam raised fresh rice seedlings for second planting to cover around 225 hectare of flood damaged areas.

Collaborative Project

National Initiative on Climate Resilient Agriculture (NICRA)

The site specific technology packages for adoption to current climate risks under the project NICRA have been demonstrated in the farmers' field of 4 different villages of Dibrugarh, Sonitpur, Cachar and Dhubri with an objective to enhance the resilience of

agriculture of the selected villages to climate variability and climate change through application of improved production and risk management technologies and to generate information on location specific climate resilient practices and its performance in farmers' field. Considering the major contingencies of the selected villages, the four KVKs are carrying out the technology demonstration component with 4 different modules-natural resource management, crop production, livestock & fishery and institutional intervention. Movement of fish during flood can be restricted by placement of nylon nets along the periphery of fish ponds and renovation as well as raising the height of dykes of ponds. The KVKs are also striving to introduce integrated rice-fish and poultry farming to help the small farmers to cope with the losses due to flood.

DBT Project on Biotechnology Led Organic Farming in North Eastern Region

Organic farming aims at low input farming thus reducing dependence on inorganic fertilizers, herbicides and plant production chemicals. The project on Biotechnology Led Organic Farming in NER has been in 5(five) KVKs of Assam viz., KVK, Lakhimpur, Jorhat, Golaghat, Karbi Anglong and Kokrajhar. Organic farming technologies of fruits (orange, pineapple), vegetables (tomato, frenchbean), spices (ginger, turmeric, black pepper, chilli) focusing on non chemical use for plant nutrition and plant protection and other organic farming requirements have been assessed and refined through these KVKs. Some of the concluded demonstrations have showed encouraging performance which would definitely help in development of much desired standards for export promotion of high value horticultural crops of the state.

Other Programmes

- 1) Farmers' Participatory Action Research Programme on toria, potato, tomato, other crops sponsored by Ministry of Water Resources, Govt. of India.
- 2) Collaboration in NAIP.
- 3) Demonstration units on integrated farming system under Rashtriya Krishi Vikash Yojana (RKVY).

Other Extension Activities

Besides the mandated activities, KVKs are conducting other extension activities for development of farming community as enlisted below:

be the principal of the mind of the control of the							
Extension Activity	No.	Extension Activity	No.				
Field day	253	Phone in/ help line programme	121				
Kissan Mela	14	Exposure visit	58				
Exhibition	20	Function of self help group	19				
Awareness programme	95	Extension literature	397				
Radio talk	454	TV Programme	75				
Press Coverage	819	-	-				

Extension Publications (Numbers)

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Extension Bulletin/						
Literature	47	102	134	103	112	498
Scientific Paper/						
Popular Article	58	176	233	269	259	995

E-Learning Material for Farmers

- 1. Development of AAU Web Portal (http://portal.aau.ac.in) having up to date AAU information, details of technologies in agriculture, veterinary, home science, fishery etc, agro-met advisory services , weather forecasting, e-bulletins, news letters, current agricultural knowledge and information etc. for use of farming community.
- 2. Innovative farmers friendly, the first of this kind in North East, India agricultural website "http://briddhi.aau.ac.in" with content both in Assamese and English for use of farming community having details of Crop Production, Package and Practices, news-letters, bulletins, photo gallery, video gallery etc. related to agriculture and allied sector.
- 3. Service of Kisan Call Centre (KCC) to address farmers problem by expert team of Assam Agricultural University
- 4. Disseminating farm information/ technology, management options through e-mode of extension by KVKs using short-message-service (KMAS) by mobile phones to the farmers.
- 5. Dissemination of Current commodity Price/ Market information/ Futures contract etc through Electronic Ticker Board installed at various KVKs and ATIC, Assam Agricultural University.
- 6. Agricultural websites for 19 KVKs uploaded in ARIS Cell, AAU have been developed with user friendly content, information, production and protection technologies, other interactive services etc through KVKs.
- 7. One Rural Knowledge Centre, with a farm knowledge portal in Jorhat district of Assam has been established by KVK Jorhat with support from NABARD, Assam having information on agricultural and allied sector, demonstration on recent production technologies, digitized phone directory, agro advisory services and other interactive services for benefited the farming community.
- 8. Development of Farm technology packages using multimedia for farmers under respective KVK.
- 9. Interactive learning systems with image and video gallery, video conferencing have been developed.
- 10. Web based programmes like digitized package of practices of major crops of Assam for farming community has been developed and published through AAU Web Portal, RKC for better reach.
- 11. HRD information package of technical expert of AAU in the field of agriculture and allied sectors has been developed so that farmers can take better advantage as and when required.
- 12. Developed e-learning training materials like CDs, Software, animation tools etc.

Recognition

1. Since its inception, Krishi Vigyan Kendra, Chirang has been trying sincerely for overall agricultural development in both Bongaigaon and Chirang districts of Assam. It is all about the works of KVK scientists, for which the Zonal Coordinating Unit (Zone-III), Umium has recognized and appreciated as one of the best performing KVK of NE Region in the year 2007.

- 2. KVK, Kamrup was awarded second position in the exhibition of 3rd Regional an 14th State level Annual Agri-Horti show from 10th to 14th February, 2008.
- 3. KVK, Kamrup was awarded first position in the exhibition of 17th state level Annual Agri-Horti show from 9th to 13th February, 2011.
- 4. The technology on Diffusion of Early Ahu rice var. Luit in social system was disseminated and popularized by KVK, Nalbari was recognized as one of the best technology of KVKs by ICAR in 2010.
- 5. AAU has bagged 3rd prize in the Tableau competition in connection with the Republic day celebration at Jorhat Court Field in 2009.
- 6. AAU stall was awarded 3rd prize in the exhibition organized in connection with the Asom Sahitya Sabha session, Dergaon in 2010.
- 7. AAU stall received 3rd prize in the exhibition organized in the NE Regional Agri Fair held at ICAR Research Complex, Barapani.
- 8. KVK, Dhubri was selected as one among 12 best NICRA project centres in the country by ICAR in 2012.
- 9. AAU has bagged special prize for attractive exhibits at First Mega Agri-Horticultural Exhibition, 2013 organised by Directorate of Horticulture and Food Processing, Guwahati, Assam.

4. Technology Commercialized

- Bt Chickpea line developed by the university with resistance pod borer infestation is being commercialized.
- Assam Mix, a weaning baby food developed by the University has been commercialized.
- Classical Swine Fever vaccine produced by the university is being commercially produced in a PPP mode.

5. New initiatives

- The university is putting up V-type nursery facility for production of quality planting material in lakhs with a target of around 12 lakh materials per annum.
- One Agri-hub with satellite units is being put up for technology accessing with facilities for custom hiring of farm machineries.
- A program on hydroponic agriculture is under consideration through funding from RKVY.
- Program on fish seed production under controlled environment for making available the seed early (by March/April) has been initiated.
- Peri-urban agriculture is being started soon.
- Research on carbon sequestration has been initiated.
- Programme on soil testing and fertility mapping is being pursued for precise fertilizer recommendation to the farmers of Assam.