

PROFILE OF ASSAM AGRICULTURAL UNIVERSITY

HISTORICAL BACKGROUND:

The seed of Assam Agricultural University (AAU) was sown way back in 1913 with the establishment of an agricultural research station at Karimganj in Barak Valley followed by another at Titabar in Brahmaputra Valley. Although the stations conducted research and training, the need for an agricultural and a veterinary college was felt immediately after independence leading to the establishment of the Assam Agricultural College at Jorhat and the Assam Veterinary College at Nagaon in 1948. Later on, in 1969, the Assam Agricultural University was established embracing both these Colleges. Subsequently, the College of Home Science at Jorhat (1973), Fisheries Science at Nagaon (1988), College of Agriculture at Biswanath Chariali (1988), 2nd Veterinary college at North Lakhimpur (1988) and the College of Agriculture at Dhubri (2010) were established. Two more colleges, namely the college of Horticulture at Nalbari and the College of Sericulture at Titabar have also become operational. The University has now six Regional Agricultural Research Stations (RARS), five Commodity Research Stations (CRS) and 23 number of Krishi Vigyan Kendras (KVK) (Fig.1).

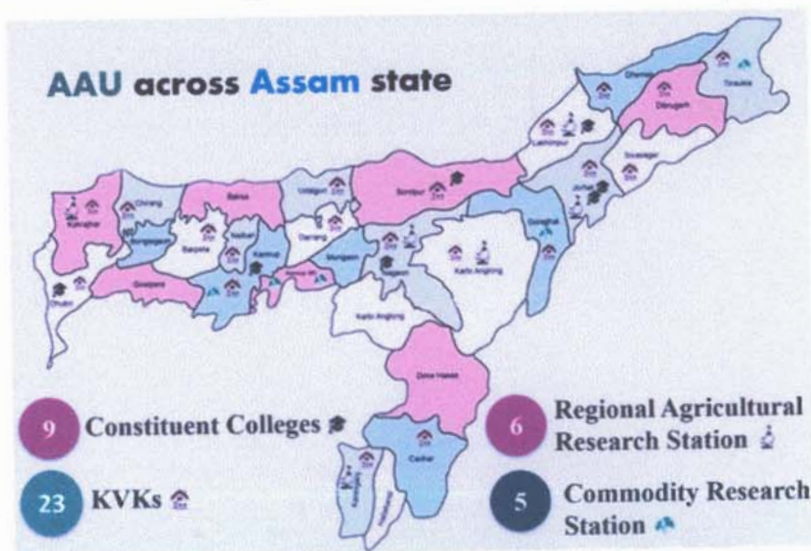


Fig.1: Map of Assam showing the Colleges, Research Stations, KVKs under AAU



Fig.2: Administrative Building



Fig.3: DBT-AAU Centre

THE MANDATE:

As laid down in the AAU Act, 1968, the broad mandates of the University are

- ▶ making provision for imparting education to the people in agriculture and allied branches of learning
- ▶ furthering the advancement of learning and prosecution of research in agriculture and allied sciences, and
- ▶ undertaking the extension of such sciences especially to the rural people of the state

THE VISION:

“Provisioning of quality human resource to facilitate technology led agricultural revolution ensuring both production and environment sustainability targeting a minimum of ‘8 per cent plus’ agricultural growth; while addressing the issues of household nutritional security, farmers’ distress, commerce in agriculture as well as regional, national and global food crises taking the advantage of innovative technology, market reforms and liberalization.”

SALIENT ACHIEVEMENTS:

A. EDUCATION:

- ✓ Offers both Masters and Ph. D programme in 78 disciplines under four different faculties (Table 1)

Faculty	PG Courses		Total
	Masters (Discipline-wise)	Ph.D.	
Agriculture	19	13	32
Veterinary	19	15	34
Community Science	05	05	10
Fishery	01	01	02
Total	44	34	78

Table 1:Disciplines offering PG degrees

- ✓ Since its inception, the University has produced 13650 graduates and post graduates, of which 9766 are Bachelor’s, 3779 Masters and 505 are PhD degree holders.

B. RESEARCH:

AGRICULTURAL SCIENCE:

- ✓ The AAU has developed and recommended about 113 varieties of various field and horticultural crops. These include 55 in rice, 16 in pulses, 8 in *toria*, 2 in sesame, 8 in sugarcane, 2 in jute, 2 in forage and 20 in vegetables. Varieties like Ranjit, Bahadur, Basundhara, Luit, Disang, Joymati, Kanaklata, Bishnuprasad, Jyotiprasad, Aghoni, Bhogali of rice; Pratap in greengram, M 27, TS 36 and TS 38 of *toria*; CoBIn 9605 of sugarcane have become very popular among the farmers of the state and some of these have also been cultivated successfully outside the state. Important crop varieties developed in the very recent years are Mulagabharu, Gitesh, Jalashree and Jalkuwari in rice, TS-46 and TS 67 in *toria*; SG-21-5 in green gram; Tarunand Apeswari in jute; Nambor, Kapilipar and Doiyang in sugarcane; Shyamalima in rice bean etc.

- ✓ The most promising varieties of horticultural crops developed at AAU include Kamrupa, Assam green tall and Kahikuchi hybrid-1 of coconut; JC-1, JC-2 of brinjal; and AAUJ-2 and AAUJ-3 of ridge gourd.
- ✓ Many varieties developed elsewhere have been recommended to the farmers after their extensive testing. The most recent among such varieties are the two short duration, high yielding wheat varieties (DBW-14 and HUW-468) that can be harvested before pre-monsoon showers.
- ✓ Bt-chickpea lines resistant to pod borer have been developed and transferred to India's leading Seed Company for further testing and commercialization.
- ✓ Biofertilizer based INM packages have been developed for rice based cropping systems.
- ✓ Biocontrol agents like *Trichogramma* (Tricho cards) for rice stem borer and *Beauveria bassiana* for hispa have been developed.
- ✓ Bio-pesticides-Biofor-PF (Jaiva-Kiran) and Biozin-PTB containing virulent cells of *Pseudomonas fluorescens* and *Trichoderma harzianum* in organic substrate has been developed for management of wilt disease of crops like tomato, potato, brinjal, chilli, ginger, cabbage, cauliflower, etc.
- ✓ Post-harvest packaging and handling technologies have been developed for long-distance transportation of pineapple, orange etc., extending shelf-life of perishable vegetables and also for commercial floriculture.
- ✓ Technologies for off-season cultivation of vegetables and flowers have been perfected and popularized.

ANIMAL SCIENCE:

- ✓ Upgraded pig variety with 87.5 per cent Hampshire inheritance developed and propagated.
- ✓ Beetal x local goat cross with 75 per cent beetal blood developed.
- ✓ DNA fingerprinting of Swamp buffalo established its closeness to riverine buffalo.
- ✓ MOET (Multiple Ovulation Embryo Transfer) protocols in goat standardized.
- ✓ Cell culture vaccine for Swine Fever developed which is now being mass produced in a PPP mode.
- ✓ **Developed area specific mineral mixture**
- ✓ **Developed different livestock products**
- ✓ **Biotech research on transboundary diseases**

HOME SCIENCE:

- ✓ Assam mix – a promising weaning food has been developed for both infants and lactating mothers and commercialized.
- ✓ Several traditional recipes were nutritionally fortified using the process of nutrification.
- ✓ Women-friendly farm-tool "Kuhuna" for drudgery reduction was developed and tea plucking basket was improvised
- Standardization of methods for extraction of natural dyes from locally available plants
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- ✓ Smokeless chullah was validated and propagated.

FISHERIES SCIENCE:

- ✓ Developed polyhouse fishery for advance breeding of fish.
- ✓ Crop - fish - livestock based Integrated farming system models have been developed for Assam conditions.
- ✓ Cat-fish magur (*Clarias batrachus*) seed production successfully carried out.
- ✓ Developed low-cost model of carp hatchery.
- ✓ Developed low-cost fish feed under the trade name "Sushama".

- ✓ Capacity built to produce 8 crore fingerlings per year.

COMMERCIALIZED PRODUCTS:

Bt Chickpea, Assam Mix, Swine Fever Vaccine, Meat Pickle & Paste, Pork Sausage, Smoked Pork, Pork Pickle, Chicken Pickle, Fish Pickle, AAUVETMIN, Low Cost Fish Feed-SUSHAMA, Biopesticide-Biozin

C. EXTENSION:

Successfully conducted Training and Demonstration Programmes (Table 2).

Type of programme	Number	Beneficiary
Farmers' training	5864	159591
Vocational training	167	4472
State and other functionaries	145	3285
Frontline demonstration	1658	7660
On farm trial	1281	9059
Villages adopted	250	15000 (Families)

Table 2 : Training and Demonstration Programmes (2009-14)

- ✓ Successfully conducted "Technology Showcasing" on Rice, Toria & Lentil covering 15 districts of Assam

TECHNOLOGY DISSEMINATION MEANS:

- Through ICT based tools and applications like *E-choupal*, Rural Knowledge Centre, AAU portal, Mobile solutions etc. besides participatory mode

SKILL DEVELOPMENT:

- Certificate courses ranging from 1-6 months duration in different areas of agricultural sciences have been undertaken to produce highly skilled manpower for the sector

COLLABORATION:

- The University has both national & international collaboration especially with European Union countries, Universities in USA, Institutes at Australia, Kenya etc.

AWARDS & RECOGNITION:

- ✚ Sardar Patel Outstanding Institution Award, Agriculture Leadership Award, Best Zonal KVK Award, Fakhruddin Ali Ahmed Award, Awards for Best AICRP/AINP centres, Best Farmer Award & Others



Fig.4: Dr. K.M. Bujarbaruah, Vice Chancellor of AAU receiving Sardar Patel Outstanding Institution Award (ICAR 2014)