

NAHEP



**NATIONAL AGRICULTURAL HIGHER
EDUCATION PROJECT**



ASSAM AGRICULTURAL UNIVERSITY

ANNUAL REPORT 2019-20



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ANNUAL REPORT

Annual Report 2019-20 of IDP, NAHEP, Assam Agricultural University, Jorhat



Annual Report 2019-20

Publisher:

Principal Investigator

IDP, NAHEP

Assam Agricultural University

Jorhat-13

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ANNUAL REPORT

Dr. Bidyut C. Deka
Vice Chancellor



ASSAM AGRICULTURAL UNIVERSITY
JORHAT- 785013, ASSAM (INDIA)

(Recipient of Sardar Patel Outstanding Institution Award)

Foreword

It gives me immense pleasure to know that IDP, NAHEP is going to bring out an annual report for the period 2019-20 which is a mirror of the activities of the project in that year. In spite of COVID-19 pandemic situation, a number of ventures were taken up which are remarkable. I appreciate the PI and his team for their effort to document the activities of the project completed in the year. Skill development and entrepreneurship developments amongst the students were badly affected due to the restrictions in international travel and absence of students from the campus. I am told that the faculty upgradation programme through international exposure could not be undertaken from 2019-2020.

I wish that the teachers, scientists and students of our university will utilize the facilities already created in various departments. Provisions have been made in this regards to utilize them for revenue generation.

I am happy to learn that ICAR and World Bank have decided to extend the project period by one year. I hope that the NAHEP team will make use of the unspent fund in judicious way to carry forward the activities for development of the University.

(Bidyut C. Deka)

Preface

Dr. Kishore K. Sharma

Principal Investigator

IDP, NAHEP

Assam Agricultural University, Jorhat

I am very happy to present before you the Annual Report (2019-20) of IDP, NAHEP of Assam Agricultural University. It was a hard time to carry forward the project activities due to COVID pandemic situation. The main objectives are student centric and the time demanded to keep the students away from the campus. There was restriction in movement that deaccelerated the pace of progress.

Inspite of every odds we could conduct webinars where renowned persons shared their experiences. The College of Veterinary Science, Khanapara conducted 3 skill development training amongst the students. However, deputaion of students and faculty to undertake training in foreign institute could not be materialised.

In this report, we have included experiences of some students and faculties on training in overseas which would encourage the students to improve their skill and knowledge. Faculties have been stimulated research papers in journals of high impact factor.

I am thankful to the Hounrable Vice Chancellor, AAU for his keen interest in pursuing every activities of the project in letter and spirit. He has made provision to utilize the facilities created through NAHEP for revenue earning activities even after the project period. I shall remain indebted to Dr. P. Ramasunderam, NC, IDP and the entire team in PIU for their support and for timely suggestions. I shall fail in my duty if I donot name all the Deans of Faculties, Associate Deans and Registrar, AAU for their support through out. My team of JRFs, Office Assistant and Accounts Assistants deserve appreciation for their hard work to carry out the activities of the project.

INTRODUCTION

One of the most important mandates of ICAR/DARE includes promotion and coordination of education in agriculture, agro-forestry, animal husbandry, fisheries, home science and allied sciences in the country. It has been the endeavor of ICAR over the years to strive for uniformity in norms and standards in academics, governance and finance management, quality and relevance of education, and policies on human resource development in the country. ICAR is now embarking upon an ambitious step in further strengthening the National Agricultural Education System in the country through National Agricultural Higher Education Project (NAHEP) with financial assistance of the World Bank by investing on infrastructure, competency and commitment of faculty, and attracting talented students to agriculture.

ICAR - Agricultural Universities (AUs) System comprises 61 State Agricultural Universities (AUs) modelled on the US Land Grant University pattern, five Deemed to be Universities (DUs), three Central Agricultural University (CAUs) and four Central Universities (CUs) with Agriculture Faculty. With about 265 constituent colleges having about 35,000 total student-intake capacities, the AUs impart education in 11 major disciplines at undergraduate and about 95 subjects at post-graduate level. About 55% students in higher agricultural education level are from rural background and 36% are girl students. Besides, about 100 private colleges, affiliated to general universities, and a few in States of Chhattisgarh, Maharashtra, and Tamil Nadu, affiliated to AUs, impart higher agricultural education (Policy for Higher Agricultural Education). The Indian Council of Agricultural Research (ICAR) in collaboration with the World Bank has enunciated a series of projects to revamp the national research, extension and innovation systems. The National Agricultural Higher Education Project has been conceived to enable the agricultural education system catch up nationally and internationally with the peers. This project is aimed at enhancing the capability of best of the agricultural universities in the country (like the DUs in the ICAR system) to become globally relevant and competitive by investing in chosen core activities that have a bearing on their reckoning to be counted in the race.

National Agricultural Higher Education Project is formulated by ICAR with a total cost of US\$ 165million (Rupees 1100 crore at the exchange rate of Rs. 67.49 = 1US\$) for four years starting from 2017-18. The project is proposed on 50:50 cost sharing basis between the World Bank and the GOI, implemented at the Education Division, ICAR, New Delhi. It has been formulated with a focus to improve and sustain quality of higher agricultural education. It aims to produce a globally competitive agricultural human resource capable of developing newer technologies and skills for scale up and transfer of new technologies to improve the production system and value addition. Over all, the project aims to develop resources and mechanism for supporting infrastructure, faculty and student advancement, and providing means for better governance and management of agricultural universities, so that a holistic model can be developed to raise the standard of current agricultural education system that provides more jobs and is entrepreneurship oriented and on par with the global agricultural education standards.

Vision, Mission and Values of the Proposed IDP

Vision

Injecting needed level of skill together with strengthened knowledge base into the agricultural graduates so as to make them capable of confronting the current and upcoming challenges to the sector head on as well as to prepare them for self and cross sectoral employment.

Mission

To produce regionally, nationally and globally competitive agripreneurs in the era of globalization and liberalization of agricultural trade and commerce by imparting knowledge and skill based agricultural education.

Values

- Provide quality education and training in the areas of agriculture and allied science
- Promote cordial and inspiring teacher-students relationship
- Transforming job seeker graduates to job provider in agriculture and allied sector
- Service to agriculture means service to society, nation and the globe

Details of Assam Agricultural University:

Assam Agricultural University, the first institution of its kind in the whole of north-eastern 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 at Jorhat and the Assam Veterinary College at Guwahati.

The seeds of agricultural education in the North Eastern part of the country were sown way back in the first quarter of the 20th century with the establishment of two rice research stations, one at Karimganj in the Barak Valley and the other at Titabar in the Brahmaputra Valley in 1913 and 1923, respectively. Even while the stations were producing trainees, the need for an agricultural college was felt immediately after independence. Consequently, the Assam Agricultural College at Jorhat and Assam Veterinary College at Nagaon came into existence in 1948 as a result of exemplary will power and dedication to service of Bharat Ratna Late Gopinath Bordoloi, the first Chief Minister of Assam. Both the Colleges were affiliated to Gauhati University and then to Dibrugarh University before the Assam Agricultural University came into being embracing both the colleges.

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 in an effort to harness optimum benefits in production, profitability and permanency in agriculture.*

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 per cent + 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.

Mission

To fill up 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 on the face of shrinking/ fragmented land holdings, ailing soil health, diminishing water resources and increased human population.

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 key role in transforming the state's agriculture of subsistence to agriculture of abundance.*

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 horticulture and sericulture, all the other seven constituent colleges have their own 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 and the other for veterinary science and fisheries science, headed by a Director of Research. 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 Director of Students' Welfare, Director of Physical Plant and Chief Librarian and other important officers as per the Statute. The Director of

Students' Welfare is responsible for 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 Steering Committee of IDP, NAHEP, AAU are as under:

Sl. No.	Designation in NAHEP		Name
	Leader	:	Vice Chancellor, AAU
	Principal Investigator	:	Dr. Kishore Kumar Sharma
	Co Principal Investigator	:	Dr. Badal Bhattacharya
	Co Principal Investigator	:	Dr. Binoy Kumar Medhi
	Nodal Officers:		
	a) Finance	:	Mr. Dhiren Khound
	b) Academic	:	Dr. Anup Kumar Das
	c) Agriculture	:	Dr. Utpal Kotoky
	d) Veterinary	:	Dr. Birendra Nath Bhattacharya
	e) Community Science	:	Dr. Pranati Das
	f) Fishery	:	Dean & Dr. S. Borthakur
	g) GRM	:	Dr. Rana Pratap Bhuyan
	h) BNCA	:	Associate Dean & Dr. D.N. Hazarika
	i) SCSCA	:	Associate Dean & Dr. R. Ojha
	j) ESP	:	Dr. Kaushik Das
	k) EAP	:	Dr. Nabaneeta Gogoi
	l) Procurement	:	Dr. Utpal Kotoky
	Implementers / Co-operators for Entrepreneurship / Skill development		
	1) Organic seed production	:	Dr. Purna Kanta Barua
	2) Bio-pesticides	:	Dr. L.C. Bora
	3) Bio-fertilizers	:	Dr. Rajen Baruah
	4) Floriculture	:	Dr. (Mrs.) Madhumita Choudhury Talukdar
	5) THT	:	Dr. R. P. Bhuyan
	6) Bakery & Confectionary	:	Dr. Pranati Das
	7) Ornamental Fish Breeding	:	Dr. S. Borthakur
	8) Poultry processing	:	Dr. Deben Sapkota
	9) Pig processing	:	Dr. Dhireswar Kalita

MEETINGS AND WORKSHOPS

Sl. No.	Title of workshop	No. of participated candidates	Host AU / Institute	Event duration (days)	Learning
1	Soft skill workshop	88	AAU, Jorhat	06 days	Improvement of soft skills related to personality development and mental fitness
2	Workshop on Nanotechnology	22	College of Agriculture, AAU	01 day	Faculty members learnt about Nanoparticle Tracking Analysis(NTA): A New Technique for Nanoparticle Characterization and Aggregation Studies
3	Career orientation workshop	87	AAU, Jorhat	01 day	Awareness about the various career options after graduation
4	Soft skill workshop	71	College of Fisheries Science, AAU, Raha	03 days	Improvement of soft skills related to personality development and mental fitness
5	AAU Industry Interface	93	College of Veterinary Science, AAU, Khanapara	01 day	<ul style="list-style-type: none"> • Brought together the AAU students and 10 dynamic entrepreneurs from across North east India • Students interacted with them regarding establishment of profitable enterprise
6	Workshop on documentary film making	15	Assam Agricultural University, Jorhat	10 days	Various aspects of audio-visual aids and film making helped the students to think for career options in this area
7	Procurement Workshop and Workshop on	46	College of Veterinary	02 days	Various aspects of EAP, ESS, GRM and

	Social & Environment at CVSc., Khanapara		Science, AAU, Khanapara		Procurement procedures were reviewed and discussed
8	Workshop on Artificial Intelligence	30	Assam Agricultural University, Jorhat	10 days	Students were trained on use of AI tools in survey and monitoring crop diseases
9	Orientation Programme on Higher Agriculture Education Policy	57	Assam Agricultural University, Jorhat	02 days	Capacity building of newly recruited assistant professors on recent higher education policies
10	MiNDFit Workshop for Skills Development using EXA based Therapy	36	Assam Agricultural University, Jorhat	03 days	Helped in personality development and mental fitness of students



Soft skill workshop conducted in AAU, Jorhat



Soft skill workshop for students of College of Fisheries Science, AAU, Raha



Workshop on Nanoparticle Tracking Analysis (NTA) for Faculty members of Agriculture



AAU-Industry Interface held at College of Veterinary Science, AAU, Khanapara



Workshop on Documentary film making held at AAU, Jorhat



Workshop on Artificial Intelligence held at AAU, Jorhat



Procurement and ESS workshop held at College of Veterinary Science, AAU, Khanapara



MiNDFit Workshop for Skills Development using EXA based Therapy

HUMAN RESOURCE DEVELOPMENT

1. Student Development:

Applications were invited from UG students of 3rd Year across the accredited colleges of AAU. On that basis, cognitive tests were conducted on 19th February, 2020 for the students having CGPA above 7.5. A meeting was held on 15th March, 2020 and altogether, 22 students were selected to undergo training in foreign institutes following norms provided by PIU. However, due to Covid-19 pandemic, restrictions in movement had held up the programme temporarily.

2. Faculty Upgradation

Applications were invited from faculty members for foreign training, as per the prescribed format provided by NAHEP, AAU. On the basis of the applications, a meeting was held on 15th March, 2020 in the presence of a selection committee appointed and presided over by the Hon'ble Vice Chancellor, AAU. Twenty faculty members across the accredited colleges of AAU were selected, which will be sent to ND for approval. However, the programme was held up temporarily, due to outbreak of COVID-19 pandemic.

3. Short Visits and Seminars

Fourteen faculty members across the accredited colleges of AAU got the opportunity to read scientific papers in international forum/conference under the funding of IDP, NAHEP, Assam Agricultural University.

4. National Internship for students:

Altogether 127 students in eight batches underwent internship programme during semester break in January, 2020 in different organizations within and outside the state and acquired hands-on training on different frontier areas of agriculture and allied activities.

Title of event	No. of students participated	Host AU / Institute	Event duration (days)	Learnings
Internship on Floriculture	32	Daffodil Nursery, Bherakuchi, Kamrup, Assam	20	Hands-on training on floriculture
Internship on Organic Agriculture	27	Spread NE, Sonapur, Assam	20	Hands-on training on organic farming and zero budget edible food production
Internship on Integrated farming system	30	Pabhoi Greens, Pabhoi, Assam	20	Hands-on training on integrated farming system
Internship on CADD	6	CADD Centre, Kolkata	15	Hands-on training on Computer Aided Design
Internship on APTECH	4	Aptech Computer Education Centre, Kolkata	15	Hands-on training on Aptech programme
Internship on Food processing	5	Indian Institute of Food Processing Technology, Guwahati	13	Hands-on training on food processing technology
Internship on Textile and apparel designing	7	Weavers' Service Center, Khanapara, Guwahati	15	Hands-on training on Textile and apparel designing

Internship on Fisheries	16	DCFR, Bhimtal, Uttarakhand	15	Hands-on training on Cold water fisheries
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Internship programme of students of College of Community Science, AAU during semester break



Demonstration of Panchagavya preparation to students undergoing internship in Pabhoi Greens



Preparation and protection of nursery plants by internees in Daffodil Nursery



Zero Budget Edible Food Forest in Spread NE, Sonapur



Students attending classes during internship programme



Students engaged in hands-on work during internship programme in Daffodil Nursery



Students engaged in hands-on work during internship programme in Pabhoi Greens

Internship programme of students of College of Agriculture, AAU during semester break

5. Visit of Adjunct Professor

Dr. M.K. Bhattacharyya, Professor, IOWA State University, Ames, USA visited AAU for 1 month during the month of February, 2020 as adjunct professor and delivered lectures on various aspects of molecular genetics and Plant Breeding to students and faculty members of Agriculture in 3 accredited colleges of AAU. Altogether 300 students and 25 faculty members across Faculty of Agriculture attended the lecture series.



Dr. M.K. Bhattacharyya, Professor, Iowa State University, Ames, USA delivered lectures to students and faculty members of College of Agriculture, AAU, Jorhat



Dr. M.K. Bhattacharyya, Professor, Iowa State University, Ames, USA delivered lectures to students and faculty members of SCSCA, AAU, Dhubri

6. Contractual Services

Junior Research Fellow (JRF): Three JRF had been appointed (@ Rs. 28000 per month) during the financial year 2019-20.

Accounts Assistant: One Account Assistant was appointed (@ Rs. 25000 per month) during the financial year 2019-20.

Office Assistant: One Office Assistant was appointed (@ Rs. 25000 per month) during the financial year 2019-20.

EQUITY ACTION PLAN

Equity Action Plan has been implemented in Assam Agricultural University, Jorhat under NAHEP. EAP covers six colleges of AAU, situated in five different campuses. The action plan of EAP has already been uploaded in AAU website.

During 2019-2020, many activities such as student development programme, faculty up gradation, civil works which includes renovation, repairing and strengthening of laboratories, class rooms, existing buildings, farms, water supply, electrical connection etc. were carried out. Under EAP, labour management and grievance redressal mechanism was also taken care of.

Student Development Programme: Under this programme, the following activities were carried out.

- i) **Personality development programme:** One programme on personality development was carried out in Jorhat campus where 36 students were participated. Out of 36, female participation was 61% including both SC and ST students. Discrepancy was also found less in case of female than in male students.
- ii) **Industry interface and Entrepreneurship:** Total participation was 57% female and 43% male student inclusion of both ST and SC students. Discrepancy was found less in case of female than male students.
- iii) **Soft skill courses:** Two soft skill courses were conducted in Jorhat and College of Fishery Sc. Raha. Total participation was 159, out of which 60.4% girl student including both SC and ST students.
- iv) **Lecture series:** Total participation of students was 300 and out of which 53% female and 47% male participation .There was no discrepancy in ST and SC female student.
- v) **Student Overseas training:** 60 students got exposure during overseas training to different universities in abroad namely ETH, Zurich, Switzerland, ITCPH,

Philippines, AIT, Bangkok and IOWA State University, USA. 80% female students got chance to participate in overseas training during 2018-2019. No discrepancy was found in selection of girl students including ST and SC students. Selection process was also completed for 2019-2020 batches for overseas training, but no official correspondence was made with ICAR till date.

Entrepreneurship Development Programme:

1. **Industry internship:** Altogether 127 under graduate students were placed in different industries to carry out their internship. Four different colleges took part in this programme. 61% female and 39 % male students could avail this. No discrepancy was found in both female and male students' inclusion of ST and Sc.
2. **Robotics & automation:** In this entrepreneurship development programme 63% female and 37% male students were took part. No discrepancy was found for both male and female students.

Faculty development programme:

- i) **Workshop/ Lectures:** Total 111(F-66, M-45) no of faculties were gone to attend workshop and deliver lectures in different places.
- ii) **Short visits & seminars:** 14 faculties attended seminar in different places out of which only two were female faculties.
- iii) **Overseas training:** 12 faculties from three colleges of AAU went to different universities in abroad for one month and three months trainings fall under respective categories.

Qualitative improvement: Both girls and ST/SC students showed 100% on time graduation rate from 2017-18, 2018-19 and 2019-2020 academic session.

Civil works status: Civil works under NAHEP included renovation, repairing and strengthening of laboratories, class rooms, existing buildings, farms, water supply, electrical connection etc. Total 18 different works have been completed under NAHEP in different colleges and campuses.

These are:

- College of Agriculture, AAU, Jorhat
- Department of Horticulture, College of Agriculture, Jorhat
- College of Veterinary Science, AAU, Khanapara
- Department of Plant Breeding and Genetics, College of Agriculture, AAU, Jorhat

- College of Fisheries Science, AAU, Raha
- Department of Plant Pathology, College of Agriculture, AAU, Jorhat
- Bio-fertilizer Unit, Department of Soil Science, AAU, Jorhat
- College of Veterinary Science, AAU, Khanapara
- College of Community Science, AAU, Jorhat
- BNCA, AAU, Biswanath Chariali
- AAU, Jorhat

Labour Management Plan (LMP): Social justice and safety and security of the labors such as equal wages for men and women, no child labor, portable drinking water facility, separate GRM etc were taken care of during civil works by the concerned person. Different steps were followed during civil works to ensure safety of the students/ labours by barricading the place with suitable poster.

User friendly campus (Differently Able & female): To make the campus more user friendly ramp in impotent places, differently able washroom for both male and female, Incinerator for safe disposal of napkin, napkin vending machine CCTV and street lights etc. are very much essential. There are one napkin vending machine, two incinerator, 52 CCTVs and 496 street lights in AAU inclusion of five campuses.

Number of Students get chance to participate in overseas training due to minimize in grade point from 7.5 to 7: No student having CGPA less than 7.5 got chances to participate in overseas training (Exposure visit) till date. Students above 7.5 CGPA were allowed to appear the cognitive test for selection of overseas training (exposure visit).

Social Monitoring Indicators: Under this we have invited two guest faculties to deliver lecture on lessons on social / equity aspects during 2018-19 and 2019-2020.

Impact of EAP: Students of AAU could get international exposure under IDP, NAHEP for the first time. Students received hands on training on the focused areas of the project. All section of the UG students irrespective of gender, social status got equal opportunity in getting the exposures in all the trainings, internship and international exposure. The discrepancies in wages for laborers used by contractors were removed. Installation of CCTV in Library and Academic Complex has ensured security of the students particularly the girls.

ENVIRONMENTAL SUSTAINABILITY PLAN

Acts and legal compliances as per ESP.

S. No.	Legal Compliances	Status	Remarks
1	Preservation of Trees Acts	Completed	In Assam Agricultural University, renovations for already existing laboratory had been done under NAHEP without cutting / felling of trees
2	National Building Code of India 2005	Completed	Class I Contractors and reputed firms are allotted for such works. All construction materials are continuously monitored by DPP and the Engineers of the University. Provision of standby source for power supply to sensitive and costly equipment is ensured.
3	The Noise Pollution (Regulation and Control) Rules 2000)	Completed	Sound generating construction equipments are allowed to use during off periods or holidays.
4	Hazardous Wastes Management and Handling Rules (1989 and Amendment Rules, 2000 & 2003)	Completed	Though no hazardous waste is released from the laboratory of Assam Agricultural University, there should have provisions for safe disposal of common laboratory wastes.
5	Environment Protection Act (1986)	Completed	Waste treatment before disposal is required. This mechanism is already adopted in bio-pesticide laboratory of AAU.

Impact of ESP

- Renovated classroom with proper space, aeration and electrification
- Debris generated during renovation are put to alternate use (e.g. in gravel road)
- Environment friendly organic approach of agriculture carried out under NAHEP
 - » **Bio-fertilizer laboratory:** Environment-friendly microbes are used for production of bio-fertilizer. Application of bio-fertilizers improves soil health and reduces the detrimental effects of synthetic chemicals.
 - » **Bio-pesticide laboratory:** Beneficial organisms are used for production of bio-pesticides, which have no detrimental effect on the environment. Application of bio-pesticides reduces environmental degradation mediated by synthetic chemical pesticide.

- » **Organic seed production unit:** One of the important environmental friendly approaches of modern agriculture is carried out.



AAU students engaging themselves for sensitization on Covid-19 pandemic during the lockdown period



Disposal of garbages in the office, hostel and canteen premises



Girls' hostels are surrounded by boundary walls

Initiatives undertaken by authority for achieving a clean and safe AAU

Head-wise and Year-wise Budget Sanctioned

(Rs Lakhs)

Sl. No.	Items of Expenditure	2019-20
A.	Goods & Equipment	
	Digitization Accessories	0.00
	Office Equipment	0.00
	Laboratory Equipment	0.00
	Furniture & Fixtures	0.00
	Computers & Peripherals	10.47
	Books & Journals	10.00
	Sub-total (A)	20.47
B.	Civil Works	
	Minor repair & renovation work	0.00
	Sub-total (B)	0.00
	Sub-total (A+B)	20.47
C.	Human Capacity Building	
	National Training	0.00
	International Training	136.40
	Short visits/Seminars	0.50
	Meetings and Workshops	0.00
	Sub-total (C)	136.90
D.	Consultancy	
	International	0.00
	National	15.00
	Sub-total (D)	15.00
E.	Recurrent Cost	
	Travel expenses	1.00
	Contractual Services	63.96
	Operational Expenditure	198.80
	Sub-total (E)	255.76
F.	Institutional Charges	12.79
	Sub-total (C+D+E+F)	420.45
	Grand Total	440.92

Sl. No.	Head of Account	Opening balance	Receipt During	Total Available Fund	Expenditure during	Refund during the year if any	Closing Balance
A	Goods & Equipment						
	Equipment/Plant /Machinery						
	Office Equipment	55317.00	0.00	55317.00	0.00	0.00	55317.00
	Laboratory Equipment	11449779.00	0.00	11449779.00	9699278.00	0.00	1750501.00
	Furniture & Fixtures	16711.00	0.00	16711.00	0.00	0.00	16711.00
	Computers & peripherals (Hardware & Software)	8342097.00	1047000.00	9389097.00	5764300.00	0.00	3624797.00
	Books & Journals	500000.00	1000000.00	1500000.00	1000000.00	0.00	500000.00
B	Civil Works			0.00			0.00
	Minor repairs & renovation works	1235854.00	0.00	1235854.00	0.00	33124.00	1202730.00
	Sub-total (A+B)	21599758.00	2047000.00	23646758.00	16463578.00	33124.00	7150056.00
C	Human Capacity Building						
	National Training	0.00	1500000.00	1500000.00	0.00	0.00	1500000.00
	International Training	2840000.00	13640000.00	16480000.00	0.00	0.00	16480000.00
	Short Visits/ Seminars	1088673.00	50000.00	1138673.00	1142122.00	0.00	-3449.00
	Meetings & Workshops	1800298.00	0.00	1800298.00	907312.00	0.00	892986.00
D	Consultancy			0.00	0.00	0.00	0.00
	National Level Consultancies	1450000.00	0.00	1450000.00	50000.00	0.00	1400000.00
E	Recurrent Cost						
	Pay & Allowances		0.00	0.00	0.00	0.00	0.00
	Travel Expenses	476302.00	100000.00	576302.00	282751.00	0.00	293551.00
	Contractual Services (RA/SRF/ System Analyst /Programmer)	5872612.00	6396000.00	12268612.00	3368993.00	0.00	8899619.00
	Operational Costs	17833697.00	19080000.00	36913697.00	4791954.00	0.00	32121743.00
F	Institutional Charges	850000.00	1279000.00	2129000.00	2129000.00	0.00	0.00
	Sub-total (C+D+E+F)	32211582.00	42045000.00	74256582.00	12672132.00	0.00	61584450.00
	GRAND TOTAL	53811340.00	44092000.00	97903340.00	29135710.00	33124.00	68734506.00

Procurements under NAHEP, AAU (2019-20)

Computer and Peripherals

Sl. No.	Items	Total number	Place of Delivery	Number
1	Desktop Computer	40	DBT, AAU	6
			CCSc., AAU	5
			NAHEP Office	4
			SCSCA Library	5
			BNCA	5
			CFSc., Raha	5
			CVSc., Khanapara	10
2	Desktop Computer	25	AAU Library	25
3	UPS-20 KVA	2	SCSCA Library	1
			AAU Library	1
4	Software	1	DBT, AAU	1
		1	DBT, AAU	1
5	Colour Printer	3	DBT, AAU	1
			NAHEP Office	1
			NAHEP Office	1
6	Camera etc	50	AAU Library, ADM Building, CVSc.	50
		20	DSW, Soil Science, DBT, Dean FA, BNCA, CCSc., Plant Pathology, SCSCA, Plant Breeding and Genetics, NAHEP Office	20
7	OLAT	2	DBT, AAU	1
			DBT, AAU	1

Books and Journals

Sl. No.	Items	Total number	Place of Delivery	Number
1	E-books	42	AAU Library	42
		46	AAU Library	46

Laboratory Equipments

Sl. No.	Items	Total number	Place of Delivery	Number
1	UV Spectrophotometer	1	Plant Pathology	1
2	Laboratory Equipment for FISH BREEDING	1	CFSc., Raha	1
3	Autoclave Vertical	1	Soil Science	1
4	Meat Mincer	1	CVSc., Khanapara	1
5	Vacuum Packing Unit	1	CVSc., Khanapara	1

6	Brine Injector	1	CVSc., Khanapara	1
7	Single Phase Motor	1	CVSc., Khanapara	1
8	Automatic Sealing Machine	1	Soil Science	1
9	Vertical Refrigerator	1	CVSc., Khanapara	1
10	Bone Saw Machine	1	CVSc., Khanapara	1
11	Display Cabinet	1	CVSc., Khanapara	1
12	Electrically operated Smoking Cabinet	1	CVSc., Khanapara	1
13	Chimney	1	CVSc., Khanapara	1
14	Killing Cones	1	CVSc., Khanapara	1
15	Poultry Rendering Plant	1	CVSc., Khanapara	1



CCTV cameras installed in AAU, Jorhat



Spectrophotometer



Autoclave Vertical



Poultry Rendering Plant