

PROGRESS REPORT

(April, 2018 to March, 2019)

INSTITUTIONAL DEVELOPMENT PLAN NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT (NAHEP)



JUNAGA|DH AGRICULTURAL UNIVERSITY
JUNAGADH-362 001 (GUJARAT)

Submitted to PIU, NAHEP, ICAR

April, 2019

Table of Contents

1. Executive Summary	2
2. Component 1 a	3
2.1 Output-outcome monitoring	3
2.2 Input and activity monitoring	4
2.3 Challenges faced and lessons learnt under Component 1 a:.....	5
2.4 Plan ahead (Key activities) for next reporting period	5
Annexure - I	6
Annexure - II	7
Glimpses of the activities carried out	10
Disclaimer	16

1. Executive Summary

NAHEP Project Objective:

NAHEP is designed to strengthen the national agricultural education system in India with overall objective to provide more relevant and high quality education to agricultural university students. This programme will promote efficiency and competitiveness through changes in working mechanism of agricultural universities, raising the teaching and research standards through improved research and teaching infrastructure and enhanced faculty competency and commitments, and making agricultural education more attractive to talented students. There are four key components under NAHEP, namely; Institutional Development Plan (IDP), Centres for Advanced Agricultural Sciences and Technology (CAAST), ICAR to support excellence in agricultural universities (AUs), and ICAR Innovation Grants to AUs. It is envisaged that improved AU performance through quality enhancement, better employment and entrepreneurship opportunities created for agriculture graduates, non-accredited AUs attaining ICAR accreditation, and institutional reforms implemented in education division of ICAR and AUs under these components together shall contribute to the achievement of the overall program objective.

Progress made during period: The progress made across each components of NAHEP during Nov'18 to March'19 has been captured herewith.

Component 1 a: Support to Institutional Development Plan (IDP) of AUs

The IDP financed activities are more oriented towards capacity building and governance reforms leading to **the greater autonomy and sustained accreditation of the University**. The key provisions for funding under IDP include **teaching and research infrastructure development, faculty development and training, networking and industry collaboration, vocational training, students job placement, own revenue generation and support to twinning plan**. In addition to these priorities, emphasis is also being placed on **effective industry linkages to enhance employability of agriculture graduate as well as to help AUs to generate their own resources**. Renewed public-private partnership efforts **will strengthen stakeholder role in curriculum design and faculty and student development**. This will help the agricultural higher education system in India to produce quality graduates with desired traits, exposure and experience, and skills in innovation, entrepreneurship, and agribusiness to solve current and emerging problems of agriculture.

Develop skill and inculcate entrepreneurship among the students, strengthen linkages between institute, industries, corporate and foreign agencies, as well as strengthening student services and integrated management information system.

Procurement of laboratory equipments and goods, MoU with DAIICT, Students deputed for National trainings bagged awards, Soft skill training were conducted, International collaboration for student trainings is in progress and 18 students to be sent for international training.

Monitoring and Evaluation: All the activities in the JAU were frequently monitored by the concerned authority and outcome were evaluated regularly

Plan Ahead

Organize Training/ Internship, Skill Development, Entrepreneur/workshop, international training of student and faculties in the advanced agricultural technologies.

2. Component 1 a

Support to Institutional Development Plan (IDP) of AUs

Component cost
USD 69.4 Mn

2.1 Output-outcome monitoring

S. N.	Particulars ¹	April'18 to March'19		
		Plan	Achievement	Progress made during period (Elaboration)
1	Number of new facilitative units established to enable academic and research infrastructure (IIIC- Industry Institution Interaction Cell / Start up cell / incubation cell / experiential learning unit / placement cell etc.)	Renovation of following laboratories: 1. Automation Irrigation System Laboratories 2. Color Sorting Laboratories 3. Shed and SPV laboratories 4. Robotics and Automation Laboratory 5. Minor Modification in Existing Laboratories	Achieved	Minor Civil work and modification in laboratories and procurement of goods and equipment
2	Number of pilot courses added / upgraded on communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills, industry oriented courses etc.	1. Entrepreneurship Courses 10 (500) 2. Vocational courses 37 (1850) 3. Certification courses 7(210) 4. Skill development courses 17 (510)	1. 6 (661) 2. 16 (769) 3. 1(3) 4. 3(225)	
3	Additional revenue generated through institutional activities with industries in INR lakhs	0	0	
4	Revenue generated through public usage of infrastructure for academic activities in INR lakhs	0	0	
5	Number of MoUs signed with industry for knowledge exchange programs/ internships / short term training programs etc.	MoU with Different Institute and Industries for short term training	MoU with DA-IICT, Gandhinagar	Advance course conducted for students on and off campus
6	Number of faculty exchange programmes (both national and international) initiated by AU	0	0	
7	Number of student exchange programmes (both national and international) initiated by AU	58	0	

¹ Add the numbers for component specific awarded AUs and fill the required fields accordingly. If there was no plan against any specific indicator during this period, it needs to be filled zero.

2.2 Input and activity monitoring

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
Goods and equipments	Equipment, Plant & Machinery	0.00	0.00	See Annexure-I
	Office equipment	7.50	6.3276	
	Laboratory equipment	100.00	99.99529	
	Furniture & fixtures	5.00	4.9990	
	Computers and Peripherals	129.92	29.89633	
	Books and Journals	10.00	0.00	Procurement is still pending due to insufficient number of quotation qualified for the procurement
Civil works	Minor repair and renovation works	55.83	51.5169	Renovation of various laboratories
Human capacity building³	National level training	0.00	0.00	Deposited for International training
	International level training	164.25	16.00	
	Short visit/ seminars	15.50	1.98879	
	Meetings and workshops	10.00	1.434	
Consultancy	National level consultancies	8.33	0.00	
Recurrent cost/ Miscellaneous	Travel	8.52	0.82786	
	Contractual services	78.75	11.28464	
	Operational costs	448.50	147.5591	See Annexure-II
	Institutional charges	26.79	19.81	
Total		1068.89	391.639539	

² Mention the physical numbers and specify the activities / purposes against each input category

³ Plz share the training details

2.3 Challenges faced and lessons learnt under Component 1 a:	
1	If the fund would have been released/received in time, more activities could have been conducted.
2	Limitation of time : Highly intensive course curriculum of UG programmes, which requires continuous involvement of students i.e. lectures, practicals, hourly exams, sports and other activities. Hence training, seminar, workshop, visit and other programmes have to be organized keeping the time frame of the curriculum so that the main stream courses are not affected and does not have impact on the grades of UG students.
3	Faculties are involved in research and teaching and have a very tight schedule and several commitments in their respective fields of education/ research and extension.
4	International / Abroad training procedure takes time, For International faculty deputation state government approval is essential, which causes delay in process
5	Students/Candidates should possess a CGPA of 7.5 and above for International training. With the experience of progress of plan, it is felt that some revision is required. The Impact factor of the publication above 7 NAAS rating may be reconsidered.
2.4 Plan ahead (Key activities) for next reporting period	
1	Inetgration of the new advanced courses in UG course curriculum. Regularization of the newly developed student learning portal
2	Structured and Need based courses like entrepreneurship, leadership, communication skill, vocational, soft skill development, to put in action of the student portal,
3	Industry linkage, colloboratio and MOUs with other institutes and industries at national and international level, to incorporate and promote live projects with industries. Establishing the linkages with Alumni by development of interavctive operational platform/hub.
4	Encouraging stuents and faculties to publish in high rated journals.
5	Students and faculties to be sent for International training

S. N.	Particulars ⁴	Nov'18 to March'19		
		Plan	Achievement	Progress made during period
1.	Number of faculty exchange programmes (both national and international) initiated by AU	0	0	
2.	Number of student exchange programmes (both national and international) initiated by AU	58	0	
3.	Number of technologies transferred to industry / private sector / national / international organisations	0	0	
4.	Number of students selected in JRF / SRF / ARS	0	51	
5.	Number of students who were admitted in foreign universities	0	2	
6.	Number of students received National Young Scientist Award	0	0	
7.	Number of students received ICAR's Jawaharlal Nehru thesis Award	0	0	
8.	Number of students awarded at Agri-unifest	0	0	22 participated
9.	Number of students awarded at Agri uni sports meet	0	2 gold medals 1 silver medal	44 participated
10.	Number of industry- sponsored projects and positions in cutting-edge areas of agri-science	0	0	
11.	Number of competitive grants from a national/international funding agency	0	0	
12.	Number of technologies commercialised by AU	0	0	

Nodal Officer (ICAR) & ADR
Junagadh Agricultural University
Junagadh 362 001 (Gujarat)

Vice Chancellor
Junagadh Agricultural University
Junagadh 362 001 (Gujarat)

⁴ Add the numbers for component specific awarded AUs and fill the required fields accordingly. If there was no plan against any specific indicator during this period, it needs to be filled zero.

Annexure – I

Goods and Equipments

S. N.	Name of Item	Qty.	Amount (Rs.) in lakhs	Justification
Office Equipments :				
1	Copier Machine with auto duplex facility and ADF	2	3.9976	For administrative and regular office work.
2	Paper shredding machine	10	1.1800	
3	Paper laminating machine	10	1.1500	
Total (Rs.)			6.3276	
Laboratory Equipments :				
1	Robots for farm mechanization with accessories	2	46.52150	For establishment of automation and robotics lab
2	Instrumentation for Robotic Technology Lab (Cameras, Manipulator, Motors, Drives, Power supplies, Haptic devices, prototype tools etc.)	1 set (9 items)	10.59257	For establishment of Robotic technology lab
3	Instruments for Drone Technology Lab (Drone for pesticide spraying, Drone Sensors, Imagery analytics system, Multispectral camera etc.)	1 set (4 items)	20.59985	For establishment of drone technology lab
4	Variable Refrigerant Flow (VRF) System	1	22.28137	To maintain cooling environment in laboratories
Total (Rs.)			99.99529	
Furniture & fixtures				
1	Computer Revolving Chairs	100	4.9990	For seating arrangement in laboratories
Computers and Peripherals				
1	High End Server	2	16.66100	For high end computation and administration
2	Short Throw Projector	7	6.99923	For presentation facilities in laboratories and classrooms
3	Workstation	3	6.23610	For high end computation
Total (Rs.)			29.89633	

Annexure – II

Details of National Seminar/Workshop/Trainig/Short Visit

Sr. No.	National Seminar/ Workshop/ Training /Short visit	Organizing Place	Number of Participants		Organized Date
			Students	Faculty	
1	Orientation Workshop on IDP	JAU, Junagadh	110	130	March 28-29, 2018
2	Two refresher courses on Higher Mathematics, Advanced Computer Programming programme-2018 at DA-IICT	DA-IICT, Gandhinagar, Gujarat	92		June 10 to July 22, 2018
3	Machine Learning Course conducted through Video Conferencing taught by Faculties from DA-IICT, Gandhinagar, Gujarat	CAET, JAU, Junagadh	24		August, 2018 to November, 2018
4	Training on Personality Development & Employability Skills	CAET, JAU	40		Nov. 22, 2018
5	Training on Personality Development & Employability Skills	CoH, JAU	30		Nov. 26, 2018
6	Training on Personality Development & Employability Skills	CoA, JAU	40		Nov. 27, 2018
7	Entrepreneurship Training on Pet Spa and Pet Behavioural Issues	CoVSAH, JAU	70	79	Dec. 03, 2018
8	National seminar cum training on Modern Trends and Advances in Animal Sciences	CoVSAH, JAU	60	40	Dec. 21-22, 2018
9	Training on Emerging Technology Skill Development	Expertshub Industry Skill Development Centre, Pune	9		Dec. 22-29, 2018
10	Workshop on Application of advanced instrumentation in drug discovery and role of veterinarians in biomedical science	CoVSAH, JAU	103	32	Jan. 04, 2019
11	Training program on ROBOTICS	IGTR Campus, GIDC, Vatva, Ahmedabad	2		Jan. 11-12, 2019.
12	Training on UAV- Drone Design & Development	Expertshub Industry Skill Development Centre, Bengaluru	3		Jan. 17-23, 2019.

Sr. No.	National Seminar/ Workshop/ Training /Short visit	Organizing Place	Number of Participants		Organized Date
			Students	Faculty	
13	Training on Machine Learning/ Artificial Intelligence (MLAI)	Gateway-Expertshub Industry Skill Development Centre, Delhi NCR	11		Jan. 21-28, 2019.
14	Training on "4th National Convention on Integrated Agriculture- Prosperous Bharat-Agrivision-2019"	NASC, ICAR, Pusa, New Delhi	6		Jan., 28-29, 2019
15	Workshop on "Emerging Research Topics in Engineering"	Institute of Technology, Nirma Univ., Ahmedabad.		1	Feb. 2-3, 2019
16	Training on Soft Skill, communication Skill and Personality Development	CoA, Amreli	45		Feb. 5-6, 2019
17	Training on Soft Skill, communication Skill and Personality Development	CoF Veraval	40		Feb. 7-8, 2019
18	Training on "National Level Competition for Agriculture Science Students"	Organized by MakeIntern	60		Feb. 12-13, 2019
19	Training on " Production Technology of cut flowers in Greenhouse"	Institute of Horticulture Technology, 42A, Knowledge park III, Greater Noida - 201310	6		Feb 12-16, 2019
20	Industrial and Institutional Visit for Augmenting Entrepreneurship an Business Skills	GSFC, Vadodara, GNFC, Bharuch and Western Seeds, Gandhinagar	48		Feb. 13-15, 2019
21	Training on "Multi-rotor Drone/ UAV"	DRONOTECH & Indian Academy for Drone, Mumbai	3		Feb. 13-17, 2019
22	Training on "Personality development, body language and presentation skills"	CoVSAH, JAU, Junagadh	45		Feb 15-16, 2019
23	Training on "Personality development, body language and presentation skills"	CAET, JAU, Junagadh	40		Feb 18-19, 2019
24	Training on "Entrepreneurship Orientation Workshop"	CoA, JAU, Junagadh.	45		Feb 25-26,2019
25	Training on "Entrepreneurship Orientation Workshop"	College of Horticulture, JAU, Junagadh.	40		Feb 27-28, 2019

Sr. No.	National Seminar/ Workshop/ Training /Short visit	Organizing Place	Number of Participants		Organized Date
			Students	Faculty	
26	Training on "Entrepreneurship Orientation Workshop"	CAET, JAU, Junagadh,	45		March 01-02, 2019
27	Agriculture Drone Training	Novatech Robo Pvt. Ltd. Bangalore	11		March 7-12, 2019
28	National Symposium on "Futuristic Technologies in Agriculture"	JAU, Junagadh	100	50	March 10-11, 2019
29	Training on "Entrepreneurship Orientation Workshop"	College of Fisheries, JAU, Veraval,	40		March 11-12, 2019
30	Training on Soft Skills & Entrepreneurship/Interview skills	CoA, JAU, Junagadh	55		March 11-14,2019
31	Training of Robotics Technology	Indian Institute of Robotics Technology, Noida (New Delhi)	5		March 11-15, 2019
32	Training on "Entrepreneurship Orientation Workshop"	CoVSAH, JAU, Junagadh.	45		March 13-14, 2019
33	Training Programme on Festival of Innovation and Entrepreneurship (FINE)	National Innovation Foundation, Gandhinagar	3		March 15-18, 2019
34	Entrepreneurship skill Development program on Export Import of Agril. Commodities and Field Visit	CoA, JAU, Junagadh and Visit at Morbi & Rajkot	40		March 16-17, 2019
35	Short Visit for Student development program for entrepreneurship and business skills	Fertilizer, Bio-Pesticides and Seed Manufacturing Companies, Gandhinagar, Vadodara and Bharuch	51		March 26-27, 2019
36	Vocational course on Organic and Hydroponic Farming	Ministry of Micro, Small and Medium Enterprises, GOI	20		March 30-31, 2019
Total Number of Participants			1387	282	

Glimpses of the activities carried out under Objective-1:



Orientation workshop organized at JAU during March 28-29, 2018 to generate awareness of the IDP Project



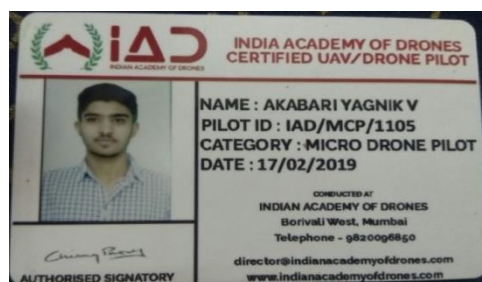
Class room teaching of Higher mathematics and Computer Programming at DAIICT-Gandhinagar



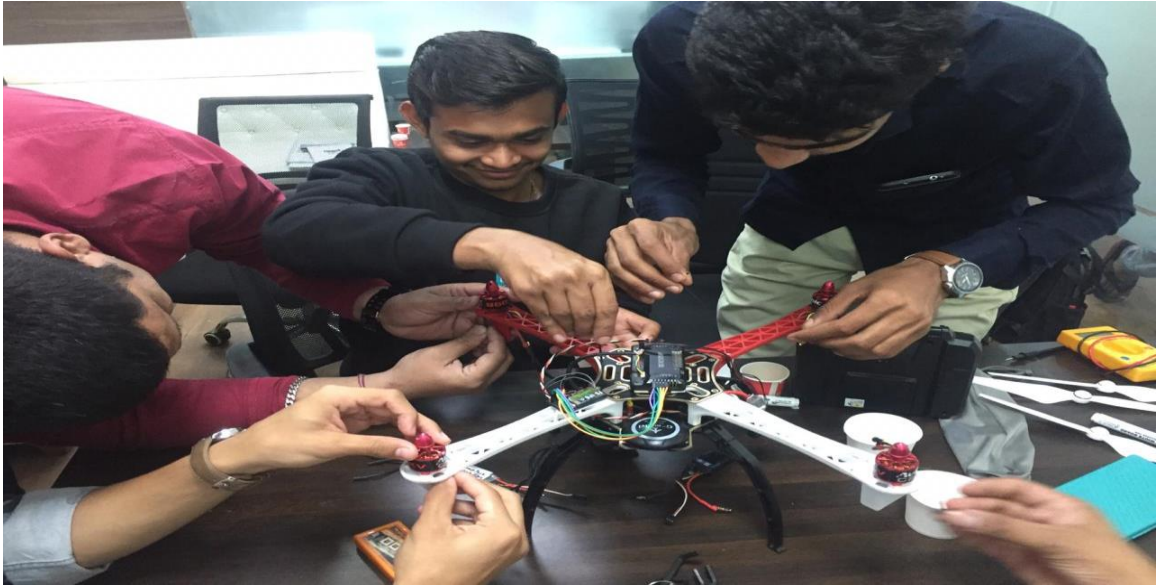
Entrepreneurship Programme on “Pet Spa & Pet Behavior Issues” on December 03, 2018



Runners-up title in the Technical Project Competition on UAV and Drone Design and Development



Micro Drone Pilot license by Indian Academy of Drones



Assembling & Flying of Agriculture Drone



Entrepreneurship Skill Development Training Programme on Export-Import of Agricultural Commodities



Dignitaries at National Symposium on “Futuristic Technologies in Agriculture”



National Symposium on “Futuristic Technologies in Agriculture” during March 10-11, 2019



Training on "Entrepreneurship Orientation Workshop" during March 13-14, 2019



Training on Personality Development & Employability Skills



Training on "Personality development, body language and presentation skills" during Feb. 15-16, 2019.



Training on Soft Skill, communication Skill and Personality Development during March 7-8, 2019.

Disclaimer

This report has been prepared only for Indian Council of Agricultural Research (ICAR), in accordance with the agreed terms and conditions as per the contract dated 8th October, 2018 and for no other purpose. We do not accept or assume any liability or duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

The opinions contained in this report are based on the facts, assumptions, and representations stated herein. Our assessment and opinions are based on the fact and circumstances provided/ collected during our meetings with related officials and research from sources in public domain held to be reliable. If any of these facts, assumptions or representations are not entirely complete or accurate, the conclusions drawn therein could undergo material change and the incompleteness of inaccuracy could cause us to change our opinions. The assertions and conclusions are based on the information available at the time of writing this report.

The procedures we carried out in performing the work that forms the basis of this report were not as to constitute an audit. As such, the content of this report should not be considered as providing the same level of assurance as an audit. PwC disclaims all liability to any third party who may place reliance on this report and therefore does not assume responsibility for any loss or damage suffered by any such third party in reliance thereon.

This report is provided on the basis that it is for the use of ICAR only and that it (and any extract of it) will not be copied or disclosed to any third party or otherwise quoted or referred to, in whole or in part, without PwC prior written consent. Furthermore, PwC will not be bound to discuss, explain, or reply to queries raised by any agency, other than the intended recipient of this report.

© 2019 PricewaterhouseCoopers Private Ltd. All rights reserved. “PwC”, a registered trademark, refers to PricewaterhouseCoopers Private Limited (a limited company in India) or, as the context requires, other member firms of PwC International Limited, each of which is a separate and independent legal entity.