

*Progress Report (April 2019 to March 2020):
National Agricultural Higher Education
Project (NAHEP)*

Submitted to PIU – NAHEP, ICAR

April, 2020



**INSTITUTIONAL DEVELOPMENT PLAN (IDP)
NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT
(NAHEP)
JUNAGADH AGRICULTURAL UNIVERSITY
JUNAGADH 362 001 (GUJARAT)**

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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 April'19 to March'20 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, 8 MoUs Signed, 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, National level Agri-Student conclaves, MoUs, 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

April'19 to March'20				
S. N.	Particulars ¹	Plan	Achievement	Progress made during period (Elaboration)
1	Number of new facilitative units established to enable academic and research infrastructure (IIC- Industry Institution Interaction Cell / Start up cell / incubation cell / experiential learning unit / placement cell etc.)	0	Following labs were renovated from unspent balance of FY 2018-19. 1) Automation Irrigation System Lab., 2) Color Sorting Lab. and 3) Robotics and Automation Lab.	
2	Number of pilot courses added / upgraded on communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills, industry oriented courses etc.	<ul style="list-style-type: none"> • Entrepreneurship Courses 5 • Vocational courses 22 • Certification courses 2 • Skill development courses 30 	<ul style="list-style-type: none"> • 5 (200) • 19 (1266) • 2(55) • 27 (1845) 	
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	Nil	Nil	
5	Number of MoUs signed with industry for knowledge exchange programs/ internships / short term training programs etc.	25	08	
6	Number of faculty exchange programmes (both national and international) initiated by AU	International training –10 faculties	International training - 0	
7	Number of student exchange programmes (both national and international) initiated by AU	International training- 4 (20)	International training-7 (24)	

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	Nil	Nil	
	Office equipment	1.17	Nil	It is the saving after purchasing all required office equipment. The said amount along with the unspent amount of computer and peripherals and unspent amount of books and journals (of College of Agriculture, JAU, Junagadh) was planned to utilized for procuring recycle plant but could not be utilized as permission is not granted by ICAR, New Delhi. Planning: The same may be revalidated and will be utilized in the F.Y. 2020-21 after getting sanction from ICAR, New Delhi.
	Laboratory equipment	88.00	16.32	The purchase orders for two equipment of College of Agriculture, JAU, Junagadh: 1. Robotic Clay Fraction Analyzer of amount Rs.40,91,745/- and 2. Ion Chef of amount Rs. 29,95,000/- (Total amount of two equipment Rs. 70, 86, 745/-) were made but due to COVID-19 lockdown delivery of the said equipment is delayed and hence the payment of Rs. 70,86,745/- is not made in F.Y. 2019-20. Planning: This payment will be made in F.Y. 2020-21 after the delivery of the equipment (which is expected after the lockdown). After purchasing all sanctioned

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

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
				laboratory equipment, Rs.81,625/- will be unspent which may be revalidated and will be utilized to purchase equipment after taking sanction from ICAR, New Delhi.
	Furniture & fixtures	0.00	0.00	
	Computers and Peripherals	100.00	90.62	<p>The saving in the sanction amount is Rs.9.42 lakhs. The said saving amount along with unspent amount of office equipment and unspent amount of books and journals was planned to utilized for procuring Recycle Plant and the proposal of the same was made to ICAR but the permission was not received till March 31, 2020 and hence the amount is still unspent.</p> <p>Planning: About 200 computers, 2 servers and other networking setup established under IDP needs to be protected for electrical fluctuation. Therefore, 2 high capacity UPSs are required which may be procured from this saving amount in F.Y. 2020-21 after taking sanction from ICAR, New Delhi.</p>
	Books and Journals	25.00	19.82	<p>The saving in the sanction amount is Rs.5.18 lakhs.</p> <p>The said saving amount along with unspent amount of office equipment and unspent amount of computers & peripherals was planned to utilized for procuring Recycle Plant and the proposal of the same was made to ICAR but the permission was not received till March 31, 2020 and hence the amount is still unspent.</p>

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
Civil works	Minor repair and renovation works	4.31	3.54	The amount Rs 0.77 lakh is the saving from the sanction amount of civil work. Planning: The saved amount may be revalidated and will be utilized in F.Y. 2020-21 for civil work in SPV lab.
Human capacity building³	National level training	0.00	0.00	
	International level training	225.42	0.00	Two scientists permitted for International training from PIU but due to lockdown unable to join. Other 3 faculties fulfilled eligibility criteria. Out of which one was invited by University of California, Davis, USA and applied for the further permission from ICAR, New Delhi. The permission is under process and delayed due to COVID-19. Planning: They will again correspond with the host university as soon as COVID-19 situation is over.
	Short visit/ seminars	18.01	2.23	Several seminars and conferences were cancelled by the organizing institutes due to COVID-19. Therefore, limited faculties could participate in the seminars, short visits. Planning: The remaining amount may be revalidated and will be utilized in F.Y. 2020-21 for attending seminars, conferences short visits,

³ Plz share the training details

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
				etc.
	Meetings and workshops	18.56	2.78	<p>AgrEngers-2020: A National Level Agri Student Conclave which includes 3 workshops was planned to organized during March 24-28, 2020 but due to COVID-19 Lockdown, these workshops could not be executed.</p> <p>Planning: This conclave will be organized in September-2020, if COVID-19 situation is over.</p>
Consultancy	National level consultancies	16.33	0.00	<p>Out of 6 consultancies, only 1 consultancy (PLC based Automation) could fulfill the procurement guidelines and that also could not be materialized due to COVID-19 situation.</p> <p>Planning: In the F.Y. 2020-21, amount of Rs. 98,000/- may be revalidated for only one consultancy for PLC based automation and remaining amount of Rs. 14,35,000/- for other 5 consultancies will be surrendered as it couldnot be materialized after so many efforts in F.Y. 2019-20</p>
Recurrent cost / Miscellaneous	Travel	9.17	2.37	<p>Due to COVID-19 travel restrictions, the amount could not be utilized.</p> <p>Planning: The amount may be revalidated in F.Y. 2020-21 and will be utilized for the travel purose.</p>
	Contractual services	146.22	96.10	Two RAs and Three lab technicians were not appointed in F.Y. 2019-20.

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
				<p>Planning: Two RAs and Three lab technicians will be appointed in F.Y. 2020-21.</p>
	Operational costs	565.12	246.37	<p>1. AgrEngers-2020: A National Level Agri Student Conclave was planned in March, 2020 but due to COVID-19 lockdown, the said conclave could not have been implemented. 4 MoUs were also planned during this conclave. The approximated Rs. 35,00,000/- of operational expenditure was estimated for this event out of which Rs. 6,35,484/- was utilized in event preparation.</p> <p>Planning: 1. The said conclave will be organized in Sep, 2020 if COVID-19 situation is over. 2. Fifteen students had got acceptance letter for 2 months International Training at Asian Institute of Technology, Bangkok, Thailand. The estimated expenditure of Rs. 50,00,000/- would have been utilized in the said training but due to COVID-19 lockdown the said training could not be implemented. The said training will be organized in Octo-Dec, 2020 if COVID-19 situation is over. 3. Three students had got selected by WUR, Netherlands for two months International Internship. The estimated expenditure of Rs. 26,63,880/- would have been utilized in the said internship but due to COVID-19 lockdown the said international internship could not</p>

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
				be implemented. The said internship will be organized in Oct-Dec, 2020 if COVID-19 situation is over.
	Institutional charges	22.15	22.15	
Total		1239.46	502.30	

2.3 Challenges faced and lessons learnt under Component 1 a:	
1	The outbreak of COVID-19 virus pandemic as per government of India advisories all the activity related to Conference, Workshop/Meeting are suspended.
2	CAET planned and selected 15 UG students for internationally training and had got invitation for two (2) months international training (May-June, 2020) at Asian Institute of Technology, Bangkok, Thailand. Three CAET students had been selected through screening process by Wageningen University of Research, Netherlands for two (2) months International Internship (June-August, 2020), but due to outbreak of pandemic COVID-19 the said proposed International Internship is postponed. Apart from that CAET planned to organize AgrEngers-2020: A National Level Students' conclave during March 24-28, 2020. The conclave was included three Vocational Trainings and three Workshop along with Startup Summit. Around 700 participants were expected to participated in the conclave. But due to outbreak of pandemic COVID-19 the said conclave was postponed.
3	The detail asked in Output-outcome monitoring and other details like number of technology transferred, Number of students who were admitted in foreign universities, Number of students received National Young Scientist Award, Number of students received ICAR's Jawaharlal Nehru thesis Award, etc. are not aligned with planned students' development programmes under NAHEP-IDP.

2.4 Plan ahead (Key activities) for next reporting period	
1	<p>I. The AgrEngers 2020 – A National level Agri-Student conclave (Three Workshops, Three Vocational Trainings, Startup Summit along with Seven different technical events) will be organized in the month of September, 2020 if COVID-19 situation is over.</p> <p>II. A National level Agri-Student conclave 2021 (Two Workshops and two Vocational Training with Startup Summit along with seven different technical events) will be organized in Fourth Quarter.</p>
2	The International Training for UG students will be organized at reputed Institutes.
3	Programmes on Soft skill, Entrepreneurship development, Vocational training, Environment awareness and Social equity shall be organized by JAU, Junagadh.
4	<p>Peer to Peer programmes:</p> <p>The peer to peer programmes will be organized once in every month in which students will form a technical group and programmes will be conducted by the students for the students.</p>

5	Technical and awareness programmes for weaker students and SC/ST students All the colleges shall organize technical and awareness programmes as and when required.
6	The certification courses will be organized in the domain of Data Analytics, Programming and Machine Learning
7	‘Professional Skill Development Training’ (e.g. Data analysis & Deep Learning Applications)
8	Seminars on latest topics / drone technology / IoT will be organized.
9	Workshops on identified topics as listed in sanction letter of project will be organized
10	A series of programme for preparation of competitive exams for economically and socially weaker sections will be organized
11	Professional English Coaching Classes for weaker students will be conducted.
12	Remedial courses for weaker students will be conducted.
13	Procurement of the items as per the approved plan through STEP will be carried out
14	Implementation of Elective courses in UG course curriculum.
15	More MoU will be signed with Globally recognized institutes, industries, NGOs etc.
16	The consultancy for the PLC based automation will be executed.
	Note : The above mentioned programmes will be conducted online if the situation of COVID-19 pandemic continues.

Apr'19 to March'20				
S. N.	Particulars ⁴	Plan	Achievement	Progress made during period
1.	Number of faculty exchange programmes (both national and international) initiated by AU	International – 10 faculties	International - 0	
2.	Number of student exchange programmes (both national and international) initiated by AU	International- 4 (20)	International- 7 (24)	
3.	Number of technologies transferred to industry / private sector / national / international organizations	Nil	Nil	
4.	Number of students selected in JRF / SRF / ARS/ GATE	Nil	68	
5.	Number of students who were admitted in foreign universities	Nil	01	
6.	Number of students received National Young Scientist Award	Nil	Nil	
7.	Number of students received ICAR's Jawaharlal Nehru thesis Award	Nil	Nil	
8.	Number of students awarded at Agri-unifest	Nil	02*	*4th position in Debate favour and against.
9.	Number of students awarded at Agri uni sports meet	Nil	03*	*3 Medals (2 Gold and 1 Silver)
10.	Number of industry- sponsored projects and positions in cutting-edge areas of Agri-Science	Nil	17	
11.	Number of competitive grants from a national/international funding agency	Nil	5	
12.	Number of technologies commercialized by AU	Nil	01	

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.

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DETAILS OF STUDENTS' DEVELOPMENT PROGRAMMES

The Junagadh Agricultural University has organized various students' development programmes such as International Training, Vocational Training, Workshops, soft skill development programmes, etc. under NAHEP – IDP. The undergraduate students of the different disciplines were benefited from these programmes. The students were also motivated to participate in the various on campus as well as off campus technical and soft skill development events. The insight of the various students' development programmes under NAHEP-IDP is depicted in the following sections.

1. International Training for Students':

Sr. No.	Title	Organizing Place	Number of Participants	Date Organized
1.	Automation in Green House	University of California, Davis, USA	3	June 24, 2019 to Aug. 9, 2019
2.	Digitization in Agriculture		5	
3.	Remote Sensing and GIS application	Asian Institute of Technology, Bangkok, Thailand	3	July 8, 2019 to July 26, 2019
4.	Aquaculture and Aquatic Resource Management		3	July 1, 2019 to Sept. 30, 2019
5.	Evaluation of grafting compatibility in solanaceous species	AVRDC, The World Vegetable Center, Tainan, Taiwan	1	Sept. 1, 2019 to Oct. 30, 2019
6.	Screening for insect resistance on bitter melon		1	
7.	Screening for insect resistance on eggplant		1	
8.	IPM of Southern Blight (<i>Sclerotium rolfsii</i>) in tomato		1	
9.	Application of Smart Aquaculture Technologies	Asian Institute of Technology, Bangkok, Thailand	3	Jan. 5, 2020 to April 4, 2020
10.	Comparative evaluation of salinity tolerance in different crops	International Center for Biosaline Agriculture (ICBA), Dubai, UAE	1	March 1, 2020 to May 31, 2020
11.	Agronomical and physiological evaluation in quinoa genotypes growing under saline irrigation		1	
12.	Phenotypic evaluation of genome wide association mapping panel of quinoa		1	
Total			24	

2. Student Development Training Programme:

Sr. No.	Title	Organizing Place	Number of Participants	Date Organized
Entrepreneurship Development				
1.	Processing and Value Addition of High Value Crops	CoA, JAU, Junagadh	40	May 11-12, 2019
2.	Campus to Corporate Training	CoF, JAU, Veraval	49	Aug. 28-29, 2019
3.	Campus to Corporate Training	CoA, JAU, Junagadh	45	Aug. 30-31, 2019
4.	Campus to Corporate Training	CAET, JAU, Junagadh	50	Sept. 3-4, 2019
5.	E-Business and Business Plan	PGIABM, JAU Junagadh	16	Sept. 16-20, 2019
Total			200	
Skill Development				
1.	Training on Agriculture Drones	Novatech Robo Pvt.Ltd., Bangalore	12	May 15-23, 2019
2.	Enhancing Students' Competitiveness in GPSC, IBPS and other Competitive Examinations	CoA, JAU, Junagadh	136	May 20, 2019
3.	International Conference on Innovative Horticulture and value chain management	GBPUAT, Pantnagar	6	May 28-31, 2019
4.	Standardization and Quality Assurance in the Area of Agricultural Engineering	CAET, JAU, Junagadh	173	July 15, 2019
5.	Leadership Training Programme	CAET, JAU, Junagadh	70	July 17-18, 2019
6.	Personality Development and Stress Management	JAU	1600*	Aug. 5, 2019
(*which is not included in total beneficiaries because, local farmers and others people of Junagadh were present in this event)				
7.	Application of Artificial Intelligence For data Analysis in Animal Science	CoVSAH, JAU, Junagadh	89	Aug. 5-6, 2019
8.	Environmental Awareness Training Program	Sasan Gir, Gir Somnath	42	Aug. 17, 2019
9.	Seminar on Veterinary Laws and Ethics	GVA, Gandhinagar, Gujarat	30	Aug. 27, 2019

10.	Farm & Companion Animal Practices	TANUVAS, Chennai, Tamil Nadu	4	Aug. 30-31, 2019
11.	Guest Lecture on Veterinary Education in India	CoVSAH, JAU, Junagadh	225	Sept. 5, 2019
12.	Automation and Advance in chromatography	CoVSAH, JAU, Junagadh	90	Sept. 6-7, 2019
13.	Latest Advancement in Upstream Reproductive Physiological techniques	CoVSAH, JAU, Junagadh	100	Sept. 16-18 2019
14.	Diabetes Awareness and Investigation	JAU, Junagadh	160	Nov. 14, 2019
15.	Agricultural & Food Processing Machinery Manufacture meet	CAET, JAU, Junagadh	49	Nov. 27, 2019
16.	Leadership and Entrepreneurship Development	CoA, JAU, Junagadh	75	Nov. 18-19, 2019
17.	Hydroponics and Vertical Farming	Dholera, Ahmedabad	3	Jan. 3 to Feb. 28, 2020
18.	International symposium on Artificial Intelligence based Future Technologies in Agriculture	Pune, Maharashtra	17	Jan. 07-09, 2020
19.	Social and Human Values	CoF, JAU, Veraval	73	Jan. 16, 2020
20.	English Speaking and Communication Skills	CoF, JAU, Veraval	73	Jan. 17-18, 2020
21.	Social and Human Values	CAET, JAU, Junagadh	67	Jan. 20, 2020
22.	English Speaking and Communication Skills	CAET, JAU, Junagadh	81	Jan. 20-21, 2020
23.	Global Potato Conclave 2020 (GPC 2020)	Mahatma Mandir, Gandhinagar, Gujarat	15	Jan. 28-31, 2020
24.	Agriculture based Android Mobile Application Development Internship	Cosmos App Development Institute, Bhavnagar, Gujarat	2	Feb. 1 to March 10, 2020
25.	Brackish water Aquaculture Farmers Conclave (BAFAC-2020)	Surat International Exhibition and Convention Centre, Surat, Gujarat	40	Feb. 19-20, 2020

26.	Special coaching classes for various competitive examinations e.g. UPSC, GPSC, and IBPS	CoA, JAU, Junagadh	60	Feb. 24 to April 23, 2020
27.	Empowering Youth with Gender Equality and Skills Development	JAU, Junagadh	103	March 3-7, 2020
28.	Applied Mathematics for Agricultural Decision Making	CoA, JAU, Junagadh	50	March 13-17, 2020
Total			1845	
Vocational Training Programme				
1.	Profitable Dairy Farming	JAU Junagadh and Upleta	40	July 24-28, 2019
2.	Internet of Things for Agricultural Domain	CAET, JAU, Junagadh	60	Aug. 3-8, 2019
3.	Entrepreneurship in nursery Management	JAU, Junagadh and Visavadar	40	Aug. 5-9, 2019
4.	Application of CAD in Designing Agricultural Equipment	CAET, JAU, Junagadh	42	Sept. 16-21, 2019
5.	Application of One Health Concept for Control of emerging Zoonoses and Health Threats	CoVSAH, JAU, Junagadh	98	Oct. 14-18, 2019
6.	Autopilot Drone Development	CoA, JAU, Junagadh	54	Nov. 5-9, 2019
7.	Biorational Approches for Plant Disease Management	CoA, JAU, Junagadh	44	Nov. 11-15, 2019
8.	New Approches and OMRS Tools for Identification and Control of Ticks and Tick- Borne Disease	CoVSAH, JAU, Junagadh	92	Nov. 18-22, 2019
9.	Skill Development in Aquaculture related Technologies and its application	CoF, JAU, Veraval	40	Dec. 16-21, 2019
10.	GIS Application in Fisheries	CoF, JAU, Veraval	55	Jan. 13-17, 2020
11.	Fisheries under the era of automation and Artificial intelligence	CoF, JAU, Veraval	49	Jan. 13-17, 2020
12.	Advances in Fish Processing Technology	CoF, JAU, Veraval	49	Jan. 20-24, 2020
13.	Challenges and opportunities in the field of seafood processing sector	CoF, JAU, Veraval	55	Jan. 20-24, 2020
14.	Alternative Scientific Modalities to Improve the Learning Skills in Veterinary Anatomy	CoVSAH, JAU, Junagadh	80	Jan. 21-25, 2020
15.	New-Age Skills under Changing Agriculture Scenario	CoA, JAU, Junagadh	293	Jan. 29 to Feb. 02, 2020
16.	Honeybee Farming (Apiculture) for Entrepreneurship Development	CoA, JAU, Junagadh	35	Feb. 11-15, 2020

17.	Alternative Farming Systems to Improve the Learning Skills in Agronomy	CoA, JAU, Junagadh	50	Feb. 24-28, 2020
18.	Problems and Prospects in Palm Tissue Culture and Cryopreservation	CoA, JAU, Junagadh	50	March 2-6, 2020
19.	Advances in fish disease diagnosis and health management in aquaculture	CoF, JAU, Veraval	40	March 2-6, 2020
Total			1266	
Incubates Trained				
1.	Technology Innovation Forum for Agricultural Nurturing (TIFAN)-2020	Society of Automotive Engineers India (SAEINDIA) at Vishwakarma Institute of Tech., Pune	5	Sep. 21, 2019
2.	Advance in Shrimp Culture Technology	CoF, JAU, Junagadh	42	Oct. 19, 2019
Total			47	
Certification Courses				
1.	Analytics in Agriculture	DA-IICT, Gandhinagar	35	June 10, 2019 to July 19, 2019
2.	Certificate Course on Export Import of Agricultural Commodities (Weekend Course)	LIME Institute, Rajkot	20	July 27, 2019 to Jan. 24, 2020
Total			55	
Grand Total			3413	

Placement benefit through NAHEP – IDP activities : The university organized wide spectrums of different Programmes i.e. Vocational Trainings, Workshops, Skill Development Programs, Entrepreneurship Programs etc. Total 3413 undergraduate students of the university were benefited from these events conducted by university in the year. The students were also motivated to participate in the various on campus as well as off campus technical and soft skill development events. Twenty-four (24) students got benefitted through such initiatives and get placement in different multi-national companies, private as well as public sector.

Students' feedback : Compiled Feedback from students in their words: “We the students of JAU, Junagadh would like to convey our gratitude to our Institute and University for giving us platform through various activities under NAHEP –IDP. These activities have helped us in improving our communication skills and technical knowledge. That has helps us in our placement interview. We have got placement due to the overall improvement in ourselves through such events conducted under NAHEP-IDP programme”.

INTERNATIONAL TRAININGS

Glimpse of Non-Degree Student Exchange Program on “Greenhouse Automation” and “Digitization in Agriculture” University of California (UC) , Davis, USA



Prof Heiner Lieth, mentor, Department of Environmental Horticulture

Prof. Alireza Pourreza, Mentor, Department of Agricultural and Biological Engineering



Working with advanced software's like QGIS and Remote sensing

Training on Drone technology



Hands-on Training on Agricultural greenhouses



Hands on Training on Automatic Greenhouse



Working on Controlled Environment in Agriculture (CEA)



Advanced technologies like Soilless Cultivation under Artificial Lights for cultivation of agricultural produces



Industrial visit of fully Automated Greenhouse



Industrial visit of advanced Floriculture Greenhouse

Glimpse of International Training on Remote sensing and GIS with special focus on Drones, Asian Institute of Technology, Thailand



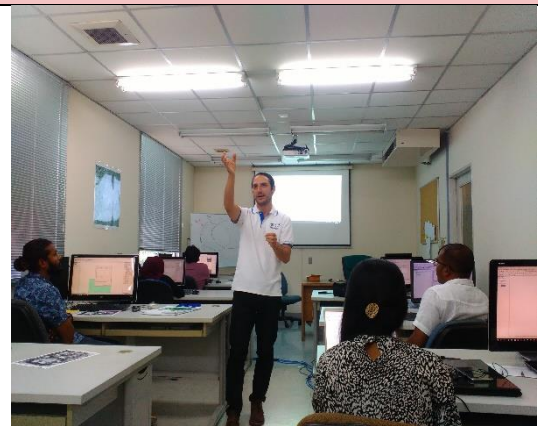
Dr. Manzul Kumar Hazarika, Director GIC, Asian Institute of Technology with JAU students



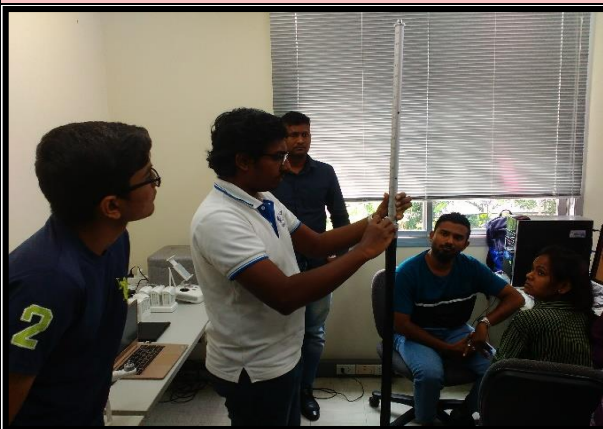
Training on Phantom five advanced Drone application to agriculture



Geo-Informatic center at Asian Institute of technology



Training on Quantum GIS and Remote Sensing softwares in application to agricultural Domain



Training on data aquesation from drone with advance softwares



Educational Visit to Space Research Station



JAU student at Asian Institute of Technology

Glimpse of International Training on Advance Aquaculture Practices & Sustainable Asian Aquaculture At Asian Institute of Technology – Thailand



Dr. Krishna R. Salin, Asso. Professor & Program chair, AARM, AIT



Tilapia Egg Collection



Catfish farm & Hatchery



Hormonal Sex Reversal feed making



Visit at aquaculture genetics research and development division



Visit at Institute of Marine Science, Chonburi



Students performing lab work



Students performing field work

Glimpse of International Training on Remote sensing and GIS with special focus on Drones, Asian Institute of Technology, Thailand



CoA, JAU Students with faculties of WVC, Taiwan



Field Visit at WVC, Taiwan



Educational Visit at World Vegetation Gene Bank



APARNA JYOTI : International Training on “Evaluation of graft compatibility of tomato with different Solanaceous species” at World Vegetable Center, Taiwan



SHINGALA DHARMESH SURESHBHAI : International Training on “Bt. Bioassay against the legume pod borer (*Maruca virata*)” at World Vegetable Center, Taiwan



PARTH B. TRANGADIYA : International Training on “Screening for insect resistance on bitter gourd (*Momordica charantia*) against melon fruit fly (*Bactrodera cucurbitae*) and effect of Bt.- Bio pesticides on melon fruit fly (*Bactrodera cucurbitae*)” at World Vegetable Center, Taiwan



BORKHATARIYA TEJASKUMAR HARDASBHAI : International Training on “Preliminary tests to control tomato southern blight” at World Vegetable Center, Taiwan

Glimpse of International Training on Application of smart aquaculture technologies Asian Aquaculture At Asian Institute of Technology – Thailand



Meet with Dr. Salin at AIT



Hatchery Visit at AARM, AIT



Add fermented rice bran



Visited prawn hatchery in Bangkok



Prepared the mixture of rice bran, sodium bicarbonate for biofloc inoculum



At AIT campus

Glimpse of International Training on at ICBA, Dubai



Recording the general characters of plant in field of quinoa at ICBA, Dubai



Celebration of the International Women's Day alongwith AWLA (Arab Women Leaders in Agriculture) Fellows Graduation Ceremony at ICBA, Dubai



The collection of seed along with tag of individual genotype name and maintenance of different sized pack through proper weighting for various uses



Experiment on germination of seeds from the germplasm gene bank, Central Analytic Laboratory, ICBA, Dubai



Water sample analysis for salinity and temperature at ICBA, Dubai



Working on Hydroponics system in green house at ICBA, Dubai

Student Development Training Programmes :

1. Enterprenurship Development Programmes:

Glimpse of the Programmes



Inauguration ceremony of Campus to Corporate training

Group photo of Campus to Corporate training



Practical session during campus to corporate training



Certificate distribution to the beneficiaries



Group photo of participants of E-Buisness and Business Plan

2. Skill Development Programs:

Glimpse of the Skill Development programmes



Interaction of expert with participants



Practical activity by students



Dr. K. C. Patel talking about the significance of Social and Human values



Shri Hiren bhai Mehta talking to the participants



Mr. Pradeep Sharma interacting with the gathering



Group photo of training programme on "English Speaking and communication skills"



JAU students' participation in Brackish water Aquaculture Farmers' Conclave at Surat, Gujarat

3. Vocational Training Programs

Glimpse of the Vocational Training Programmes



Group photo of valedictory function for IoT based vocational training



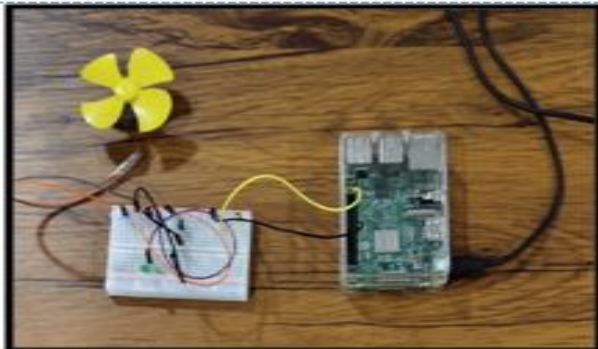
Certificate of excellence distribution for top three group in IoT Training



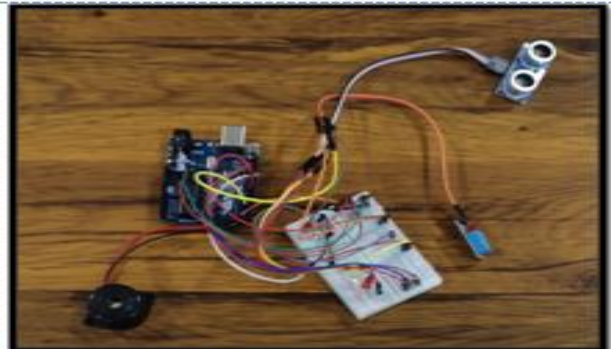
Certificate of excellence distribution for top three group in IoT Training



Feedback speech related to training by Mr. Yogendra verma



Automatic Motor Controlled by Internet (Web)



Warehouse monitoring for fire hazards & rodent



Voice control home device



Farm Protection using ultrasonic sensor



Expert Lecture given by Shri. Jaydipsinh Kathota on 'Use of satellite imageries and GIS for aquaculture site selection and potential resource mapping'



Expert Lecture given by Mr. Dhaval Jungi on 'Application of GIS and remote sensing in marine fisheries and Coastal zone Management'



Motivational remarks by, Shri Piyushbhai Fofandi



Expert Lecture delivered by Tom C. Joseph, on 'Requirements for Approval of Establishments to Process Fish & Fishery Products for Export from India (Plant/Cold Storage)'



Certificate Distribution to the participants



Group Photo with students and dignitaries in the vocational training on "Advanced Fish Processing Technologies"



Practical sessions on CAD application for Agricultural Impliments



Inaugural function of Enhancing preparedness to Competitive Exams



Inaugural function and release of Training manual in “ Five Days Vocational Training Programme on “Profitable Dairy Farming”



**Group Photo during Five Days Vocational Training Programme
Autopilot Drone Development**



Hands-on experience for the participants with drones during Vocational Training Programme Autopilot Drone Development



Group Photo of Five Days Vocational Training Programme : Biorational Approaches for Plant Disease Management



Hands-on experience for the participants during Five Days Vocational Training Programme Biorational Approaches for Plant Disease Management



Lighting of the lamp by the dignitaries in five days vocational training program on “New-Age Skill under changing Agriculture Scenario”



Technical lecture delivered by Mr. Gaurang Narang, CEO, Vertical Farming Technologies Pvt. Ltd., Bengaluru, Karnataka



Technical lecture delivered by Dr. A. B. Patil, Officer on Special Duty, Office of the Deputy Chief Minister, Government of Karnataka



Technical lecture delivered by Mr. Syed Asadur Rahman, Sr. Research engineer, Eduxlab, Gurugram, Haryana



Mr. Tushar Sumera, IAS, Municipal Commissioner, Junagadh Municipal Corporation, Junagadh, Gujarat delivered expert lecture



Technical lecture delivered by Dr. Manishkumar H. Vaghasiya, Executive Director, Integrated Coating and Seed Technology India Pvt. Ltd., Ahmedabad, Gujarat



Group Photo of Five Days Vocational Training Programme on Alternative Farming Systems to Improve the Learning Skills in Agronomy



Expert Lecture Sessions during Five Days Vocational Training Programme on Problems and Prospects in Palm Tissue Culture and Cryopreservation



Hands-on experience for the participants during Five Days Vocational Training Programme on Problems and Prospects in Palm Tissue Culture and Cryopreservation



Inaugural Function of Five Day Special Skill Development Training Programme on Applied Mathematics for Agricultural Decision Making



Expert lecture Sessions during Five Day Special Skill Development Training Programme on Applied Mathematics for Agricultural Decision Making



Chief guest of International conference Dr. A. R. Pathak, immediate Ex-Vice Chancellor with the students and staff of JAU at College of Agriculture, GBPUA&T, Pantnagar, Uttarakhand



Group photo of JAU Faculty with trainees and Director of NAARM at Rajendranagar, Hyderabad



Expert Lecture in Vocational training on Automation and Advances in Chromatography



Expert lecture in Vocational training on Application of one health concept for control of emerging zoonoses and health threats



Expert Lecture in Vocational training on Alternative Scientific Modalities to Improve the Learning Skills in Veterinary Anatomy



Interaction of Expert with gathering in Vocational training on New Approaches and OMICS Tools for Identification and Control of Ticks and Tick-Borne Disease



Expert lecture in Vocational training on Latest Advancement in Upstream Reproductive Physiological Techniques

4. Incubated Training



Inauguration function of Advances in Shrimp Culture Technology



JAU students' participation in TIFAN-2020, Pune, Maharashtra



Presidential Address by Dr. A. Y. Desai in function of Advances in Shrimp Culture Technology



Group photo of Advances in Shrimp Culture Technology training

5. Certification course



Lecture Session during Certificate Course on Export-Import of Agricultural Commodities, Rajkot, Gujarat



JAU students' training on "Data Analytics in Agriculture" at DA-IICT, Gandhinagar

Field Exposure:



Field visit during Processing and value addition of high value Crops, Rajkot, Gujarat



Field visit at Krishna Farm and Nursery, Ratang, Gujarat in Five Days Vocational Training Programme Entrepreneurship in Nursery Management



Field visit during Entrepreneurship in Nursery Management training, Ratang, Visavadar

Environmental Safeguards :

Junagadh Agricultural University in the current scenario of mitigating climate change and environmental sustainability takes due care for environmental safeguards activities during the implementation of this project.



JAU Campus Cleaning Actiivity initiated by Hon. Vice Chancellor along with officers under SWACHCH BHARAT MISSION on 2nd October 2019



Junagadh Agricultural University officers along with Students promoting environmental awareness rally on 01st February, 2020



JAU Students rally on environmental awareness on 01st February, 2020



Student participated in Marathon on theme “ Run for Environment” on 02nd February, 2020 conducted by the Junagadh Municipal Corporation, Junagadh



Student participated in Marathon on 02nd February, 2020 conducted by the Junagadh Municipal Corporation, Junagadh



Celebration of WORLD FOOD DAY on the theme of “Our actions are our future, healthy diets for a zero hunger world” by JAU, Junagadh



Environmental Safeguard Program on “Environmental Awareness” at Gir WildLife Sanctuary, Sasan, Gir Somnath, Gujarat



Costal cleaning program by JAU students under SWATCH BHARAT Mission



Green Initiative by JAU - Tree Plantation Activity at JAU Campus



Renewable Energy Initiatives by JAU, Junagadh



Barrier free access for the physically challenged



Different Sign board inside and outside of the buildings and laboratories of JAU



Notice boards for display of information



Provision of parking



Preservation of existing trees to the extent possible to maintain the flora and fauna



Rain water harvesting at JAU



JAU students won two gold and one silver medals in AGRISPORTS-2020

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