

# **Annual Progress Report (2020-21)**

## **NAHEP-INSTITUTIONAL DEVELOPMENT PLAN**

**Strengthening Institutional Capacity to Produce Skilled Professionals  
for Market Driven Agriculture**



Submitted By



**CCS Haryana Agricultural University, Hisar-125 004**

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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.

Under NAHEP, CCS Haryana Agricultural University (HAU), Hisar is implementing the Institutional Development Plan (IDP). The project is improving efficiency of Agricultural education through enhanced faculty competence, innovative partnerships with industry and international universities and strengthening/ renovation/modernization of existing physical facilities. It has been intended to initiate innovative courses and training programs in partnership with industry and universities abroad to enhance employability and nurturing entrepreneurial skills to produce the next generation of graduates and leaders for climate resilient market driven sustainable agriculture in a global context. Specific activities undertaken include institutional capacity building and global knowledge partnerships through faculty development, curriculum enhancement, student and faculty exchanges, internships and experiential learning with industry, skill development activities, alumni networks, agribusiness incubation centre, and university industry conclave.

## **2. Progress made during period**

The progress made across each components of NAHEP during April'20 to March '21 is provided.

### **i. Component 1a: 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.

**a. Procurement:**

- Equipment purchased upon approval in STEP

S.No.	Activity Reference No. / Description:	Procurement Category	Evaluation Options	Process Status
1.	IN-CCS HAU HISAR-117122-GO-RFQ / NIR Spectrophotometer ( One in number)	Goods	RFQ	Completed
2.	IN-CCS HAU HISAR-117444-GO-RFQ / Dry bath (One in number)	Goods	RFQ	Completed
3.	IN-CCS HAU HISAR-90554-GO-RFQ / Nanodrop/microvolume spectrophotometer	Goods	RFQ	Completed
4.	IN-CCS HAU HISAR-169099-GO-RFQ / Digital Balance (One in number)	Goods	RFQ	Completed
5.	IN-CCS HAU HISAR-90657-CW-RFQ / Modernization of lecture rooms (COA) including smart class room accessories	Goods	RFQ	Completed
6.	IN-CCS HAU HISAR-169103-GO-RFQ / Digital Microscope ( Five in number)	Goods	RFQ	Completed
7.	IN-CCS HAU HISAR-117441-GO-RFQ / Micropipettes Sets (five in numbers)	Goods	RFQ	Completed
8.	IN-CCS HAU HISAR-169109-GO-RFQ / pH Meter (two in number)	Goods	RFQ	Completed
9.	IN-CCS HAU HISAR-169123-GO-RFQ / CCTV with recorder ( Five in number)	Goods	RFQ	Completed
10.	IN-CCS HAU HISAR-169261-GO-RFQ / Office Equipments (Air Conditioner (1.5tons) with stabilizer	Goods	RFQ	Completed
11.	IN-CCS HAU HISAR-169110-GO-RFQ / Hot Plate Stirrer	Goods	RFQ	Completed
12.	IN-CCS HAU HISAR-90633-GO-RFQ / Books and Journals	Goods	RFQ	Completed

13.	IN-CCS HAU HISAR-169258-GO-RFQ / Office Tables ( four in number), Standard table ( Five in number), Office Chairs (five in number), Book Shelf ( Five in number)	Goods	RFQ	Completed
14.	IN-CCS HAU HISAR-117443-GO-RFQ / SPAD Plus Chlorophyll Meter (two in number)	Goods	RFQ	Completed
15.	IN-CCS HAU HISAR-117436-GO-RFQ / Ice Maker( One in number)	Goods	RFQ	Completed
16.	IN-CCS HAU HISAR-90541-GO-RFQ / Quantitative Real time PCR	Goods	RFQ	Completed
17.	IN-CCS HAU HISAR-90684-GO-RFQ / smart class room equipments (interactive panels, podium, microphone, audio system, cctv camera with recorder, visulaiser, biometric attendance system)	Goods	RFQ	Completed
18.	IN-CCS HAU HISAR-117446-GO-RFQ / Equipment for precision farming (Drone for GPS based crop monitoring, Pneumatic Planter (6 row),Auto steer system for Tractor, LIDAR based Speed Device, PTO Torque Sensor)	Goods	RFQ	Completed
19.	IN-CCS HAU HISAR-90551-GO-RFQ / gel electrophoresis with power supply	Goods	RFQ	Completed
20.	IN-CCS HAU HISAR-90581-GO-RFQ / Puff gun machine	Goods	RFQ	Signed
21.	IN-CCS HAU HISAR-90662-CW-RFQ / Modernization of lecture rooms (COHS) including smart class room accessories	Goods	RFQ	Signed
22.	IN-CCS HAU HISAR-90647-CW-RFQ / Renovation/repair/refurbishment/extension of laboratory (COAE&T)	Works	RFQ	Signed
23.	IN-CCS HAU HISAR-117533-GO-RFQ / Computer and Peripherals (One Audio system for smart class , One LCD projector with screen , One Central server for IDP cell, Internet connectivity to IDP	Goods	RFQ	Signed

	cell, smart class rooms, Advanced ICT teaching aid)			
24.	IN-CCS HAU HISAR-171106-GO-RFQ / Vacuum Dehydrator ( One in number)	Goods	RFQ	Signed
25.	IN-CCS HAU HISAR-171104-GO-RFQ / Cereal Flake production line ( One in number)	Goods	RFQ	Signed
26.	IN-CCS HAU HISAR-169096-GO-RFQ / Gel Electrophoresis System with Power Supply (One in number)	Goods	RFQ	Material received
27.	IN-CCS HAU HISAR-90653-CW-RFQ / Renovation/repair/refurbishment/extension of laboratory (COHS)	Works	RFQ	Signed
28.	IN-CCS HAU HISAR-171108-GO-RFQ / Cookie dropping Machine ( One in number)	Goods	RFQ	Signed
29.	IN-CCS HAU HISAR-90659-CW-RFQ / Modernization of lecture rooms (COAE&T) including smart class room accessories	Goods	RFQ	Signed
30.	IN-CCS HAU HISAR-90575-GO-RFQ / semolina making machine	Goods	RFQ	Signed
31.	IN-CCS HAU HISAR-169100-GO-RFQ / Water purifier system ( One in number)	Goods	RFQ	Completed
32.	IN-CCS HAU HISAR-117423-GO-RFQ / Vacuum Fryer ( One in number)	Goods	RFQ	Signed
33.	IN-CCS HAU HISAR-169111-GO-RFQ / Growth Chamber ( One in number)	Goods	RFQ	Material received
34.	IN-CCS HAU HISAR-169122-GO-RFQ / Normalized Difference Vegetation Index ( One in number)	Goods	RFQ	Material received
35.	IN-CCS HAU HISAR-90570-GO-RFQ / Biscuit cutting machine	Goods	RFQ	Signed
36.	IN-CCS HAU HISAR-169119-GO-RFQ / Hybridization Oven ( One in number)	Goods	RFQ	Material received

37.	IN-CCS HAU HISAR-171109-GO-RFQ / Hunter Color Lab ( One in number)	Goods	RFQ	Signed
38.	IN-CCS HAU HISAR-169106-GO-RFQ / Fragment Analyzer ( One in number)	Goods	RFQ	Pending Implementation
39.	IN-CCS HAU HISAR-176297-CW-RFQ / Renovation/repair/refurbishment/extension of laboratory two in number (One each in COA, Hisar and COBS&H)	Works	RFQ	Under Implementation
40.	IN-CCS HAU HISAR-90691-GO-RFQ / software for students activity (online attendance, grade submission, plagiarism etc.)	Goods	RFQ	Pending Implementation
41.	IN-CCS HAU HISAR-169117-GO-RFQ / Infrared Thermometer ( One in Number)	Goods	RFQ	Material received
42.	IN-CCS HAU HISAR-178324-GO-RFQ / Modernization of food processing lab One in number (All quartz double distillation unit, Biosafety Cabinet, Vertical deep freezer, Fume hood)	Goods	RFQ	Signed
43.	IN-CCS HAU HISAR-176296-CW-RFQ / Modernization of lecture room five in number ( One lecture room each in COA Hisar, COA Kaul, COAE&T, COHS and COBS&H)	Goods	RFQ	Signed
44.	IN-CCS HAU HISAR-173952-GO-DIR / Computer & Peripheral ( Anti Plagiarism tool, Computer Software)	Goods	RFQ	Pending Implementation
45.	IN-CCS HAU HISAR-173953-GO-DIR / Books & Journals (e-books for central library)	Goods	RFQ	Material received
46.	IN-CCS HAU HISAR-171110-GO-RFQ / Potter Tower ( One in Number)	Goods	RFQ	Signed
47.	IN-CCS HAU HISAR-169243-GO-RFQ / Smart class room equipment (Five in number) Interactive panels, podium, microphone, audio system, CCTV Camera with recorder, visualizer, bio metric attendance system	Goods	RFQ	Completed

48.	IN-CCS HAU HISAR-176434-GO-RFB / Automation, robotics and artificial intelligence lab equipment (Programming Boards with accessories, Product manufacturing Machines ,Robotics teaching kits, Equipments for measuring vegetation indices, Transducers and actuators, trainer kits.	Goods	RFB	Under Implementation
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- Lab No 57, Department of Nematology is being renovated in COA, CCCSHAU, Hisar.
- Lecture room No 9, in COA is being renovated.
- Renovation of lecture room No. 3 in COHS is under process.
- Conversion of lecture room into smart class room COA, Kaul is under process.
- Biochemistry lab at COBS renovation is under process.
- Conversion of lecture hall into smart class room at COBS is under process.
- Renovation of lecture hall 5 at COAE is under process.
- Relevant documents were uploaded on STEP.

**b. Trainings and workshops:**

• **For Students:**

S. No.	Details of training /workshops/ Interactive session/Guest Lectures	Student beneficiaries	No. of students benefited
1.	National webinar on “locust: A serious threat to Agriculture” was conducted on 29 May, 2020.	Students and Faculty, CCSHAU, Hisar	240
2.	Webinar on Impact of COVID-19 on Agricultural Education “was conducted on 01 June,2020	Students of CCSHAU, Hisar	40
3.	Three day training programme on” Basics of Entrepreneurship in Agriculture” in association with College of agriculture Kaul”	UG students of COA, Kaul	25
4.	Webinar on Emerging trends in Physics and its applications in agriculture on 29 June 2020.	Students and faculty	650
5.	ART Festival 2020	UG Students	65



6.	COVID-19, Me and Nature: My Observation	Students	89
7.	Online seminar on “Synthesis of Chitosan –based nanoparticles “on 9 June 2020.	UG students	20
8.	Live Webinar report on International training in Pedagogy	UG students	25
9.	Webinar on “Value Addition of Horticultural crops-A way to Entrepreneurship” was organized by CCSHAU NAHEP-IDP in collaboration with Saina Nehwal Institution of Agricultural Technology Training and Education from July 01 to 04.	Farmers and students	30
10.	Online training on “Adding Meaning to Nutritional data” was organized by Dr. Sangeeta C. Sindhu (HOD, F&N) on 5 <sup>th</sup> July 2020	UG students	100
11.	IDP NAHEP organized a webinar on “Computational techniques for applied sciences” in association with Department of Mathematics and Statistics on 06-07, July, 2020.	UG Students of CCSHAU Hisar	30
12.	International webinar on “International Funding for Young Researchers- an Opportunity” on July 11, 2020 for Scientists and students.	Students and Faculty	150
13.	“Online International training on climate change” was conducted in lecture series on 16, 23, 30 July and 6 <sup>th</sup> August 2020.	UG students	30
14.	Breastfeeding week on theme Support “Breastfeeding for a Better Planet” was celebrated by IC College of Home Science under NAHEP (IDP Project) from 1 <sup>st</sup> - 7th August 2020. Under this three different competitions viz., Poster, Quiz and Innovative Nutritious Recipe competition were organized online for CCSHAU students and slogan writing competition was organized for Rural	Students, CCSHAU Hisar	198

	Women/Field Functionaries.		
15.	Webinar on “Nematode problem in horticultural crops and their management” was organized on 09 <sup>th</sup> August, 2020.	Students and faculty	125
16.	online training on “How to skill up during COVID-19” was organized from 5 <sup>th</sup> Aug to 14 <sup>th</sup> of August, 2020	UG students	30
17.	Poster Competition theme “Har Jiwan ho Poshan se Roshan” under NAHEP-IDP by Department of Foods and Nutrition, COHS, CCSHAU Hisar on September 18 <sup>th</sup> during celebration of “National Nutrition Month” September 2020.	UG students	43
18.	International Webinar on “Combating Hidden Hunger-Obstacles & Interventions for Sustainability” under NAHEP-IDP by Department of Foods and Nutrition, COHS, CCSHAU Hisar September 19 <sup>th</sup> , 2020	Students and faculty	600
19.	Virtual training program on Pesticide safety “Responsible Use of Crop Protection Products” on 24 Dec,2020	Students and faculty	100
20.	Three days Virtual workshop on “Digital Library Frame Work for Strengthening Agricultural Knowledge” on 17-19 <sup>th</sup> Feb, 2021 through Zoom platform.	Students	400
21.	Webinar on “quantifying the quality traits in food” on 27 <sup>th</sup> June 2020 by Dr. Sangeeta C. Sindhu	Students and faculty	200

#### **c. Overseas trainings**

- 25 faculties were selected for the overseas training. But, due to covid19 continuous lock down, international training for faculties were suspended.
- 68 students were have been identified for the academic year 2020-21 for overseas internship programme but due to Covid-19, continuous lock down internship programme for students were postponed.

#### **d. Administrative work:**

- Finance and related work:
  - All payments were done through PFMS system.

- Audit for the year 2019-20 was completed from the CA team
- Interest earned during 2019-20 was returned to ICAR
- IUFRs were submitted for all the four quarters and annual expenditure was also submitted
- Review meetings:
  - Review meetings conducted by PIU for PMTS, Procurement, EAP and ESP were attended by PI, Co-PIs and team.
  - The suggestions and instructions given during the review meetings were noted and implemented thereafter
- Student related:
  - Various numbers of online National and International trainings, Webinars and workshops, literary fest and online competition for singing, dancing were conducted during COVID-19 pandemic situation.
  - Purchased E-books and Books for central library.
- Environmental Sustainability Plan:
  - Rotavapour installed for disposal of hazardous liquid waste
  - Fire extinguishers installed in laboratories and hostels
  - Bio hazardous waste bins installed in the Laboratories
  - Roof top water harvesting system (02) COA & COAET
  - Establishment of solar system in the campus

All the compliances related to environmental safety were fully complied while implementing the construction / renovation activities carried out in the project.

- Equity Action Plan:
  - Sentry napkin wending machine has been procured and installed in colleges and girls hostels in Hisar, Kaul and Bawal campus
  - Incinerator machine for disposal of used sentry napkins have been installed for maintenance of hygiene in college and hostel premises
  - Web camera and speakers have been procured for effective online teaching
  - Facilities for physically disabled persons like toilets, ramps, lift were monitored and maintained in the campus

**e. Major innovations/achievements during the period**

- Barcodes were prepared for the procured articles in IDP and pasted the barcodes stickers for the same.
- All the trainings and workshops organized for students and faculty of CCSHAU were updated on NAHEP website periodically
- Food analysis Lab in Department of Foods and Nutrition, I.C. College of Home Science and Farm power and machinery lab is renovated in COAE&T, CCCSHAU, Hisar.

- Procured different goods and equipments to improve the work efficiency of students and researchers.
- Various numbers of online National and International trainings, Webinars and workshops, literary fest and online competition for singing, dancing were conducted during COVID-19 pandemic situation from April to February 2021
- Renovation and modernization of 5 lecture rooms and 2 labs in different colleges of University with latest ICT tools is under process. Estimates for the smart class rooms and labs for different colleges have been submitted for the approval. The specification of the smart class room gadgets has been finalized and in process of purchasing of the same.
- Online Motivational lectures and career opportunity lectures were delivered to students of CCCSHAU Hisar, by eminent and successful alumni of CCSHAU.
- National level trainings/webinars were conducted on current environmental issues such as locust: A serious threat to Agriculture, “Responsible Use of Crop Protection Products Online International training on climate change, Adding Meaning to Nutritional data”, “Nematode problem in horticultural crops and their management” and Combating Hidden Hunger-Obstacles & Interventions for Sustainability.
- Online competition, quiz, slogan writings were conducted on different themes such as “Support Breastfeeding For A Better Planet”, “Har Jiwan ho Poshan se Roshan”, ART Festival 2020
- Virtual workshop on “Digital Library Frame Work for Strengthening Agricultural Knowledge” where 12 specialists delivered lecture on frame work of digital library and how it can be used in strengthening agriculture knowledge.
- All the trainings and workshops organized for students and faculty of CCSHAU were updated on NAHEP website periodically.

**ii. Progress made during period - Component 1a: Support to Institutional Development Plan (IDP) of AUs**

**a. Output-outcome monitoring**

S. N.	Particulars	Apr'20 to March'21		Remarks (Action plan for areas where improvement is needed)
		Plan	Achievement	
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 /	7	-	Renovation of 5 lecture rooms and 2 labs is under progress

S. N.	Particulars	Apr'20 to March'21		Remarks (Action plan for areas where improvement is needed)
		Plan	Achievement	
	placement cell etc.)			
2.	Number of pilot courses added / upgraded on communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills, industry-oriented courses etc.	3 Two certificate course in the Dept of Soil and Water Engg. and Processing and Food Engg. was planned in COAET college and One Certificate course in the Deptt of. F&N was planned	Three month certificate course on : (i) Design Installation, Operation and Maintenance of Protected Structures (ii) Food Processing. (iii) Value Addition And Post-Harvest Technology certificate course has been approved by the BOS meeting	COVID-19 pandemic, the course were not started, as the students were not allowed to come in the college.
3.	Additional revenue generated through institutional activities with industries in INR lakhs	-	-	-
4.	Revenue generated through public usage of infrastructure for academic activities in INR lakhs	-	-	-
5.	Number of MoUs signed with industry for knowledge exchange programs/ internships / short term training programs etc.	-	5	Sri Laxmi Venkateswara Seeds, Sampoorana seeds, Haryana

S. N.	Particulars	Apr'20 to March'21		Remarks (Action plan for areas where improvement is needed)
		Plan	Achievement	
				State Cooperative Marketing and Federation Limited (HAFED), Habitat Genome Improvement Primary Producers Company Ltd., and Astral International Pvt Limited.
6.	Improved AU revenue generation ( % change in Internal revenue of AU )	-	-	-
7.	Number of international trainings undertaken by faculties under IDP comp	15	-	25 faculties were selected but could not be sent due to covid19
8.	Number of national trainings undertaken by faculties under IDP comp	-	-	-
9.	Number of international trainings undertaken by students under IDP comp	20	-	68 students were selected but due to continuous lock down of covid19, the internship programme was not conducted.
10.	Number of national trainings	-	5	Virtual trainings

S. N.	Particulars	Apr'20 to March'21		Remarks (Action plan for areas where improvement is needed)
		Plan	Achievement	
	undertaken by students under IDP comp			organized for Students through Google met, Zoom platforms etc.,
<b>11.</b>	Number of direct beneficiaries of the project	4000	3190	
<b>12.</b>	Number of female beneficiaries out of total direct beneficiaries	1600	1800	

**b. Input and activity monitoring**

Input / Activity indicator	Sub- head / category	Apr'20 to March'21		Activity elaboration
		Expenditure / input in INR lakhs		
		Planned	Utilization	
<b>Goods and equipments</b>	Equipment, Plant & Machinery	-	-	-
	Office equipment	2.5	2.14	IDP cell
	Laboratory equipment	262.0	165.8	To run courses and UG/PG practical's
	Furniture & fixtures	5.0	4.73	For IDP cell
	Computers and Peripherals	10.0	13.29	For IDP cell
	Books and Journals	15.0	19.89	For central library
<b>Civil works</b>	Minor repair and renovation works	75.0	59.77	Renovation of 5 lecture rooms and 2 labs
<b>Human capacity building</b>	National level training	-	-	
	International level training	-	-	
	Short visit/	5.0	-	

Input / Activity indicator	Sub- head / category	Apr'20 to March'21 Expenditure / input in INR lakhs		Activity elaboration
		Planned	Utilization	
	seminars			
	Meetings and workshops	5.0	-	
<b>Consultancy</b>	National level consultancies	1.0	-	
<b>Recurrent cost / Miscellaneous</b>	Travel	5.0	0.256	For attending meeting/seminar/workshops
	Contractual services	56.0	63.231	SRF/JRF/ data operators
	Operational costs	327.0	43.76	
	Institutional charges	19.4	-	
<b>Total</b>		<b>787.9</b>	<b>372.956</b>	

### 1. Case study/Success story:

#### a) Experience sharing:-

Training on “Enhancement of Handicrafts Skills for Entrepreneurship Development” from 6<sup>th</sup> – 18<sup>th</sup> March, 2020 was organized for UG students of CCSHAU, Hisar. Mr. Rajesh Jangra, Dr. Gita Jangra, Dr. Anju Chaudhary, Mr. Abhimanyu Soni and Mrs Renu jindal as experts demonstrated use of various techniques viz. Lamasa Clay, Paper Mache art, use of Marble Clay Powder to make wide range of products such as sculptures, paintings, stone carving, pottery and decorative items like photo frames, wall hangings, pen stands and other utility items. **Thirty** students successfully completed this training.





#### Training on Enhancement of Handicrafts Skills for Entrepreneurship Development

The various benefits of the training listed by the students were:

- Each hand made item is special and unique and creating it makes them feel special and stress free during the lockdown period.
- It was a win-win training experience for them. This helped them academically as well as professionally, as they can now do their practical work with more of creativity and could have better grades.

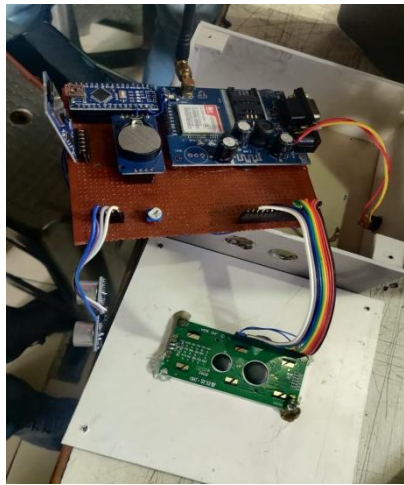
**The impact of the training** was that two girl students of College Of Home Science namely Ms. Sakshi Sharma and Ms Yashvee practice these skills with increased vigor and enthusiasm because of income generation opportunities. Both of them as a team used techniques they learned while training like Lamasa Clay, Paper Mache, use of Marble Clay Powder to make various decorative items like Wall Hangings, Photo Frames, Pen Stands, Jewellery Stand etc. which they sold out to their neighbors and have generated money for themselves.



**a. Story brief: Keshav Goel 2017AE18BIV**

A seven days training on Robotics and automation was conducted in COAE&T in which we were given information regarding the use of Arduino UNO and how to attach and use various sensors attached to it. As an outcome of the training, he was inspired to develop a pond level depth measurement instrument. The instrument designed uses an ultrasonic sensor to measure the

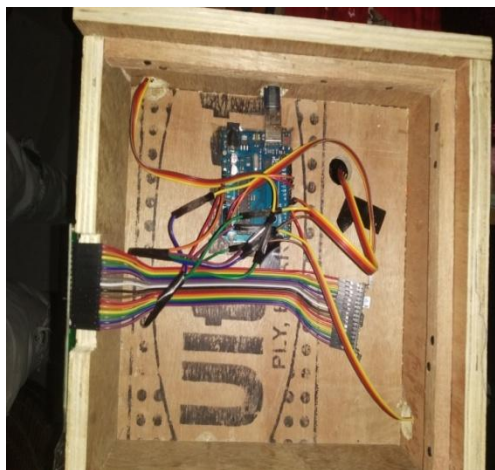
depth of water. It also consists of a GSM module which sends the reading via SMS at regular intervals. To make the reading more accurate an SD card module is also attached to store the readings in the SD card which can be retrieved whenever needed. The working principle is based on the reflection of ultrasonic waves by the water. The level of water in pond is measured by subtracting the pond depth from the empty depth of pond. We would have not been able to build the project without having the knowledge gained from the training. Now we are working to make the model more compact so that it can be made commercially available.



**Mukul Saini (2017AE20BIV)**

In the March, 2021 a training entitled "Robotics & Automation" was organized in College of Agricultural Engineering & Technology, CCS Haryana Agricultural University under NAHEP. Although i was not a part of training because of limited seats, but my teacher's allowed me to attend the training after knowing my interest in the related topic. The training was awesome. I was a beginner to the era of Robotics so i wasn't aware much about Arduino and all those things but after attending the 7 days training i got to know many things, how various digital things works. After completing the training i tried to work practically with arduino. I learnt many new things from YouTube and built an "Arduino based Dimension Measuring System for round fruits". It took only 3 for me to complete the whole work and its functioning very well. Its giving the dimensions in 1-2 seconds with great accuracy. Now I'm still working on it to make it more effective. Now i had titled it as "Arduino based physical properties measuring system for Round fruits". Now it would be telling physical properties like Length Breadth, Height, Weight, Surface Area, Volume, Geometrical Mean Diameter (GMD), Sphericity. These are all things we need to calculate for any fruits before doing any research on it and it is a time consuming process but the system developed by me would give the values within a few seconds. This is all about my project.





#### b) MoU signed and Publications

Sr. No.	Name of Organization	Date of signing
1	Massey University New zealand	13-10-2020

#### MoUs signed with National institutions:

Sr. No.	Name of Organization	Date of signing
1	Indian Insritute of Resins and Gums, Ranchi	07.01.2020
2	Amity Universities and Institutions	17.01.2020
3	IITM (Indian Institute of tropical Meteorology) Pune	18.12.2020
4	Eternal University Baru Sahib, H.P.	06.07.2020
5	Astral International Pvt Limited for publication work of package of practices	06.07.2020
6	Ampoorna seeds, Kurnool, Andra Pradesh	08.01.2020
7	Sri Laxmi Venkateswara Seeds, Kurnool, Andra Pradesh	20.01.2020
8	ABIC, CCS HAU	23.10.2020
9	Haryana State Cooperative Marketing and Federation Limited (HAFED), sector 5 Punchkula	01.07.2020
10	M/s Habitat Genome Improvement Primary Producers Company Ltd., Village Ramayan, Hisar	01.07.2020

#### Publication:

- The university is publishing the monthly newsletter of CCSHAU-IDP showing the activities completed and the upcoming events in the university.



## पोस्टर मैकिंग, प्रश्नोत्तरी, रेसिपी और स्लोगन स्पर्धा आज एचएयू में होगी

**सिटी रिपोर्टर •** एचएयू के इंदिरा चक्रवर्ती गृह-विज्ञान कॉलेज के छात्र एवं पोषण विभाग की ओर से 6 अगस्त यानि आज विभिन्न प्रतियोगिताओं का ऑनलाइन आयोजन किया जाएगा। डॉ. संगीता चहल ने बताया कि इन प्रतियोगिताओं का आयोजन विवि के वीसी प्रो. समर सिंह के दिशा-निर्देश व कुशल नेतृत्व में किया जाएगा। 'राष्ट्रीय कृषि उच्च शिक्षा परियोजना' के सहयोग से इन प्रतियोगिताओं को गृह विज्ञान महाविद्यालय की अधिष्ठाता डॉ. बिमला दांडा की देखरेख में होगा। इसके तहत पोस्टर मैकिंग, प्रश्नोत्तरी, रेसिपी बनाना और स्लोगन प्रतियोगिताएं ऑनलाइन आयोजित कराई जाएंगी।

## बागवानी फसलों में सूत्रकृमि की समस्याएं और उनके समाधान पर होगा मंथन

**हिसार।** चौधरी चरण सिंह हरियाणा कृषि विश्वविद्यालय में 6 अगस्त को एक ऑनलाइन वेबिनार का आयोजन किया जाएगा, जिसमें बागवानी फसलों में सूत्रकृमि की समस्याएं और उनके समाधान विषय पर मंथन होगा। यह जानकारी देते हुए वेबिनार के संयोजक एवं सूत्रकृमि विज्ञान विभाग के अध्यक्ष डॉ. आरएस कंवर ने बताया कि यह वेबिनार विश्वविद्यालय के कुलपति प्रो. समर सिंह के दिशा-निर्देश व कुशल नेतृत्व में आयोजित किया जाएगा। इस वेबिनार के मुख्य वक्ता चौधरी चरण सिंह हरियाणा कृषि से इसी विभाग से सेवानिवृत्त विभागाध्यक्ष एवं भारतीय कृषि अनुसंधान परिषद् में सेवानिवृत्त प्रोजेक्ट कोर्डिनेटर डॉ. आरके वालिया होंगे। इस वेबिनार को अनुसंधान निदेशक डॉ. एसके सहरावत की देखरेख में आयोजित किया जाएगा। डॉ. आरएस कंवर ने बताया कि इस वेबिनार में बागवानी फसलों में सूत्रकृमि बीमारी की समस्याएं और उनके समाधान को लेकर कृषि वैज्ञानिक अपने विचार साझा करेंगे।

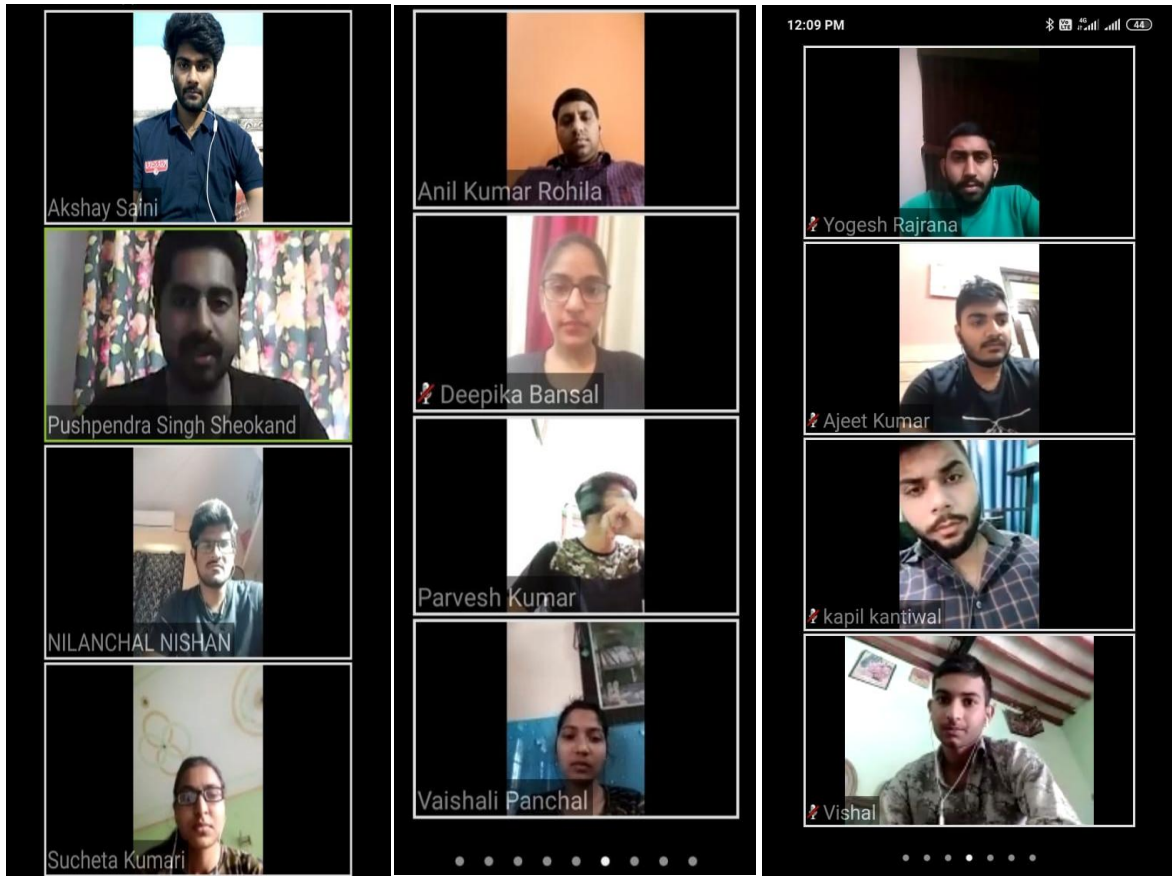
## हकूति में स्तनपान सप्ताह के तहत 6 अगस्त को होगी कई प्रतियोगिताएं

**सिटी पल्स न्यूज़, हिसार।** चौधरी चरण सिंह हरियाणा कृषि विश्वविद्यालय के इंदिरा चक्रवर्ती गृह-विज्ञान महाविद्यालय के छात्र एवं पोषण विभाग की ओर से विभिन्न प्रतियोगिताओं का ऑनलाइन आयोजन किया जाएगा। यह जानकारी देते हुए छात्र एवं पोषण विभाग की विभागाध्यक्षा डॉ. संगीता चहल ने बताया कि इन प्रतियोगिताओं का आयोजन विश्वविद्यालय के कुलपति प्रोफेसर समर सिंह के दिशा-निर्देश व कुशल नेतृत्व में किया जाएगा। स्तनपान सप्ताह के अवसर पर 'राष्ट्रीय कृषि उच्च शिक्षा परियोजना' के सहयोग से आयोजित इन प्रतियोगिताओं को गृह विज्ञान महाविद्यालय की अधिष्ठाता डॉ. बिमला दांडा की देखरेख में आयोजित किया जाएगा। इसके तहत पोस्टर मैकिंग, प्रश्नोत्तरी, रेसिपी बनाना और स्लोगन प्रतियोगिताएं ऑनलाइन आयोजित कराई जाएंगी। उन्होंने बताया कि इन प्रतियोगिताओं का मुख्य उद्देश्य स्वस्थ ग्रह के लिए स्तनपान को बढ़ावा देना है, जिसमें विश्वविद्यालय के विद्यार्थी हिस्सा लेंगे। इस प्रतियोगिताओं के परिणाम अगले दिन निकाले जाएंगे। विभागाध्यक्षा ने बताया कि सभी प्रतिभागियों को ई-प्रमाण पत्र जारी किए जाएंगे।

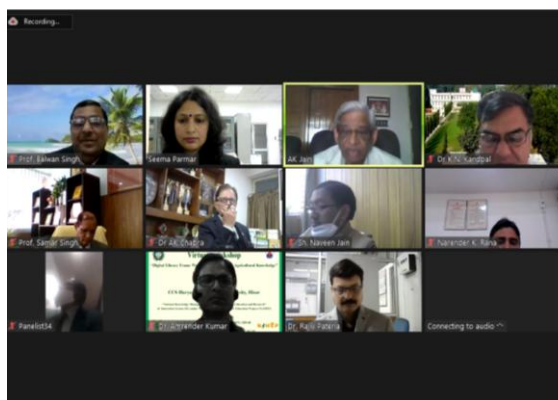
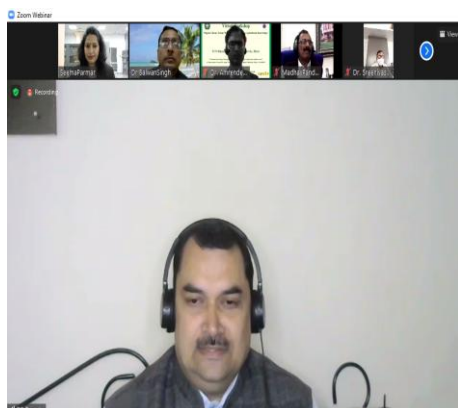


**हिसार।** एचएयू की लाइब्रेरी में आयोजित कार्यशाला के शुभारंभ अवसर पर संबोधित करते हुए कुलपति प्रो. समर सिंह।





**Glimpses of virtual meetings/ webinars/workshops**



Glimpses of Virtual workshop on “Digital Library Frame Work for Strengthening Agricultural Knowledge” on 17-19<sup>th</sup> Feb, 2021





### **Renovated labs and lecture rooms at different colleges**

#### **Challenges faced and lessons learnt under Component 1 a:**

- The equipment that was to be supplied by firms could not be supplied because of the lockdown. Thus amount earmarked for procurement remains unspent.
- Because of the present situation arises due to covid-19 there is pendency of the payment of the bills as lockdown order was implemented in the University and no office work was undertaken.
- Trainings for students were planned to be organized at MANAGE, Hyderabad and the dates were confirmed but due to lockdown could not be organized.
- Certificate courses and Remedial classes could not be fully materialized.

#### **Plan ahead (Key activities) for next reporting period**

- Renovation and modernization of 5 lecture rooms in different colleges of University with latest ICT tools
- Renovation and up-gradation of 2 labs with latest laboratory equipments for quality publication and Modernization of food processing lab
- Creation of robotics labs for teaching and training in the field of robotics and artificial intelligence
- Procurement of e-books and learning material for central library
- Procurement of goods and equipment
- Students and faculty international training programme
- Students National training at premier training institutes covering exposure visits
- Three certificate courses
- Skill enhancement and entrepreneurial training through agri incubation centre

- National and International conference (1 each), industry linkage conclave for better student placement avenues
- Conduct of Remedial courses for the weak students
- Online faculty development trainings and workshop will be organized
- Efforts will be made for online international training of faculty and students

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