



IDP-NAHEP Pantnagar Updates

G. B. Pant University of Agriculture & Technology
Pantnagar 263145, Uttarakhand

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Message of IDP Leader, GBPUAT, Pantnagar

Writing the Success Story of Educational Transformation

Educational transformation is an evolutionary process. Capacity building and nurturing the stakeholders of teaching-learning needs continuous and strategic interventions for which system support becomes imperative. The IDP-NAHEP project at Pantnagar played this critical role of generating an effective ecosystem which led the University towards swift transformation for online teaching-learning and evaluation. It is a matter of pleasure and satisfaction to see the freshers joining regular online classes after proper registration and other formalities. Several colleges of the University also organized online orientation of the freshers to keep the system in place. The IDP-NAHEP played the lead role in upbringing the new normal of online structures which was an integrated intervention much beyond merely providing hardware system. This holistic and responsible intervention of IDP-NAHEP, Pantnagar is indeed seminal and will go a long way in the story of educational transformation of the University.

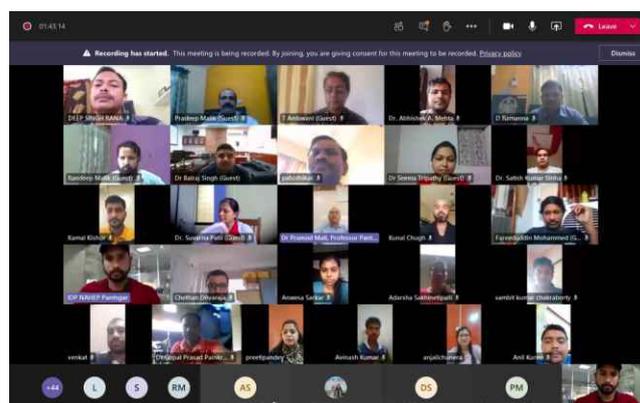


(Tej Partap)

Faculty Development Centre at Pantnagar Initiates its Journey

First Online Training Held on Pedagogy of Online Teaching

It is equally important for an academician to be an expert of subject as well as an expert of teaching, because being a subject expert does not necessitate that an individual will be an expert into teaching it. To enhance such capabilities of faculty members all across the country, the Faculty Development Centre (FDC) at Pantnagar will be running all its activities and events. To initiate, the FDC which has been granted to Pantnagar University under NAHEP Component 2, organized its first ever online training for faculty members of all agricultural universities of the country. The training was held on October 23-24, 2020 on the topic *Pedagogy of Online Teaching: Philosophy and Methods*. The guest for the inaugural session of the training were Dr. S.K. Soam, CPI, NAHEP Component 2, ICAR-NAARM, Hyderabad and Dr. Tej Partap, Vice Chancellor, GBPUAT, Pantnagar and Chairperson, FDC, Pantnagar. Stating the importance of FDC for the



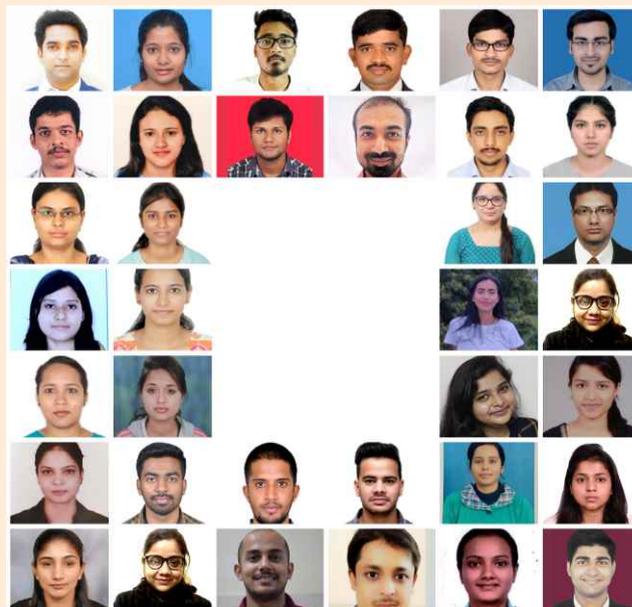
universities, Dr. Soam said that the purpose is to establish these centres as secondary NAARM at the university level. Dr. Tej Partap elicited that Pantnagar University is planning to explore more exhaustive areas of faculty training in days to come. The inaugural session of the training was followed by the first session

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Exclusive Remedial Classes Launched by IDP Pantnagar for UG Students Alumni Provide Handholding for Preparation of Competitive Examinations

The concept of remedial classes as popularly known spearheads the case of providing extra support to students with their regular academic curriculum. However, the IDP Pantnagar team took this concept ahead and expanded its domain by including support for competitive examination preparation to all undergraduate students of Pantnagar University. This exclusive approach towards the remedial classes is being supported by the alumni of the University, wherein those alumni who cracked the competitive examinations with flying colours would be leading these classes. The inauguration of the remedial classes was held on October 25, 2020 in the presence of Hon'ble Vice-Chancellor, GBPUAT, Pantnagar, Dr. Tej Partap, PI, IDP-NAHEP and Dean, College of Agriculture, Dr. S.K. Kashyap, Nodal Officer (Academic), Dr. S.K. Guru, faculty coordinators of remedial classes, and the IDP team. Speaking on the occasion, Dr. Tej Partap said that a major part of Pantnagar culture has always been the student networking and alumni relations and this dual initiative of remedial classes and alumni nurturing the current generation of students is indeed unique and will go a long way in strengthening the educational outcomes and the Pantnagar culture as well. Thereafter, all the college coordinators of remedial



courses including Dr. Amit Kesarwani, from College of Agriculture, Dr. Aman Kamboj, from College of Veterinary and Animal Sciences, Dr. Archana Kushawaha and Dr. Shefali Massey, from College of Home Science, Dr. Vipul Gupta, from College of Fisheries, and Dr. R.C. Srivastava, from College of Basic Sciences and Humanities, briefed about the structure and execution process of the remedial courses of their respective colleges. The online remedial classes begin from October 26, 2020.

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of the training which was led by Dr. Rajan Saxena, a renowned management academician who has served in various institutes like IIM Indore, NMIMS Mumbai, Xavier's Institute, S.P. Jain Institute of Management and Research, ICFAI Business School, Gurgaon etc. in various leading capacities. During his deliberation, Dr. Saxena emphasized that principles and philosophy of online teaching calls for an approach where we need to understand that in order to make the teaching more learner-centered the content must be at focus than the technology. On the second day of the training, three experts viz. Dr. R.N. Padaria, Principal Scientist and Professor, ICAR-IARI, New Delhi; Dr. Kavita Pathak, Director, Jaipuria Institute of Management, Lucknow and Dr. Poornima Gupta, Associate Professor, Great Lakes Institute of Management, Gurgaon took the sessions. Dr. R.N. Padaria discussed on the pedagogical concerns of online teaching during the session. Dr.

Kavita Pathak centered her talk around the tools and techniques for better delivery in online teaching. Dr. Poornima Gupta, in her deliberation advocated that the role of content development is important especially in virtual learning environment therefore for effective online teaching, focus must be on understanding the need of cognitive, affective and psychomotor domains of learning and thus content plan as well as preparation must be executed accordingly. Dr. S.K. Guru, HR Executive Officer and Coordinator, FDC, Pantnagar coordinated the event with his team of faculty members of the University comprising Dr. A.K. Upadhyay, Dr. S.C. Tripathi, Dr. Neelam Bhardwaj, Dr. Sanjay Kumar Sharma, Dr. Anupama Pandey, Dr. Avdesh Kumar and Dr. R.C. Srivastava. More than 150 faculty members from different universities of the country registered for the first FDC training programme.

Feedback of Interns of Internship Pathshala-3



Deepshikha Gharami , B.Sc. IInd Year, College of Home Science

Being a part of NAHEP Internship Pathshala has been a delightful experience. As an intern, I got an opportunity to explore various aspects of my way of working and also improving them. NAHEP provided a great platform to enrich my knowledge and boost my writing skills. This was indeed a valuable experience.



Khaba Moirangthem, B.Sc. IIIrd Year, College of Agriculture

The NAHEP Internship Pathshala has given me a unique opportunity to furnish my personality. It is a wonderful opportunity to interact with many people including various alumni. It has helped me to experience a new type of learning which I have not experienced in the previous years.



Niharika Arora, B.Sc. IInd Year, College of Agriculture

Pathshala-3 gave me an opportunity to explore new dimensions of my potential. The daily tasks made me explore the internet each day and learn something new. This experience was different than what we learn in a classroom, hence it gave me an inner boost in confidence to tackle challenges ahead.



Pooja Kaira, B.Sc. IInd Year, College of Agriculture

IDP-NAHEP's Pathshala-3 has rendered me the opportunity to get a valuable work experience as an intern. It has served as a platform to hone our skill sets and while contributing to our university at the same time. This internship not only boosted my self-confidence but also helped me to gain a sense of responsibility.



Rahul Bohara, B.Sc. IIIrd Year, College of Agriculture

The perfectly designed Internship Pathshala-3 has been an enriching experience that enabled me to learn, explore and boost my potential. The internship has provided me an opportunity to understand the functioning of different organizations and helped me gain a more practical approach towards life.



Rohit Bhatt, B.Tech IIIrd Year, College of Technology

I have learnt a lot of new things from NAHEP Internship Pathshala. The mentors have been very helpful in assigning and explaining the tasks. It has been a brilliant experience of learning which has made me a lot more confident. I am looking forward to learn a lot more things in upcoming days through this internship.



Simran Gupta, B.Sc. IIIrd Year, College of Home Science

NAHEP Internship has helped me to look on the work in a more professional way. Completion and execution of daily targets, gave me a sense of accomplishment. It was totally a relevant and valuable experience which led me to a whole new world of knowledge, skills, and learning.



Vartika Sharma, B.Tech IIIrd Year, College of Technology

Internship under NAHEP Pathshala-3 has been an amazing learning experience both personally and professionally. It is a good platform to enhance skills such as multitasking, communicating, learning to deal with diversity, and rigorous effort to meet the deadlines.

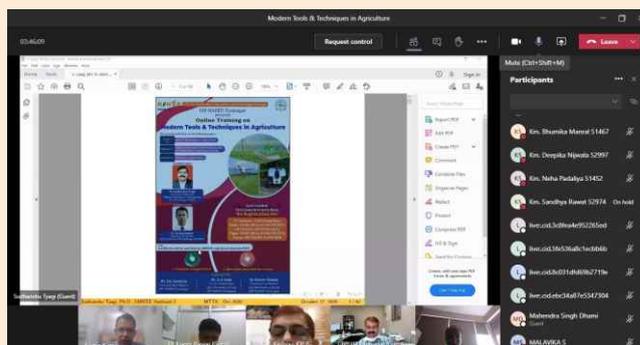


Vartul Pandey, B.Tech IInd Year, College of Technology

The NAHEP Internship Pathshala is an online internship which mainly emphasizes on practical activities. My job scope included editing, formatting and reporting work. I feel that it was an enriching experience to be part of this internship program as I got valuable experience through my engagement.

Two Days Training Organized on Modern Tools and Techniques in Agriculture

The technology is growing at a thunder speed owing to which its implications are expanding towards all domains including agriculture. Thus, it becomes important to keep updated about contemporary developments in agricultural technologies. Looking into this critical requirement, the IDP-NAHEP, Pantnagar has been organizing several workshops, trainings, webinars, etc. and the most recent one being an online training on *Modern Tools and Techniques in Agriculture*. The training was held on October 17-18, 2020 on the Microsoft Teams online platform. On the first day, training sessions were addressed by academic expert Dr. Sudhanshu Tyagi, Assistant Professor, Thapar Institute of Engineering and Technology, Punjab. He emphasised on the importance of agriculture by sharing the statistical data about the current and future demand for food with an increase in population. The participants were briefed about applications of the Internet of Things (IoT), Machine Learning, Cloud Computing and Block Chain in farming. The lecture session was followed by a tutorial session that helped the participants to get familiarized with different tools and techniques through simulation exercises.



On the second day of the training, the sessions were led by academic expert Dr. Sachin Kumar, Associate Professor, Amity School of Technology, Lucknow. Discussing about digital farming and the use of robotics in agriculture, he focused on the use of Raspberry-Pi and Arduino, and explained about different versions and advantages of using them and also shared the technical specification of the same. He touched issues like various challenges that are faced while applying these changes in India and across the world such as robust weather, internet connectivity, safety issues, etc. The session concluded with a vote of thanks by Dr. Rajeev Ranjan, Member, Academic Component, IDP-NAHEP who also coordinated the entire training programme.

Joint Director Central Silk Board Addresses Participants of Online Certificate Course on Sericulture

The online certificate courses offer an opportunity to interact with the intellectual and field expertise of the Pantnagar University and around the globe. These courses are useful to all individuals and organizations directly or indirectly linked to agriculture and to anyone who is interested to learn.

As a part of these online certificate courses, expert webinars are regularly held. Recently, as a part of Online Certificate Course on Sericulture a webinar session on *Understanding the Prospects of Silk Industry in India for Promoting Agriprenurship* was held on October 7, 2020. The webinar was delivered by Dr. Sardar Singh, Joint Director Central Silk Board (CSB), Govt. of India. After formal welcome remarks by Dr. Poonam Srivastava, the webinar initiated. Dr. Singh described the social, economic and cultural aspects of sericulture industry



prevailing in India since ancient times. He also briefed about the entrepreneurial opportunities in the current times and presented a plan for half acre land utilization in sericulture. The session was further vibrant with the discussions among the course instructors, resource person and the participants. Dr. R.P. Srivastava (Professor, Entomology) and Dr. Poonam Srivastava (Associate Professor, Entomology) were also present to answer the queries of participants along with the expert. The session was closed with the customary thank giving by Dr. S. K. Guru, Nodal Officer (Academic) who emphasized the value of entrepreneurship in the present era and the institutional benefit through some entrepreneurial interventions by the help of projects. He congratulated all participants for their enthusiastic engagement in the webinar.

Guest Lecture Held Online on Post Harvest Management and Startups

Start-up avenues in food industry are emerging because of the changing food habits and raising living standards of the people. The post harvest management of fruits and vegetables is one such sector that holds enormous potential for entrepreneurship. The guest lecture by leading professor of Agriculture and Food Engineering department of IIT Kharagpur, Dr. Hari Niwas Mishra held on October 31, 2020 also focussed on the same topic. Dr. Mishra who is also Nodal Officer of the Agri Incubation Centre at Kharagpur stated that start-ups are working on many innovative concepts like edible coating, shelf life enhancement of cut fruits and vegetables, bio plastic based packaging and utilization of fruits and vegetable wastes. Dr. Mishra advocated that the importance of fruits and vegetables have increased due to more rigorous scientific investigations about their chemical composition and their health benefits. He added that these scenarios have therefore led us to think of managing the post harvest losses which are quite high and must be minimized for ensuring food and nutritional security of the growing population of the globe. Talking specifically



of the start-up opportunities in the food sector w.r.t. the post harvest management, Dr. Mishra stated that in order to work upon any idea we as an entrepreneur need to scan the opportunities that are existing, identify the potential competitors, the market, the consumers and other things for assessing its viability and sustainability prior investing money. He added that government have also made some provisions for ensuring easy handholding for the technology generation and dissemination to the start-ups, therefore they also must be explored in advance by the emerging entrepreneurs. A total of 50 participants attended the session and got benefited from the insights generated by Dr. Mishra.

IIRS-ISRO Scientist Trained UG Students on Remote Sensing and GIS Applications in Agriculture

Remote Sensing and Geographical Information System (GIS) are two rapidly emerging areas in agriculture sector. In due importance of this, Agri-Informatics component conducted two days online training on *Remote Sensing and GIS Applications in Agriculture* under IDP-NAHEP on October 1, 2020 and October 5, 2020. The motive of the training program was to make students aware about applications of GIS and remote sensing techniques and how to analyze soil nutrition levels to best benefit the plants. The training was led by Dr. Suresh Kumar, Senior Scientist, Indian Institute of Remote Sensing - ISRO, Dehradun. Dr. Kumar initiated the program by briefing on geospatial technologies, remote sensing and geostationary satellites. Emphasising on the application of GIS in agriculture he added that it has helped in increasing the crop production and reducing costs in farming by enabling better management of land resources. He further made participants aware that GIS represents powerful tool sets that are used for



transforming and displaying real-world spatial data; and remote sensing data retrieved by air and space located sources provides much of this valuable data for mapping and environmental management and planning.

In the closing session of the training, Dr. A.S. Nain, Co-PI, IDP-NAHEP and Director Research, GBPUAT, Pantnagar also elaborated applications of remote sensing in the agricultural sector such as crop product forecasting, crop identification and mapping of soil and water resources. At the end of the training, the expert expressed his delight and congratulated IDP-NAHEP, Pantnagar for organising such informative technical sessions for students and expressed that it is important for agriculture graduates to get acquainted with experienced and knowledgeable technocrats for increasing their social network and gaining knowledge. The session was appreciated by all participants who learnt the practical use of remote sensing and GIS.

Biophysicist from IISc Bengaluru Oriented Young Minds on Career Prospects in Research

An online interactive session on *Research as a Career: Challenges and Opportunities on an Adventurous Journey* was held on October 16, 2020.

Dr. Sushant Kumar, a Pantnagar alumnus and currently a Research Associate at Molecular Biophysics Unit, Indian Institute of Science, Bengaluru was the expert of the session. Dr. Kumar very interestingly initiated his deliberation by putting a brief talk on how he came to being a scientist. He emphatically stated that it was his curiosity about the science of cell, its function and structure that excited him to thought of taking the path of exploration as a career. Dr. Kumar explained that being a researcher is like taking a journey where the path is not clear and the uncertainties are also numerous. Talking about career in research system, he stated that one needs to develop essential traits like perseverance, focus, inquisitiveness, observation, quest for knowledge, constant questioning and ability to communicate.



Giving examples of the renowned scientists from the field of agriculture, he supported how essential traits shape one's temper towards research. Giving an overview of the research process, the expert stated that research is a very rigorous process and starts when one's questions regarding the idea of research in the concerned discipline are clear and well-defined. He further stated that an outcome oriented research gets its foundation from a research methodology developed by using MAX-MIN-CON principle which refers to maximizing the experimental variables, minimizing the error variables and controlling the extraneous variables. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP stated that such career based sessions are essential for building the strong foundation of young minds. The participant queries to the expert regarding career options in foreign Universities, fellowships and scientific temperament were aptly reflected by the expert.

Online Workshop on Achievement Motivation Held with Communication Scientist from ICAR-IARI

Personality development of undergraduate students by means of soft skills training on communication related aspects is one of the focus of IDP project at Pantnagar. A two-days online workshop on a significant theme *Achievement Motivation: Understanding and Managing Self* was held on October 26-27, 2020. The expert of the session Dr. Girijesh Singh Mahra, Scientist, ICAR-IARI, New Delhi who is a communication enthusiast and motivation trainer led the workshop by seeking active participation from the students. On day one of the workshop, Dr. Mahra initiated the training by making the learners understand the concept of SWOT and drawing a SWOT matrix for oneself. He tried to make the learners understand the concept of youth and its qualities by quoting inferences from the life of great personalities for setting the initial pace of understanding self. On the second day of the workshop, Dr. Mahra oriented the participants to understand the concept of goal setting and motivation by relating it to the need theories. Dr. Mahra stated that knowing oneself is the prerequisite to every goal that one sets for himself/herself.



Eliciting the model of Johari Window, he made the participants understand the importance of the open, hidden, blind and unknown self in shaping the personality of an individual. The participants expressed that they felt extremely energetic and focused by the end of the session led by Dr. Mahra. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar stated that such sessions which are meant for letting the learners know themselves and then work on oneself are crucial in shaping the personality especially during college days. Dr. Aman Kamboj, Project Scientist, IDP-NAHEP, Pantnagar also played important part in coordinating this online event.



IELTS and TOEFL Coaching Classes Initiated by IDP-NAHEP, Pantnagar

Under the Language Lab Component of IDP-NAHEP, Pantnagar, an initiative has been undertaken to improve the English language skills of University students in order to improve their prospects of taking higher education in international academic institutes. This initiative will provide for the IELTS/TOEFL two months online coaching classes to undergraduate students of Pantnagar University. The IELTS (International English Language Testing System) and TOEFL (Test of English as a Foreign Language) are two English language tests through which students enrol in foreign universities mainly in Europe, US, Canada, New

Zealand and Australia for higher education. This two-months coaching will help the students in scoring a great band in the IELTS/TOEFL test. Initially, a batch of 50 students have been taken for the coaching and IDP-NAHEP is bearing the coaching fee to aid the students financially. The coaching classes began on October 26, 2020 and the inaugural of the classes witnessed the presence of Hon'ble Vice-Chancellor GBPUAT Pantnagar Dr. Tej Partap, PI, IDP-NAHEP and Dean, College of Agriculture, Dr. S.K. Kashyap, and Dr. Alka Goel, Coordinator, Language Lab Component and Dean, College of Home Science.

The Main Events of November 2020

S. No.	Event	Proposed Date	Venue	Nodal Unit	Convener
1.	3 Days Training on Drones and Its Applications in Agriculture	05-11-2020 to 07-11-2020	Online	Agri Informatics Team	Dr. A.S. Nain, College of Agriculture
2.	A Webinar on Scope & Prospects of Designing for Entrepreneurship	06-11-2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
3.	A Webinar on Recent Advances in Weather Forecasting and Agromet Advisories	06-11-2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
4.	A Guest Lecture on Case Studies of Entrepreneurship and Incubation Process: Pathways to Succeed	09-11-2020	Online	Innovation & Incubation Centre	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences
5.	3 Days training on Climate Smart Agriculture: Preparing Future Farms	10-11-2020 to 11-11-2020	Online	Agri Informatics Team	Dr. A.S. Nain, College of Agriculture
6.	Online Convocation and foundation day programme	17-11-2020	Online	Project Team	Dr. S.K. Kashyap, College of Agriculture
7.	2 Days Training on Automation in Agriculture for Informed Decisions	18-11-2020 to 19-11-2020	Online	Agri Informatics Team	Dr. A.S. Nain, College of Agriculture
8.	2 Days Training on Big Data and Analytics in Agriculture World	26-11-2020 to 27-11-2020	Online	Agri Informatics Team	Dr. A.S. Nain, College of Agriculture



Exploring Possibilities of Improvement

Dr. S.K. Kashyap
Dean, College of Agriculture/PI, IDP-NAHEP, Pantnagar

The IDP-NAHEP has been a phenomenal learning process for all of us. It has been observed that at various aspects the environmental and social concerns were not systematically addressed with due quantified parameters which IDP-NAHEP proposed and promoted through a University wide structure of nodal officers. It was eye opening to observe that many crucial aspects were overlooked till time, which are now taken into proper cognizance through IDP-NAHEP efforts. These efforts led the University towards being a more sensitive and responsible institution. Indeed social and environmental concerns are critical interventions in project planning and implementation at every level which needs to be addressed systematically in future as well. Moreover, this is an important learning for the IDP-NAHEP team as it has helped us in exploring immense possibilities of improvement.

