



# IDP-NAHEP Pantnagar Updates

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

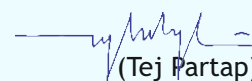
No. 15  
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## Message of IDP Leader, GBPUAT, Pantnagar

### Celebrating the Completion of Six Decades with Waves of Transformation

In its journey of six decades, G.B. Pant University of Agriculture and Technology, Pantnagar has contributed to the country in a phenomenal way. Over the years, the teaching, research and extension services of the University have covered a long way benefitting the stakeholders of agriculture. The quality seeds and quality students produced by the land of Pantnagar are indeed renowned and known for their enormous potential. Now, on the occasion of completion of 60 years of establishment, it is a matter of immense pride that the University has witnessed a series of developments which have led towards a transformation in the infrastructure and institutional capabilities. The IDP-NAHEP project has played a seminal role in ushering this transformation, especially the role played by the IDP Pantnagar team in leading from front in the entire duration of the pandemic and still taking the wave of transformation ahead with all vigour and enthusiasm. I aspire that with all the transformations evolving in the University, it will play an even more crucial and significant role in the times to come.



  
(Tej Partap)

## 33<sup>rd</sup> Convocation of Pantnagar University Held Online

### IDP Pantnagar Coordinated the Complete Ceremony

In the first convocation address of Pantnagar in 1963, the then Chief Guest Dr. S. Radhakrishnan boldly stated that he expects graduates of Pantnagar to serve the country by serving the rural areas and uphold the flag of rural and agricultural development. His hopeful and assertive statement still serves as a guiding mantra for all Pantnagar graduates as well as for the entire University fraternity. Established in 1960, as the first agricultural university of the country, G.B. Pant University of Agriculture and Technology, Pantnagar completed six decades of its service to humanity on November 17, 2020. On the same day, the 33<sup>rd</sup> convocation ceremony was also held online. The graduating batches of undergraduate, postgraduate and doctoral programmes of year 2018 and 2019 were awarded degrees in the online convocation ceremony. Also, the recipients of Chancellor's Gold Medal, Vice-Chancellor's Medals and other special prizes were awarded during the online ceremony. The Chief Guest



for the convocation was the Hon'ble Governor of Uttarakhand, Smt. Baby Rani Maurya who is also the Chancellor of the University. The ceremony had the presence Dr. Tej Partap (Vice-Chancellor, GBPUAT, Pantnagar), Dr. J. Kumar (Registrar), all Deans and Directors of the University, faculty members, alumni and the IDP Pantnagar team who coordinated the entire online ceremony. The graduating students participated in the ceremony online.



## e-Content Writers Trained on Copyright Issues and Use of OERs

The present situation demands transformations of the traditional methodologies of teaching and learning to various new e-learning educational resources. It is also expected by content developers to create new e-learning material promptly to take up the teaching-learning process smoothly in educational institutes. At the same time, it has also made us realize the importance and necessity of e-learning and such technologies and tools in our education system.



In order to create e-content, there are a number of guidelines which content developers and providers need to adhere to, and also there are various rights associated with the content and the creator of the content as soon as the content is created. With this dynamic frontier of content delivery, questions and concerns about intellectual property rights emerge among content developers and providers.

Seeking this, a two-day workshop was organized by e-Content Development Component, IDP-NAHEP, Pantnagar on November 27-28, 2020. Dr. Basavaprabhu Jirli, Consultant, e-Content Development Component, IDP-NAHEP, an eminent personnel in the field of

extension, Banaras Hindu University, Uttar Pradesh was the expert of the workshop. Dr. S.K. Kashyap, Dean College of Agriculture and PI, IDP-NAHEP Pantnagar welcomed Dr. Jirli and addressed the participants. He highlighted the importance of developing e-content for students of the University and aspect of copyright issues in the process of e-content development. On day one, a detailed description on various types of copyrights, registration of copyrights, authorization of scientific works, and appropriate ways to use data from internet was explained by the expert. Dr. Jirli also elaborated the process of getting a copyright from internet within a short span of time. On day two, Dr. Jirli highlighted upon the creation of Online Education Resources. He elaborated the ways to recognize OER, to create OERs. He also elaborated on various OERs that are popular in India. The session was indeed enriching for improving the skill and knowledge of the e-content developers of the University. 30 e-content developers from different colleges of Pantnagar University participated in the two days workshop.

## Book Published on Academic Innovations by IDP-NAHEP, Pantnagar Released in 33<sup>rd</sup> Convocation Ceremony of Pantvarsity

In its one year of endeavour, the IDP-NAHEP has treaded on the path of innovation and transformational development in the teaching-learning ecosystem of the University. Several initiatives were taken in context of infrastructural development as well as for capacity building of faculty members and students. The initiatives aimed to change both the internal and the external ambience of the teaching-learning spaces. Thus, digital classrooms, advanced technological laboratories, innovation and incubation centre, etc. were developed on one hand, while green washrooms, clean drinking water facilities, solar lighting system, sanitary napkin vending machines were put in places where several of the student activities take place such as the Crop Research Centre area, Practical Crop Production area, and similar other crucial areas. All such initiatives and innovations by IDP-NAHEP that have helped reinvigorate the academic landscape of Pantnagar have been compiled and published as a book



intitled, 'The 50 Pathfinding Academic Innovations by IDP-NAHEP, Pantnagar'. The book was released on the occasion of 60<sup>th</sup> Foundation Day of the University i.e. November 17, 2020, in the 33<sup>rd</sup> Convocation Ceremony which was held on the same day. The book can be accessed at the link given below [www.online.flipbuilder.com/zqck/qqrj/or](http://www.online.flipbuilder.com/zqck/qqrj/or) by scanning the given QR code.





## Feedback of Interns of Internship Pathshala-4

My experience with NAHEP Internship Pathshala 4 is crucial in my overall development. This internship is helping me to increase my knowledge and creativity and also to work on my technical writing skills. I look forward to applying the lessons and skills I learned in my future professional settings.

- Abhishek Gangola, III<sup>rd</sup> Year, College of Technology



My internship experience has been truly amazing up till now. My friendly colleagues and mentor were always ready and willing to offer advice and guidance to help me overcome any challenges I faced.

- Avneesh Kaur, IV<sup>th</sup> Year, College of Agriculture

The internship also gave us a chance to have the experience of working as a team. The decision to join the internship seems very right. Looking forward to more enriching experiences that the internship is yet to offer.

- Bhumika Manral, IV<sup>th</sup> Year, College of Agriculture



This internship is brilliant in the way that in it we take every challenge as an opportunity and we are just eager to learn more. This internship cultivated a new perspective for me and opened my eyes towards opportunities that I could capitalize on.

- Chetan Joshi, III<sup>rd</sup> Year, College of Agriculture

The internship helped reinforce my knowledge of responsibility, focus, drive and ambition. It was both valuable and helpful to me as a student and gave me the opportunity to look at content editing from a professional perspective.

- Govind Choudhary, III<sup>rd</sup> Year, College of Fisheries



As the IDP-NAHEP Pathshala-4 was my first internship programme, it led me to the first step of professionalism. I especially like to thank my mentor, for being such a support system and also, nurturing our team for the best and future.

- Namrata Garbyal, III<sup>rd</sup> Year, College of Veterinary and Animal Sciences

It was a journey of working under enthusiastic mentors, as a dedicated team, in a systematically designed Pathshala which led to several new learnings and experiences. I am really very grateful to the team of IDP- NAHEP for this unique opportunity.

- Prachi Nagarkoti, III<sup>rd</sup> Year, College of Agriculture



The internship was for a tenure of 2 months and helped me in understanding the nuances of content editing which was a new experience altogether. It also helped in enhancing the knowledge as the topics revolved around the agriculture arena.

- Perna Pandey, III<sup>rd</sup> Year, College of Agriculture

The internship has brought me a lot of valuable meanings in various aspects and I believe that these will be lessons and guidelines for my future career. I appreciate the opportunity given to gain all these experiences that helped me to bring me to different aspects of thinking and interpretations.

- Rajat Nautiyal, IV<sup>th</sup> Year, College of Agriculture



Being a part of the e- content development team was a window of opportunity. The whole process, be it the classes about the basics or the meetings about formatting the content, were all precise and informative.

- Samiksha Yadav, III<sup>rd</sup> Year, College of Agriculture

The IDP-NAHEP, Pantnagar is giving a brilliant opportunity to the budding professionals of the university through NAHEP Pathshala. I harvested certain skills which were lying latent within me and this experience of professionalism will surely help me in my professional life.

- Sarthak Kothiyal, IV<sup>th</sup> Year, College of Agriculture



NAHEP Internship Pathshala-4 has not only given me a precious opportunity to explore myself and sharpen my skills but it also helped me in making my time productive and make the best use of it during this period of lockdown.

- Shreshtha Chandra, IV<sup>th</sup> Year, College of Agriculture

The most important element of the internship was its integrated classroom knowledge and theory with practical application and skills developed in professional settings. It has shown a path of learning as well as making the best use of time in this pandemic.

- Tanuja Palariya, III<sup>rd</sup> Year, College of Agriculture



Being a part of NAHEP Internship has been a great opportunity for me. It allowed me to learn and explore many new things that fortified my knowledge that I gained throughout the programme. Being a member of NAHEP, I hope to get more programmes like this in future also.

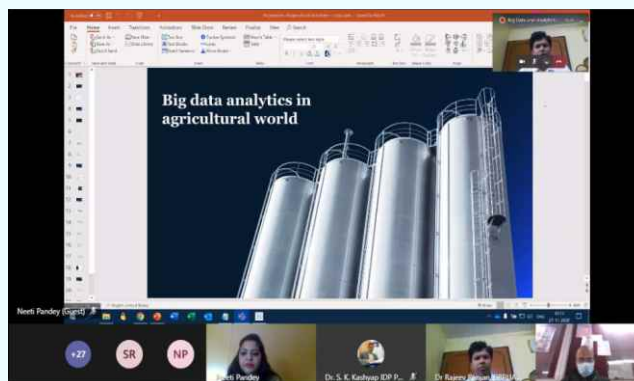
- Tanuja Rana, IV<sup>th</sup> Year, College of Technology



## Exploring Deeper Dimensions of Big Data Analytics and Agriculture

The applications of big data technology are immense and critical in the present day context. The IDP-NAHEP, Pantnagar under its several initiatives, even developed a complete Big Data Analytics laboratory to strengthen the works in the field of big data analytics and agriculture. Also, varied workshops, trainings, guest lectures have been organized in last one year on related issues. Recently, a two days training was organized by the Agri-Informatics Component on November 27-28, 2020. The training entitled *Big Data and Analytics in Agriculture World*, was led by Dr. Sanjay Naithani, Chief Agronomist, Israel Chemicals Limited, Gurugram, who is also an alumnus of Pantnagar University and Ms. Neeti Pandey, Solution Delivery Specialist, Mckinsey and Company, Gurugram. The focus areas of the training were emerging need of big data analytics in agricultural industries and role of big data in smart farming.

Owing to the rapid changes in agricultural technologies, systems and processes, the training experts emphasized on the emerging role of big data in agriculture world. They suggested that technologies like livestock monitoring gadgets, drones, and soil sensors are generating large volumes of data to support data-driven farming. The utility of agriculture



based mobile applications in this regard is also of paramount importance, as told by the experts. As a closing message for the training, the experts highlighted that technological innovations have greatly shaped agriculture throughout time and thus they motivated the participants to develop certain technology based models for farmers which would eventually enhance agricultural outputs and outcomes. The ultimate goal is to help different agricultural stakeholders adopt beneficial agricultural practices. Dr. S.K. Kashyap, Dean, College of Agriculture and PI, IDP-NAHEP applauded both the experts for their excellent efforts in delivering such an informative training. A total of 80 students participated in the training.

## Exploring Applications of Drones in Agriculture, 3 Days Training Organized

Drones are changing the way companies do business in all industries including agriculture sector. Keeping in mind the future of Drones in agriculture, the Agri-Informatics Component of IDP-NAHEP, Pantnagar conducted a three days online training on *Drones and Its Application in Agriculture*. The expert of the training was Mr. Biswajit Dey, Co-Founder and Chief Technical Officer (CTO), RCHobbytech Solutions Pvt. Ltd., Kolkata. He spoke in detail about the fundamentals of drone technology, types of drones, advantages and limitations, flight dynamics, hardware components, digital sky portal, DGCA rules, agri-drone types and application, agri spraying drone components, multispectral camera and its types, and different vegetation indexes etc. Moreover, the expert also showed the agricultural drone, mapping drone and multispectral camera and its components which



are extremely efficient devices to capture agricultural data and has lots of utility. Dr. A.S. Nain Co-PI, IDP-NAHEP, Pantnagar and Coordinator Agri-Informatics Component, stated that in the agriculture industry, drones are being used for precision farming. They monitor crops, do soil and field analysis and even assess crop health. Some insurers are starting to use drones to help monitor areas ripe for natural disasters, such as floods, droughts and hurricanes. The participants were enthusiastic about learning the new emerging technology and showed interest in future trainings on the design and development of drones and hands on training of drones and its use in agriculture. Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar gave an assurance to the students that more trainings would be organized on development and application of drones by IDP-NAHEP in future.

## Online Guest Lecture Held on Understanding the Incubation Process

The Innovation and Incubation Centre (IIC) strives to enable University students to receive first hand experience in entrepreneurship and provide a healthy ecosystem to promote innovative ideas. To understand the incubation process and its importance and roles, an online guest lecture was organized on the topic *Case Studies of Entrepreneurship and Incubation Process: Pathways to Succeed*. The guest lecture was held on November 9, 2020 and the deliberation was made by Mr. Nitin Srivastav, an alumnus of Pantnagar, a business strategy consultant, and Founder of Stars of Pantnagar Podcast.

The lecture initiated with cases of successful grassroot entrepreneurial ventures, wherein Mr. Srivastav shared examples of Push Beverages, Salt Startups of Pithoragarh, etc. He then elaborated on the process of incubation and reflected that incubation is necessary to solve the problem of the society. Suggestions regarding possible ideas which could be incubated were also shared which included generating traditional agriculture and allied products from each college of the University, marketing and marketing services - both traditional and digital,



research validation services for universities and corporates, employee hiring and agri-graduate hiring services for corporates, and artificial intelligence based products and applications etc. The entire deliberation was challenging and thought provoking for the participants.

Dr. S.K. Kashyap, Dean, College of Agriculture and PI, IDP-NAHEP, Dr. A. K. Upadhyay, Professor and Head, Veterinary Public Health and Epidemiology, Coordinator, Innovation Incubation Cell, IDP-NAHEP and Dr. Ravi Saxena, Professor, Electrical Engineering and other team members of Innovation and Incubation Cell also attended the event.

## 3 Days Online Training Organized on Aspects of Climate Change

The climate concerns across the world have been gradually increasing, and thus a proactive approach is needed to deal with it effectively. A three days online training programme on the topic *Climate Smart Agriculture: Preparing Future Farms* was organised by IDP-NAHEP, Pantnagar from November 10-12, 2020 to address a similar concern. The expert trainers were Dr. M. Prabhakar (Principal Investigator, NICRA, ICAR-CRIDA, Hyderabad) and Dr. Himanshu Pathak (Director, National Institute of Abiotic Stress Management).

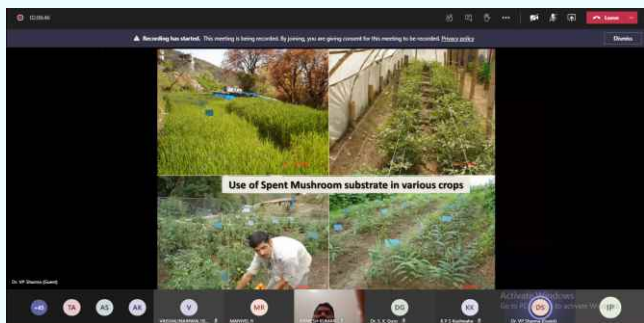
The first day of the training marked the introduction of the topic wherein Dr. Prabhakar highlighted the concept of climate change including the reasons, sources, degree of change and monitoring the change. He also informed the participants about the concerns of the world organizations in combating the potential threats of climate change; among which the UN Climate Change Conference, 1972 and the Paris Agreement, 2015 were the most prominent. The second day threw light on the impact of climate change on agriculture and food security. Dr. Prabhakar



explained his participants that the diverse climate patterns in India, its long coastal line and majorly rain dependent agriculture makes India as a country is more vulnerable to climate change. The climate change in the country may be noticed through the irregular and extreme weather patterns and the increased incidence of droughts, cyclones, hailstorms and unseasonal rains. He also provided information on how ICAR-CRIDA is working on developing new technologies to address climate change. In the third day training session, Dr. Himanshu Pathak emphasized on climate smart agriculture. He also deliberated on the adaptation and mitigation strategies of climate smart agriculture. The three days training programme was a successful endeavour and provided new insights.

## Series of Webinar Held for Promoting Agripreneurship Organized in Collaboration with Online Certificate Courses Team

The varied contributions of IDP-NAHEP, Pantnagar towards transforming the teaching-learning ecosystem of the University have been praised wholeheartedly by all concerned stakeholders. Among the several contributions, the initiation of online certificate courses has been one of the significant. Currently, 10 online certificate courses are running with 250 participants from all the across the country, having different academic and professional backgrounds. Apart from the regular course curriculum, an important part of these online courses is the expert webinar series which is specifically aimed towards inculcating an entrepreneurial orientation among the participants. In the month of November 2020 four such expert webinars were held and this series is being organized by the core team of IDP-NAHEP, Pantnagar.



The webinar on *Scope and Importance of Designing for Entrepreneurship* was held on November 6, 2020. The expert for the session was Mr. Bhavin Trivedi who is a senior associate at Darshi Shah Bhavin Trivedi Label, Ahmedabad. The designer emphasized on the importance of research in market for creating need based, demand oriented and customized fashion market for the budding designers. He stated that being in designing calls for one being rational, creative, innovative, sensitive to the art and ecology and the traditional art form that existed as the identification of rich culture of India.

The webinar on *Recent Advances in Weather Forecasting and Agromet Advisories* was held on November 6, 2020 with Dr. K.K. Singh, Head Agromet Advisory Services Division and Scientist 'G', India Meteorological Department, Ministry of Earth Sciences, New Delhi as the expert. Dr. Singh focused upon how the advanced technologies have made it possible to do weather forecasting with more



precision. He talked of the Meghdoot application and other targeted interventions of agromet advisories to the farmers under the Gramin Krishi Mausam Sewa Project initiated by the government keeping in mind the need and concerns of weather forecasting in pursuing agriculture.

The webinar on *Importance and Scope of Mushroom Cultivation in India for Promoting Agripreneurship* was deliberated on November 21, 2020 by Dr. V.P. Sharma who is presently the Director of ICAR-Directorate of Mushroom Research, Chambaghaat, Solan, Himanchal Pradesh. Dr. Sharma gave an overview of the mushroom market in the country and the world. In context of mushroom cultivation as an enterprise, he added that mushroom is a zero-waste, low input intensive and high market value product, and thus its cultivation can be a good business venture.

The webinar on *Hi-Tech Nursery Management and Its Accreditation* was held on November 21, 2020. The expert of the session was Dr. Sanjay K. Sharma who is Professor and Head, Department of Horticultural Technology and Fruit Science, ICAR-IARI, New Delhi. Giving the examples of the innovations that are coming in terms of automatizing the nursery equipments, emerging low cost and environmentally sustainable concepts, use of sensor technology in nursery management and production, he quoted the references of the success cases within the country as well as abroad. He also briefed upon the accreditation of nursery, its need and importance for adding the profitability in nursery management as an enterprise.



## The Main Events of December 2020

S. No.	Event	Proposed Date	Venue	Nodal Unit	Convener
1.	Innovation and Incubation Centre Meeting with Headstart Network Foundation	01-12-2020	University Centre - NAHEP Building	Innovation and Incubation Centre Team	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences
2.	3 Days Training on Classroom Management	01-12-2020 to 03-12-2020	Online	Faculty Development Centre Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
3.	Webinar on Quality Concerns in Agricultural Education: A Futuristic Outlook	03-12-2020	Online	Faculty Development Centre Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
4.	Educational Animation Script Designing Contest	06-12-2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
5.	4 Days Literary Activities on French Culture and Civilization	07-12-2020 to 10-12-2020	Online	Language Lab Team	Dr. Alka Goel, College of Home Science
6.	Personality Development Session on Powerful Routines to Change Life	08-12-2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
7.	Two Months NAHEP Online Internship on Animation Development for UG Students	10-12-2020 to 10-02-2021	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
8.	Two Months NAHEP Online Internship on e-Content Development for UG Students	14-12-2020 to 14-02-2021	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
9.	Guest Lecture on Waste to Wealth Startups	11-12-2020	Online	Innovation and Incubation Centre Team	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences
10.	Applications of DNA Computing in Agriculture	23-12-2020 to 24-12-2020	Online	Agri-Informatics Component	Dr. A.S. Nain, College of Agriculture
11.	Beginning of Five Online Certificate Courses	25-12-2020 to 25-03-2021	Online (www.gbpuatdigital.in)	Academic Team	Dr. Ranjan Srivastava, College of Agriculture



## Stimulating the Output-Outcome Framework for Better Performance

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

The IDP-NAHEP project currently running at Pantnagar University has proved to be of critical significance. It has provided multiple opportunities to look towards our own institute and one primary outlook in this context was the output and outcome. Each activity of the project had a certain output and an outcome, which was critically designated and structured in the given output-outcome framework with a complete vertical of project monitoring and evaluation. A similar system must be there into all agricultural universities for all teaching, research and extension related activities to think in terms of the activities being done, the expected outputs and outcomes in a scientific and structured manner. Periodic assessment of activity based outputs and outcomes will lead to timely and efficient completion of tasks, which is otherwise a huge obstacle in the university system. Intensive workshops and brainstorming must be done to execute this framework. Such structured interventions will definitely take the agricultural universities towards better performance, excellence and global ranking.



## Top Scorers of IDP Golden Points Till November 2020



**Sarthak Kothiyal**  
ID : 51662  
College of Agriculture  
Points Earned : 955



**Shubham Singh**  
ID : 53734  
College of Technology  
Points Earned : 555



**Varsha Kamboj**  
ID : 53217  
College of Home Science  
Points Earned : 780



**Rekha Bhandari**  
ID : 52961  
College of Agriculture  
Points Earned : 530



**Yogesh Pandey**  
ID : 50192  
College of Basic Sciences and Humanities  
Points Earned : 755



**Aakash**  
ID : 53561  
College of Technology  
Points Earned : 500



**Yanshi**  
ID : 49758  
College of Veterinary and Animal Sciences  
Points Earned : 705



**Pallavi Bisht**  
ID : 52958  
College of Agriculture  
Points Earned : 480



**Sumit Tiwari**  
ID : 52963  
College of Agriculture  
Points Earned : 605



**Mohit Singh Bohra**  
ID : 53038  
College of Agriculture  
Points Earned : 475