



IDP-NAHEP: A Pragmatic Vision for Innovation in Education

THE CASE OF PANTNAGAR



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

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**Institutional Development Plan
National Agricultural Higher Education Project
G. B. Pant University of Agriculture and Technology
Pantnagar 263145, Uttarakhand, India**

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IDP Pantnagar: An amazing story of academic and administrative empowerment



Dr. Tej Partap
Vice-Chancellor
GBPUAT, Pantnagar

The IDP-NAHEP, Pantnagar cannot imagine what changes it has inculcated in the structures and vision of the University. We planned a lot and structured a lot but the implemented version of IDP-NAHEP at Pantnagar was beyond our imagination. The immenseness of the ripples of innovative initiatives of this project will not die off easily, it will indeed sustain for decades to come and also provide a strong platform for the futuristic NEP (New Education Policy) planning of the University.

What was the crux of the success of this IDP Pantnagar model? The significantly visible impacts are many, still I shall capture a few which will become precedence for future for the University administration. First aspect of this Pantnagar model was autonomy. The project was an example of autonomy, administrative as well as financial. The PI of the project was the drawing-disbursing officer supported with an accounts officer and a deputy comptroller to take all possible decisions at project level with infinite financial power. The PI was also eligible to sanction his own tours and all possible decisions/sanctions according to the mandate and plans which were approved by the PIU (Project Implementation Unit, New Delhi) and STEP portal of World Bank. Second aspect of the project was the fully transparent, automated and effective project management system including the World Bank STEP portal, the review and reporting structure by NC (National Coordinator) and ND (National Director) of the project at PIU, the financial management team of PIU, the weekly report, quarterly report, the six monthly report, the annual report structure and all other reporting and reviewing systems of this project. The universities should learn this distinction where the NAHEP teams at universities were provided a structured target for each step of the project which hanged in public domain at STEP portal to be monitored minute by minute by PIU as well as World Bank officials. The third mantra of success at Pantnagar was multidisciplinary democratic approach. The academic, innovation,

language, industry linkage, informatics, e-content, monitoring and evaluation, certificate and diploma courses components emerged with participation of faculty from all the colleges, working together for the common mandate. It leveraged the real strength of multidisciplinary convergence. The fourth mantra of visible impact was an approach to peep beyond the periphery. The mandated overseas lectures, interactions, exchange, visit, foreign internships, visiting faculty, adjunct faculty, sandwich programme, twin degree concept made us peep beyond our limited periphery. The vision percolated down to departments and sections where lots of such convergence could get practically implemented across in the University. It shook the status quo and led the University towards competitive excellence. The fifth salient aspect of this brilliant endeavour was pragmatic innovativeness and strong vision. The hi-end units like Virtual Lab, Innovation and Incubation Centre, FDC, Pantnagar Museum, Language Lab put at one place with perfect maintenance and free accessibility for the whole University was a pragmatic vision. The smart classrooms with customized equipments put across the colleges at 54 places was yet another conviction to put the facility to utmost use. It made the system reform appear as true and tangible. The sixth unique aspect of IDP at Pantnagar was a very strong and structured follow-up plan to keep the ball rolling in every direction. If smart classrooms were created then continuous faculty training were done in each college to equip each faculty member for using the facility in utmost manner. A help centre was created for faculty hand-holding for digital empowerment, working round the clock. Each intervention was provided a follow-up plan with destined outcomes and it never stopped before it reached to tail end. The next strong aspect of IDP-NAHEP at Pantnagar was fostering network and linkages across multiple stakeholders throughout the arena. The connects, agreements, collaborations, exchange accomplished through the project led the institution to think of creating new outlook towards opening the gates for mutual bonding. It spilled to academic and research institutions, industries, non-government organisations, world bodies, government initiatives and what not. Overall, the invariably strongest foundation to success and achievements from IDP experience at Pantnagar was the insight, excellence and brilliance of our IDP Pantnagar team with a very strong and pragmatic leader. The whole University and the PIU will confirm that the non-stop and uncompromising

Mantras of Success of IDP-NAHEP, Pantnagar

- Administrative and financial autonomy
- Transparent, automated and effective project management system
- Multidisciplinary democratic work culture
- Challenging the status quo and moving beyond the periphery
- Pragmatic innovativeness and strong vision
- Strong and structured follow-up plan for each task
- Fostering network and linkages across multiple stakeholders
- Insight, excellence and brilliance of the team with a pragmatic and visionary leader

dedication and commitment of IDP team at Pantnagar could make the mandates brilliantly realised even amongst the worst moments of global pandemic. Now is the time for the University to carry ahead the legacy of IDP-NAHEP, Pantnagar across the University mandates to leap prominently in the NEP era.



Dr. R.C. Agrawal, ND NAHEP has always been a source of encouragement and incessant support for Pantnagar

IDP-NAHEP, Pantnagar: The extremely ambitious plan and the promises kept

Dr. S.K. Kashyap
Principal Investigator
IDP-NAHEP, Pantnagar



When the University presented the IDP plan of Pantnagar in front of the empowered committee of ICAR before project sanction, a specific reflection and feedback from the committee was that the Pantnagar plan was too ambitious to be implemented within the project timeframe. When we connect the dots while presenting this impact document, I strongly feel that the feedback emerged as a strong motivation for us right from the beginning.

It was in 2019 that I got an opportunity to be a part of 3-weeks Leadership for Academicians Programme (LEAP), the flagship programme of the Ministry of Education, Government of India to study and analyse the best practices for academic stewardship at University of Hyderabad and Monash University, Australia. After returning, I was bestowed the responsibility to chair the University Ranking Monitoring Committee of the University to identify and work upon the gaps to take the University upto the top position. The responsibility of Dean of College of Agriculture also provided me the leverage to apply the values, virtues and sparks of academic transformation in the College which reflected in the noteworthy outcomes in the College at all fronts. It was with the responsibility of the IDP-NAHEP project as PI at the University level, that I could visualise how this University should grow in next decades as a Centre of Excellence with a strong and sustained ecosystem of innovation.

The institutions grow only with a clear dream of the future which paves the pathway for a pragmatic and concrete vision statement. A decentralized plan follows the vision to bring the transformation to the ground but indeed the critical factor is the conviction of implementation. It cannot be a one-man show as the success of this pragmatic, concrete and tangible algorithm of institution building depends on its reach,

depth and penetration across the dimensions of the institutions among all stakeholders. The capable teams to carry the mission ahead are not available on its own, they are strategically nurtured to accomplish and carry ahead. The decentralized and widespread responsibility is an essence but the leadership has the stake in keeping the team together and motivated, building the capacity and efficiency of the team with a clear plan and targeted execution strategy. The systematic follow-up and plan-bound evaluation strategy to keep an eye on the pace as well as direction is equally important for the successful implementation. IDP-NAHEP at Pantnagar emerged on this line right from the beginning. The Pantnagar plan could get a regular visit, revisit and re-focus of the thrust on weekly and monthly level for all the IDP-components without fail since inception which provided the much-needed pace to the project.



Dr. P. Ramasundaram, NC, IDP-NAHEP has been a constant source of guidance for the IDP Pantnagar team

The IDP-NAHEP, Pantnagar never lost its focus. The mandates were kept in front at each step with an insight of long-term institution building. Institutional gaps were captured and mapped to be addressed in the execution plan. The responsibilities were catered with a sense that a self-propelled innovation-based ecosystem appears in the University which could retain its pace beyond the IDP time period. The projects have a limited time-period but the institutions sustain for centuries. Though a short-term project, IDP-NAHEP, Pantnagar could make long-lasting and ever-needed contribution in the direction of institutional reform at Pantnagar which has set a strong precedence for all times to come. This book is a testimony of the immense efforts made in this direction in a very short spell of time in a severely odd and exceptional pandemic situation, keeping in view the promises made in front of the empowered committee in New Delhi before project sanction. The institution will keep extracting the values and virtues of these efforts in the years to come.



When there is utmost trust and unconditional support, accomplishment and victory is sure to come

About IDP-NAHEP

The Institutional Development Plan of National Agricultural Higher Education Project popularly known as IDP-NAHEP is an ambitious plan of reforms in teaching and learning ecology of G.B. Pant University of Agriculture and Technology, Pantnagar through constructive disruptions. The IDP-NAHEP is a World Bank funded project and it aims towards development of higher order cognitive skills of undergraduate students and research and administrative excellence for faculty members through varied interventions. The IDP-NAHEP, Pantnagar provides opportunities to undergraduate students for national and international exposure, soft skills training and technical training in critical areas of choice, language skills in multiple foreign languages, virtual lab for 3D and virtual reality based learning, interaction with renowned experts across the world, entrepreneurship development through incubation centre, experiential learning through industry mentorship, practical exposure in advanced laboratories in the field of artificial intelligence, big data analytics and robotics in agriculture, short term paid internships, exclusive subject based remedial classes. Besides students, the faculty members will also be provided with an opportunity to update and enhance their proficiency and skills through exposure visits, international faculty exchange programmes and other workshops. The University Centre or NAHEP building is the focal point of the project with all required facilities for execution and monitoring of the project activities.

The innovations and advancements of IDP-NAHEP, Pantnagar have impacted the teaching-learning environment towards diverse learning and better understanding. From 2019 to 2021, IDP-NAHEP conducted a huge number of successful events for students and faculties which have impacted their lives in a positive way. This booklet is the representation of outstanding achievements accomplished by IDP-NAHEP, Pantnagar in bringing a revolutionary change in the University.



**A long-cherished dream
came true**

Mass Scale Skilling in Hitech Agriculture

IDP-NAHEP, Pantnagar establishes Hydroponics, Aeroponics and Plant Propagation unit

The Innovation and Incubation Centre under the aegis of IDP-NAHEP, Pantnagar installed the Hydroponics, Aeroponics and Plant Propagation hi-tech agricultural polyhouse units inside the premises of College of Agriculture of the University with 157 registered undergraduate (UG) students as interns. These units are specifically designed for UG students of B.Sc. Agriculture and the proposed objective of these units is to introduce the students to the latest trends of emerging agriculture at their early stage of education along with rigorous practice of management of automated polyhouse, crop selection for protected cultivation, managing complete crop cycle in soil-less media, relay cropping, task distribution, accountability management, designing marketing strategies, etc. which will ultimately lead to creating future entrepreneurs. Working in these units is mandatory for UG students as hands-on practice in hi-tech agriculture has been included in their course curriculum.

The unit became functional in September, 2021 in which students worked for 115 days during the first semester of academic year 2021-22. Total six varieties of lettuce crop were grown in the hydroponics unit whereas more than 15 ornamental plants were propagated under the plant propagation unit for mass multiplication through different propagation methods. From the day of unit initiation, the UG students took charge of management of the unit under expert guidance for preparing inert media, seed sowing, moisture maintenance in pro-trays, shifting of crop plants to hydroponics stands, repotting of propagated plants to new pots, nutrients feeding, regular pH - EC reading and collection, maintaining nutrients according to plant growth etc. with backend support of IDP Pantnagar team. The students also learnt daily data gathering, analysis, interpretation and periodical evaluation.

The students also worked for product publicity and product sale to embrace their marketing skills. The

Highlights of Hydroponics, Aeroponics and Plant Propagation Training

157
Students

115
Days

400
Hours

320
kg Crops

2000
Ornamental
Plants

revenue generated from these nutritional crops will be distributed among all the students at the end of their academic year. The drive of this student agri-business unit has enhanced the competency of

agriculture graduates and eventually helped in building confidence in the continuously changing agricultural world and evolving technologies especially automation technologies.





Vice-Chancellor Dr. Tej Partap and Dean Agriculture Dr. S.K. Kashyap interacting with the students running the Hydroponic unit



**We stretched our arms
to search for all
possible cases of patents**

Submitted 35 Patent Cases in One Year

IDP-NAHEP strengthens the Intellectual Property Management Centre at University

The IDP-NAHEP, Pantnagar took the initiative to boost-up the efforts of patent submission across the University and worked on a well-designed strategy of identification and promotion of potential intellectual property cases across the colleges through a decentralized team of faculty members. Alignment of Intellectual Property Management Centre (IPMC) with IDP-NAHEP yielded in significant results from all the colleges. Total 35 patent cases were filed by IDP-NAHEP, Pantnagar since 2020 which is more than 36 percent of total cases filed in last seven years of inception of IPMC in the University. Equally, examination fee of 30 already filed patent cases were submitted

during this duration by IDP-NAHEP, many of the cases had already expired due to non-submission of examination fee. The cases were revived following the government rules and relaxations at war footing. The upsurge could emerge due to the department-wise meeting and reinforcement drive by IDP-NAHEP patent team to identify and generate patentable cases across, from the technologies generated in last years. It was reinforced with hiring the services of professional consultant of IPR under IDP-NAHEP to help in building the patent cases, taking them ahead and providing counselling as and when needed at all levels of the college and University as a whole.

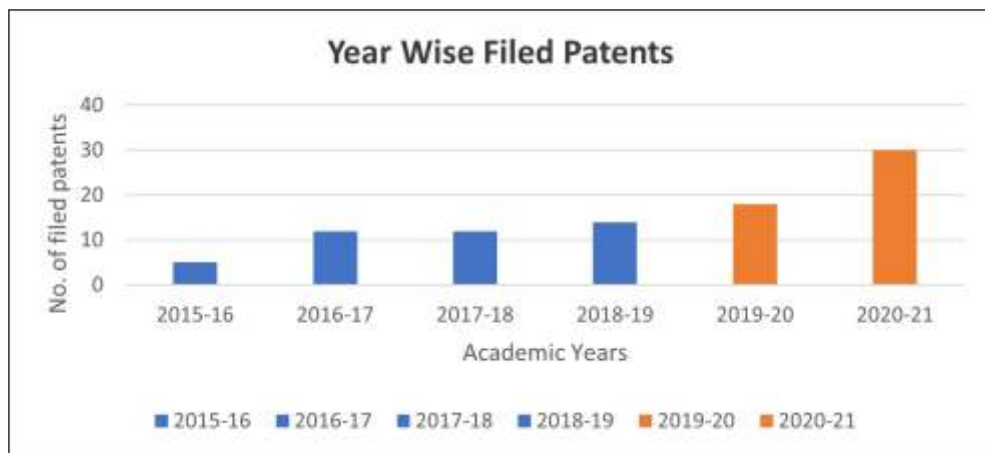


Fig. 1: Increase in number of patents filed during the NAHEP years i.e. 2019-20 and 2020-21 at Pantnagar

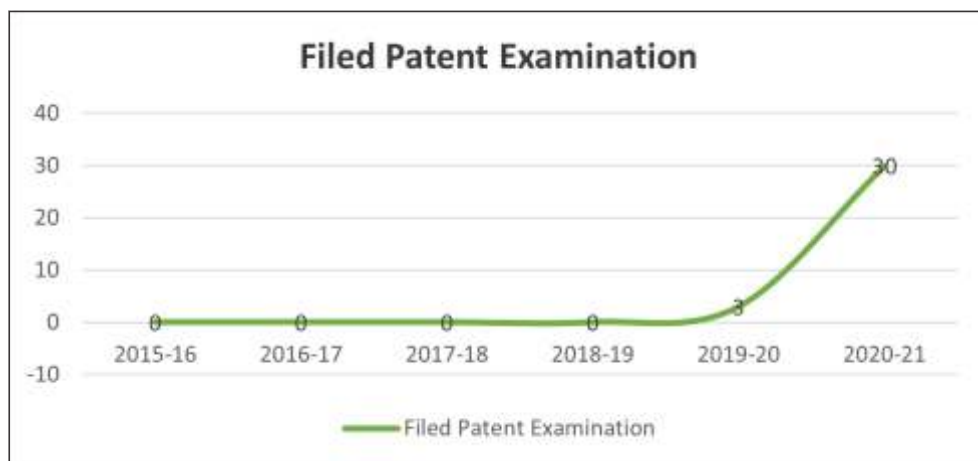


Fig. 2: Increase in number of examination of patents filed during the NAHEP years i.e. 2019-20 and 2020-21 at Pantnagar

Patents Filed by UG Students

The IDP-NAHEP, Pantnagar has encouraged our budding talents i.e. undergraduate students to develop prototype and file patent applications. At the Innovation and Incubation Centre of IDP-NAHEP Pantnagar, a total of 24 students were incubated in various projects related to agricultural improvements. Five students applied for a patent for the creation of two machines, one, a grain collector and a bagging

machine known as the 'Bag Packer' (the patent number for the Bag Packer is 202111005952, and was filed on February 12, 2021), and the second patent for designing a machine for digital farm measuring, also known as the 'Wheel-O-Meter' (the patent number is 202111013078, and the filing date is March 24, 2021). The students who have developed this innovative machine have shared their experiences with IDP Pantnagar team.

“The Wheel-o-meter was not just a technical project but an exciting journey of experiments. I've spoken and read multiple times on the topic, 'Failure is the initial step of a successful journey' but this project manifested these words in an evidential form. The process and progress from the initial question to the final design was filled with ups and downs. From making the 3D model and seeing the final design taking shape, we are excited and hopeful that we can pursue risks with greater confidence.”



Mr. Shubham Singh

B.Tech. Mechanical Engineering, College of Technology, Pantnagar

Young Innovators

“We have developed a manual Bag Packer under Innovation and Incubation Centre of IDP-NAHEP, Pantnagar which is a highly efficient and economic post-harvest mechanical tool. We were highly privileged to be guided by our mentor (Dr. Amit Kesarwani, Assistant Professor, College of Agriculture) at every step of the project. We were pleased for given the opportunity for developing our ideas into an economic project, broaden our horizon by thinking out of the box and use our skills to purpose. We thank all the officials of NAHEP project who helped us throughout the project directly and indirectly.”



Ms. Nimisha Maurya and Ms. Sonakshi Saxena
B.Sc. Agriculture, College of Agriculture, Pantnagar

“The journey from research to documenting, compiling data and finally presenting our design Wheel-o-meter was an incredible experience. This process was sometimes grueling but nonetheless, seeing our creation come to life was exhilarating as well. Taking part in different competition and being part of entrepreneurship workshop was interesting.”



Ms. Abha Belwal
B.Sc. Agriculture, College of Agriculture, Pantnagar

“From coming up with the design and presenting this idea in front of different people, and filing patent has made us think in different avenues so as to make up for all that is lagging. We'll be grateful to IDP-NAHEP, Pantnagar and our mentor Dr. Amit Kesarwani who taught us to develop individual projects for societal benefits.”



Mr. Kartikey Singh
B.Sc. Agriculture, College of Agriculture, Pantnagar



**Social safeguarding
is institutions'
primary responsibility**

Translated the Campus in No-Accident Zone

IDP-NAHEP, Pantnagar sets environmental and social safeguards norms

G.B. Pant University of Agriculture and Technology, Pantnagar lost many precious lives of its faculty members, students and other employees in recent years due to fatal accidents occurring within the campus. The State highway passing through the University campus posed biggest threat with extremely high-speed vehicles trespassing the campus. Looking into the speed-aligned threat lurking over the campus-inmates, IDP-NAHEP, Pantnagar installed 40 road barricades, 15 reflecting convex mirrors, 180 solar panel-based LED lights and 20 ANPR bullet close circuit TV cameras at various spots such as

college roads, hostel roads, other major roads and public spaces.

Zero fatal accident since then

The major outcome of the intervention under social safeguards initiative of IDP-NAHEP, Pantnagar reflects that the number of fatal accidents has subsided down to zero since IDP-NAHEP road safety initiatives (University Security Office vide letter no S/O/2200). These initiatives have promoted an encouraging environment for University students by making them safe, facilitating social and creative learning, and ensuring a sense of security for all campus residents.

Impact of IDP-NAHEP social safeguard initiatives









We aspired to train each student across campus in language skills

Total 4110 Hours of Language Classes Served 856 Students

IDP-NAHEP, Pantnagar ran mass-skilling campaign in Foreign Language Skills

Foreign Language training was a major thrust of IDP-NAHEP, Pantnagar to take University students towards international orientation. With the introduction of French and German language courses along with English, IDP-NAHEP, Pantnagar has brought a significant change in the University teaching-learning ecosystem. One can easily find lecture rooms in academic campuses but with the wonderful initiative of Foreign Language

Component, IDP-NAHEP, Pantnagar provided the varsity its first Foreign Language Lab with modern equipped software and applications to facilitate students with the four skills of language that are reading, writing, listening and speaking. The component connects the students to the international world deepening the knowledge of language and culture since the inception of the project in September 2019 for undergraduate students of the University.

STUDENT BENEFICIARIES OF FOREIGN LANGUAGE CLASSES

of IDP-NAHEP, Pantnagar in last 2 years



French
286

German
260

English
310

Teaching Hours of Foreign Language Classes of IDP-NAHEP, Pantnagar

1600 hours
of French
language class

1600 hours
of German
language class

910 hours
of English
language class

A1-A2 Level Courses

Students at IDP-NAHEP, Pantnagar complete the A1 and A2 level of the French and German Language course after getting trained for 100-120 hours (in 3-4 months time) in each level and among all aspects of reading, writing, listening and speaking to know the language well. The same is for the English Language where the levels are categorized as Beginners and Advanced Level. The classes are conducted four days a week with 90-120 minutes of language learning in each class

followed by self-practice sessions. The first batch of all the three language classes was initiated in November 2019 (classroom mode) and later continued in online mode due to the pandemic situation in the country. Undergraduate university students registered themselves for the foreign language courses to enhance their multi-linguistic skills. Till date, a total of 856 University students have enrolled in the different foreign language courses organized by IDP-NAHEP, Pantnagar in both online and offline mode.



Innovative teaching methods including seminars, workshops, quiz and competitions

The IDP-NAHEP, Pantnagar organized language awareness seminars, quizzes, and cultural workshops from time

to time where the students could realize the importance of learning a foreign language in this globalized world. They also learnt about the linguistic and cultural aspects of the language from different domains such as poetry, cinema, art,

literature, cuisine, etc. Competitions based on language and cultural skills were also organized which motivated them to excel in

the language. The below table lists such events organised by the Language Lab component.

Table 1: List of innovative events organized by Language Lab component of IDP-NAHEP, Pantnagar

S.No.	Date	Event	Expert
1	October 10-11, 2019	Language Awareness Workshop	Dr. Naresh Thapliyal, Assistant Professor, Foreign Languages, Amity University, Noida
2	May 10-18, 2020	Diversity in French Language and Francophone Studies	Dr. Varun Dev Sharma, Assistant Professor, Department of French and Francophone Studies, Doon University, Dehradun
3	December 7-11, 2020	French Culture and Civilization	Mr. Ajay Kumar, Assistant Professor (Guest), Delhi School of Journalism, Delhi University, New Delhi
4	December 22-24, 2020	Christmas in France: Culture and Tradition	Ms. Annéa SAILLY, Department of French and Francophone Studies, Doon University, Dehradun
5	August 4, 2021	France through the Eyes of a French Family	DRONET Family, Vallet, Pays de la Loire, France
6	August 13, 2021	Postcard Exchange: Postcards Connecting France	Collège Saint Joseph, Vallet, Pays de la Loire, France
7	September 26, 2021	Virtual French Home Tour	Ms. Annéa SAILLY, French Language Trainer, Nouvelle Aquitaine, France
8	December 18, 2021	French Film Festival	Language Lab Team, IDPNAHEP, Pantnagar
9	December 27, 2021	French-German New Year Card Making Competition	Language Lab Team, IDPNAHEP, Pantnagar
10	February 26, 2021	French Crepe Recipe – Learn how to make French dessert	Ms. Cécile NEDELLEC, Collège Saint Joseph, Vallet, Pays de la Loire, France

Success Stories

From Pantnagar to Berlin



Ms. Kritika Chauhan
*B.Sc. Agriculture,
College of Agriculture,
Pantnagar*

Ms. Kritika Chauhan, a final year student from College of Agriculture, Pantnagar got selected at Humboldt University, Berlin, Germany to pursue her higher studies. German Language Course was one of the major tools that helped her in the admission process. Sharing her journey, she reflected - "Initially it was just a language course for me, however, gradually I started liking the entire experience of learning the German language. The course begins with the basics and leads towards the complexities which help in the better understanding of the language. The instructor always bends backward to make students comfortable with the new language by connecting it with English. Moreover, activities like video lecture, animated stories, interactive sessions, paragraph writing, and workbook makes it easier as well as fascinating. Furthermore, the whole NAHEP team is extremely supportive to arrange classes at students' convenience. I recommend this course to all students who are planning to study abroad; this will not only enhance your CV but also confirm your admission in your dream university."

Achieving Dreams



Ms. Saloni Haldua
*B.Sc. Agriculture,
College of Agriculture,
Pantnagar*

Like her fellow mate Kritika, Ms. Saloni Haldua, a final year B.Sc. Agriculture student also dreams of studying abroad. She is enrolled in the German Language Course (A2 level) after having successfully completed the A1 level. She also shared her experiences. "For me, this course is a chance to say yes to my dreams. I have applied to various foreign universities where language certificates are necessary. I was going to drop the idea of studying abroad but this course made me realize that dreams are meant to be made the truth of life."

GUEST LECTURE ON:

STUDY OPTIONS AT ROYAL VETERINARY COLLEGE (RVC) LONDON, UK



FOR ALL
VETERINARY
UNDERGRADUATE
STUDENTS



We aspired to unleash the dreams of students

Total 30 Overseas Experts Shared Global Experiences with 2000 Students

IDP-NAHEP, Pantnagar organized 30 sessions with experts from leading foreign Universities

The IDP-NAHEP project paved a path to strengthen the institutional network with leading foreign institutes. The project mandates to engage in meaningful collaborations through short-term foreign exchange programmes, lectures of foreign experts, industry

internships, exposure visits and a series of other programmes. The project also aims to enhance opportunities for the University students through these academic and industry networks which will ultimately improve their learning outcomes and higher order cognitive skills.

Students must learn from across the world !

Personal interaction with leading scientists and academicians of the world

Exposure to emerging body of scientific knowledge

Latest updates of the industries, technologies and technical know-how

Ideas of **interdisciplinary** thinking and performance

Global experience through tie-ups with the global universities

Awareness about multiple avenues of research and career

Motivation to pursue higher studies abroad

Improved credibility and **confidence**

The IDP Pantnagar team made tremendous efforts to continue with these interaction and networking initiatives despite restrictions posed by the pandemic. Prominent experts of foreign universities from USA, UK, Canada, Australia, Germany, Spain, Thailand, Philippines, Nepal aligned for sharing knowledge and experiences with students of the University. From the month of December 2020, an international lecture series on varied, contemporary issues about agriculture and allied sciences was organized. This lecture series had experts from more than 30 universities from around the world. Apart from the lecture series, various other experts have been

continuously nurturing the students of the University. Corroborating with the project mandate, IDP-NAHEP, Pantnagar made utmost efforts through these initiatives to help students emerge as professionals with global outlook and exposure. The lecture series focused on aspects to provide a wholesome learning experience to the University students and to provide them with strong technical and soft skills. The opportunity of networking and alignment with foreign experts emerged under IDP-NAHEP, Pantnagar which paved the way for involving all the students and faculty members with leading foreign institutes and provide the much needed exposure.



“ I see learning from overseas experts as an opportunity to enhance my receptivity for observation and new knowledge creation. NAHEP is playing a huge role in providing these opportunities. Having interaction with overseas experts at the undergraduate level allows us to expand our horizons, right from the start of our degree programme.”



Ms. Mallika Tripathi

B.Sc. Agriculture, College of Agriculture, Pantnagar



“ During the pandemic, when it became impossible to physically send the university students out of the country for any foreign exchange programme, IDP-NAHEP Pantnagar made a point that learning should not stop, come what may and organised various webinars and training programmes with overseas experts, internationally renowned in their fields. The interaction helped us gain insights about the procedures and techniques used outside India and the level of advancement they possess. I was fortunate enough to have this rich experience.”



Mr. Sarthak Kothiyal

B.Sc. Agriculture, College of Agriculture, Pantnagar

UNIVERSITY CENTRE



We intended for functional collaboration beyond paper-MOUs

Fifty Industry Experts Nurtured University Students

IDP-NAHEP, Pantnagar generates industry network for market insight to students

Universities-Industry Collaboration (UIC) refers to the interaction between any part of the higher education system and industry aiming mainly to encourage knowledge and technology exchange. It has the focus to improve the students' learning experience, promote entrepreneurial skills and develop skills for future employment. In this view, IDP-NAHEP, Pantnagar took a strong step in pooling industries across the globe considering their area of expertise in conducting training, internships, webinars, workshops, mass scale skilling programme, counseling and consulting.

Impact of Industry Collaboration

The project brought 50 industry experts on-board for trainings, interaction, collaboration, internship and hand-holding of students in entrepreneurship development efforts. The experts were from the food industry, IT sector, agriculture input industry, consultancy firms, horticultural innovation-based firms, agripreneurship aligned startups and

human resource professionals. The IDP-NAHEP, Pantnagar could organize many innovation-aligned training with facilitative roles of young entrepreneurs which covered concepts of minimum viable product, idea generation, team generation, qualities of entrepreneurs, current requirements of industry, issues in collecting funds and registering a startup. These entrepreneurship skill trainings nurtured the budding entrepreneurs of the University on how to start a startup.

The IDP-NAHEP, Pantnagar also provided an industry-ready platform for veterinary students of the University who could do internship under Dr. Rahul Srivastava, Vice-President, Hester Biosciences, Ahmedabad, who established First Veterinary Business Incubator in India at IVRI, Izatnagar, and facilitated record 21 technology commercialization with the highest revenue realization in ICAR institutions in less than three years. Students have prepared entrepreneurship projects on

Highlights of industry collaboration events

50

Experts

120

Days

450

Hours

1200

Students

180

Scientific
Topics

various topics associated with veterinary sciences. The Campus to Corporate campaign was taken with industry partners where upskilling of final year undergraduate students was taken to increase their awareness of the agri input industry, agri companies organization structure, agri input retail sector and career opportunities in these sectors. Several sessions on leadership, strategic management and industry oriented soft skill were taken by the senior management of corporate organizations. The Industry Collaboration component of IDP-NAHEP, Pantnagar also generated sponsorship for

young and needy students to join different Certificate Courses launched under IDP-NAHEP, Pantnagar.

MoUs Signed

In the tenure of the last two years, more than fifty industry partners were aligned out of which seven MoUs were signed between IDP-NAHEP, Pantnagar and different academic and industrial organizations to facilitate entrepreneurial and technical skill development among students and scientists of Pantnagar University. The aspects on which MoUs were formulated are given below.



Why we generated MoUs with leading institutions



Capacity building of students for upgrading their technical skill sets and awareness on latest agricultural technologies



Facilitate exchange of technology and interaction among scientists and students



Foreign exchange programme for students and faculty members



Nurturing the innovative startup ideas of the University students



Establishing a model unit of agricultural innovations in the University



Handholding for entrepreneurial ventures of the University students



**The world came to us
through these courses**

Online Study Materials for 156 Weeks Uploaded for the Novel Certificate Courses

IDP-NAHEP, Pantnagar developed 156 video lectures, 179 assignments and 780 reading modules for online Certificate Courses

For the first time in six decades, University decided to run certificate courses for interested learners around the world with no formal eligibility criteria while maintaining the quality of teaching-learning through updated educational and information technology tools, as well as aligning pedagogy and course materials to nurture high-quality students in accordance with global standards. The courses attracted learners from across the country, from different walks of life who were interested in agricultural education, who were interested in Pantnagar, and who were interested in these need-based courses,

resulting in the registration of more than 500 learners across the country for certificate courses offered by the University. The structure of the three-months online Certificate Course is a package of 60 reading material, more than 150 additional references, pre-recorded video lectures, weekly assessments, weekly interactions with University scientists, live chat box running 24x7 in order to address the queries and doubts of the learners along with the flexibility to access the matter at any time. The certification of the scholars is also subjected to the passing of the final assessment. As of now, scholars from



Reading Material Accessed
1,85,760 hours



Video Lectures Watched
6192 hours



Webinar Participation
4644 hours



Assessment Attempted
6042 hours

Time spent on the certificate course portal by the registered scholars for accessing the course content

more than 60 different professions from more than 155 organizations got benefitted from these online certificate courses.

The IDP-NAHEP Pantnagar played an instrumental role in the initiation of the Certificate Courses by providing a specially designed Certificate and Diploma Course Portal for seamless registration, secured payment processing, managing and streamlining content development including lecture notes, assessment, video lectures, and additional references, uploading of the content, scholar monitoring and scheduling weekly webinars for interactions between scholars and instructors. This sustainable portal is presently accommodating course material of 156 weeks that includes 780 lecture notes, 156 video lectures, 169 assessments, 1000 additional references and 156 weekly webinars.

The online Certificate Courses have emerged to be beneficial not only for learners from all across the country, but also for the University fraternity. They provide aid to respective departments, colleges, University and instructors on regular basis. Also, the positive responses from the participants made the instructors re-launch their respective courses after the initial start. Learners around the country and world are approaching the University to start new courses on agricultural engineering, programming languages, web development, and other emerging technologies. To fulfill the emerging demand, the University is constantly working to generate new course material that will eventually help learners across the globe and the University to emerge as a global learning center in the field of agriculture and allied disciplines and emerging technologies.

Highlights of online certificate courses

13
Certificate
Courses

62
Faculty
Members

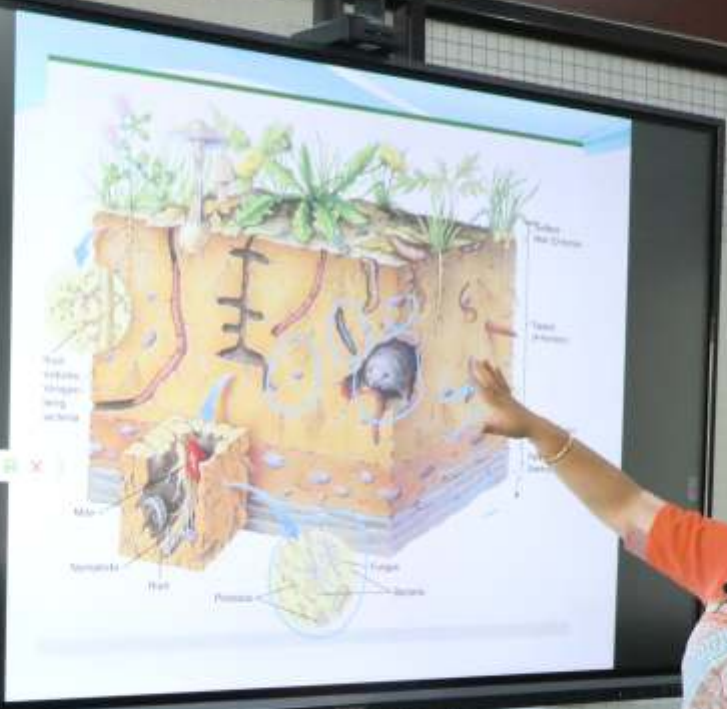
total
516
Scholars

of
62
Profession

from
155
Organization

Profile of Scholars





We tried to put the e-content in innovative digital format

550 e-Modules Created by 80 Faculty Members Worth 1000 Hours of Reading Material

IDP-NAHEP, Pantnagar develops novel and interactive e-content of 52 courses

Digital learning or e-content is the latest trend of education with an emphasis on taking education beyond the boundaries of time and space. G.B. Pant University of Agriculture and Technology, Pantnagar has also initiated the development of electronic content for various courses of the ICAR affiliated degree programmes. This initiative emerged under the support of the World Bank sponsored project Institutional Development Plan of National Agricultural

Higher Education Project (IDP-NAHEP). The e-content development component of the project aspires to continuously upskill the University teachers and students in usage of digital teaching-learning tools by creating a rich repository of e-content on various agricultural subjects which will cater to a larger community of learners across the world. This e-content portal is an outcome of this aspiration and mission to make learning accessible for all.

Highlights of e-content development efforts

50+
comprehensive
courses

1000+
hours of
educational
content

550+
subjective e-
modules for self-
study

80+
experienced
educators involved

1000+
students
benefitted

6
Colleges involved

For the first time ever in the University, more than 80 faculty members have collectively made a comprehensive effort to create distinctly designed e-content for ICAR accredited undergraduate courses of the University taught in different undergraduate programmes. The IDP Pantnagar team has led this endeavour to create textual modules supported by hyperlinked photos, animations, and videos of shortlisted 52 courses. Effort has been made to develop each module in an interesting format so that the students may get learning and in-

depthness through self-study. The content is created in interactive workbook format with question-answer, references, cases, illustrations, learning activities and other interactive linkages. The entire content is available on the e-content portal. This e-content portal provides a perfect opportunity of self-paced, independent and enriched learning without any temporal barriers. The e-content is planned and created by a highly competent team of faculty members in an efficient and crisp way to be interactive, engaging and yet simple enough to appeal to the varied audience.





Training with renowned experts

COMMUNICATION SKILLS: THE ART OF EXPRESSION

Don't get what you wished for.
Get what are you are skilled for.
Wishing: START SKILLING...



MR. ANKUSH CHAWLA
MDA (Agribusiness), IIM Ahmedabad

November, 2019

National Development Plan
Agriculture & Technology, Pantnagar



We put young and best talents from across the country for mentoring our students

1353 Hours of Remedial Classes in 12 Subjects Benefitting 837 Students

IDP-NAHEP, Pantnagar organizes remedial classes through 59 illustrious alumni

The IDP-NAHEP, Pantnagar organized a series of parallel remedial classes for the University students by engaging 59 illustrious alumni who had qualified JRF or SRF or ARS examinations etc. in recent past. The classes provided the students much-needed clarity of concepts and subjects as well as an understanding of preparation of different competitive examinations. This is a one-of-a-kind endeavour by IDP-NAHEP, Pantnagar's academic component to accomplish competitive goals which gained immense popularity across the University. Across the four colleges

(College of Agriculture, College of Veterinary and Animal Sciences, College of Home Science and College of Fisheries) remedial classes were planned and organized successfully for the students.

The perception and design behind the remedial classes

- ❖ Focusing to close the gap between what a student understands and what is expected to teach for up-scaling.
- ❖ Improving learning and practice by applying new skills, including daily reviews and practice exercises.
- ❖ Providing competitive edge to aspirants.

Highlights of unique alumni led IDP remedial classes

706 Lectures

in 12 modules
covering 4 UG degree
programmes

837 Students

enrolled till March
2022

1353 Hours

of classes and
mentoring completed

5 Coordinators

and advisory committee
for the smooth
operation of classes

59 Alumni

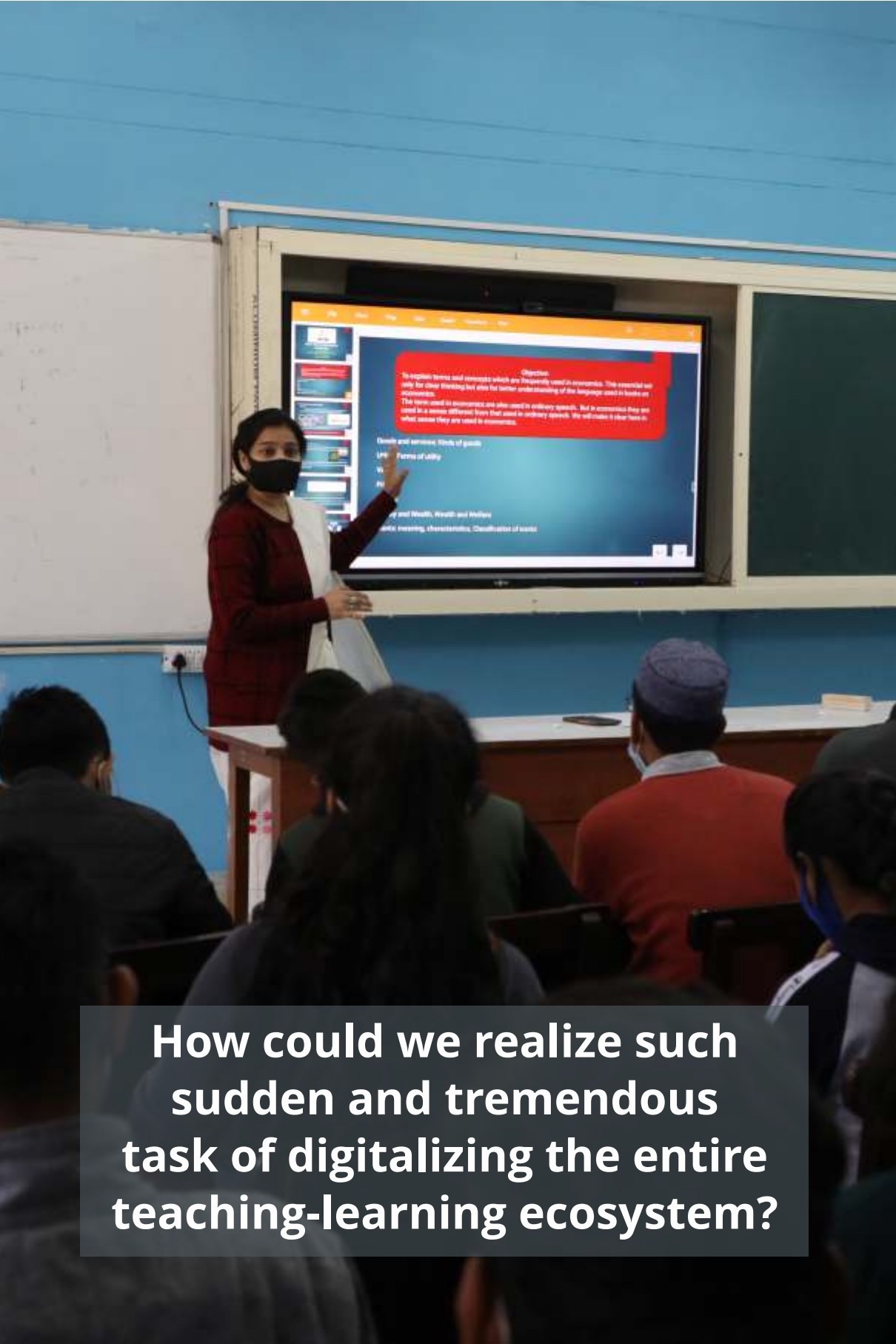
nurtured the students
for competitive exam
preparations

- ❖ Aligning with the vibrant and academically sound mentors for support and guidance.
 - ❖ Evening online classes on exclusive module of respective discipline.
 - ❖ Assessing what the student has learned and whether they are prepared to move on.
- The remedial teaching benefitted students in honing their academic capabilities, as evidenced by Pantnagar students' significantly enhanced success in national and state-level competitive exams. The students were capable of taking competitive exams with confidence since they became familiar with the examination pattern as taught during remedial classes. The clarity and consistency provided during the classes thus upboosted their competency and prepared them for their future roles.

Table 2: List of modules taught under remedial classes of IDP-NAHEP, Pantnagar

S. No.	Colleges	Name of the modules
1.	College of Agriculture	Genetics and Plant Breeding
		Horticulture and Vegetable Science
		Entomology
		Plant Pathology
		Agronomy and Soil Science
		Extension and Economics
2.	College of Home Science	Foods and Nutrition and Clothing and Textiles
		Family Resource Management, Extension and Human Development
3.	College of Veterinary and Animal Science s	Veterinary Sciences
		Animal Sciences
4.	College of Fisheries	Aquaculture and Aquatic Environment Management
		Fish Harvest and Processing Technology and Fisheries Resource Management





Objective:
To explain terms and concepts which are frequently used in economics. This essential set only for clear thinking but also for better understanding of the language used in books or newspapers.
The terms used in economics are also used in ordinary speech. But in economics they are used in a sense different from that used in ordinary speech. We will make it clear here in what sense they are used in economics.

Define and services: Study of goods
LPM: Forms of Utility
and Health, Wealth and Welfare
Meaning, characteristics, Classification of work

How could we realize such sudden and tremendous task of digitalizing the entire teaching-learning ecosystem?

Overall 18,000 Hours of Use of Interactive White Board Recorded Since Installation in the University

IDP-NAHEP, Pantnagar equipped 54 digital classrooms and provided 5000 Microsoft Team licenses to students and faculty members

Online learning has grown more important in people's lives after the COVID-19 pandemic. The pandemic has caused schools, universities, and businesses to operate remotely, which has increased the use of online learning. The IDP-NAHEP, Pantnagar led the entire process of shifting the education process of the University into online mode. As a result of this digital experience, the University has gained a new competence that will help it to achieve its long-term goal of increasing its instructional breadth.

- Microsoft Teams (MS Teams) connected the entire University via online mode

Digital Classrooms

In order to resonate the experiences of classroom teaching via online platforms, the IDP-NAHEP, Pantnagar provided interactive digital panels to different colleges and research centres in the University.

- ❖ A total of 54 interactive digital panels along with other facilities like high-speed internet connectivity, webcam,

Microsoft Teams (MS Teams) connected the entire University via online mode

The IDP-NAHEP Pantnagar, provided dedicated Microsoft Teams licenses to more than **4000 students** and all faculty members, officials, and teaching personnels of the University.

It was a tremendous task accomplished of providing with more than **1500 man hours** of support and handholding through college-wise training programmes, covering small groups for smooth transition to the online teaching-learning platform.

The faculty members **conducted all the academic activities** including regular classes, finals and pre-final examinations, research seminars, viva-voce, guest lectures, workshops, and all other related tasks on MS Teams.

As per the records of Microsoft Team Usage on Administrator Portal, in the duration of three months (June 14, 2021 - September 11, 2021) University fraternity participated in and organized **3388 and 2704 meetings** respectively, and during these meetings **69086 minutes** were given to **screen sharing**, **1001472 minutes** of **audio** is available and **566851 minutes** of video appearance is there.

MS Teams licensed application and sound systems were installed.

- ❖ More than 400 hours were invested in training and handholding for effective usage of interactive digital panels for classroom teaching and other academic activities.
- ❖ 18000 plus hours have been spent on undergraduate classes and examinations in the through interactive digital panels during academic year 2020-21 and 2021-22.

The use of this technology has unquestionably improved teaching abilities of the faculty members and the learning experience of the students. The interactive panels ensured the conduct of regular and scheduled classes for undergraduate students and facilitated the pre-final and final examinations for odd-even semesters of session 2020-21.

Owing to the commendable efforts of IDP Pantnagar team in leading the digital transformation of G.B. Pant

University of Agriculture and Technology, Pantnagar; the University was selected among the 18 elite universities by ICAR-IASRI, New Delhi for setting up the virtual classroom facility. This innovative virtual classroom setup facilitates recording and uploading of lecture videos, webcasting and sharing them with students and other learners. The virtual classroom takes in its ambit the integration of diverse technologies making it a wholesome package having a long-lasting impact on educational experience. The teaching professionals of the University actively participated and cooperated towards making the virtual classroom initiative a huge success for the University. The faculty members of different departments across the University contributed and shared their knowledge with 250 plus enlightening lectures for ICAR's Krishi Megh Repository. Master Trainers of IDP- NAHEP Pantnagar facilitated the faculty members by providing technical assistance for hassle-free recording and uploading.





**A novel concept of
internship in soft skills**

107 Students Received Opportunity to Complete NAHEP Internship Pathshala

Total 8 internship sessions of 2-months each completed successfully

The IDP-NAHEP, Pantnagar has been working continuously towards the skill development of undergraduate students of the University by initiating unique, need-based programmes. One programme is the NAHEP Internship Pathshala, based on the philosophy of 'Earn While You Learn'. A total of 107 students invested a total of 22470 hours to work upon the assignments under the eight Internship Pathshalas conducted till date. The basic objective of this programme is to orient the students towards market-demanded skills. The programme is supposed to sharpen the industrial and professional acumen of the

students to face the challenges of the professional world. It has served to nurture the students in data mining, documentation, professional writing and communication, project management, networking, and several other market relevant skills. The duration of the internship is two months in which the undergraduate students from all colleges of Pantnagar University are eligible to apply. The selection of the students is based on a written examination. The selected students work with the research associates and postdoctoral fellows of IDP Pantnagar team as their mentors. The schedule of internship included

Nurtured the students to make them market ready professionals



Digital Content Development



Data Management and Documentation



Alumni and Agri-Incubator Database Management



AR/VR Intervention in Education



Social Networking Strategizing



Creating Endowment Funds Model



Educational Animation Script Designing



Layout For Web-Designing



Educational Video Making

mentorship on daily basis and weekly review meetings in which a total of 416 hours were invested by the team of mentors for regular feedback to the

students apart from dedicated work hours for the interns. Eight Internship Pathshalas have been conducted so far with a total of 107 student beneficiaries.







**Providing opportunity to
look into cutting-edge
technologies**

Capacity Building of Students in Emerging Fields of Agriculture

IDP-NAHEP provides exposure and experiential learning in the fields of AI, robotics, big data analytics and climate smart agriculture

IDP-NAHEP, Pantnagar introduced three core areas of modern agriculture under the Agri-Informatics component for continuous improvement in digital tools and collaborations among farmers and researchers across the public and private sectors. They are artificial intelligence and big data analytics, robotics and climate-smart agriculture.

IDP-NAHEP, Pantnagar organized 30 trainings in emerging technological

areas in agriculture like smart farming, robotics, sensors, drones, remote sensing, GIS, precision farming, mobile app development, computer-aided design and climate-smart agriculture since 2019. Total 2100 students were trained in these advanced technological developments in the field of agriculture with help of 42 experts from leading organisations from across the country and abroad. Salient outcomes of these trainings have been as follows:

Aspects focused during student training/workshops



Computer-Aided Design



Robotics in Agriculture



Remote Sensing and GIS



Climate Smart Agriculture



Mobile App Development



AI and Big Data Analytics



Precision/Smart Farming

- Multi-disciplinary teams of students could initiate projects under IDP-NAHEP and other agencies. Total 22 multi-disciplinary groups participated in Idea Contest of IDP-NAHEP. Students could learn to think and link beyond their specific disciplines.
 - Students could perceive brilliant ideas to pursue as their summer projects, internships and the compulsory project/thesis work of degree programmes.
 - Students could understand the emerging concepts of AI in agriculture, big data in agriculture or robotics in agriculture precisely with the veteran practitioners, which broadened their outlook and vision of career.
- Students could generate direct alignage with veteran experts and practitioners of the country and abroad and have even extended their contacts beyond the IDP network.



“ I learned a lot about precision farming, C-level language, and its application in precision farming. Now, learning a programming language seems to be a fun activity which I never assumed as my cup of tea earlier, being in agriculture. Now, I could understand that every discipline merges at one point. ”



Mr. Nitin

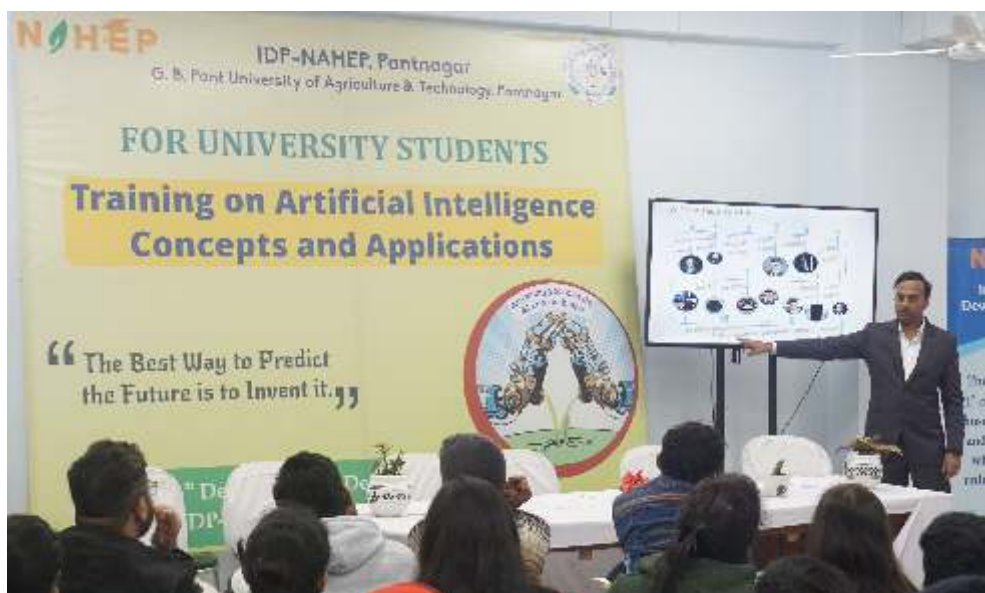
B.Sc. Agriculture, College of Agriculture, Pantnagar

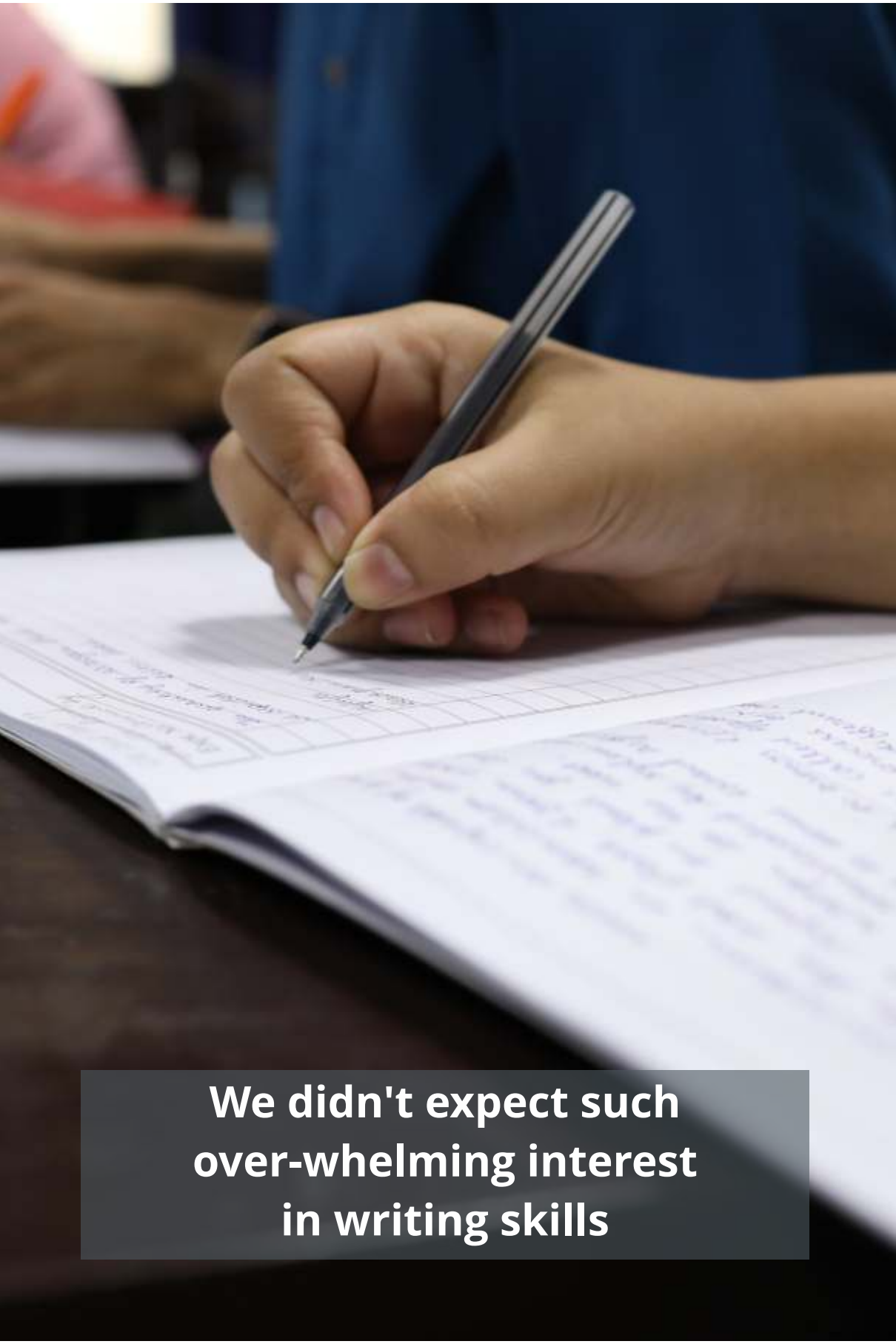
“ We have been exposed to a very new and different domain of agriculture, that was Informatics in Agriculture which is in demand nowadays. It directly impacts our employability and confidence level. Before NAHEP, it was unimaginable for agriculture students. Thank you IDP-NAHEP, Pantnagar. ”



Ms. Gagandeep Kaur Dhillon

B.Sc. Agriculture, College of Agriculture, Pantnagar





**We didn't expect such
over-whelming interest
in writing skills**

The Writing Studio of IDP-NAHEP, Pantnagar: One Year of a Novel Initiative

IDP-NAHEP nurtured more than 1000 students in essential skills of academic and professional writing through more than 150 hours of rigorous training

The IDP-NAHEP, Pantnagar took multiple novel initiatives which were set as precedence for the country. One of such novel initiative is the IDP-NAHEP Writing Studio which has completed its twelfth monthly edition in March 2022.

The Writing Studio was designed to nurture the writing skills of the University students. The talent expression and employability are largely aligned with the writing skills of students. The researches reveal that it is one of the most neglected skill set of the generation, mostly

Issues of writing skills addressed through the Writing Studio workshops

- 1 Identifying and accessing authentic secondary sources for professional writing
- 2 Identifying and accessing authentic secondary sources for professional writing
- 3 Practicum on Writing Research based-Review Article
- 4 How to build successful self-profile
- 5 Skills of Good Writing: Concerns of Micro and Macro Editing
- 6 Creative writing skills
- 7 News and Feature Writing
- 8 Learn to Design your Write-up: Concerns of Layout and Design
- 9 Adding Rigour in Research Paper Writing
- 10 Fundamentals of Professional Writing
- 11 Efficient Apps to Help Improve Writing Skills
- 12 Top e-Learning Resources and their Use in Writing Assignments
- 13 Digital Tools for Impressive Content Creation

overlooked by the students as well as the universities. Students need to write assignments, reports, exams, articles, research papers every now and then. They also write their resume, CV, statement of purpose according to their career needs. Besides these, letters and emails are also a daily obligation. If we get towards creative skills then the students compose essays, poems, stories, proposals, blogs, and a plethora of other expressions. At all these junctures, writing skills emerge as the critical factor in generating visibility, victory, and success. IDP-NAHEP, Pantnagar created a wide-ranging plan of nurturing and honing writing skills among students, covering all these aspects in comprehensive manner. A need assessment survey was conducted to explore the most needed issues in writing which the students mostly confront. An expert was searched to take up this much needed intervention on regular basis. The IDP-NAHEP, Pantnagar could then get Dr. Shweta Gupta, Ph.D. from IIM, Indore and a young-accomplished writer with deep insight of mentoring students on this front who generated the path-breaking series of Writing Studio which emerged as a very popular soft skill interventions, embedded with strong follow-up of practices and activities.

Since then, all the above aspects of writing including insights on writing styles,

types of writing, use of secondary sources, authenticity of sources, digital tools for effective writing have been covered in an elaborated manner. The effort could capture the attention of more than a thousand students in last twelve months in which total 168 contact hours have been successfully completed along with around additional 100 hours of practice, assignments and tutorials.

Impacts of Writing Studio

- 168 hours of content on writing skills have been delivered among 1000 students which is a record in itself.
- Students could get more than 100 hours of thorough practice in writing skills.
- The trainees could produce hundreds of finished products during the workshops such as essay, article, report, story, news, summary, paper, creative writing samples etc.
- Each entry and effort of students were duly acknowledged with proper personal feedback to improve.
- Hundreds of trainees could develop their profile, resume, biodata professionally and precisely with in-depth understanding of career objectives.
- Proper understanding of digital resources to the trainees was expressed as a marvel output of the trainings.





**We knew that our
efforts are for next 20 years**

Generating Immersive Learning Experience through the NextGen Virtual Reality Lab

IDP-NAHEP, Pantnagar made the learning experiences of the students more alive through AR and VR

Virtual Reality based learning is bringing innovation in 21st century teaching and learning systems. The virtual laboratory is developed at University Centre, NAHEP Building with a goal to provide an interactive environment for learning through the technological intervention of 3D view, virtual reality and augmented reality to support in the undergraduate teaching. The teaching learning ecosystem in the University was confined to the LCD projectors and black boards. With this new facility added, the university jumped into new era of teaching-learning system by introducing interactive panels at 54 identified rooms across the colleges.

The objective of the Virtual Laboratory is to increase the efficiency and effectiveness of agriculture and allied

education for the students. It is difficult to visualize seasons, human, animal, crop physiology, taxonomy, insects etc. through naked eyes. This Virtual Lab with 3D simulations/AR-VR facility will help the students to explore, to discover and get into immersive content with deeper understanding. It will help in providing realistic experiences of subject matter to undergraduate students for enhanced learning outcomes.

With the facility of 3D video demonstrations, more than 25 sessions have been organized in the Virtual laboratory in which a total of 524 students across the colleges and 74 staff members across the university got acquainted with the concept of 3D video. The lab is well equipped with two 3D projectors, video processor, silver projection screen for 3D

Let's explore the virtual world to get some real learning

- **First Virtual Lab** with 3D demonstration and virtual reality devices established by IDP-NAHEP in Pantnagar University Campus
- **Live experience** of virtual reality devices and 3D demonstrations provided to more than **600 undergraduate students**
- **Developed scripts** of more than **100 modules** of undergraduate course curriculum to be further designed as VR videos

view, sound system including speaker and subwoofer, 3D polarized filter and 3D polarized glasses, 16 VR Headsets with android operating system and seating capacity for 100 individuals.

To further strengthen the AR-VR facility at the University, IDP-NAHEP, Pantnagar has been provided with 04 headsets by NAHEP Component 2, ICAR-IASRI, New Delhi. Further a professional team of Hyper Reality Studio is also on task

to develop AR-VR material. The work on selected topic for VR module is underway.

The laboratory also aims to provide video lectures, web resources and animated demonstrations for undergraduate courses. A total of 20 animated 2D/whiteboard videos have been created in selected undergraduate courses across the colleges which will be a part of practical classes for first year students. The process of generating more such content as well as development of AR and VR material is under way.







Mostly, we miss the most important thread of documentation

Consistent Efforts of Documentation Led to a Wave of Change

IDP-NAHEP, Pantnagar was the flagbearer of consistent documentation efforts with regular films, radio programmes, monthly newsletter, books, booklets and media coverage

The inch-by-inch efforts made by IDP-NAHEP, Pantnagar in strengthening the teaching-learning ecosystem of the University and its impacts were precisely captured and documented by a dedicated professional team. The consistent trend of data capturing, compiling, documenting, creating a repository, translating in digital formats, conserving on the University Website and other well-established

portals, sharing among all possible stakeholders across the globe not only generated a visibility but also set a standard of IDP-NAHEP, Pantnagar. Four professionally designed Websites/Portals were also launched under IDP-NAHEP, Pantnagar with well-structured content and a system of content updation and client visits. The count of use hours put by the clients on those platforms till March 2022 end are 92880 hours since inception.

Number of publications/documentation resources produced by IDP-NAHEP, Pantnagar

35 Radio Programmes on IDP-NAHEP events and student feedback

5 Booklets showing the efforts of IDP-NAHEP, Pantnagar in improving the academic system

30 Monthly Newsletter capturing the activities and impact of IDP-NAHEP, Pantnagar

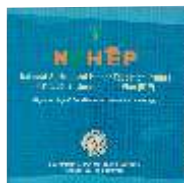
2 Brochures of IDP-NAHEP, Pantnagar and Pantnagar Museum

21 Videos on YouTube of the initiatives and innovations of IDP-NAHEP, Pantnagar

2 Annual Report of 2019-20 and 2020-21 providing details of input, output and outcome

4 Social Media presence on Facebook, Instagram, YouTube and LinkedIn

1 Website of IDP-NAHEP, Pantnagar (www.idppantnagar.in)



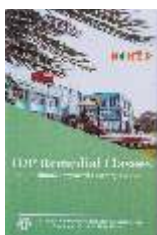
IDP NAHEP Brochure

IDP-NAHEP, Pantnagar published a brochure giving a brief introduction about IDP-NAHEP, Pantnagar, and its objectives. The brochure also depicts the set targets of projects for faculty members, students and for overall infrastructure strengthening. The brochure also gives an idea that who can align and take direct benefits from the project.



The 50 Pathfinding Academic Innovations by IDP-NAHEP, Pantnagar

A booklet to showcase the development of academic innovations in the campus, NAHEP building interiors, first virtual classroom, first innovation and incubation centre, e-content lab, the establishment of the Faculty Development Centre, agri-informatics laboratories, open-air amphitheater, digital classrooms, etc.



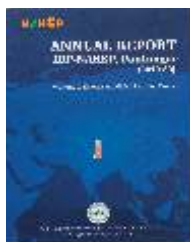
IDP Remedial Classes: Unique Alumni Supported Learning Endeavour

The remedial classes are designed to suitably address the needs of the learners with the help of illustrious alumni of the University. The first remedial classes were launched in the presence of Hon'ble Vice-Chancellor of Pantnagar University Dr. Tej Pratap and PI, IDP-NAHEP, Pantnagar Dr. S.K. Kashyap.



Experience Assessment Booklet: Taking A Giant Leap, Pantnagar Towards Adoption of Digital Teaching-Learning

The booklet depicts opportunities and challenges in implementing the digital teaching-learning system among the faculty members and students of the University. It represents not only the experience of the students and faculty members regarding online teaching-learning but also exposure, satisfaction level, and preference for the digital platforms.



Annual Report

Two annual reports published by IDP-NAHEP, Pantnagar detail about the initiatives undertaken for developing the infrastructure, generating innovation ecosystem, adopting agricultural informatics, steps towards digital learning, nurturing foreign language skills, impact assessment of students' activities, efforts under EAP and ESP, success stories, and overall progress.



Monthly Newsletter

To showcase the activities of the project, IDP-NAHEP, Pantnagar is publishing a monthly newsletter since October 2019. The newsletter is also sent to the, national coordinators of NAHEP, different agricultural universities/colleges, vice-chancellors, deans, directors, HODs, and other faculty members and staff of the universities.



Pantnagar Museum: Nurturing a Culture of Conserving the History

To commemorate the efforts undertaken to build the historic Pantnagar Museum, a booklet was published by IDP-NAHEP, Pantnagar. The booklets gives a brief on the intensive research and toil taken to build up the museum.



Radio Programme

IDP-NAHEP, Pantnagar also created Radio Programmes as a segment of content intended for broadcast on Pantnagar Janvani 90.8 FM. The programmes include the introduction of training and experts, students' feedback and content provided in the training, what they learned, and the requirement of future training to enhance students' skills.

Pantnagar Museum



scholars and scientists
institution, in order to
advanced agricultural
and quality human
ified memories of the

inception of this great institution and its pledge to contribute
upto the fullest to sustain food and nutritional security of the
country, have been preserved in this museum. Let's feel the
Pantnagar spirit and commit ourselves to sustain the
vibrance, virtues, and vigour of this illustrious institution.

माता भूमिः पुत्रो अहं पृथिव्याः ।
धृत्वां भूमिं पृथिवीं धर्मणा धृताम् । शिवां स्योनामनु वरेम विश्वल ।
- अथर्ववेद १२.१.१२, १२.१.१७

The Earth is our Mother and we are her children.
of the world, who sustain us, grow on the immovable Earth, the Earth which is held
(s), and in which auspiciousness gently pervades throughout the world.
- Atharva Veda, 12.1.12, 12.1.17

P.L. Govind

A source of et



An unimaginable saga of
connecting the fading dots

Raked 20,000 Book Pages to Initiate the Pantnagar Museum: Nurturing a Culture of Conservation

IDP-NAHEP, Pantnagar could generate a never-lasting monument at Pantnagar conserving history of evolution of University agricultural education of the country.

Pantnagar Museum at IDP-NAHEP Building is a befitting monument preserving the history of the unique land of Pantnagar right from its day of inception. It is the first-ever museum of G.B. Pant University of Agriculture and Technology, Pantnagar the country's first agricultural university. Inaugurated on November 22, 2021, in the presence of Gen. (Retd.) Gurmit Singh, Hon'ble Governor of Uttarakhand and the Chancellor of the University, the museum showcases an archive of important documents, historic photographs and

prestigious artifacts related to the University.

Talking about its foundation, the brilliant idea of establishing this beautiful monument came up in 2005 when Dr. S.K. Kashyap, present Dean, College of Agriculture, took inspiration from Dr. P.L. Gautam (Former Vice-Chancellor, GBPUAT, Pantnagar) while working with him for the majestic book 'Five Decades of Pantnagar'. After 15 years of extension, in 2021, his tremendous efforts along with his IDP Pantnagar team led him to bring life to

Efforts Undertaken for Development of Museum



8000
man hours
invested



1350
man days
involved



4000
photographs
referred



20000
book pages
read



950
minutes of
telephonic
conversation

a model penned on paper. From the design and development of the museum to the gathering of important facts, documents, artifacts, and other relevant information related to the history of Pantnagar, the team worked consistently for three months. Separate teams of documentation, photography, computer designing, content editing, and implementation worked simultaneously to make the museum come alive. The museum wouldn't be possible without Mr. Grover Webb, Son of Dean H.W. Hannah (who designed the initial blueprint of the University), University of Illinois, USA, who shared rare photographs and information of the initial days of the establishment of the University.

The museum is open to the public on weekdays (morning and evening shift) and University students give their time and efforts to run it smoothly. Till time, 550 of people have visited this repository and treasure house to have a glimpse into the past. It is also a part of the orientation programme of the first year students of different colleges of the University to make them understand the history and glory of Pantnagar, eulogized as the Harbinger of Green Revolution by Nobel laureate Dr. Norman E. Borlaug. Even though the museum has a lot many stories to narrate to its visitors, digitalization of the museum content is still in progress to enhance the quality.





Annexure 1

**List of Training/Workshops/Seminars/Internships/Interactions
organized for undergraduate students by
IDP-NAHEP, Pantnagar from September, 2019 to March, 2022**

Total Events = 266, Total Participants = 19,660

S. No.	Events	Date
1	IDP Sensitization Programme	September 16, 2019
2	Workshop on Introduction to eContent Development	October 12, 2019
3	Technical conversation on Documenting India's Water and Millet Culture	September 24, 2019
4	Training on Critical Thinking for Innovative Outlook	September 28, 2019
5	Awareness Workshop for Foreign Language Classes	October 10, 2019
6	Guest Lecture on Study Options at Royal Veterinary College (RVC)	October 23, 2019
7	Inauguration of IDP Amphitheatre	October 25, 2019
8	Student Interaction of National NAHEP Director and IDP Coordinator	October 25, 2019
9	Sensitization Workshop of Innovators	November 7, 2019
10	Advanced Communication Skills Training	November 8-10, 2019
11	Renovate the IDP Building Contest	November 15, 2019
12	Band and Guitar Show at IDP Amphitheatre	November 15, 2019
13	Innovators Meet	November 30, 2019
14	Training on Innovative Startups in Community Science	December 4- 9, 2019
15	Interactive Session with representatives of FrenchEmbassy for Academic Alignment	December 5- 6, 2019
16	Benchmark Student Survey	December 5-10, 2019
17	Training on Robotics	December 6 - 9, 2019
18	Interactive Session on Skilling Youth for Career in Health Bioindustry	December 7- 8, 2019
19	Orientation Session for Students Overseas Exchange Programme	December 14, 2019
20	Training on Career Options in Agriculture	December 14, 2019

21	Overseas Exposure: An Interactive Session with Illustrious Alumni	December 14, 2019
22	Mind Management Training for Stress free Living	December 15, 2019
23	Training on Artificial Intelligence Concepts and Applications in Agriculture	December 26- 28, 2019
24	Team Building Workshop	January 1, 2020
25	Planning session for the IDP Diary Radio Programme	January 8, 2020
26	International Training on System Thinking and Modelling in Agriculture	January 9-14, 2020
27	Guest Lecture on Wildlife Management	January 17, 2020
28	Reinventing the Bicycle Design Contest	February 15, 2020
29	Screening and selection of UG students for International Students Exchange Programme (2 months Internship)	February 16-20, 2020
30	Workshop on Leadership and Entrepreneurship Development	February 20-21, 2020
31	Interaction Session with Padma Shri Gwardhan Panika (Weaving Artist)	February 21, 2020
32	Development of Soft Skills for Entrepreneurship among Agri Graduates	March 1, 2020
33	An Interactive Session on Hone Your Entrepreneurial Skills	March 14, 2020
34	Workshop on Personality Development	March 14-15, 2020
35	Inauguration of University Centre and Launching of IDP NAHEP Website	March 14, 2020
36	21 Hours Training on Quality Assurance and Laws for Food Products	March 14-17, 2020
37	Webinar on Self Management for a Better Career	March 30, 2020
38	Online Interactive Session on IT Architecture and Innovation	March 31, 2020
39	Online Learning for Faculty: what you need to know and prepare for a successful transition of your curriculum by QASPIR	April 1-3, 2020
40	IT Architecture and Innovation	April 1, 2020
41	Career Opportunities in Civil Engineering and Infrastructure Innovation	April 1, 2020
42	Digital Transformation and Trends in IT Industry	April 2, 2020
43	Online Teaching Skills	April 7-9, 2020
44	How to become 21st Century Industry Ready Graduate: Needs and Requirements	April 6, 2020

45	Nutrient Deficiencies in Crops and their Management	April 11, 2020
46	Security Issues on Online Platform: Dos and Dents	April 17, 2020
47	How to Stay Positive in Adversities?	April 23-25, 2020
48	Knowledge Management & Rural Communication: Key to a Successful career	April 24, 2020
49	Strategies for UPSC Aspirants: How to Prepare with Graduation?	April 25, 2020
50	60 Hours Online Remedial Classes for English Language	April 27 - June 27, 2020
51	Linking Livestock Science with Economics in Indian Perspective	May 2, 2020
52	Himalayan Agriculture In INDIA: Scope and Prospects	May 2, 2020
53	Skilling Agri-Graduates for Technology Transfer through Participatory Learning	May 12, 2020
54	Advances in Biomedical Engineering and their applications in Livestock Management & Health	May 21, 2020
55	Applications of artificial Intelligence Tools in Agriculture	May 22-24, 2020
56	International Opportunities for Agriculture Graduates: A Global Perspective	May 25, 2020
57	Data Science and Analytics Case Studies	May 26, 2020
58	Career Opportunities for Professional Students	May 26, 2020
59	Agriculture 4.0- The Age of Digital Farming	May 29, 2020
60	Generating Skills for Digital Designing as a Career Prospect	May 30, 2020
61	Effective Strategies of Managing Stress: Handling Self, Family and Nation	May 31, 2020
62	Using Open Educational Resources (OER) for Creating Courses	June 1-2, 2020
63	Small Animal Dermatological Disease and their Zoonotic Importance	June 1, 2020
64	Managing India's Invisible Resource The Role of Participatory Groundwater Monitoring and Management at the Village Level	June 5, 2020
65	Opportunities in Agribusiness Sector: Post COVID19 Scenario	June 10, 2020
66	Intellectual Property Rights and Patent Design Specifications: An Overview	June 12, 2020
67	Smart Farming Exploring IoT in Agriculture	June 14, 2020
68	Entrepreneurial Opportunities in Agro Food Processing Sectors for Agricultural Engineers	June 17, 2020

69	Critical Robotic Services for Handling Corona Pandemic	June 19-20, 2020
70	Qualitative Research Methodologies in Social Science Research	June 22, 2020
71	Research Paper Writing Challenges	June 23, 2020
72	Precision Farming	June 29 - July 3, 2020
73	Internship Pathshala-I	July 10 - September 10, 2020
74	Geo Informatics and Its Applications in Fisheries Resource Management	July 11, 2020
75	Evolving Skills and Attitude for Learning in Covid Times	July 16, 2020
76	Learn to Become a Successful Entrepreneur	July 17, 2020
77	Zoonosis: A Threat to Mankind	July 17, 2020
78	Learning the Skills of Digital Marketing	July 23, 2020
79	Internship Pathshala-II	July 25 - September 25, 2020
80	Getting Skilled for Better Employability in Food Industry	July 25, 2020
81	Technological Innovations in Coastal Aqua-Farming for Entrepreneurship Development	August 10, 2020
82	Higher Order Cognitive Skills for Better Employability : A Global Demand	September 2, 2020
83	Internship Pathshala-III	September 10 - November 10, 2020
84	English remedial Course Beginners Level	September 14 - November 14, 2020
85	Bio-Control Agents: Understanding their role in Sustainable Agriculture	September 26, 2020
86	Scope and Prospects of Beekeeping Industry for Entrepreneurship	September 26, 2020
87	Understanding the Concepts & Prospects of Protected Cultivation for Better Employability	September 26, 2020
88	Exploring Entrepreneurship Options in Silk Industry	September 26, 2020
89	Concepts of Nursery Management for Agripreneurship	September 26, 2020
90	National Education Policy and Its Implications on Agricultural Education	September 28, 2020
91	Remote Sensing and GIS Applications in Agriculture	October 1-5, 2020
92	IELTS and TOEFL Coaching Classes	October 14 - December 14, 2020

93	Understanding the Prospects of Silk Industry in India fo Promoting Agriprenurship	October 7, 2020
94	Internship PathshalalV	October 15 - December 15, 2020
95	Research as a Career: Challenges & Opportunities on an Adventurous Journey	16 October, 2020
96	Modern Tools & Techniques in Agriculture	October 17- October 18, 2020
97	Remedial Capsule: From Basics to Competitive Concepts o Agriculture	October 25, 2020- January 25, 2021
98	Remedial Capsule: From Basics to Competitive Concepts of Veterinary & Animal Sciences	October 25, 2020- January 25, 2021
99	Remedial Capsule: From Basics to Competitive Concepts o Home Science	October 25, 2020- January 25, 2021
100	Remedial Capsule: From Basics to Competitive Concepts of Fisheries Sciences	October 25, 2020- January 25, 2021
101	A Two Day Online Training Programme on Achievement Motivation: Understanding and Managing Self	October 2627, 2020
102	Scope and Prospects of Food Industry fdnnovativeStart-up Ideas	October 31,2020
103	Drones and Its Application in Agriculture	November5-7, 2020
104	Scope and Prospects of Designing for Entrepreneurship	November6, 2020
105	Recent Advances in Weather Forecasting and Agruet Advisories	November6, 2020
106	Case Studies of Entrepreneurship and Incubation Process: Pathways to Succeed	November9, 2020
107	Climate Smart Agriculture: Preparing Future Farms	November10-12, 2020
108	Importance and Current Status of Mushroom Cultivation in India for promoting Agriprenurship	November20, 2020
109	Hi-Tech Nursery Management in Horticultural Crops and Its Accreditaion	November21, 2020
110	Big Data & Analytics in Agriculture World	November27-28, 2020
111	Webinar on National Education Day	December 3, 2020
112	Core Leadership Skills for Emerging Agriprenreus of 21st Century	December 4, 2020
113	Educational Animation to Improve Learning: Script Designin Contest	December 6, 2020
114	French Culture and Civilisation	December 7-10, 2020

115	Personality Development Session on Powerful Routines to Change Life	December 8, 2020
116	3 Days Training Course on Python in GIS	December 10-12, 2020
117	Real Flowers withers- Freeze Drying Reserves: An Entrepreneurs Experience for happy emotions	December 11, 2020
118	Skills and Knowledge needed for Agricultural Graduates to become Globally Competitive Professionals	December 12, 2020
119	Internship Pathshala-V	December 14, 2020 - February 14, 2021
120	Understanding the Global Perspective and Scope of Food Quality Monitoring	December 15, 2020
121	Automation in Agriculture for Informed Decisions	December 18-19, 2020
122	Internship Pathshala-VI	December 18, 2020 - February 18, 2021
123	Closing the Nutrient Loop: Phosphorous Management in Protein Farming	December 19, 2020
124	Challenges of Contaminated Land	December 21, 2020
125	Advances in Plant Genetics and Breeding	December 21-22, 2020
126	Enhanced Mineral Weathering for Climate Change Mitigation and Food Security	December 23, 2020
127	Christmas in France: Culture and Tradition	December 22-24, 2020
128	Rewire Your Brain to Design Your Pathway	December 24, 2020
129	Culture of Rainbow Trout: Rainbow Trout Culture in the Himalayan Kingdom	December 24, 2020
130	Innovative Aquaculture Technologies	December 26, 2020
131	Smartphone based Sensors for Greenhous Production	December 29, 2020
132	Agroforestry: A resilient and Sustainable Strategy to Combat Changing Climate	December 29, 2020
133	Culture of Rainbow Trout: Nutrition and feed Formulation for Rainbow Trout	December 30, 2020
134	Advances in Soil, Crop and Weed Management: Soil Sensing for Crop Inputs Management	January 6, 2021
135	Advances in Soil, Crop and Weed Management: Digital Soil Mapping and recent Initiatives	January 7, 2021
136	Role of Sensors in Smart Farming	January 8-9, 2021
137	Breeding for Resistance to biotic and abiotic stresses and development of Bt-Cowpea	January 15, 2021

138	Advances in Remote Sensing and Machine Learning Techniques for Agriculture Applications	January 18-19, 2021
139	Sustained Food Security in India: Need for Multi- institutional Collaboration	January 22, 2021
140	Quantitative Analysis of Farming System	January 25-26, 2021
141	Startup Ecosystem and its stakeholder	January 27, 2021
142	Prospective Role of Agriculture Engineering in World Market	January 27-30, 2021
143	Crop Health Monitoring Using Geospatial Technology	February 1-2, 2021
144	Emerging Multi Satellite Dataset Techniques in Farming World	February 9, 2021
145	A Multi-Criteria Approach for Urban Stormwater and Flood Management using Remote Sensing Technology	February 11-12, 2021
146	Online Remedial Crash Course on Agriculture for aspirants of JRF & other Competition	February 13 - March 14, 2021
147	Advances in Soil, Crop and Weed Management	February 16, 2021
148	International Opportunities for Professional Development in Entomology and Precision Integrated Pest Management	February 18 - March 11, 2021
149	Start-up Idea Validation	February 20, 2021
150	Development of Mobile Application for Agricultural World	February 22 - March 9, 2021
151	An Excellent Opportunity in the form of 30-day English Remedial Classes	February 20 - March 28, 2021
152	Prospective Role of Agricultural Engineering in World Market	February 23-26, 2021
153	The U.S. Cooperative Extension System a Futuristic Perspective	March 5, 2021
154	Online Coaching and training for Python Programming Language	March 6, 2021
155	Advances of UAV in Agriculture	March 15-16, 2021
156	Online Remedial Crash Course on Fisheries Sciences for aspirants of JRF & other Competition	March 15 - April 15, 2021
157	Online Remedial Crash Course on Veterinary and Animal Sciences for aspirants of JRF & other Competition	March 15 - April 15, 2021
158	2-months internship project on Tree species of Pantnagar	April 1, 2021
159	An interaction session with the first-year students of College of Agriculture on the basics of idea generation and incubation for generating a project.	April 1, 2021

160	An exposure visit to Chaddha Seed Farm, Kaladhungi for exposure to Innovation and Entrepreneurship in Papaya Cultivation	April 2, 2021
161	Demonstration of facility and utility of virtual lab including 3D, AR-VR facility	April 4, 2021
162	15 days remedial classes of English Language	April 5-20, 2021
163	One month internship on the topic Finance Management in Food Startups	April 5, 2021
164	Effective Communication Skills	April 5-11, 2021
165	Photography Workshop	April 5-17, 2021
166	Interaction of Hon'ble Vice Chancellor, GBPUA&T, Pantnagar with the students on their food startups	April 7, 2021
167	How to start a Startup	April 7, 2021
168	Train your mind to be successful	April 10-18, 2021
169	Value addition course on the topic Agricultural Informatics	April 10-11, 2021
170	Demonstration of the concept of 3D videos, augmented reality and virtual reality	April 11, 2021
171	Identifying and accessing authentic secondary sources for professional writing	April 13-17, 2021
172	A counseling session for faculty members Systems and Contemporary Trends in Students Counselling	April 15, 2021
173	Beginners A1 Level in French Language Course	April 15 - July 15, 2021
174	Remedial classes on Spoken English	April 17, 2021
175	An introspection session with the final year undergraduate students of the University regarding the strategies to be followed in the lockdown period in context of personal growth and development	April 18, 2021.
176	Advanced Course on Mobile App Development: Sensitizing Students for Farmer Welfare	May 20 - June 2, 2021
177	Fundamentals of 3D Modelling	April 28 - May 7, 2021
178	Practicum on Writing Research based Review Article	May 21-25, 2021
179	Honing Skills of Foreign Languages and Foreign Culture	May 10-18, 2021
180	Workshop on Idea to Venture Creation	May 7, 2021
181	Motivational Lecture	May 27, 2021
182	Role of Smart Farming in Indian Agriculture System	May 10-14, 2021
183	Interactive Sessions Held on COVID19 and its Management Strategies	May 10-13, 2021

184	Start-up Week: From Idea to Revenue	June 2-8, 2021
185	Workshop and Quiz Competition on Environmental Consciousness in France	June 07-10, 2021
186	Webinar on Emerging Issues and Concerns related to Planetary Health: Making our Planet Chemically Safe	June 7-8, 2021
187	Environmental Consciousness in France	June 7-10, 2021
188	An interactive session on the topic Ecological Restoration of Degrading Wetlands	June 8, 2021
189	Interactive Session Le Tourisme Vert	June 9, 2021
190	Application of Machine Learning in Agriculture	June 10-20, 2021
191	Quiz competition entitled as Le jeu-concours.	June 10, 2021
192	Application of Machine Learning in Agriculture	June 12-22, 2021
193	Applications of Smart Farming Techniques for Enhancing Quality of Plant Nutrients	June 23-26, 2021
194	How to build successful selfprofile	June 23-27, 2021.
195	Geospatial technology for crop estimations and yield modelling	June 25, 2021.
196	Hands-on training on Open-Source Platforms for image analysis: Google Earth Engine on.	June 26, 2021
197	Digital Agriculture for Enhancing Profitability	July 14-15, 2021
198	Effective Presentation Skills	July 15, 2021
199	Leadership Skills	July 15, 2021
200	Computational Tools for Advanced Biotechnology Research	July 16, 2021
201	ICTs Intervention for Northeastern Hill Region	July 17, 2021
202	Skills of Good Writing: Concerns of Micro and Macro Editing	July 21-25, 2021
203	A1 batch in French language lab	July 26, 2021
204	Webinar on Time Management	July 28, 2021
205	Internship Pathshala-VII	July 30 - September 30, 2021
206	A webinar on Honing competencies for success in life	August 3, 2021
207	Interactive session with a French family	August 4, 2021
208	Big Data and the Future of Agriculture	August 9-10, 2021
209	Developing success habits	August 12, 2021
210	Online postcards to French families	August 14, 2021

211	Understanding Newer Technologies for better Career Growth	August 19, 2021
212	User Centric Design Process	August 20, 2021
213	Creative writing skills	August 25-29, 2021.
214	Applications of Computer-Aided Design (CAD) in automation of Agriculture	August 27-1 September 2021
215	An idea pitching contest Ingenious21- Unleash Your Innovations	August 29, 2021
216	A virtual tour on Challenges and their Innovations in Farm to Fork Operations	August 31, 2021
217	Crash course for JRF Aspirants of College of Agriculture	September 2-5, 2021
218	Fascinating World of Biological Nanomachines: Understanding Fundamentals of life through Macromolecular Structures	September 3, 2021
219	Innovations in Cultivation Technology of Paddy Straw Mushroom (<i>Volvariella</i> sp.)	September 4, 2021
220	Innovations in Quality Seed Production of Forage Crops	September 4, 2021
221	Applications of 3D Modelling in Automation of Agriculture	September 8, 2021
222	Maintenance of varietal purity/seed health	September 11, 2021
223	Diseases of Mushroom and their Management	September 11, 2021
224	Seed Testing and Certification	September 18, 2021
225	Role of Digital Soil Management Practices in Smart Farming	September 20-21, 2021
226	News and Feature Writing	September 21-25, 2021
227	Global Soil Organic Carbon Sequestration Mapping	September 21, 2021
228	Learn to Design your Write-up: Concerns of Layout and Design	October 13, 2021
229	Transformation of Agri-Food System in India	October 16, 2021
230	Campus to Corporate	October 18-21, 2021
231	Offline French Language course A1& A2	October 25, 2021
232	Orientation session on the concept of Aeroponics and Hydroponics unit	October 27, 2021
233	Hands-on-training to work in the Aeroponics and Hydroponics unit	October 29 - November 1, 2021
234	Opportunities in Wildlife Research	October 30, 2021
235	Emerging technologies in postharvest management of horticultural crops	November 2, 2021

236	Hands-on training on seed sowing and plant propagation techniques in Aeroponics and Hydroponics unit.	November 9-11, 2021
237	Inter College Level Debate competition	November 13, 2021
238	Nanotechnology: A Recent Advancement in Agriculture and its Scope	November 15, 2021
239	Design Thinking	November 18-19, 2021
240	Potential Role of Internet of Things and Large Data Analytics in Agriculture	November 19, 2021
241	Adding Rigour in Research Paper Writing	November 23 - 27, 2021
242	Sustainable soil Management	December 5, 2021
243	Using Micro-organisms to boost Agricultural Production: Skills and Techniques	December 7, 2021
244	Fundamentals of Professional Writing	December 10-14, 2021
245	2 Months Internship Programme for Undergraduate Students on Content Development for e-Resources	December 14 - February 14, 2021
246	French Film Festival	December 18, 2021
247	Workshop on Soft Skill and Personality Development	December 20, 2021
248	NAHEP Orientation workshop for first year students	December 22-24, 2021
249	National Farmers Day	December 23, 2021
250	New Year Greeting Card Making Competition in French and German language	December 27, 2021
251	Webinar on Capacity Building and Personality Development: Lessons from Indian Army	January 22, 2022
252	Online Workshop on Efficient Apps to Help Improve Writing Skills	January 23, 2022
253	Communication and English Speaking Skills	January 28 - February 10, 2022
254	Internship Pathshala-VIII	January 28 - February 28, 2022
255	Microsoft Excel Training: Beginner to Advanced	January 31 - February 11, 2022
256	Top e-Learning Resources and their Use in Writing Assignments	February 14-18, 2022
257	Remedial Crash Course on Home Science for aspirants of JRF & other competitions	February 15 - March 15, 2022
258	Webinar on Attitude: A matter of choice	February 15, 2022

260	Internship on Designing Radio Programme	February 23 - April 15, 2022
261	French Crêpe Recipe -Learn how to make French Crêpes	February 26, 2022
262	Advanced Photography Skills	March 9 -15, 2022
263	Digital Tools for Impressive Content Creation	March 12 -16, 2022
264	Exploring Counseling Strategies: The way to Institution Building	March 12, 2022
265	Internship in Field Work	March 21 - July 31, 2022
266	R Studio Programming Basic	March 21 -30, 2022



Institutional Development Plan
National Agricultural Higher Education Project
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