

भारतीय प्रौद्योगिकी संस्थान जम्मू INDIAN INSTITUTE OF TECHNOLOGY JAMMU



Progress Report 1-4-2023 to till date <u>Regional Coordinating Institute (RCI)</u> Indian Institute of Technology Jammu

Jammu & Ladakh Region

Prof. Rakesh Singhai (RCI Coordinator)

Dr Riya Bhowmik (PI Coordinator)

Mrs Jeyoti Kaul (UBA Project Assistant)

Mr. Subash Langeh (Field Staff)

Name of RCI	Indian Institute of Technology Jammu
AISHE CODE	U-0906

<u>Orientation Review Workshop</u> <u>And</u> <u>1-Day Workshop on Bamboo Candy Making and Cultivation</u>



Indian Institute of Technology as Regional coordinating Institute, Unnat Bharat Abhiyan organized one day training, awareness and demonstration workshop on 'Bamboo Candy Making' and 'Bamboo Cultivation' and an orientation review workshop for new as well as existing Participating Institutions on 28th April 2023 in physical mode at IIT campus in collaboration with CSIR-NIScPR, New Delhi, CSIR-IHBT, Palampur and NCI, IIT Delhi, the Knowledge Partners were CSIR-IHBT Palampur and Vijnana Bharti (VIBHA).

This event was planned for stakeholders of Jammu Province including the farmers and the stakeholders from our adopted villages and also the adopted villages of our participating institutions (PIs) of Unnat Bharat Abhiyan of Jammu province who are already into the bamboo trade/cultivation.

The workshop was conducted in three sessions, the introductory session was taken by Dr. Riya Bhowmik, UBA PI Coordinator, followed by welcome address by Prof. Rakesh Singhai UBA RCI Coordinator IIT Jammu welcomed the dignitaries, highlighted the achievement and shared the intentions behind the organizing this workshop, he wanted the follow up of the workshop shall be promising for the attending farmers.

The session continued with an online speaker Prof. Vivek Kumar, Co-Coordinator, NCI, IIT Delhi, stressing upon transforming higher education and villages for Atmanirbhar Bharat, its objectives, its network, its outcomes focusing on NEP and convergence for facilitation of holistic and sustainable rural development.

We were enlightened by our next online speaker Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, New Delhi who in her inspiring words spoke about the working objectives of CSIR-NIScPR --- always ready to reach out to the grass root level through its network.

The Technical sessions started with the speech of Dr. Yogesh Suman, Senior Principal Scientist (NIScPR) introducing the technical sessions and shared a series of workshop schedules in a months ahead. The first technical session on Bamboo Candy Making was taken by Dr. Mahesh Gupta, Principal Scientist CSIR –IHBT Palampur, he started his

session with Bamboo Shoots---'A Healthy Food Option' were he elaborately explained the multiple uses of bamboo as food products. He also demonstrated the whole process of Bamboo Candy Making. The technical session of the event continued with the speech of Dr. Rohit Joshi Senior Scientists CSIR – IHBT Palampur, he took the session on Bamboo Resources and Technologies at Palampur, he talked about the different types of Bamboo available, their properties, their uses and how these can be differentiated as per their usability. He welcomed the attended farmers to CSIR-IHBT Palampur to get to know the cultivation techniques, propagation techniques through seeds and stems.

As we all know every region has its climatic and soil differences and plays avital role to adapt a particular cultivation, therefore to get to know about all this we had invited the scientist team from KVK Samba, Kathua and Reasi who updated the gathering about the Bamboo species available in Jammu Region, we had with us Dr. Sanjay Khajuria, **C**hief Scientist Agroforestry & Head Krishi Vigyan Kendra (KVK) Samba, he shared the experiences with a group of bamboo workers whom he met. They were in a bad condition, they could hardly earn to live their bread, but without butter, because they could only think of few bamboo craft things like vegetable baskets in different sizes, nothing beyond, they have not heard of bamboo candies and pickle. Dr. Khajuria also shared that the ministry has kept him as 'Invitee' in bamboo mission and he has to report progress after every two months and the things have start moving and a sanction of 1.5 crore INR grant was sanctioned to build a cooperative as cluster 1 for Samba district for the bamboo farmers where they can bring their various products for exhibition throughout the year. And as an achievement, Dr. Khajuria also shared that he had sent a group of 5 to 6 farmers to Assam who got trained in bamboo furniture etc.

This part of agriculture has no history in Jammu because, in Jammu only a particular community does this bamboo craft as this craft is considered a craft for lower caste community, therefore this particular part of agriculture lack behind, but now the ideologies have changed and the avenues have added in every sector.

Continued the session with Dr. Lalit Upadhyay, Scientist of KVK-Reasi. He talked about the common constraints faced by the farmers are--- there are only few species of local bamboo available e.g., 'Lathi Bans' and that too is very hard to cut, he also mentioned that in Jammu generally we find the bamboo in forests and before 2017, the state had no Forest policy and the farmers were not allowed to cut the bamboo for the craft, but after the forest policy of 2017, the bamboo has been kept out of the forest laws, so we can cut and cultivate the bamboo without the permission.

Adding the information about local bamboo species available by Dr. Vishal Mahajan Senior Scientist of KVK-Kathua. He put forward the important point that there is a great difference between the climatic conditions of Palampur and Jammu, the moisture content in the air is very less than Palampur and the bamboo grown in Jammu is very hard and is not fit for candies and pickle. While sharing his research in the field that only 4 types of bamboo is available in the forest areas of Jammu and the focus need to be given to increase the cultivation of more species.

We had with us the NCI, IIT Delhi team, Dr. Meenakshi Choudhary and Mr. Ashish Chauhan who coordinated the event at NCI level.

The event concluded with the vote of thanks by Dr. Bhowmik, thanking the Scientists and Farmers for making this event a success. The glimpses of an event and a group photograph can be seen in fig-1 and fig-2.





Fig-2

Computer Training:

The training of neighboring school students as part of our outreach programme was scheduled on the request from the adopted village Kuwara of Panjgrain. IIT Jammu social club (Kritash) and UBA took the initiative and planned the same. The schedule below was designed for weekends, so that it will not disturb the routine class work of both, the school students who want to learn and the IIT volunteers who want to teach. There were around 20 students who were on roll. Most of the students had seen the computer first time. We can see the glimpses in fig-2A, 2B, 2C and 2D

Date	Time	Торіс			
04-01-2023	4-5pm	Revision of Introduction to computer and Operating computer using GUI Based Opertating System			
04-02-2023	2-5pm	Revision of Understanding Word Processing and Using Spread Sheet			
04-08-2023	4-5pm	Revision of Introduction to Internet, WWW and web browser			
04-09-2003	2-5pm	Revison of Communications and Collaboration and Making small presentations			
04-15-2023	4-5pm	Revision of Financial literacy for banking Scheme and Applications			
04-16-2023	2-5pm	will take test and certificate distribution			
04-29-2023	4-5pm	Revision of Introduction to Internet, WWW and web browser			
04-30-2023	2-5pm	Revision of Understanding Word Processing and Using Spread Sheet			
05-06-2023	4-5pm	Revision of Financial literacy for banking Scheme and Applications			
05-07-2023	2-5pm	will take test and certificate distribution			



Students of IIT Jammu providing computer classes to school students from adopted villages



2C

The first day in the lab

Participated in "Living Udaharan with C20 - LiFE working group", which aims to bring attention to "Lifestyle". The contributions of Living Udaharan play a

vital role in shaping Lifestyle For Environment and society, but often go unnoticed. The poster of the Web series can be seen in fig-3.



IIT Jammu as Regional coordinating Institution could find Rajat Salgotra, an MBA graduate from Janipur area of Jammu district is one of the volunteers of Disha Foundation who have dedicated themselves for the social good. Some of his attention seeking works are:

He was finding it difficult to understand how the urban dung could be stopped from flowing into Tawi River to save the river from getting further polluted and to find answers to his queries, the 28-year-old Rajat S/o Sh. Ravi Kumar Salgotra studied the relevant matter available on the internet and YouTube. His hard work finally paid off when he learn to make some of the creative eco-friendly products using the urban dung and he got a private company registered under the name of Samast Eco Alternatives Private Limited and started working on different creative models to create a range of products from the organic waste material (dung). Therefore stopping the same from flowing into the rivers, including Ganpati idols, incense sticks, decorative items, Sambrani cups, diyas, incense cones, pots, seed balls, cow dung logs, and cow dung cakes.

According to Salgotra, every year, tonnes of dung is generated by the stray animals loitering around the city areas and this goes into the rivers as a waste.

His foundation also took an initiative to clean the dirty ponds, wells with the help of NSS volunteers of different Universities and colleges of the city too. His foundation widen the network by personally meeting the NSS Coordinators to increase the manpower. This all was initiative to save the mother earth from getting more polluted, This talk was an inspiration for all of us and we are in touch with him to help his and even our cause to save environment.

The report was submitted on the given format to NCI, IIT Delhi.

Engagement of IIT Jammu with Panchayati Raj institutions and how to tap funding opportunities

A talk by Dr. Polly Datta (How to link IIT Jammu to Panchayati Raj institutions) A talk was delivered by Dr. Polly Datta on "engagement of above topic on Tuesday April 11, 2023 at 4 PM. Dr. Polly Datta has a PhD from University of Heidelberg, Germany and her expertise is on Decentralized Finance for Rural Upliftment. She discussed various ways to disseminate applied research outcomes of various departments of IIT Jammu to the nearby Gram Panchayats (GPs) through regular qualitative engagement with the respective GPs while finding out the felt need of these GPs. This talk intended to shed light on exploring possible avenues in utilizing the platform -UBA-Cell based at an institute of eminence like IIT to the fullest extent. This platform has a huge potential to attract funds from both the international donor agencies and rural banks (NABARD) as well as from national and sub-nation (State) governments that float Programmes /Schemes which have rural components. This not only helps in making UBA Cell a self-sustaining platform but also can create a buzz among the entire fraternity of any IIT in innovating rural-friendly technological models while blending tradition with modern technologies. These proposed models can be location-specific and season specific as well as can also cater to all-weather conditions and rural locations in India. These rural-friendly, technological models can be upscaled and marketed while making it economically viable by establishing regular and continual engagement between the UBA Cell and the local administration (viz. Panchayat, Block, District and State). Such initiatives to be undertaken by the UBA Cell can also facilitate the process of earning patents and can also help the Career Counseling unit/Placement Cell of an IIT for sharing requisite knowledge to the students that might want to initiate startups in rural areas in future. Few images of the talk can be seen in fig-4 and fig-5.

On Wed, Apr 12, 2023 at 10:32 AM Polly Datta <<u>pollydatta@gmail.com</u>> wrote: | Dear Sir,

Thanks indeed for everything. I really enjoyed interacting with your UBA Team and was positively surprised by their depth of understanding on this issue.

Please find attached the talk that I delivered and please pass it onto Jyoti mam-project coordinator, UBA, IIT Jammu. Looking forward to meeting all of you again

Sincerely, Polly



Fig-4

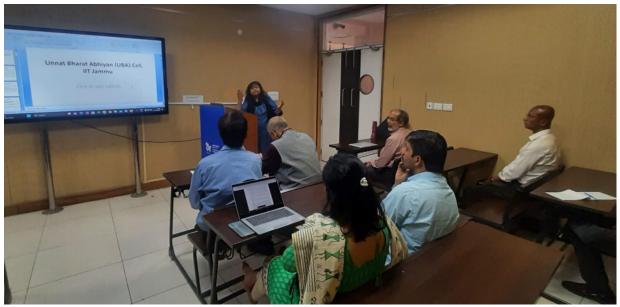


Fig-5

Drawing Competition on World Environment Day'23

In support of the initiative of the Government of India: **Mission Life**, IIT Jammu organized a **Drawing Competition** with a following theme and time schedule

Theme: Nature and Environment

Date: 4th June 2023

Time: 10 AM to 1 PM

All the materials required for the drawing competition, like colours, pencils, paints, brushes, etc. were provided by the organizers.

Prize distribution was kept for 5th June 2023 i.e. on World Environment Day:

1st Prize: 3000 Worth

2nd Prize: 2000 Worth

3rd Prize: 1500 Worth and Two Consolation Prizes of Rs. 1000/-

All the respected Faculty Members, Staff, and Students were invited to put their imagination of the Greener Tomorrow on paper!

All the participants were supposed to fill **Google form** to get entry for the competition.

Around Seven drawing interested students from two schools of village Panjgrain were enrolled by UBA team through Google form for the competition. This was a step ahead, sharing the same classroom with rest of the IIT Jammu students, staff and faculty and all the participants got participation certification for the Talent and Hard work they poured into the Art.

I am proudly writing that Riya Loach of village Panjgrain won the Third prize of Rs. 1500/- and Samaksha Rajput of the same village won the Consolation prize of Rs. 1000/- among the August Audience. The student holding the drawing can be seen in fig-6 and the group photo graph can be seen in fig-7.



Fig-6, Samaksha Holding her Drawing on 4th June 23



Fig-7 Group photograph on 4th June 23

Pledge for Planet:

It was a movement to take pledge to Conserve, Protect and Care for the planet through LIFE. IIT Jammu as RCI for Unnat Bharat Abhiyan took this Pledge while celebrating World Environment Day before along with the forest Officers the region along with the students of the adopted villages who had come to participate in the drawing competition can be seen fig-7A and fig-7B. The students of the village were also made aware of the concept behind this pledge.



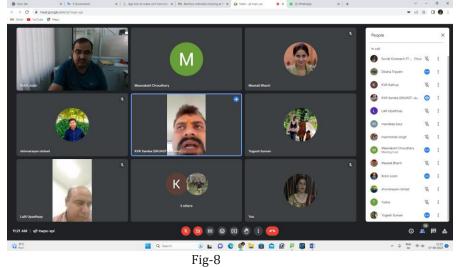
Fig-7A



Fig-7B

A followup meeting on 1-Day Workshop on Bamboo Candy Making and Cultivation:

An online meeting held on 7th June 2023 by UBA and CSIR for implementation of Bamboo cultivation training at IHBT Palampur for the stakeholder of Jammu province to discuss, how its implementation in Jammu regions through UBA and KVK network can be made possible. The KVK Scientists of Reasi, Samba and Kathua were present in the meeting to share their valuable expertise. The screen shot of the meeting can be seen in fig-8.



Attended Two Day Interaction Meeting for Regional Coordinating Institutions:

The Regional Coordinating Institutions hold importance in the implementation of the scheme Unnat Bharat Abhiyan. The insights, experience, and perspectives of Regional Coordinating Institutions are valuable to NCI-UBA and to ensures that the objectives as stated in the scheme mandate are achieved accordingly, the NCI team keep on interacting and learning from other RCI's work/expectations/ future plans and vice versa. Mrs. Jeyoti Kaul attended the meeting on 13th & 14th July and the topics of the interaction were, the current progress, understanding related to Unnat Bharat Abhiyan work, challenges, collaborations & the implementation strategies. The intricacies of RCI and PI Portal's were demonstration by the NCI technical team.



Training of Panchayat Stakeholders on Carbon Neutral Panchayat Survey by IIT Jammu as Regional Coordinating Institute, Unnat Bharat Abhiyan:

In an endeavor to drive rural development and harness the potential of knowledge institutions, the Indian Institute of Technology Jammu (IIT Jammu), under the aegis of Unnat Bharat Abhiyan (UBA), organized a successful One-Day Training Cum Demonstration Workshop on Carbon Neutral Survey at the Jagti campus. The workshop witnessed enthusiastic participation of more than 120 panchayat secretaries from across the Jammu region on 18th July 2023. The main objective of this training program is to replicate the Palli Gram Panchayat Model across all Halqa Panchayats of Jammu & Kashmir UT as IIT Jammu has already supported Rural Development Department &Panchayati Raj in conducting household survey, data digitization, data analyses and report submission to create Palli GP as Model Carbon Neutral Panchayat during 2022-23.

Building upon the exceptional accomplishments of Palli Panchayats Climate Change Action Plan for Carbon Neutrality, the Jammu & Kashmir administration is now determined to replicate this ground breaking survey model across all panchayats in the region.

The esteemed occasion witnessed the presence of Ms Sheetal Pandita, Deputy Secretary, Department of Rural Development and Panchayati Raj, Jammu & Kashmir, who graced the event as the chief guest. She unveiled the ambitious plan to develop a dedicated portal for the submission of survey data from all panchayats. Ms Pandita also extended her encouragement to all panchayat officers, urging them to contribute more efficiently to the carbon neutrality initiatives can be seen in fig-9.

The training commenced with an introduction to the objectives of Unnat Bharat Abhiyan (UBA) and the methodologies employed during the implementation of the Carbon Neutral Survey in Palli Panchayat by Dr Riya Bhowmik, PI UBA, IIT Jammu.

Prof Uma Shankar, dean Students Affairs IIT Jammu delivered the welcome address, shedding light on IIT Jammu's vision for achieving Carbon Neutrality. He emphasized the significance of measuring the elements of water, air, soil, trees, and energy (abbreviated as WASTE) as key indicators of sustainability can be seen in fig-10.

In the first session, Ms Jeyoti Kaul expertly guided the participants in comprehending the various intricacies of the Survey Form, which included a detailed Energy Audit Form for Household, along with the methodology for conducting the survey. Subsequently, Dr Riya Bhowmik facilitated the gathering with methodologies for analysis of the gathered data, aiding in the digitization of the information for the purpose of report generation can be seen in fig-11 The session concluded with vote of thanks by Dr. Bhowmik

A group photograph was taken and can be seen in fig-12. The esteem gathering was then taken for Lunch.

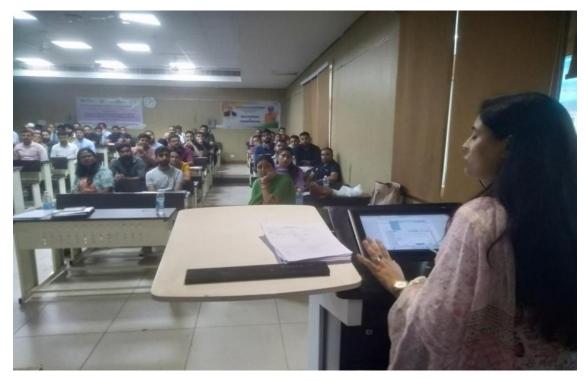


Fig-9 Ms Sheetal Pandita, Deputy Secretary, Department of Rural Development and Panchayati Raj, Jammu & Kashmir UT administration,



Fig-10 Prof Uma Shankar, dean Students Affairs IIT Jammu delivered the welcome address, shedding light on IIT Jammu's vision for achieving Carbon Neutrality.



Fig-11 Dr Riya Bhowmik facilitating the gathering with methodologies for analysis of the gathered data



Fig-12 Group Photograph

Lifestyle For Environment"- Samajshala at UBA Villages

Celebration of Environment friendly lifestyle with the people in our adopted village Pangali: UBA Regional Coordinating Institution, IIT Jammu has felicitated Ms. Pumma Devi, who has dedicated her whole life for the social good. She remained bachelor her whole life and has donated three and a half kanals of land for the Ghoushala for stray cattle (cows). There is a trend in Jammu that when cows or shebuffaloes stop giving milk, they leave them open. Ms. Puma Devi has given shelter to these unspoken animals from years and is still doing the same. Now there are many helping hands and the committee has been formed. The committee try to generate money by either cash or kind for feed there animals. At present there are 78 animals in the Ghoushala and increase in number continue----

On our first visit in May 23, we met the lady and asked her, in what way we can help her. She quickly answer that she does not need anything for her, else she is in need of a big steel container with lid to store water for drinking purpose, because people often visit her Ghoushala and there is nothing to store water for drinking purpose. Therefore our team purchased a 25litre steel drum and handed over it to her with a small gift. The glimpses can be seen in figures 13.



Fig-13 glimpses

Activities taken with Tribal students of Mahore, district Reasi

• Lab Visit

• Art and Craft Workshop:

The Outreach and UBA team of IIT Jammu hosted the tribal students from village Mahore of district Reasi, Jammu on 22nd September 2023. The team received the group of 25 students and took them to Tinkering lab, the Central Workshop, Bio lab and Physics lab. They were given hands on training in these labs especially in tinkering lab, it was a very different experience for the students who had eventually came out of their village for the first time. They were gifted an acrylic name plate of their school in the tinkering lab which was created by them only under the guidance of lab staff.

During 2nd half of the day the Art and painting activity was taken with them where they put their raw, folk and pure imagination paper. The ice-cream stick models were created by them under the guidance of Mr. Subash Langeh, an Artist of state recognizance. The glimpses can be seen in Fig-14



Fig-14 Glimpses of Activity

Orientation/Training/Review Workshop:

Indian Institute of Technology Jammu, as the Regional Coordinating Institute for UBA, organized an Orientation/Training/Review Workshop/Interaction with the coordinators of its Participating Institutions KVK Scientists and Self Help Groups (SHGs), on Friday, October 13, 2023.

The purpose of this meeting was to interact with PIs, newly registered PIs, allowing for the exchange of experiences, achievements, and action plans related to working under this scheme. Almost all the Participating Institutions presented their activities, covering the progress report from April 1, 2023, to September 30, 2023.

The best four PI coordinators were recognized and honored during the event, based on their work in the adopted villages and progress report submission.

Inaugural session and Work experiences in adopted villages as PI Coordinator was conducted by Dr. Riya Bhowmik. Framework for preparation of 'Plan of Action' was briefed to the participants by RCI coordinator, Prof. Rakesh Singhai. The emphasis was on more SEG Proposals submission. The core committee members were invited to guide the PI coordinators and RCI Coordinator assigned every core committee member five PIs to help them in SEG Proposal Submission

The training session was kept to train coordinators on updating their respective institution UBA portals with a particular focus on how to update completed events to minimize report submission delays.

lunch was served following the meeting

Travel Expenses of up to Rs. 750 per person was processed for reimbursement by RCI.

The new PIs were briefed about the involvement of Panches, Sarpanches, Tehsildar, BDOs, Local bodies, etc. in village development plan, village surveys and household survey and how to link Govt. schemes with villages, how to encourage SEG Projects Proposals from Faculty as well as students (Customization as well as Development). Internship proposals, NSS, NCC involvement in villages could also be encouraged. The event glimpses can be seen in Fig-15 and 15A.



Fig-15



Fig-15A

Sustainability of Screen Printing Unit at Panjgrain:

The Screen Printing unit although making a good amount of business but could not save much, because they we not able to make screen as per orders and they were getting ready to use screen made from the market, this practice could not

help them to save much, therefore they are now given training in design development, reuse of frames and and mesh screens to save the profit.



Regional Coordinator's visit to the Screen Printing SHG at adopted village Panjgrain:

On 26th September 2023 a visit of the Regional Coordinator along with UBA team to the Screen Printing Self-Help Group (SHG) in the adopted village Panjgrain was scheduled. The event was aimed at monitoring and assessing the progress of the group's activities to ensure that the objectives are being met and to provide support or guidance if needed. Through direct interaction, the Regional Coordinator, Prof. Rakesh Singhai, PI Coordinator, Dr. Riya Bhowmik can identified areas where the SHG members need further training or capacitybuilding initiatives to enhance their skills and capabilities. They were suggested to strengthen the market network to make the SHG sustain. We can see the pictures in Fig-16





Fig-16

Self Help Group (SHG) from adopted villages Jagti, Tanda and Panjgrain got business from IIT Jammu and local market:

IIT Jammu in its role as a Participating Institution under Unnat Bharat Abhiyan is striving hard to help as well as to sustain skill development in its adopted villages. We are presently working with three SHGs who are self sustainable.

'Jai Laxmi Mata' self help group (SHG) a group of 10 ladies who are now comfortable in making the Angvastram and Robes for the Students, Dignitaries and Marshals etc. The improved skill quality and precision can be seen that attracted the convocation dress committees since its first convocation in 2020 to recently conducted 4th convocation in 2023 for the repeat orders and we are proudly expressing that our these small orders/steps is a big contribution to their family income, as most of the village families are dependent on daily wages. In addition to this Convocation bags with screen printing on both sides was also given to them for stitching.

Another group trained in screen printing during 2022 have started getting orders during the training tenure only and third SHG in Binna Art (Local Jammu Art) has won the hearts of our guests. Mostly our SHGs get work from govt. offices, IIT Jammu and local market.

The extension of work have expanded to IIT hostel work etc. Apart from getting business from convocation activities, the group has got call from hostel authorities. They have got an order for 30 sets of bed sheets with pillow and covers. The screen printed logo's, printed by our another SHG of Panjgrain village were put on both bed sheets and pillow covers earning a business of INR 18000/-. The continuous orders for folders, Jute bags, Gota art dry fruit guthi's etc. in the month of October around INR40000/- for our SHGs. To make their payments transparent we have registered the SHG as vendor, now the payment goes directly to their group account. Some of the pictures can be seen in Fig-17.



Fig-17 Glimpses

Training Cum Demonstration Program for the Panchayat Stakeholders of Kashmir Province:

The Department of Rural Development and Panchayati Raj Jammu & Kashmir is organized the Training on Carbon Neutral Panchayat survey for the Stakeholders of Jammu & Kashmir Panchayats through the empanelled agency on 30th September 2023. The aim of this training program was to replicate the Palli Gram Panchayat Model across all Halqa Panchayats of J&K UT.

IIT Jammu has already supported RDD&PR in household surveys, data digitization, data analyses, and report submission to create Palli GP as Model Carbon Neutral Panchayat, we further want to replicate this process to make other Halqa Panchayat Carbon Neutral.

This training cum demonstration program has already taken place in IIT Jammu in the month of July 2023 for the stakeholders of Jammu Province, therefore now the repeated training session was arranged by the RDD&PR in Tourist Centre Srinagar for Kashmir province.

The esteemed occasion witnessed the presence of Deputy Secretary, Department of Rural Development and Panchayati Raj Kashmir division, Jammu & Kashmir, who graced the event extended her encouragement to all panchayat officers, urging them to contribute more efficiently to the carbon neutrality initiatives. The training commenced with the methodologies employed during the implementation of the Carbon Neutral Survey in Palli Panchayat by Dr Riya Bhowmik, PI UBA, IIT Jammu.

Prof Rakesh Singhai, Regional Coordinator, Unnat Bharat Abhiyan IIT Jammu joined the event online shedding light on IIT Jammu's vision for achieving Carbon Neutrality.

Dr Riya Bhowmik facilitated the gathering with methodologies for analysis of the gathered data, aiding in the digitization of the information for the purpose of report generation. There seems to be an active audience, who in an interactive session asked the most relevant questions for its implementation and all the question were well answered by Dr. Bhowmik.

In the second session, Ms Jeyoti Kaul expertly guided the participants in comprehending the various intricacies of the Survey Form, which included a detailed Energy Audit Form for Household, along with the methodology for conducting the survey. The august gathering was asked that they can be in touch with IIT team for any further clarifications.



Computer Literacy Program of our Security Personnel

The UBA and Outreach team is pleased to present the report on the Computer Literacy Program conducted for our security personnel. This program aimed to enhance the digital skills and overall computer literacy of our security team, ensuring they are well-equipped to handle modern technological challenges in the ever-evolving security landscape.

The duration of the Program was 20 working hours, covering the following topics - Google software(Gmail, map, you tube, google meet, Translator, drive, photos) Microsoft Word, Power point, Canva, Microsoft Excel, Cyber Security etc. The primary goal of the program was to empower our security personnel with fundamental computer skills, enabling them to utilize technology efficiently in their daily tasks and contribute to enhanced security measures.

There were 15 participants who willingly filled the admission forms and 14 have successfully completed the course. All of them have demonstrated a significant improvement in their computer literacy skill. This has incredibly increased the awareness about Cyber security and there was a positive feedback regarding the practical relevance of the program

The program was scheduled during the week ends of November 2023.

This program could have not been possible without the sincere contribution of our B.tech and M.tech student volunteers.

The candidates and volunteers were felicitated by the Institute registrar Commander Barthwal, Dean Continuing Education, Associate Dean Social Outreach and Security incharge Lt. Commander Mr. Mannu Virk.



Establishment of UBA Core Committee.

The formation of this committee is an integral part of the program. Nearly every department is expected to contribute to this social responsibility. In August, 23, the Regional Coordinator circulated an email, requesting the nomination of at least one faculty member from each department to join the core committee of Unnat Bharat Abhiyan (UBA) at IIT Jammu. These committee members will provide guidance in crafting SEG (Subject Expert Group) Proposals aimed at securing the UBA SEG Proposal grant of Rs. 20,00,000 per year for utilization in village development projects. The response from all Heads of Departments (HOD's) and faculty members to join the core committee and support this social cause has been highly positive. The following faculties have voluntarily joined the core committee:

1. Prof. Rakesh Singhai, Regional Coordinator Regional Coordinator (Jammu province and Ladakh UT)

- 2. Dr. Riya Bhowmik, PI Coordinator, IIT Jammu PI Coordinator
- 3. Dr. Subhasis Bhattacharjee, Faculty, Computer Science
- 4. Dr. Jayaramulu Kollebiyina, Faculty, Chemistry
- 5. Dr. Karan Nathwani, Faculty, Electrical Engineering
- 6. Dr. Pratik Kumar, Faculty, Civil Engineering
- 7. Dr. V Raj Kumar, Faculty, Mechanical Engineering
- 8. Dr. S R K Chaitanya Indukuri, Faculty, Physics
- 9. Dr. Nitesh Kumar, Faculty, Material Science

The Coordinators extended a warm welcome to the Committee, and the meeting commenced with introductions and an overview of the UBA family& its functioning and structure at IIT Jammu.

IIT Jammu has adopted seven villages under the scheme, and it has been commended for its excellent implementation of the scheme in these villages, as per NCI monitoring. However, a crucial aspect of this scheme is the submission of SEG Proposals relevant to the villages. According to the scheme, Rs. 1,00,000 will be allocated for Development Projects, and Rs. 50,000 for Customization.

During the discussion, valuable ideas emerged, and the core committee members committed to drafting SEG proposals in their respective fields:

o Dr. Pratik Kumar, Faculty in Civil Engineering, has agreed to draft an SEG Proposal focusing on solid waste management.

o Dr. V. Raj Kumar, Faculty in Mechanical Engineering, has committed to crafting a proposal on Candle Making, focusing on 3-D printed moulds. He also suggested raising awareness about economic prospects of bamboo products among the younger population.

o Dr. Nitesh Kumar, Faculty in Material Science, recommended proposals for vocational training to generate employment, as well as the promotion of extraction and purification of lavender oil for essential oil/incense-based trades in the villages.

o Dr. Jayaramulu Kolleboyina, Faculty in Chemistry, has taken the responsibility of writing proposals for water purification projects and zero wastewater management, which are currently in high demand.

o Dr. S. R. K. Chaitanya Indukuri, Faculty in Physics, emphasized the importance of developing awareness about sports and careers. He suggested initiatives such as distributing relevant career books and providing access to a mobile library. o Dr. Karan Nathwani, Faculty in Electrical Engineering, proposed promoting workshops for school children in grades 9 to 12. He also mentioned the utilization of faculty SSR funds for village development within the UBA initiative.



Awareness program with the Tribal students on celebration of Jan Jatiya Gaurav Diwas from 23rd to 25th November 2023:

During the celebration of Jan Jatiya Gaurav Diwas from 23 to 25 Nov. 2023 at IIT Jammu, Outreach and UBA team took two session with Tribal group received from Reasi district.

- The Computer Awareness
- Visit to IIT Labs

The group had seen computers for the first time, their Practical skill development was addressed through computer training can be seen in Fig-18. The mechanical workshops, and tinkering lab sessions with the help of student volunteers. The visiting tribal students got hands-on approach to 3D printing during the tinkering lab session. These practical skill sessions were led by Mrs.Jeyoti Kaul, Project Officer, UBA-IIT Jammu, Mr. Mohammad Israil and Gautam Gupta of Tinkering Lab, Dr. Arun Kaushal and his team of Central Workshop, and Mr. Arjun and Mr. Sumeet of Physics Lab.



Fig-18

Online interaction with the farmers of Heeng for the Kargil district of Ladakh UT

This is again an online follow-up meeting for the Hing cultivation in Kargil district of Ladakh UT held on 18th December 2023. The concerned Scientists at IHBT Palampur now want to interact with the UBA Participating Institute at Kargil and local farmers to know the availability of land and plausible conditions suitable for hing crop.

Therefore a meeting was arranged by RCI, IIT Jammu. The meeting was attended by RCI and NCI teams, CSIR-NIScPR New Delhi and CSIR-IHBT Palampur scientists, the agriculture foundations, farmers and the PI Coordinator of GDC Kargil.

The following list of willing farmers with available land was shared by PI Coordinator from GDC Kargil can be seen in the Table A-1

S.No.	Designation	Address	Land	Interested in any
	(Farmer/		Availab	other cultivation
	Foundation		le with	apart from Hing
	Member)		them	
1	Raza Ali	Village Kharool, Kargil, Ladakh UT	15 kanals	Yes. Hing,Some medicinal plants and Apricot processing.
2	Ghulam Mohd	Village Hundarman Brok, Kargil	4 kanals	Yes. Medicinalplants like aconitum ssp, artimisia innuaand Peony flower.
3	Ghulam Mohd	village Poyen, Kargil	2 kanals	Yes, Peony flower
4	Manzoor Ahmad	village Poyen, Kargil	2 kanals	Only hing
5	Mansoor Ali	Village Kharool, Kargil, Ladakh UT	2 kanals	Yes, lillium and peony flowers
6	Syed Jamal	Saliskote	2 Kanals	Hing , yes
7	Mohd Ibrahim	Village Kharool, Kargil, Ladakh UT	2 kanals	Hing ,yes
8	Mustafa Ali	Village Hundarman Brok, Kargil	2 kanals	Hing , yes
9	Zahir Abass	Village Kharool, Kargil, Ladakh UT	2 kanals	Hing , yes

Table-A-1

IIT Jammu as Regional Coordinating Institute for Unnat Bharat Abhiyan Facilitates Empowering Gram Sabha at Panchayat Garh Panjgrain, Nagrota Jammu

IIT Jammu as Regional Coordinating Institute for Unnat Bharat Abhiyan in a remarkable initiative towards community engagement, organized a Gram Sabha at Panchayat Garh Panjgrain. The event, held on 25th January 2024 exemplifies IIT Jammu's commitment to fostering partnerships with local communities for mutual development and progress.

IIT Jammu senior faculties Prof. Rakesh Singhai, Regional Coordinator Unnat Bharat Abhiyan, Dr. Riya Bhowmik. Pi Coordinator, UBA and Dr. Karan Nathwani, Faculty IIT Jammu actively engaged with the local community, exchanging knowledge and insights. The Gram Sabha served as a platform for meaningful discussions on technological advancements and is committed to excellence in education, research, and community engagement, with a vision for societal development, IIT Jammu actively collaborates with local communities to foster sustainable growth and mutual empowerment. A group gathering can be seen in fig-19



Fig-19

IIT Jammu's Outreach Section and Unnat Bharat Abhiyan extended helping hand in Installing Defunct Leaf Plate unit of Self Help Group Members of Jammu & Kashmir Rural Livelihoods Mission.

Responding to the call for assistance of community engagement and technological support, the Outreach and Unnat Bharat Abhiyan section of the Indian Institute of Technology (IIT) Jammu under the guidance of Prof. Rakesh Singhai, and Dr. Riya Bhowmik with their team played a pivotal role in facilitating the installation of a Defunct Leaf Plate run by self-help groups of JKRLM. The unit was closed since 2019 due to COVID. Its revival was utmost priority. Therefore in a remarkable display of community collaboration and technical expertise, an electrician, Mr. Pankaj Kumar from the Indian Institute of Technology (IIT) Jammu has volunteered his services to assist in the installation of a defunct Hydraulic leaf plate unit. This unit got installed at one of our adopted villages Panjgrain. the teams coordinated efforts ensured successful installation of unit on 26th February 2024.

Another such request was put forth by Akash Jaswal, Block Program Manager JKRLM UMEED for revival of their one more similar type of unit at Bajalta village of Nagrota block, glimpses can be seen in fig-20



Fig-20

Heeng is a herbaceous plant of the umbelliferae family. It is a perennial plant whose oleo gum resin is extracted from its thick roots and rhizome. The plant stores most of its nutrients inside its deep fleshy roots.

It is endemic to Iran and Afghanistan, which are also the main global suppliers of it. It is very popular in India and is used in cooking. It thrives in dry and cold desert conditions. The plant can withstand a maximum temperature between 35 and 40 degree, whereas during winters, it can survive in temperatures up to minus 4 degree. Regions with sandy soil, very little moisture and annual rainfall of not more than 200mm are considered conducive for heeng cultivation.

During extreme weather, the plant can get dormant.Heeng is not cultivated in India. India imports about 1,200 tonnes of raw heeng worth Rs. 600 crore from Iran, Afghanistan and Uzbekistan.

In 2017, IHBT approached the National Bureau of Plant Genetic Resources (NBPGR) with an experimental project idea to cultivate heeng in the Indian Himalayas. The agriculture ministry of Himachal Pradesh has identified four locations in the Lahul-Spiti valley and has distributed heeng seeds to farmers in the region and is working perfectly and has not yet matured as it takes five years to mature. Every year the sampling are grown and the scientists are expected the gum next year.

Kargil and Drass areas of Ladakh UT's climatic and soil conditions are similar to that of conditions Lahul-Spiti valley of Himachal Pradesh. Therefore to take up this task forward, the UBA family/Network took up this mammoth task of putting this into reality on Indian soil at Kargil.

The collaborative efforts among various institutions under the Unnat Bharat Abhiyan (UBA) Scheme, aimed at empowering rural communities like those in Kargil. Here's a summary of the collaborative efforts:

Initial approach was made by Govt. Degree College Kargil to RCI IIT Jammu: GDC Kargil being our Participating Institution (UBA PI) from Ladakh UT, who have shown interest in engaging in rural development activities facilitated by the UBA Scheme for the farmers of Kargil region.

Jointly organized by CSIR-NISCPR New Delhi, CSIR-IHBT Palampur, UBA-NCI, IIT Delhi, UBA-RCI, IIT Jammu and UBA-PI, GDC Kargil : Upon receiving the request from Govt. Degree College Kargil, the training program for heeng cultivation of Kargil farmers at CSIR-IHBT Palampur was a joint effort involving several institutions, including CSIR-NIScPR New Delhi, CSIR-IHBT Palampur, UBA-NCI, IIT Delhi, UBA-RCI, IIT Jammu, and UBA-PI, GDC Kargil. This collaborative approach likely allows for the pooling of resources, expertise, and networks to ensure the success and effectiveness of the training program.

Training at CSIR IHBT Palampur: Thanks to the collaborative efforts of NIScPR, CSIR IHBT Palampur, and the coordination from IIT Jammu, a training program is organized for 9 farmers from Kargil in Heeng cultivation. The training takes place between 4th to 6th March at IHBT Palampur. This training likely covers various aspects of Heeng cultivation, including planting techniques, maintenance, and harvesting methods.

Coordination by UBA Staff: Mrs. Jeyoti Kaul, UBA staff at RCI IIT Jammu, takes on the role of coordinating the event. Supported by the RCI Coordinator and PI Coordinator at IIT Jammu ensured smooth communication and organization of the training program.

Through the collaborative efforts, the training program at CSIR IHBT Palampur becomes a reality, providing valuable knowledge and skills to the farmers of Kargil. Such initiatives play a crucial role in empowering rural communities and fostering sustainable development in the region. The sampling are getting ready at IHBT and will be travelled to Kargil in second or third week of April 2024 for cultivation as guided by the scientists at IHBT. The farmers are guided, how to prepare the land before that.



Shownik

Signature Dr. Riya Bhowmik PI Coordinator

Signature Sr. Prof. Rakesh Singhai Regional Coordinator