



## Organizing Committee

**Chairman**  
 Prof. Rajeshwar Singh Chandel  
 Vice Chancellor, UHF

**Co-Chairmen**  
 Dr Seema Jaggi, ADG HRD ICAR New Delhi  
 Dr Rajbir Singh Brar, ADG Agronomy/Agroforestry,  
 ICAR New Delhi

### Contact details for further enquiries:

**Dr Sanjeev K Chauhan**  
 Director of Research cum **Course Director**,  
 Dr YSP University of Hort. & Forestry, Nauni,  
 Solan – 173230 (HP) India  
 Tel: 91-1792-252315 (O); 91-98729-70335  
 Email: [chauhanuhf@yvspuniversity.ac.in](mailto:chauhanuhf@yvspuniversity.ac.in);  
[dres@yvspuniversity.a.in](mailto:dres@yvspuniversity.a.in)

**Dr Rajesh Kaushal,**  
 JDR cum **Course Coordinator**  
 Directorate of Research,  
 Dr YSP University of Hort. & Forestry, Nauni,  
 Solan – 173230 (HP) India  
 Tel: 91-1792-252315 (O); 91-94181-97516  
 Email: [drkaushal@rediffmail.com](mailto:drkaushal@rediffmail.com);  
[rkaushal@yvspuniversity.ac.in](mailto:rkaushal@yvspuniversity.ac.in)

**Dr DR Bhardwaj,**  
 Prof & Head cum **Course Coordinator**  
 Department of Silviculture and Agroforestry,  
 Dr YSP University of Hort. & Forestry, Nauni,  
 Solan – 173230 (HP) India  
 Tel: 91-1792-252315 (O); 91- 82193-27754  
 Email: [hodsaf@yvspuniversity.ac.in](mailto:hodsaf@yvspuniversity.ac.in);  
[bhardwajdruhf@yvspuniversity.ac.in](mailto:bhardwajdruhf@yvspuniversity.ac.in)



# ICAR Winter School



on

## Agroforestry: A Potential Approach to Mitigate Climate Changes

(January 17 to February 6, 2024)

### Lodging and Boarding

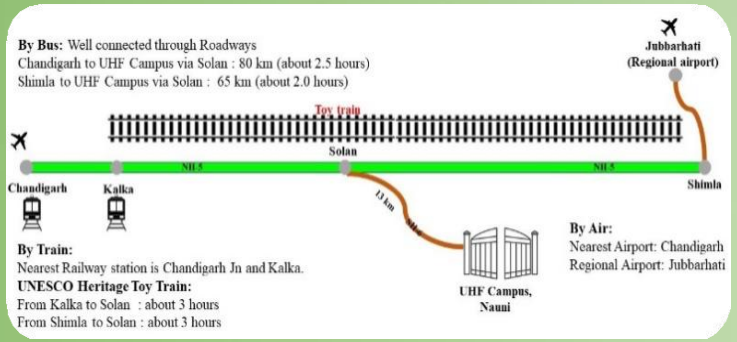
The travel expenses, including to and fro journey, restricted to AC-II/III tier train fare or bus or any other means of transport vogue, as the case may be. Actual TA for the shortest route will be paid on production of the tickets from the place of duty to Nauni, Solan (HP). Participants are requested to not bring their spouse or any family members as there is no scope for their accommodation. Participants are requested to make their own arrangement of transport to reach at University Campus, Nauni, Solan. Free lodging and boarding will be provided to the selected candidates during the training programme in the University Guest House. You are also expected to live in shared accommodation. The local candidates are not eligible for boarding and lodging, however, the local hospitality (lunch, tea, snacks etc.) will be provided to them.

### Weather Conditions

The weather in Solan in January is moderately chilly, with average highs of 16°C and lows of 4°C. Therefore, participants are advised to bring winter clothes (heavy woolen clothing) for a comfortable stay.

### How to Reach

The University is located at Nauni in Solan District of Himachal Pradesh, 15 km from Solan on Solan-Rajgarh Road. Solan town is situated on national highway (NH-5) and is well connected by train and bus services from Chandigarh/Kalka.



**Organized by**  
 Directorate of Research,  
 Dr YSP University of Horticulture and Forestry, Nauni -  
 Solan - 173230 (India)

**Sponsored by**  
 Indian Council of Agricultural Research, New Delhi -  
 110012 (India)

**Venue**  
**Dr YS Parmar University of Horticulture and Forestry, Solan 173230 (HP) India**  
[www.yvspuniversity.ac.in](http://www.yvspuniversity.ac.in)

## About UHF

Dr YS Parmar University of Horticulture and Forestry is the first Horticulture and Forestry University in Asia, established on 1<sup>st</sup> December, 1985 with the objective to promote education, research and extension education in the fields of Horticulture, Forestry and allied disciplines. University is pioneer to undertake different programs on climate change, agroforestry and climate resilient agriculture to support the sustainable livelihood of the small and marginal farmers in the region. The University is one of the coordinating centers of All India Coordinated Research Project on Agroforestry for the last three decades.

## About Winter School

There is an increasing awareness, the world over about the adverse impacts of greenhouse gas emissions and the consequent climate change. The concentration of CO<sub>2</sub> and other greenhouse gases (GHG's) in the atmosphere has considerably increased over the last century and is set to rise further, the largest proportion of which resulting from the burning of fossil fuels and the conversion of tropical forests to agricultural land. With an annual increase of 0.5% or 3.6GT carbon yr<sup>-1</sup>, atmospheric CO<sub>2</sub> concentration is expected to double until the mid to late 21<sup>st</sup> century. There is a growing international scientific effort to develop ways to slow down the addition of carbon dioxide to the atmosphere. One way to manage carbon is to use energy more efficiently to reduce our need for a major energy and carbon source-fossil fuel combustion. Another way is to increase our use of low – carbon and carbon free fuels and technologies (nuclear power and renewable sources such as solar energy, wind power, and biomass fuels). The third way to manage carbon is through 'Carbon Sequestration'. It refers to provision of long-term storage of carbon in the terrestrial biosphere, underground, or the oceans so that the buildup of carbon dioxide (the principal greenhouse gas) concentration in the atmosphere will reduce.

Agroforestry is one key path to prosperity for poor people suffering from hunger, malnutrition, abject poverty and deterioration of the environment in the areas that have been bypassed by the green revolution. Besides food and livelihood security, agroforestry systems also considered to be the sinks because the integration of trees results in greater CO<sub>2</sub> sequestration from the atmosphere and thus enhanced C storage in permanent tree components. Globally, 29 countries, including India, identified agroforestry systems as a climate change adaptation strategy, while 23 countries identified agroforestry as a mitigation strategy in their Intended Nationally Determined Contributions (INDCs) under the UNFCCC.

A key advantage of agroforestry, however, is that it provides private benefits for poor farmers in developing countries and global environment payoffs. The focus on trees, as opposed to other vegetation is because trees sequester a relatively large quantity of carbon for longer period. This is accomplished further harvesting from forests and by accumulating biomass and soil carbon. Protecting existing forests and woodlands, and establishing new ones, will help us limit greenhouse gas emissions while at the same time assisting biodiversity conservation, addressing issues such as land degradation and salinity, and in some cases generating income from timber and/or carbon 'rights.'

Agroforestry is a dynamic, ecologically sound, natural resource conserving practice that, through the integration of trees on agricultural landscape, diversifies and sustains production for increased social, economic and environmental benefits. Approximately 1.2 billion people – 20% of the world's population – depend to a large extent on agroforestry products and services for their survival. Incorporating trees into farming systems leads to greater prosperity at the farm level through marketable products – such as timber, building poles, firewood, animal fodder, fruits, medicines, etc. – all of which earn extra income.



The basic objective of the course is to acquaint the participants with the latest issues and recent innovations in the agroforestry domain for climate change mitigation. This course would offer the theory and practical orientated (industrial visit) understanding of the technologies for the development of the climate resilient agroforestry systems and assessment of the agroforestry systems for the economic, ecological and social parameters.

## Eligibility for the Participation

Participants in winter school is open for the researchers/teachers not below the rank of Scientist/Assistant Professor/Lecturer/Subject Matter Specialist on regular appointment in ICAR institute/State & Central Agricultural Universities/ KVKs. Selection will be based on strength of the applicant in terms of knowledge and experience on agroforestry and preference will be given to those who are already working / likely to take up research work related to agroforestry. The decision of the selection committee will be final and no correspondence in this regard will be entertained for non-selected candidates.

## Number of Seats: 25

## Important Dates

Last date for receipt of application: December 15, 2023  
Intimation to selected candidates: December 20, 2023  
Confirmation by selected candidates: Dec. 23, 2023

## How to Apply?

Interested and eligible participants are advised to fill nomination proforma (online) after registration on the 'Capacity Building Programme (CBP)' portal (<https://cbp.icar.gov.in/>).

Upload dully filled, signed (by Director/Head of organization) and scanned nomination proforma on to CBP portal. The hard copy should also be send to the to the Course Director by post along with registration fee as per the address and contact details given overleaf.

The registration steps will be:

- Visit the website <https://cbp.icar.gov.in/>.
- Login using your User ID and Password. To create user ID use "Create New Account" Link.
- After login, click on "Participate in Training" link and fill the proforma.
- Take a printout and send duly signed copy through proper channel to the Course Director by post along with registration fee as per the address and contact details given overleaf.
- The advance scanned copy of the nomination should be sent by email. Please feel free to contact the Course Director for any assistance.

## Registration Fees

The participants required to pay a sum of Rs. 50/- (Rupees fifty only) as registration fee (non-refundable) along with completed application in the form of Demand Draft/Indian Postal Order drawn in the favor of 'The Comptroller, Dr YS Parmar UHF' payable at Nauri, Solan.