



# CALENDAR SHORT TERM TRAINING COURSES 2020

**FOREST RESEARCH INSTITUTE**  
(Indian Council of Forestry Research and Education)  
**DEHRADUN**



## Short Term Training Courses at FRI, Dehradun

Set in the sylvan surroundings of Doon Valley and having a history of about a century of forestry research is an ideal seat for learning in forestry. FRI contributes the research perspectives focusing on different aspects of forestry research to different stake holders. The manifold research programme related to enhancement of forest productivity through quality seed and planting material, agroforestry, medicinal & aromatics plants, eco-rehabilitation, forestation techniques for stress sites, bamboo & bio fertilizers, evaluation & utilization of plantation timber to name a few.

Training as a part of extension is an important function of the institute towards capacity building. The institute organizes Short Term Training Courses (STTC) in twelve disciplines to keep managerial level officers, supervisory staff and field officers abreast with recent research developments in forestry and to transfer the latest technologies. In addition to this Short Term Low-Cost Training Courses will also be organized as provided separately in this brochure.

The faculty to impart these trainings consist highly qualified, experienced and skilled professionals and researchers. The Institute has a well-developed infrastructure of laboratories, computer center, library, herbarium, arboreta, nurseries and experimental field for conducting research and training programmes. Excellent boarding & lodging facilities are available at the Scientists Hostel and Officers Rest House of the Institute, with adequate means of recreation.

### COURSE CONTENTS

- 1. Agroforestry models for sustainable land use and development:** Tree crop combinations; site suitability of trees; procurement of quality planting material and other technical knowhow and marketing of end (timber & non timber) forest produces.
- 2. Eco-Rehabilitation of mined out and degraded lands through microbial interventions:** Selection of Species; Sustainable reclamation including field study of affected sites; Plantation techniques with Microbial and Bio-solid treatments; moisture conservation techniques.
- 3. Insect pest management in forest nurseries, plantations and natural forests:** Introduction to Forest Entomology; Insect orders important in Forestry (Orders; Coleoptera, Lepidoptera, Hymenoptera, Hemiptera, Isoptera, Orthoptera, Diptera etc.) & their identification, Habits & Role of insects in forest ecosystem, population dynamics and Insect Pests of Nurseries- Symptoms, extent and nature of damage, preventive and control measures of important pests.
- 4. Extraction, quality assessment, value addition and application of essential oils from aromatic plants:** Overview of essential oils, Techniques for extraction of essential oils, Physicochemical assessments of essential oils for quality control, GC-MS assisted analysis of chemical constituents, Value addition of essential oils & Industrial application of essential oils.

- 5. Wood and bamboo preservative and its utilization:** Importance of preservation, Seasoning, products, Composites, Finishing, Working properties and appropriate utilization of wood and bamboo.
- 6. Bamboo propagation, management and utilization:** Botany and taxonomy of Bamboo, its utilization and resource distribution; Propagation and Silvicultural management of bamboos, Bamboo cultivation and Conservation of bamboo genetic resources; Techniques in bamboo management; Techniques in bamboo management; Marketing and Trade of bamboo; Bamboo based entrepreneurship
- 7. Wood seasoning:** Importance of seasoning, equilibrium moisture content, Moisture content values and tolerances for end products; Influence of climate zones on moisture content; seasoning schedules, seasoning kilns (solar, steam, vacuum press drying, dehumidification drying etc.); other seasoning methods like chemical seasoning of plantation species like eucalyptus and poplar.
- 8. Application of remote sensing, GIS and GPS in forest resource assessment:** Principles of remote sensing; Indian Remote Sensing Satellite and sensors, Recent RS-GIS technological trends, Licensed and open source software for RS-GIS, installation of open sources software on individual laptops, Demonstration of essential tools of licensed and open source software, Source for free satellite data downloading, Hands on exercise for downloading of satellite data and its handing, Basic image handling procedures like layer stacking and mosaic king.
- 9. Reducing wastage in dimensioned lumber through finger jointing:** The Finger jointing technique – uses, design aspects, adhesive aspect, machinery, structural and nonstructural usages, glulams, strength aspects, role of moisture and seasoning, finishing aspects, hands-on practice.
- 10. Butterfly monitoring & butterfly inclusive ecotourism as a source of livelihood:** Importance of butterflies, Habits of butterflies, Diversity of butterflies in India, Identification of butterflies –Taxonomy & literature, Butterflies in National Forest Insect Collection, FRI, Dehradun, Monitoring & sampling butterflies for research, Butterflies & Climate change, Butterflies, forest types & land use planting, Butterfly inclusive ecotourism modals with livelihood opportunities & Creating butterfly nature trails and gardens.
- 11. Forest Botany:** Forest Biodiversity Overview, Dendrology, Plant classification and nomenclature, Use of forest flora for identification, Identification of species in field, collection of specimens, Herbarium's role and its Methodology, Digitization of Forest Flora, Rare and threatened species, field visits including DD Herbarium, Botanical Garden, Arboretum, Bambusetum etc.
- 12. Nursery and plantation management:** Designing of nursery; Types of containers in nursery; Raising of plants of important species in nurseries; Collection, processing and storage of seed; Macropropogation; Maintenance of plantation; Pre-sowing treatments for enhancing seed germination; Significance of Potting mixture in nurseries.
- 13. Classification and grading of timber:** Testing of wood and classification of timbers for different end-uses, defects in wood, their measurement, and evaluation, visual grading of timber, machine grading of timber.
- 14. Plywood manufacture:** Plywood raw materials both wood and adhesive; Manufacture of veneer, plywood, black board and Flush doors, their properties and testing; preparation and testing of adhesives; Plywood, Laminated of adhesives, plywood, Laminated Veneer Lumber (L.V.L.); Impreg and compreg and other in panel products.



## Low-Cost Short Term Training Courses for Field Staff, Farmers, Artisans

The following Low-Cost Short Term Training courses for State Government and NGOs sponsored field staff, farmers, artisans, JFM/VFP committees, SHG members, etc. shall be conducted at FRI, Dehradun during 2020. These courses are designed as per the requirements of the sponsoring agencies.

### Cultivation, processing, value addition and marketing of medicinal plant

**Course Director:** Dr. A.K. Pandey,  
Head,  
Extension Division

**Ph. No** : 0135-222 4255

**Dates** : 15 to 19 June, 2020

**Course contents** : National scenario of medicinal plants, seedling production and vegetative propagation of selected medicinal plants, post harvest management, value addition and marketing.

### Advances in Agroforestry:

**Course Director** : Shri Rambir Singh,  
Scientist-D,  
Extension Division

**Ph. No** : 0135-222 4243

**Dates** : 14 to 18 December, 2020

**Course contents**: Introduction to agroforestry and prevalent agro forestry practices, suitable tree species and land management through different agroforestry models with their economics marketing of agroforestry products diseases, insect pest management of agroforestry species.



## NOMINATIONS

Nomination letters for the courses to be conducted at F.R.I., Dehra Dun may be addressed to the Course Director of the concerned training and a copy may be sent to :

Head, Extension Division

Forest Research Institute

P.O. New Forest

Dehradun – 248 006 (Uttarakhand)

Phone: 0135 – 2758606

Fax: 0135 – 2756865

E-mail: [headext@icfre.org](mailto:headext@icfre.org) Website : [www.fri.res.in](http://www.fri.res.in)

The requisite course fees (through demand draft drawn in favour of the Director, Forest Research Institute, Dehradun, and payable at Dehradun) should reach on the above address at least 30 days before the commencement of the respective courses.

Participants are advised to commence their journey for the training only after getting confirmation about the course programme from the concerned Course Director at the telephone numbers.

## COURSE FEES

- The course fees for STTC (including boarding & lodging charges) per participant is as follows:
  - Rs.11,000 for Indian nationals, Rs. 22, 000 for SAARC countries, and
  - Rs.40,000 for other foreign nationals.
- Course fee for “Low-Cost Short Term training courses only for farmers, artisans, etc. is Rs. 5,500 course.
- Institutional charges @20% on course fees will be charged extra for each course.
- The minimum number of participants for each course must be 10 (ten).

## Low-Cost Short Term Training Courses for Field Staff, Farmers, Artisans

Low Cost Short Term Trainings to be conducted at Centre for Social Forestry and Eco-Rehabilitation (CSFER), Prayagraj (UP)

### 1. Cultivation techniques of important Agroforestry species

Course Director : Dr. Anita Tomar  
Ph. No. : 6386193844  
Email : anitatomar@icfre.org  
Dates : 17-19 February, 2021  
Course Contents : Cultivation techniques of Eucalyptus, Teak, Shisham, Gmelina, Melia. One day demonstration of poplar cultivation by cuttings; Seed and clonal techniques of agroforestry species in nursery

### 2. Reclamation of water logged site through integrated application of bio-drainage, microbes and climate resilient Agroforestry

Course Director : Dr. Kumud Dubey  
Ph. No. : Ph. no -9415214010  
Email : dkumud\_csfer@icfre.org  
Dates : 18-20th August, 2020  
Course Contents : Microbial application techniques; Explication of Bio-drainage technique; Establishment at problematic site and development of climate resilient Agroforestry.

### 3. Value addition of important non-timber forest produces for livelihood improvement

Course Director : Dr. Anubha Srivastava  
Ph.No : 9451180868  
Email : anubhasri\_csfer@icfre.org  
Dates : 13-15th Oct 2020  
Course contents : Description of important species; Plant parts and products; methodology of harvesting; collection, storage, processing, packaging and marketing of important species for economic improvement of livelihood.

### 4. Reclamation of degraded lands

Course Director : Sh. Alok Yadav  
Ph. No : 9411166881  
Date : 26th to 28th November, 2020  
Email : dkumud\_csfer@icfre.org  
Course Contents : Categories of wastelands Causes and effects of land degradation, Methods of waste land reclamations, Potential of tree species in reclamation of wasteland.

Nomination letters for the above courses to be conducted at CSFER, Allahabad may be addressed to the Director, Centre for Social Forestry and Eco-rehabilitation, Allahabad

(Indian Council of Forestry Research & Education), 3/1 Lajpat Rai Road, New Katra, Prayagraj (Allahabad) – 21 1002 INDIA. Phone: 91 – 0532 -2440795 (O), FAX: 0532-2440795



Training on Agroforestry at SFRI, Ladawal



Bamboo setum in FRI



Address by Director, FRI to students of Jawahar Navoday Vidhyalaya during FRI visit under PRAKRITI Programme



Inauguration of Exhibition in 2019 International Day of Forests-



Interaction with participants on Horticulture based agroforestry



Interaction with participants of Ladawal training on nursery techniques during field visit

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