



Training on marketing of agroforestry produces to technical assistants



Online interact meet cum Exhibition on Exploration of forestry products



Visit of students under PRAKRITI Programme

PUBLISHED BY DIRECTOR, FOREST RESEARCH INSTITUTE
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CALENDAR SHORT TERM TRAINING COURSES 2021

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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 the 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 & aromatic plants, eco-rehabilitation, afforestation 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 in view the managerial level officers, supervisory staff and field officers abreast with recent research developments in forestry and to transfer the latest technologies. In addition to Short Term Low-Cost Training Courses, the Institute also organizes courses 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 like laboratories, computer center, library, herbarium, arboreta, nurseries and experimental field for conducting research and training programs. 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. Forest Fire Disaster Risk Management :** Forest Fire Risk Management- Integration with Holistic Framework, Role of Geo-informatics for predicting Forest Risk Modeling, District Management Disaster Plans (DMDPs) & State Management Disaster Plans (SMDPs) issue for forest fire management, Forest Fire Management in National Parks & Sanctuaries, Community Participation in Forest Fire Management according to New Working Plan Code-2014, Water Conservation in Preparedness and Mitigation of Forest Fire Pre-warning Alert systems, Assessment of Forest Fire using Remote sensing, Likely impact of Climate Change on Forest Fires and Mitigation Measures, Field Visit.
- 2. Tools and Techniques used for Preparation of Working Plans according to New working plan Code-2014 :** Content writing under New Working Plan Code-2014; Preliminary working plan report (PWPR); Sustainable Management of Ecosystem Services under New Working Plan Code; Survey and Assessment of Forest Resources; Laying out of grid based sample plots for resource data collection; Growing stock estimation including Carbon stock estimation of forest; Assessment of Non-Timber Forest products; Biodiversity assessment; Assessment of Regeneration status; Plantation survey and assessment; Assessment of Bamboo/Rattan; Soil survey and assessment; Socio-economic survey and assessment; Assessment of Wildlife Habitat and Species; Ecotourism activities; Assessment of Tree Outside Forest (TOF); Forest Health Assessment and protection of forest resources and Field excursion.
- 3. Bamboo propagation, cultivation and management:** Importance of Bamboo, Bamboo propagation, cultivation, its management and utilization.

- 4. Wood and bamboo preservative and its utilization:** Importance of preservation, Seasoning, products, Composites, Finishing, Working properties and appropriate utilization of wood and bamboo.
- 5. Application of remote sensing and GIS in forest resource assessment:** Remote Sensing (RS): Principles of remote sensing; Indian Remote Sensing Satellite Programs; Selection and procurement of satellite data, Digital image processing, interpretation and classification; Hardware and software issues; Recent technological trends. Licensed and open source software for RS-GIS. Installation of open source software on individual laptops. Demonstration of essential tools of licensed and open source software. Sources for free satellite data downloading. Hands on exercise for downloading and processing of satellite data. Basic image handling procedures for forest resource mapping. Geographical Information System (GIS): Introduction to GIS; Spatial and non-spatial database for GIS analysis; Spatial (Vector and Raster) and Non-spatial (Hierarchical, Network and RDBMS) data models; Coordinate systems, datum and projections; Digital elevation models and their applications; Recent technological trends in GIS. Global Positioning System (GPS): Overview and principles of GPS and other Navigation Systems: Surveying methods and field data integration with GIS. Application of RS-GIS: Forest Inventory; Forest cover mapping; Land use and Land cover mapping; Soil survey and mapping; Ecosystem analysis; Biodiversity characterization and management; Watershed characterization; Change detection and monitoring; Forest fire monitoring. Hands on training on Geo-referencing and geocoding; Sub setting and mosaicking; Digitization of boundaries of important features; Entry of spatial and non-spatial data; Land use and land cover classification; Multistage sampling for change detection; Transfer of GPS data in GIS database and Map composition.
- 6. 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.
- 7. 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 and machine grading of timber.
- 8. Herbarium Techniques for plant diversity assessment and conservation :** Forest plant diversity overview, Dendrology; plant classification and nomenclature, importance of Herbarium types of Herbaria, Herbarium of India and World, role of Herbarium in Taxonomy and other discipline, Herbarium methodology (collection, processing and arrangement), 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.
- 9. Eco-physiological monitoring of forest ecosystem:** An approach to understand forest dynamics in response to climate change, Introduction to climate change and eco- physiology, Impacts of climate change on ecosystem dynamics, Methodology for ecological monitoring, Meteorological monitoring, Gas exchange monitoring of vegetation system, CHGs emission monitoring from various ecosystems, Carbon monitoring in forest ecosystem, Monitoring of plant response under Open Top Chamber conditions, Phenological monitoring of forest ecosystem & Application of RS&GIS in eco-physiological monitoring of forest ecosystem.
- 10. 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.); Compreg, Impreg and other panel products.

Forest Research Institute, Dehradun Calendar of Short Term Training Courses - 2021

Name of the Course	Name of course Director & Division	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.Forest Fire Disaster Risk Management :	Assistant Silviculturist (G), Silviculture and Forest Management Division Ph.No. 01352224223 E-mail: head_silva@icfre.org				05-09								
2.Tools and Techniques used for Preparation of Working Plans according to New working plan Code-2014	Assistant Silviculturist (G), Silviculture and Forest Management Division Ph.No. 01352224223 E-mail: head_silva@icfre.org					03-07							
3.Bamboo propagation, cultivation and management	Dr. Ajay Thakur, Head, Genetics and Tree Improvement Division Ph.No. 0135-2224403 E-mail: head_gtp@icfre.org							05-09					
4.Wood and bamboo preservative and its utilization	Dr. Sadhna Tripathi, Scientist-G/ Shri Azmal Samani, Scientist-F Forest Products Division Ph. No. 0135-2224445 E-Mail: tripathis@icfre.org								23-27				
5.Application of remote sensing , GIS and GPS in forest resource assessment	Dr. Manoj Kumar, Scientist-C IT & GIS Discipline Ph.No. 01352224235 E-Mail: head_silva@icfre.org										13-17		
6.Wood Seasoning	Dr. N.K. Upreti, Scientist-G, Forest Product Division Ph. No. 0135 222 4432 E-Mail:head_fp@icfre.org										20-24		
7.Classification & grading of timber	Sh. Rajesh Bhandari, Scientist-F TME, Forest Products Division Ph. No. 0135-2224345 E-Mail:bhandarir@icfre.org											08-12	
8.Herbarium Techniques	Dr. Anup Chandra, Scientist-F & Head, Forest Botany Division Ph. No. 0135-2224490 E-mail : anup@icfre.org											15-19	
9.Eco-physiological monitoring of forest ecosystem	Dr. Hukum Singh, Scientist-C, Forest Ecology & Climate Change Division Ph. No. 0135-222 4413 E-mail : hukum@icfre.org											22-26	
10.Plywood manufacture	Sh. D.P. Khali, Scientist-G, C.W. Discipline Forest Products Division Ph. No. 0135-2224451 E-Mail: khalidp@icfre.org												13-17

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

The following Low-Cost Short Term Training Courses for Non-Gazetted staff, farmers, artisans, craftsman, gardeners etc, shall be conducted at FRI, Dehradun during 2021. These courses are designed as per the requirements of the sponsoring agencies.

1. Extraction, Quality assessment, Value addition and application of essential oils from aromatic plants:

Course Director : Dr. Y.C. Tripathi, Scientist-F & Head, Chemistry & Bioprospecting Division

Ph. No : 0135-222 4207

Dates : 09 to 13 August , 2021

Course contents : Overview of essential oils, Techniques for extraction of essential oils, Physiochemical assessment of essential oils for quality control, GC-MS assisted analysis of chemical constituents, Value addition of essential oils and Industrial application of essential oils.

2. Bamboo Propagation, Management and Marketing Strategies :

Course Director : In charge, NTFP Discipline, Silviculture & Forest Management Division

Ph. No : 0135-222 4499

Dates : 04 to 08 October , 2021

Course contents : Distribution, Description and Silviculture of Bamboo and their morphological features, Seed Storage Technique of Bamboo, Bamboo Propagation Techniques, Bamboo Working and Management Plan, Marketing of Bamboos in India-Demand & Supply position, Scope of bamboo products in India, Bamboo protection, storage and treatment techniques and Field Visit.

3. कृषिवानिकी एवं बाजारीकरण व्यवस्था।

Course Director : Dr. Charan Singh, Scientist-F, & Head, Extension Division

Ph. No : 0135-222 4355

Dates : 26 to 28 October, 2021

Course contents : कृषिवानिकी एवं कृषि वानिकी पद्धतियों के प्रकार, मुख्य कृषिवानिकी प्रजातियां एवं उनका कृषिवानिकी में स्थापन, कृषिवानिकी उपज आकलन एवं बाजारीकरण व्यवस्था।

4. Livelihood Enhancement Strategies in Forest Fringe Villages

Course Director : Assistant Silviculturist (G), Silviculture & Forest Management Division

Ph. No : 0135-2224223

Dates : 15 to 18 November, 2021

Course contents : Livelihood of the forest dependent communities and its impact on forest carbon stock, Forest degradation in India and its impact on livelihood of forest tribes, Livelihood of local communities and forest degradation in India; issues for REDD, Filling the gap of demand and supply of forest products, Forest Management- A tool for providing livelihood support to forest fringed people, Creating alternative livelihood opportunities through poverty alleviation programmes like MNREGA, Eco-tourism for livelihood of forest fringed villagers, Livelihood generation and poverty reduction through joint Forest Management and other NAP schemes & Field excursion.

5. Advances in Agroforestry:

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

Ph. No : 0135-222 4243

E-Mail : singhr@icfre.org

Dates : 08 to 10 Dec. 2021

Course contents: Introduction to agroforestry and prevalent agroforestry 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 Website : 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) Contact No. 0532-2440796

1. Essentials of clonal forestry

Course Director : Dr. Sanjay Singh
Ph. No. : 9430366286
Email : sanjay.drsmith@gmail.com
Dates : 05th – 07th October, 2021
Course Contents : Concept of cloning, Conventional and Modern methods of Clonal Propagation procedures, Clone development, deployment and testing.

2. Nursery and plantation management

Course Director : Dr. Anita Tomar
Ph. No. : 6386193844
Email : anitatomar@icfre.org
Dates : 23rd -25th November 2021
Course Contents : Designing of nursery; Types of containers in nursery; Raising of plants of important species in nurseries; Collection, processing and storage of seed; Macro propagation; Maintenance of plantation; Pre-sowing treatments for enhancing seed germination; Significance of Potting mixtures in nurseries.

3. Agroforestry modals for sustainable land use and development

Course Director : Dr. Anubha Srivastav
Ph. No. : Ph. no – 8299103348
Email : anubhasri_csfer@icfre.org
Dates : 01st- 03th December'2021
Course Contents : 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.

4. Eco-Rehabilitation of Mined Out and Degraded Lands Through Microbial Interventions Course

Course Director : Dr. Kumud Dubey
Ph.No : 9415214010
Email : dkumud_csfer@icfre.org
Dates : 08th-10th February 2022
Course contents : Selection of Species; Sustainable reclamation including field study of affected sites; Plantation technique with Microbial and Bio-solid treatments; moisture conservation techniques.

5. Bamboo Propagation, Management and Utilization

Course Director : Sh. Alok Yadav
Ph. No : 9411166881
Date : 02nd to 04th March 2022
Email : alokyadav@icfre.org
Course Contents : 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