



03

Education Vistas



EDUCATION VISTAS

03

3.1 Improving Formal Forestry Education

The Council is promoting forestry education in the Country by providing grant-in-aid to the forestry teaching universities and up-gradation of skills of the Scientists working in ICFRE and its Institutes by permitting them for participating in the national/international seminars, workshops, symposium and workshops etc.

- During the year 2016-17, Grant-in-Aid of Rs. 75.00 lakhs provided to F.R.I. Deemed University, FRI, Dehradun
- During the year 2016-17 the funds to the University has been released as :
 1. Navsari Agricultural University, Navsari –Rs.4.20 lakhs
 2. Sher-E-Kashmir University, Srinagar – Rs.4.20 lakhs
 3. H.N.B. Garhwal University, Srinagar – Rs.4.20 lakhs
- Net-working project of Non-Timber Forest Produce is under implementation involving 04 Universities (1.Navsari Agricultural University, Navsari (Guj.), 2. Sher-E-Kashmir University, Srinagar, 3. HNB Garhwal University, Srinagar (UK), 4. Tamil Nadu Agricultural University, Mettupalayam (TN). The project duration was 03 years from 2012-13 to 2014-15. The period of the project has been extended further. The objectives are as follows :
 - Availability and source of quality planting material, regeneration techniques, qualitative and quantitative potential and research gaps.
 - Examination of the value addition chain and scope of improvements, available good practices, available R&D inputs and innovations in the area and elsewhere.
 - Examining the working techniques of each selected NTFP, the department prescriptions and establishing parameters and protocols for sustainable harvest levels, to be used by the departments.

- To further examine the role of forest department in the changed context of FRA, as also with reference to the local innovations, to promote benefit to the local communities. The Status Reports and Detailed Project Reports (DPRs) received from the universities were evaluated by the Committee constituted under "Networking Project on NTFP".

Accreditation of Universities

Ten State Agricultural Universities have been accredited with ICFRE in the meeting of Accreditation Board held on 17 March 2017. List of accredited universities is given below:

1. College of Forestry, Orissa University of Agriculture & Technology, Bhubaneswar (Orissa)
2. College of Forestry, Kerala Agricultural University, Thrissur, (Kerala)
3. College of Forestry, Dr. Bala Saheb Sawant Konkan Krishi Vidyapeeth, Dapoli, (Maharashtra)
4. Department of Forestry & Environmental Science, Kumaun University, Nainital, (Uttarakhand)
5. Department of Forestry & Natural Resources, HNB Garhwal University, Srinagar (Uttarakhand)
6. ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari (Gujarat)
7. College of Forestry, Dr. Yashwant Singh Parmar University of Horticulture & Forestry, Solan (Himachal Pradesh)
8. School of Forestry & Environment, Sam Higginbottom Institute of Agriculture, Technology & Science, Allahabad, (Uttar Pradesh)
9. Department of Forestry & Natural Resources, College of Agriculture, Punjab Agricultural University, Ludhiana (Punjab)
10. Department of Forestry, CCS Haryana Agricultural University, Hisar, (Haryana)_FRI University

3.2 Forest Research Institute (Deemed) University, Dehradun

Establishment of Forest Research Institute (Deemed) University, Dehradun has been a major mile stone in the field of Forestry Education in India. It was established to promote

forestry education in the country. After the conferment of (Deemed) University status, academic activities of the Institute have increased tremendously and it has been fostering



research and education in forestry, environment and other allied disciplines in a more meaningful and productive way. The University has been fostering pioneering research in specialized areas under Ph. D. Programme.

Academic course and admission:

- The FRI (Deemed) University has been offering the following academic courses on a regular basis:-
- Two years M.Sc. courses in Forestry, Environment Management, Wood Science & Technology and Cellulose & Paper Technology.

- One year course in Post Graduation Diploma in Aroma Technology.

A summary of students/scholars admitted in different courses, pass outs and their placements are as follow:

1. Number of students
Admitted – 127 (SAARC students – 10)
Pass outs- 118 (SAARC students – 10)
2. Ph.D awarded – 46
3. Ph.D scholars registered – 32
4. Total no. of placements- 40

3.3 Trainings Organized

Trainings are aimed for acquiring more and new knowledge, developing competencies and skills and adopting behaviours that improve performance in current jobs. Details of various training programmes organized by the ICFRE, Dehradun and its institute are given below:

Name of Institute	No. of Trainings	Duration (in days)	No. of Participants
ICFRE	13	-	233
FRI	24	178	745
IFGTB	14	75	264
IWST	16	63	358
TFRI	42	95	1413
RFRI	14	73	355
AFRI	11	29	661
HFRI	15	35	387
IFP	22	11+	889

FRI, Dehradun

- Agroforestry and land management
- Cultivation and Utilization of Medicinal Plants
- Medicinal Plants based Agroforestry
- Handmade Paper from *Lantana camara*
- Forest Fire Disaster Risk Mitigation
- Conservation and Management of Coastal Ecosystems
- Nursery Raising Technique and Management
- Plantation Technology
- Silviculture/Forestry
- Tree Seed and Nursery Technology
- Diagnosis of Soil for Production Systems
- Techniques of Gene gun 'Gene Pro'
- Soil microbiological studies
- Inventorization and conservation of rare and threatened species



Training on "Agroforestry and land management"



Training course on "Diagnosis of Soil for Production Systems"

IFGTB, Coimbatore

- Seed handling and nursery technology for biodiversity conservation and sustainable production
- Bioprospecting – Role of State Forest Departments
- Bioprospecting-Instrumentation methods and phytochemical analysis
- Analysis of DNA marker data for the researchers
- Vegetative propagation
- Scientific Writing for forestry Professionals
- Biological Diversity Act, 2002
- Plant Taxonomy
- Techniques in Bio-fertilizers Production, Maintenance and Application in Nursery and Field
- Forest Genetic Resources Management and Conservation
- Germplasm Conservation and Documentation

IWST, Bengaluru

- Wood Polymer Composite
- Wood Protection
- Field Identification of important timber species
- Statistical Methods in Forestry
- Raising, Managing and Marketing Bamboo
- Sandalwood – Seed handling, nursery & plantation technology

TFRI, Jabalpur

- Application of Biofertilizers in Forest Nurseries
- Assessing and recording the impact of damage caused by Insects-pests and diseases to tree species in forests of Central India.
- Nursery techniques of Chironji
- Biofertilizers and Organic farming

- Iora Ecological Solutions
- NTFP Harvesting, processing and Value Addition/Food from Forests
- Selection of Candidate Plus Trees
- Statistical applications in entomological and other biological experiments
- Taxonomy of Plant Kingdom
- Biofertilizers & Organic Farming
- Digital Payments
- Nutritional potential of *Moringa oleifera* leaves and prospects of its value addition
- Tree Planting (Agroforestry) and its Management
- Pollinators/Farmer friendly Insects and Biopesticides (IPM)
- Improved collection and processing methods of *Madhuca indica* flowers and prospects of its value addition

RFRI, Jorhat

- Bamboo Propagation and Nursery Management
- Bamboo Propagation Preservation and Value Addition of Bamboo
- Skill Development and Capacity Building of Rural Youth for Livelihood Generation through Bamboo Handicrafts
- Broom Grass Cultivation and other Community Livelihood Practices in Tripura
- Lac Cultivation & Processing
- Agarwood: Nursery and Plantation Management, Artificial Inoculation of Agar Tree
- Principles of Nursery Management
- Integrated Management of Nursery Pest and Disease
- Package of Practices of important fuel/grass/fodder species



- Vermicomposting Technology and its applications
- Seed Technology
- Community Approach towards Development of Forest-based Livelihood Options
- Bamboo Shoot and Edible NTFPs and Entrepreneurship Development
- Silviculture and Genetics Aspects of Forest Management
- Sustainable utilization, conservation and cultivation of medicinal plants
- Sustainable Development through Agroforestry
- Capacity Building Programme for the Frontline Field Staff of Himachal Pradesh Forest Department

AFRI, Jodhpur

- Combating Desertification
- New techniques in forestry and agroforestry
- Integrated approach for sustainable development of fragile desert eco-system
- Production of female Ardu plants through grafting technique for higher biomass production
- Wild Animal Rescue and Rehabilitation

HFRI, Shimla

- Ecology and biological control of insects including butterflies in forest eco-systems.
- Bamboo Production, Management and Marketing to the Farmers of Himachal Pradesh

- Cultivation of Atish, Bankakri, Chora and other important temperate medicinal plants
- Management of Insect- Pest and Diseases in the Nursery
- Eco-restoration of Wastelands
- Biodiversity Assessment, Monitoring and Conservation
- Seed and Nursery Techniques of Juniper, Conifers and High Altitude Medicinal Plants
- Integrated Pest Management in Forestry and control of Insect Pest & Disease in Medicinal Plants
- Integrated approaches towards sustainable Management of Natural Resources and Organic Farming
- Mass Production of Kaphal Stock in the Nursery



Training programme titled "Sustainable Development through Agroforestry"



Training programme on "Bamboo Production, Management and Marketing to the Farmers of Himachal Pradesh"



IFP, Ranchi

- Livelihood promotion of farmers by lac cultivation in Palas, Ber, Kusum and *Flemingia semialata*
- Raising, Management and Marketing of bamboos
- Agroforestry and model nursery

IFB, Hyderabad

- Medicinal plants Cultivation in Agroforestry
- Seed technology, Nursery training and Agroforestry systems
- Green Wealth for Global Health

3.4 Visit Abroad

During the year 2016-17, 23 cases of the Officers/Scientists for their Foreign Visit (Abroad) have been processed and sent to the MoEF&CC for permitting and issuing them necessary Political/FCRA Clearances to visit abroad.

- Shri V.R.S. Rawat, Scientist 'F', ICFRE participated in the 44th session of the Subsidiary Bodies (SBSTA/SBI) of UNFCCC in Bonn from 16 to 26 May 2016 as a member of Government of India delegation.
- Dr. T.P. Singh, ADG (BCC), ICFRE participated in the workshop on REDD plus finance at Bangkok, Thailand from 25 to 27 May 2016.
- Shri R.S. Prashanth, Director, Dr. A. Balu, Scientist-G, IFGTB, Coimbatore visited Australia from 19 to 27 June 2016 to undertake study tour to Australia under the ongoing collaborative project with Australian Government.
- Dr.N. V. Mathish, Scientist – F, IFGTB Coimbatore visited USA from 01 August 2016 to 31 January 2017 to execute research work under FNAPE Fellowship.
- Dr. Dinesh Kumar, Scientist –F, FRI, Dehradun, Dr. Anita Tomar, CSFER, Allahabad visited Germany & Sweden from 10 to 20 September 2016 to participate 25th session of IPC.
- Dr. R. K. Kalita, Scientist – E, RFRI, Jorhat visited Nepal from 18 to 25 September 2016 to attend "Regional Training of Trainers and to act as Resource Person.
- Dr. V. P. Tewari, Director, HFRI, Shimla participated in "Forest Ecosystem Autumn Workshop" from 19 to 24 September, 2016 at Beijing, China.
- Dr. V. Sivakumar, Scientist – F, Dr. R. Anandalaxmi, Scientist – E, IFGTB, Coimbatore visited Thailand from 19 to 25 September 2016 to attend meeting of DST funding project.
- Dr. K. K. Pandey, Scientist G attended UNEP - Environmental Effects Assessment Panel meeting held in Ioannina, Greece, from 22 to 30 September 2016.
- Dr. Sudhir Singh, Scientist – F, FRI, Dehradun visited Orlando, USA from 25 to 30 September 2016 to attend 25th International Conference of Entomology 2016.
- Dr. R. Sundararaj, Scientist – G, IWST, Bengaluru visited Evora, Portugal from 27 to 30 September 2016 to participate in the "IUFRO World Congress Silvo – Pastoral System- 2016".
- Sh. Amit Kumar Verma, RA.I, FRI, Dehradun visited Nepal from 02 to 04 October 2016 to attend regional consulting workshop.
- Dr. V. R.S. Rawat, Scientist – F, ICFRE, Dehradun, Sh. M.Z. Singhson, Director, ARCBAR, Aizwal visited Nepal from 17 to 21 October 2016 to attend REDD+ Himalaya: review and planning meeting.
- Dr. Rashmi, Scientist-D, FRI, Dehradun visited Beijing, China from 21 to 27 October 2016 to attend IUFRO Regional Congress for Asia and Oceania and Pre Congress Training Workshop.
- Dr. T.P. Singh, ADG (BCC), ICFRE participated in a regional workshop on 'Measurement, reporting and verification in the context of REDD+ in Himalayan countries at Naypitaw, Myanmar from 24 to 27 October 2016.
- Dr. T.P. Singh, ADG (BCC), ICFRE participated in meeting of COP 22 of UNFCCC at Marrakech (Morocco) from 09 to 14 November 2016.
- Sh. V.R.S. Rawat, Scientist-E, BCC Division participated in meeting of COP 22 of UNFCCC at Marrakech (Morocco) from 08 to 15 November 2016.
- Dr. Manisha Thapliyal, Scientist 'F', FRI ,Dehradun visited Nepal on 21 and 22 February 2017 to attend Inception Meeting of Higher Education for Mountain Agriculture Work Group (HIMALICA).
- Dr. Shambhavi Yadav, Research Officer, FRI, Dehradun visited Netherlands on 2 and 3 March 2017 to participate in 8 World Congress on Agriculture & Horticulture.
- Dr. Pankaj Singh, Scientist B, IFB, Hyderabad visited China from 9 to 24 March 2017 to carry out research work on molecular characterization of mushroom polysaccharide as visiting faculty.



- Dr. R.S. Rawat, Scientist – C, BCC Division, ICFRE, Dehradun visited Nepal from 10 to 12 April 2017 to attend Workshop on South-South learning "Forest Reference Level (FRL) Assessment Process in Asia/Pacific".
- Dr. N.S.K. Harsh, Scientist G, FRI, Dehradun visited Cambodia from 17 to 23 April 2017 for Health assessment of Heritage trees at the Ta-Prohm Site in Siem Reap and imparting training to Cambodian staff.

3.5 Participation in Seminars/Symposia/Workshops/Trainings

Scientists, officials, Research scholars of ICFRE and its institutes participated in various seminars/symposia/workshop/trainings/ meetings organized by various

organizations throughout the country on variety of subjects. Summary of participation in various seminars/symposia/workshop/trainings/ meetings are as follows:

Name of institute	No. of events
ICFRE, Dehradun	07
FRI, Dehradun	66
IFGTB, Coimbatore	89
IWST, Bengaluru	17
TFRI, Jabalpur	41
RFRI, Jorhat	60
AFRI, Jodhpur	26
HFRI, Shimla	31
IFP, Ranchi	26
IFB, Hyderabad	17
Total	380