# EDUCATION VISTAS

# 3. Education Vistas

### 3.1 Introduction

The Directorate of Education, being an important arm of the ICFRE, has been mandated to guide and galvanize forestry education in the country through State and Central Universities and

- To nurture FRIDU into an institute of excellence in higher learning in forestry.
- To provide financial support in the form of grantin-aid to improve gap-filling infrastructure
- To enhance quality of forestry education by continuously striving for improvements in curriculum.
- To provide a framework of quality assurance through a well laid system of accreditation in forestry.
- To integrate the institutions of forestry education with research in ICFRE system to foster mutual symbiosis and outreach.
- To network with the international institutions of repute on faculty and students exchange.
- To enhance employability of the forestry professionals for mainstreaming of forestry across sectors.
- To attract talent into forestry as a profession.
- Provide avenues for capacity building to the scientific and technical cadre of the council and of the sector in general.
- To support policy in forestry through policy research inputs.

# 3.2. Processes in Forestry Education

The above mandate is achieved by the Directorate through following processes.

 Creating teaching and research infrastructure for Universities giving impetus to Forestry Education, matching higher standards for forestry education.

- Providing access to international level teaching and learning resources, including books and journals through e-consortium and information system.
- Providing well laid IT enabled environment for academic excellence.
- A well-laid system of accreditation is in place.
   Efforts are made to bring all the universities imparting forestry education under the aegis of accreditation.
- Development of a very clear road-map for each University for the purpose of future growth in terms of Institutional management, financial resource allocation and utilization, physical infrastructure, faculty and staff, students affairs profile, course delivery, co-curricular and related activities, research and development through a process of peer review.
- Periodical curriculum revision and upgradation, in tune with the requirements of the sector, with wider stakeholder participation, bearing stamp of both the councils (ICAR & ICFRE) for wider acceptability.
- Provide support for gap-filling infrastructure for funding capital investment for forestry education and also attract matching investment from the states as per prescribed guidelines.
- Enhancing employability of the Forestry professionals and facilitating appropriate placements by tie-ups.
- Development of a range of programmes on Capacity Building catering to the requirements of the sector. This also includes the capacity building of Indian Forest Service and, therefore, design, development and execution of Mid-Career Training of Indian Forest Service for phase-III as Lead Training Organization.

- Fostering international cooperation in the field of forestry education through networking, faculty and students exchange to bring international wisdom.
- Policy Research Support to the MoEF by hosting the policy research committee at ICFRE and also institution of Policy research Studies to provide inputs to the Ministry.

### 3.3 Grant-in-Aid to Universities

The National Commission on the Agriculture in its report in 1976 recommended for creation of forestry education facilities in the universities for conducting graduate and post graduate level programs. Initially the universities imparting forestry education were supported by the grants released by ICAR and continue to work under ICAR umbrella. However, after grant of autonomy to the ICFRE, pursuant to its mission objective, ICFRE has been providing grants to develop technical capabilities and strengthen infrastructure for forestry faculties in the universities imparting forestry education at the graduate and postgraduate levels as a gap filling support.

ICFRE has been providing Grant-in-Aid to various forestry research universities/ institutions under Agricultural Universities offering Undergraduate and Postgraduate Courses in forestry only, to strengthen the infrastructure for giving impetus to Forestry Education in the country. During the period April 2011 to March, 2012 Rs. 100.00 lakh have been released to 10 Universities as grant-in-aid.

#### 3.4 ICFRE Accreditation Board

The ICFRE Accreditation Board Meeting was held on 13 October 2011 at Dehra Dun. The peer review reports of the universities alongwith the self assessment were considered in depth and on the recommendation of the Accreditation Board, the Director General, ICFRE approved the accreditation of the following 09 Colleges/Universities and courses in forestry for the period of three years from 18 October 2011, with the grading mentioned against them.

S.No.	Name of University	Accreditation
		Grade
1.	Department of Forestry, Haryana Agricultural University, Hissar (Haryana)	A
2.	Department of Forestry, College of Agriculture Orissa University of Agriculture & technology, Bhubneshwar (Orissa)	A
3.	College of Horticulture & Forestry Central Agricultural University Pasighat (Arunachal Pradesh)	A
4.	Department of Forestry Natural Resources, Punjab Agricultural University, Ludhiana (Punjab)	A
5.	Department of Forestry, HNB Garhwal University, Srinagar (Garhwal)	A
6.	College of Forestry, Dr. Balasaheb Sawant Konkam Krishi Vidyapeeth, Dapoli (MS)	A
7.	ASPEE College of Horticulture & Forestry Navsari Agricultural University, Navsari (Gujarat)	A*
8.	Faculty of Forestry, Sher-E-Kashmir University, Srinagr (J&K)	A
9.	College of Horticulture & Forestry, Maharana Pratap University of Agriculture & Technology, Jhalawar (Rajasthan)	A

This is in addition to the 9 universities already accredited; thereby, as on date 18 universities have been accredited by ICFRE for forestry education. The process of assessment and peer review has provided a good roadmap to each university to achieve higher levels of academic excellence.

# 3.5. Policy Research

Two Policy Research Studies entitled "Synergy in Various Institutions in Implementation of the Scheduled

Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 to Ensure Improved Livelihood Support as also Sustainable Forest Management" & "Analyzing the Linkage between Poverty Alleviation and Forestry Programme" have been completed in the financial year 2011-12.

Organized the fifth meeting of Policy Research Committee in Conference Room No. 403, MoEF, New Delhi on 10 August, 2011.

#### 3.6. HRD Initiatives

- As part of the HRD initiatives for capacity building of scientific personnel, 13 trainings programme (including 01 training of MCT Phase-III – Third Course) were organized in a number of training organizations of repute, in which 227 participants (including 54 participants of MCT) were trained in 17 Institutions.
- In order to provide wide national exposure to the scientists, a total of 115 permissions were issued at the Council level for participation of scientists in national level seminars, workshops, symposia etc.
- Facilitated 71 cases of foreign visits, which were finally approved from the Government of India with funding from a number of sources providing a much needed international exposure to the scientific cadre.

- Organized 04 HRD Committee meetings of ICFRE for the preparation of Committee Report on Policy on Human Resource Development in ICFRE.
- The Directorate of Education also prepared the HRD Plan for Capacity Buildingfor ICFRE for ensuing 12<sup>th</sup> Five Year Plan by involving experts in various disciplines.
- As a novel initiative, ICFRE prepared first of its kind "HRD Policy of ICFRE" to revamp the functioning of the Council. The policy is developed by involving experts from within and outside the Council and also by doing in-house consultations. The document has been placed on the website of the council.

## 3.7. Mid-Career Training of IFS

ICFRE successfully completed Mid-Career Training Project for IFS officers for phase III (Third Course), by providing best institutional arrangement and partnership with Institutions like Wildlife Institute of India, Dehradun, Forest Survey of India, Dehradun, Indian Institute of Management -Ahmedabad, Colorado State University, Fort Collins, (US) and Swedish University of Agricultural Sciences (SLU)/Swedish Forest Agency, Sweden. Fifty four officers from all over the country participated in the training progremme.

ICFRE arranged and organized following training programme for Scientists and IFS Officers from 1 April 2011 to 31 March 2012:

S.No.	Training	Dates	Institution	No. of Participants
1.	Training on Reservation Policy	07 June 2011	SC/ST Commission, Lkw at ICFRE,	22
2.	Training on Forest Biotechnology	11-20 July 2011	NBPGR, New Delhi	17
3.	Training on Planting Stock Improvement: Clonal trials	22 August 11 – 02 September 11	IFGTB Coimbatore	14



S.No.	Training	Dates	Institution	No. of Participants
4	Training of scientific support staff RAI, RAII & TAI on Laboratory Management	05-09 September 2011	TFRI Jabalpur	25
5	Training On Paper & Pulp	22 August- 02 September 2011	CPPRI Saharanpur	1
6	Training on Effect of Invasive species/weeds on Productivity of Forest Plantations & Natural forests & different cost effective methods.	13-17 December 2011	K.F.R.I. Peechi, Kerala	10
7.	Training on 'Nanotechnology'	22-25 February 2012	IWST Bangalore	15
8.	Training of scientific support staff RAI, RAII & TAI on Laboratory Management	27 February – 02 March 2012	FRI Dehradun	25
9.	Training on 'Tree Breeding'	27 February to 04 March 2012	Dr. Y.S.Parmar University of Horticulture & Forestry, Solan	6
10	Training on 'Environmental Impact Assessment'	19 - 23 March 2012	F.R.I. Dehradun	15
11	Training on 'Cultivation of Medicinal Plants'	19 - 23 March 2012	I.H.B.T. Palampur	3

#### 3.8. Grievances Redressal Cell

Grievance Redressal Cell has been functioning in the Directorate of Education under the chairmanship of DDG Education and the cell undertakes various activities for SC/ST and OBCs. During the period under report, the cell received no grievance from the employees. Two Special training workshops for Officers/ Officials of ICFRE (HQ) and FRI, Dehradun were organized on "Reservation Policy" in the Conference Hall, Scientist Hostel, FRI, Dehradun on 7 June 2011 and 27 to 28 March 2012.

# 3.9. FRI (Deemed) University

### 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 and Wood Science & Technology and Cellulose & Paper

Technology, one year courses in Post Graduation Diploma in Natural Resource Management, Diploma in Genetics & Tree Propagation & Biotechnology. Besides, the University offers research programme in forestry leading to award the Doctrate Degree.

In order to provide excellence in academic inputs in the FRI Deemed University, three Chairs of Excellence have been provided in the University. During this year, the guidelines for Operationalization of Chairs of Excellence were prepared and finalized in consultation with known academicians in the field.

#### **Sports Meet**

University Sports meet was organized from 22 to 26 March 2012 in order to emphasize the values of healthy body and healthy mind amongst the students.

#### **Placement**

Placement brochures have been prepared for all M.Sc. and Diploma courses, with student's profile. Placement



brochures were sent to different Organizations/Industries/ Companies/NGO's and constant contact was maintained to facilitate Campus Interviews. Campus Interviews were conducted with different Organizations / Industries / Companies/ NGO's and placement of students for academic year 2011-2012 carried out.

Sr. No.	Institution	Selected Students
1.	Reliance Foundation (Bij)	<ol> <li>Joystu Dutta</li> <li>Shankar Dubka</li> <li>Anjali</li> <li>Virendra Singh</li> <li>Prabeena Devi</li> </ol>
2.	Selections in Indian Forest Service (through UPSC National Competitive Examination)	<ol> <li>Vaanathi M.M.</li> <li>Rohinini Ballav Saikia</li> <li>Chaman Lal</li> <li>Harajeet Kaur</li> <li>Amrita Dutta</li> <li>Lovit Bhaarti</li> <li>Sanjay Biswal</li> <li>Arpana</li> </ol>
3.	M/s Wipro Technologies	Himani Sharma
4.	CDS Examination	Priya Nair
5.	Agriculture Officer	Swagitika Nayak

### Ph. D. Course work:

Compulsory courses for Ph.D. were conducted from 15 September to 31 December, 2011 by FRI University. The details of the research scholar's activity is summarized below:

S.No.	Research Scholars registered/submitted/Awarded Ph. D.	No. of students
1	Research Scholars registered for Ph.D	64
2	Research Scholars who submitted the thesis	28
3	Viva voice of the Research Scholars held during the year	38
4	Approval of the RDC for award of Ph. D. Degree	37



Field Visit of Officers and Scientists under Induction Training Hoshiyarpur



Visit of Officers and Scientists under Induction Training at Modern Nursery Unit



Field Visit of Officers and Scientists Arranged by FRI University for Demonsteration at Shimla



Visits of FRI Students to Valley of Flowers



Sport Meet by Deemed University FRI



Visit of Officers at DUFRI Campus during Sports Meet



Nursery Visit of DUFRI Students



Field Visit of DU FRI Students



# **3.10 Trainings Organized for Other Stake**holders

- i) Three days training programme on CDM validation and verification was organized at ICFRE, Dehradun from 3 to 5 July, 2011 with the help of M/S TUV SUD SOUTH ASIA Pvt. Ltd., New Delhi. 20 participants including DG, ICFRE attended the training programme.
- ii) One week compulsory training course for Indian Forest Service officers on "Forest and Climate Change: Opportunities and Challenges of Mitigation and Adaptation" was organized at ICFRE Dehradun from 17 to 21 October 2011. The training course was sponsored by the Ministry of

Environment and Forests, Government of India, New Delhi, and 33 IFS officers of different State Forest Departments participated in the training course. The programme was highly appreciated and rated by the participants.

One week training programme for scientists and technologists on "Climate Change and Carbon Mitigation" was organized at ICFRE, Dehradun from 14 to 18 November 2011. The training programme was sponsored by the Department of Science and Technology New Delhi, and 24 scientists and technologists participated in the training programme. The programme was highly appreciated and rated by the participants.



Participants and Organizers of One Week Compulsory Training Course for Indian Forest Service officers



Participants and organizers of One Week Training Programme for Scientists and Technologists

One week training programme for women scientists and technologists on "Climate Change and Carbon Mitigation' was organized at ICFRE, Dehradun from 06 to 10 February 2012. The training programme was

sponsored by the Department of Science and Technology New Delhi, and 25 women scientists and technologists participated in the training programme. The programme was highly appreciated and rated by the participants.



Participants and Organizers of One Week Training Programme for Scientists and Technologists



Participants and Organizers of Two Days Training Workshop for IFS Officers

Two days training workshop for IFS officers on "The significance and scope of REDD/REDD+ for Indian forest" was organized at ICFRE Dehradun from 13 to 14 February 2012. The training workshop was sponsored by the Ministry of Environment and Forests, Government of India, New Delhi, and 18 IFS officers from different State Forest Departments participated in the training workshop. The programme was highly appreciated by the participants.

Twenty Seven training programmes were organized by FRI to address the needs of stakeholders. The target group trained in these training includes participants from SFDs, officers/Scientists of ICFRE and other related institutions, NGOs, farmers.

Thirty three trainings were imparted during the year to different stakeholders group including officers

from SFDs, Scientists, NGOs, students from universities. This included one week compulsory training course for IFS officers on Forest Genetic Resource Management, training and orientation programme for Forest officers from Maharashtra and Odisha and Tamilnadu, Orientation and training programme for other department officers from TamilNadu. Dr. Alison M Berry, Professor, Department of plant science, University of California, Davis, was invited to IFGTB. The speaker delivered special address on "The current trends on Nitrogen assimilation in Datisca-Frankia root nodule symbiosis" as well as Hands on training to JRFs on "Isolation of Frankia from root nodules of *Casuarina equisetifolia*" on 2.12.2011.



















Training to Horticulture Officers

# Annual Report 2011-12

Twelve trainings were organized by the institute covering the major aspects of its mandate and the target trainees were from SFDs, Scientists, NGOs, students from universities. The training of special mention was on "Advanced Wood Processing and Utilization of Plantation Timbers". Is training was attended by officers from Karnataka State Forests Industries Corporation (KSFIC). Lectures on different aspects of wood science such as introduction of lesser known/alternate species and their trade/local names, methods of storage of logs and sawn timbers, various sawing techniques, importance of knowing different timber properties, defects in wood and grading of logs and sawn timber, finger jointing in wood and its

importance in utilization of small girth plantation timbers, field identification of important timbers, importance of wood seasoning and seasoning schedules of various timber species, seasoning kilns (solar, steam, vacuum press drying, dehumidification drying etc.); other seasoning methods, fundamentals of wood preservation and need for wood preservation, traditional and emerging wood preservatives and operation of preservation plants, prevention and control of wood deteriorating fungi susceptibility of timber to pest attack and enhancement of durability, demonstration and interaction on seasoning kilns, preservation plant etc., were delivered by IWST Scientists.

















Trainings and Other Activists at CFRHRD, Chhindwara

# Annual Report 2011-12

Twelve trainings were organized by the CFRHRD, Chhindwara under TFRI, Jabalpur. Target groups were farmers/Non Government Organizations/Women Self Help groups/Women Van Samiti members.

RFRI, Jorhat organized 28 trainings during the year. Target groups included the members from Territorial Army, Eco Task Force (Assam), students of B.Sc. (Forestry), State Forest Department Officials, Ecodevelopment committee members, NGOs and rural people.







Glimpses of the Training on "Global Positioning System Application in Forest and Land Resource Survey"



Training on "Assessment of Phyto-diversity Dynamics for Conservation in Jeypore Reserve Forest."

Training-cum-workshop Organized "Global Positioning System Application in Forest and Land Resource Survey" for officers' trainees of State environment and forestry training institute (SEAFTI), Dimapur, Nagaland and Nagaland forest department, Govt. of Nagaland.

AFRI, Jodhpur organized 7 trainings during the year for a range of stakeholders including compulsory training for the IFS officers (one week) on the Sustainable development of fragile desert ecosystem from 19 - 23 December 2011. The Institute has been identified as one of important training Instituion on desert ecosystem management by the MoEF for the purpose of capacity building of Indian Forest Service.

Six training programmes were organized by HFRI, Shimla during the year for the officials of SFD of Himachal Pradesh and representatives of Panchayati Raj Institutions and Mahila Mandals, and farmers. A number of programme were also organized commemorating International Year of Forests in 2011. Besides, two Interactive Meetings with senior and field functionaries of the State Forest Department were held on various issues Pertaining to Quality Parameters of Nursery Stock of Deodar and Ban Oak on 19 March 2012 in the Shimla Forest Circle & on 21 March 2012 in the Rampur Forest Circle, thereby, maintaining a close coordination with the forest department.





Training on "Lac Cultivation through Scientific Method" in Progress



Participants of the Training on "Lac Cultivation through Scientific Method"

Two trainings were organized by IFP, Ranchi during the year. Training on "Lac Cultivation through Scientific Method" was organized for farmers of Simdega district of Jharkhand. Training on "Bamboo Propagation, Cultivation and Management for Sustainable Livelihood" was organised for farmers, field functionaries and participants of ATMA, Katihar (Bihar).

# 3.11. Important Visits Abroad

ICFRE was represented in a number of international events, conferences, seminars abroad by its scientists and officers, by presenting research papers in important areas of research. A total of 71 cases of visit abroad were approved by the Ministry. Some important events, where ICFRE participated are mentioned below.

- Shri V.R.S. Rawat, Scientist-E Biodiversity and Climate Change Division participated in the UN Climate Change Conference from 6-17 June 2011 at Bonn, Germany.
- Shri V.R.S. Rawat, Scientist-E Biodiversity and Climate Change Division participated in the UNFCCC COP 17 and COP/MOP-7 from 28 November to 9 December 2011 at Durban, South Africa.
- Visit of Shri A.K. Bansal D.G. ICFRE (Additional Charge) and Shri Omkar Singh, DDG (Education) to Swedish University of Agricultural Sciences and Swedish Forest Agency in connection with Mid Career training of Indian Forest Service officers during 18-26 May, 2011.
- A delegation of Ministry led by Dr P. J. Dilip Kumar, Director General Forests, Governement of India, including Dr. V. K. Bahuguna, DG, ICFRE, Shri M. S. Garbyal, DDG(Admin), Shri Sandeep Tripathi, DDG (Res), Shri A. M. Singh, DIG, MoEF and Dr. S. S. Negi, Director, FRI visited Edinburgh, UK, for sharing lessons from experience of forest landscape restoration and to hold meeting with the UK Team for current and 2nd Phase of the Project under the UK-India Forest Landscape Restoration (FLR) Project.
- A delegation under the leadership of Dr. V.K. Bahuguna, DG, ICFRE attended IUCN meeting at Bangkok on 01 February 2012 to develop bilateral collaboration of ICFRE with IUCN. Dr. V.K. Bahuguna, Director General, ICFRE elaborated the research programme of ICFRE to all members of IUCN. Both the delegation discussed at length the various possible collaboration programmes for biodiversity conservation. ICFRE agreed to become a member of IUCN and for collaboration in the field of mangroves, bamboos and biodiversity conservation. Specific fields were identified for collaboration viz. land use practices, NTFP, JFM, water harvesting, fringe



forestry, invasive species, mining and rehabilitation, forest and livelihood, bioprospecting and biopiracy, secret grooves, international networking, black carbon etc.

 As an important international commitment by FRI, Dehradun, Dr. V.K. Bahuguna, Director General, ICFRE inaugurated a two days training programme on Restoration and Conservation of trees at Ta Prohm Temple on 3 and 4 February 2012. Total 23 participants from APSARA Authority Combodia attended this training programme.