

## CHAPTER 2

# Indian Council of Forestry Research and Education

The activities of forestry research, education and extension at ICFRE headquarters are as under :

### FORESTRY RESEARCH

**The Project Formulation Division** acts as a nodal agency between the ICFRE Institutes and potential donor agencies, for the formulation of research projects of ICFRE Institutes/Centres in the identified thrust areas and their submission to various National and International donor agencies as per their funding requirements. It also coordinates the release of funds to ICFRE Institutes from the donor agencies and evaluates the Project proposals with regard to their suitability in the identified thrust areas.

Thirty International Projects and 9 International Concept Notes are in the pipeline for funding with Donor Agencies, such as Japan International Co-operation Agency (JICA) Japan, Department for International Development UK (DFID), European Union (EU), Food and Agriculture Organization (FAO) of the United Nations, Asian Development Bank (ADB), etc. In Addition to the above, 18 International Projects are already under implementation.

Two hundred four National Projects and 13 Concept Notes are in the pipeline for funding with 40 National Donor Agencies such as Department of Biotechnology (DBT), Department of Science and Technology (DST), Ministry of Environment and Forests (MoEF), National Medicinal Plant Board (NMPB), National Bank for Agricultural and Rural Development (NABARD), Council of Scientific and Industrial Research (CSIR), Indian Council of Agricultural Research (ICAR), National Oil Seed and Vegetative Oils Development Board (NOVOD), Govind Ballabh Pant Institute of Himalayan Environment and Development (GBPIHED), Ministry of Textile (MoT), Sir Ratan Tata Trust (SRTT) etc. In addition, 144 National Projects are already under implementation. A large number of Research Projects received from ICFRE Institutes, MoEF and other agencies have been evaluated with regard to their suitability in the identified thrust areas. This Division coordinated with the Planning Commission for the preparation of State Development Reports (SDR) of Tripura, Lakshadweep and Andaman & Nicobar Islands. SDR of Andaman & Nicobar Islands has been finalized.

Comprehensive Bihar Project titled “Samudai Adharit Samanvit Van Prabandhan Evam Sanrakshan Yojana of Bihar State” was prepared for funding by Planning Commission, Government of India. The Project has been approved with the revised budget of Rs. 51.09 Crores for Phase: I. The proposed budget for Phase: II is Rs. 252. 33 Crores.

A Compendium of National and International Donor Agencies for funding of Research Projects was prepared. Author's Workshop on “History of Forests of India After 1947” was organized at Van Vigyan Bhawan, New Delhi on 15<sup>th</sup> and 16<sup>th</sup> November 2005.

**Planning and Programme Division** under the Directorate of Research deals with the planning, processing and execution of new research project proposals and review of the ongoing research projects of all the Institutes under ICFRE.



During the year 2005-2006, ICFRE coordinated Research Advisory Group (RAG) meetings at Institute level with user groups like farmers, NGOs, forest based industries and state forest departments. Finally the projects, approved by the RAGs, were placed before VII Research Policy Committee (RPC), the apex advisory body at the council level, which was convened on 22<sup>nd</sup> and 23<sup>rd</sup> March 2006.

During VII RPC, 74 new projects were discussed by RPC members including eminent NGO, forestry experts and representative of forest based industries. 31 projects were approved by the RPC and 28 projects having financial layout of less than rupees two lakhs were approved by the sub committee constituted by VII RPC. Two projects were recommended for external funding, and 13 were not approved.

Planning and Programme Division has also prepared an inventory of Completed Research Projects since the inception of ICFRE. A document “ An Inventory of Completed Projects of ICFRE Institutes, 1990-2005” was prepared and is being updated continuously. The document is available at the ICFRE website.

**The Environmental Impact Assessment Division** of the ICFRE undertakes consultancies for EIA studies nationwide for various developmental activities. During the year 2005-2006 following studies have been completed by the Division:

### **Kudremukh Iron Ore Company Limited (KIOCL), Karnataka**

Kudremukh Iron Ore Company Limited (KIOCL) is the largest 100% export oriented mining unit in the country. To fulfill the implementation of Honorable Supreme Court verdict, it was mandatory for KIOCL to prepare the mine closure plan and submit it to the Regional Controller of Mines for approval one year prior to closure of proposed mine. The final mine closure plan for Kudremukh Iron Ore Company Limited was prepared as per the guideline of Indian Bureau of Mines (IBM) and submitted to KIOCL. The mine closure plan has been prepared for the first time in India by ICFRE in coordination with its Institute of Wood Science Technology Bangalore and Central Water and Power Research Station, Pune. The plan submitted has been approved by Indian Bureau of Mines (IBM) and accepted by KIOCL.



View of Lakya dam and mined out area in foreground



Afforestation of grasses and shrubs on mined out areas



Studies on Environmental Impact Assessment, Socio-economic Impact Assessment, enumeration, ecological value, biodiversity loss of gene pool and Environmental Management Plan were completed and the draft report for Bodhghat Hydroelectric Project (4 x 125 MW), Dantewara was submitted to Chhattisgarh State Electricity Board (SEB), Raipur.

The Socio-economic Impact Assessment for the proposed Tapovan Vishnugad Hydro Power Project 520 (4x130) MW for NTPC in Chamoli District of Uttarakhand was conducted and draft report was submitted to NTPC. The Barrage of the project is proposed to be located on river Dhauliganga at village Tapovan with underground Power House at Animath in Joshimath Distt. Chamoli.



Project Site-Tapovan  
Vishnugad Hydroelectric project



Socio-economic impact of project

### **Sample check survey and Evaluation studies of National Afforestation Programme, MoEF**

Under this assignment, awarded by the National Afforestation and Eco-development Board (NAEB) of MoEF, evaluation studies in respect of coastal shelterbelt plantations of Bhubaneswar, Orissa and Area Oriented Fuelwood Fodder Programme scheme of Jhansi Division of Uttar Pradesh were conducted.

In addition to the above, the following assignments have been awarded to ICFRE:

- (i) Monitoring and Evaluation of the National Medicinal Plant Board, Department of AYUSH (Ministry of Health and Family Welfare) funded projects.
- (ii) Environmental Impact Assessment studies for Chandigarh Industrial Area Phase III.
- (iii) Evaluation studies of Catchment Area Treatment Plan for Tehri Dam Hydroelectric project, Tehri Hydroelectric Development Corporation.
- (iv) Evaluation of compensatory afforestation raised by States / Union Territories, under National Afforestation and Eco-development Board and under IX plan of Integrated Afforestation and Eco-development Project.

**The Biodiversity, Climate Change (BCC) Division**, Directorate of Research, ICFRE has taken up short term and long term policy programmes to address the issues of Climate Change and Biodiversity Conservation. ISO is an international consensus on good management practices with the aim of ensuring that organization can time and again deliver products or services that meet client's quality requirement. The division is making efforts to acquire ISO 9001:2000 Certification for ICFRE / FRI, Dehradun.



## A. Climate Change

BCC Division, ICFRE has taken two Externally Aided International Projects related to Climate Change:

**1. EU-India Small Projects Facility Programme “Beyond Kyoto: EU-India CDM partnership: Promoting Stakeholder Dialogue and Analysis of barriers to Forestry Mitigation Project”** The Overall objective of the Project is to create an enabling environment through dissemination of information and policy reforms for implementation of bilateral CDM Sinks Projects at the local level in India. There was consensus that the role of Sinks Projects including A&R Projects in Climate Change mitigation needs to be strategised both nationally and globally, particularly for the commitment periods beyond 2012.

Biodiversity and Climate Change Division, organized Second International workshop on “Climate Change Mitigation in Forestry Sector: Using Results of Projects, Regional and National Analysis and Project Proposal Preparation”, at India Habitat Centre, New Delhi on the 23<sup>rd</sup> and 24<sup>th</sup> January 2006 in partnership with Joanneum Research, Austria, Freiburg University, Germany and Lawrence Berkeley National Laboratory, USA as a part of the EU-India Project funded by the European Union within the Small Projects Facility Programme. National and International experts from ministries in Government of India, state forest departments, Academic bodies, Scientific institutions, industries and NGOs working in this field deliberated and shared their experiences in forestry sector for mitigation efforts particularly in context of CDM Projects. Proceeding of above workshop along with recommendation and list of delegates and CD containing session wise presentation was extended to PCCFs of States / UT and Directors of ICFRE regional institutes and to the delegates.

A Website <http://euin-arcdm.icfre.org> has been created and all the documents including “Knows and Hows for A/R Sink Projects” and FAQ about A/R CDM Projects were published for better dissemination of information on CDM Projects.

**2. FORCLIMIT India (MoEF- USEPA Programme Forests and Climate Change Mitigation Networks):** Methodology for assessment of Carbon Mitigation Potential of Farmlands, Bazpur (Udhamsingh Nagar, Uttarakhand) and Study for Carbon Sequestration Potential under farm forestry and community forestry, Betalghat (District Nainital, Uttarakhand) were completed. A two days International Workshop on “Methodologies in Forestry Mitigation Projects” was conducted at IIC, New Delhi on 13<sup>th</sup> and 14<sup>th</sup> April 2005.

Case studies under FORCLIMIT India Project are in progress namely (i) assessing industrial mitigation potential through LULUCF approach at Singareni Coal Field Bellapalli, Andhra Pradesh and (ii) Developing regional base lines in selected watersheds in the country (Uttarakhand state).

Methodology for Carbon Estimation in Plant biomass was developed and the application of PRO-COMAP model for mitigation potential is in progress.



Annual Report  
2005-2006

DG - ICFRE participated in Meeting of COP / MOP- 11 at Montreal, Canada.

A two day training workshop on 'Climate Change Mitigation: Role of Forestry and Sinks Projects within the CDM Framework' was organized at ICFRE on 29<sup>th</sup> and 30<sup>th</sup> December 2005. Thirteen IFS officers of different States participated in this workshop sponsored by Ministry of Environment and Forests, Govt. of India, New Delhi.

## B. Biodiversity Conservation

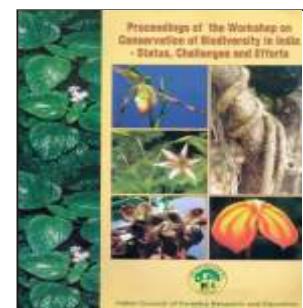
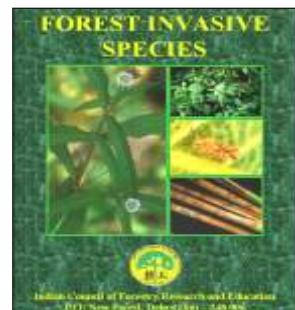
Conservation of national biodiversity has become a priority with negotiations at the international and national forum on the need for conservation. Preservation plots are examples of local level management for conservation of biodiversity. Preservation plots are important instruments for meeting the CBD targets of significantly maintaining or monitoring change in biodiversity.

BCC Division, ICFRE has established a joint venture with its regional Institutes and SFD's to reactivate the process of monitoring biodiversity through rejuvenation of preservation plots created by FRI since 1927 distributed nationwide and other bio rich areas that will provide an early warning of significant changes in the ecological systems of the region through preservation plot network. Fifteen states have confirmed existence and provided status report.

The digitization of 157 old files of Preservation Plots, which were created by FRI since 1927 onward in different States has been completed and recorded in CD for archival purpose in BCC Division.

Forest Invasive Species (FIS) is a priority issue under the Convention on Biological Diversity, accordingly, based on information received from regional ICFRE Institutes, a Brochure was published on 'Forest Invasive Species' as per revised format for Asia Pacific Forest Invasive Species Network (APFISN) which was released by Thiru A. Raja, Hon'ble Minister for Environment and Forests, Govt. of India on 24<sup>th</sup> January 2006 at India Habitat Centre, New Delhi during two days EU-ICFRE International Workshop.

BCC Division, ICFRE has published Proceedings of the Workshop of "Biodiversity in India Status, Challenges and Efforts" in June 2005. Also contributed in editing and manuscripting Proceedings of the Workshop entitled - Forests for Poverty Reduction: Changing Role for Research, Development and Training Institutions, held on 17<sup>th</sup> and 18<sup>th</sup> June 2003, Dehradun, India (RAP Publication 2005/19) sponsored by Asia Pacific Association of Forestry Research Institutions (APAFRI) and Food and Agriculture Organization (FAO) of United Nations Forestry Research Support Programme for Asia and the Pacific (FAO / FORSPA).





## FORESTRY EDUCATION

**Directorate of Education** provides financial support in form of Grant-in-Aid to Universities for strengthening the infrastructural facilities and enhancing teaching and research capabilities of their forestry faculties in order to promote forestry education in the country at university level. The activities undertaken by the Universities under this scheme include construction of college, laboratory and students' hostel buildings; purchase of equipments; purchase of books, periodicals, journals and equipments in libraries; developing glass houses, mist chambers and similar other teaching/ research facilities; developing sports/games and other students' amenities; establishment/strengthening of communication-cum-museum and instrumentation centres; purchase of transport and camping equipments for practical training and extension education; development of computer centre and purchase of mini computers, personal computers, terminals; assistance for preparation of teaching manuals and aids; organization of workshops/seminars/symposia; participation of teachers in national seminars/workshops/symposia; students' study tours and any other such work proposed by the universities and considered necessary by the ICFRE Accreditation Committee.

This Directorate also appoints SRF/RAs for implementation of the projects in the ICFRE institutes and conveys approval of the committees for the selection of JRF in respective institutes. At the same time it also conducts trainings/programmes for scientists of ICFRE and its institutes to update their technical knowledge.

**Policy Research Division** is a part of Directorate of Education, which reviews and analyse the existing forest policies, statutes and their framework. The Ministry of Environment and Forests, Government of India has constituted a committee of experts under the Chairmanship of D.G, ICFRE and D.D.G. (Education) as the Member Secretary to critically analyze the policies/programmes in the forestry sector and identify gaps and intervention required for their effective implementation. This committee is also suppose to advice Ministry of Environment and Forests, Government of India on forestry policy issues.

## FORESTRY EXTENSION

**Media and Publication Division** looks into the extension activities and strategies being adopted by the Institutes of ICFRE for the dissemination of research findings in forestry sector. This division maintains the monthly account of multifarious activities of ICFRE institutes and keeps MoEF apprised of them. Quarterly Newsletter of ICFRE brings out the latest significant achievements made by the ICFRE institutes. ICFRE Brochure is published with updated information. The reports of ICFRE and its institutes are collected, compiled, edited and published as the Annual Report of ICFRE, which is tabled in Parliament. Editing, vetting and processing of books, brochures, pamphlets and technical reports of ICFRE institutes by this division is mandatory before final publication.



**The Statistics Division** of this Directorate conducted a National level consultation on Forestry Statistics at New Delhi. As an expert group member ICFRE participated in the National Forest Database Management System (NFDMS) organized by Forest Survey of India (FSI) at MoEF, New Delhi. The division is conducting a sample survey of estimate rates and ratio of timber and non-timber forest products nationwide sponsored by CSO. International Tropical Timber Organization (ITTO) has awarded project on establishment of Network to facilitate collection, processing and dissemination of statistics pertaining to tropical timber and other forestry parameter at National level to the council. Four issues of "Timber/Bamboo Trade Bulletin" (TBTB) were published. Also classes and training courses in Statistics were imparted in FRI Deemed University.

## GENERAL ADMINISTRATION

**Information Technology Cell**, Directorate of Administration, ICFRE caters to all Information Technology needs of the users at ICFRE HQ and FRI. The activities of the cell are LAN-WAN Support; Procurement and Maintenance of Hardwares; E-Governance; Trainings and providing IT Support for the technical presentations in the Meetings, Conferences, Seminars, Workshops etc. The main achievements are :

- Upgradation of Local Area Network with a Gigabit backbone at ICFRE Hqrs and FRI was successfully implemented.
- Development and updation of websites - [www.icfre.org](http://www.icfre.org); [rfri.icfre.org](http://rfri.icfre.org); [euin-arcdm.icfre.org](http://euin-arcdm.icfre.org); [marketinfoherbs.icfre.org](http://marketinfoherbs.icfre.org); and [21apfc\\_ddn.icfre.org](http://21apfc_ddn.icfre.org).
- Project proposals submitted to the Ministry of Environment and Forests, New Delhi, under E-Governance activities.
- Upgradation Plan for MIS / RIS development based on 3-Tier Technology has been submitted to the MoEF, New Delhi.
- Imparted in-house training to officers and staff of ICFRE and its Institutes.
- Provided the faculty support for theory and practical classes of Post Graduate Classes organized by the FRI Deemed University.
- Provided Computer Application training to Ph.D. Students.



Network Room



Annual Report  
2005-2006

## **ICFRE AWARDS FOR EXCELLENCE**

ICFRE Awards of Excellence for the year 2005-06 was awarded to the following for outstanding work in the discipline as mentioned below:

1. Dr. Chandra Prakash Kala, Pauri Garhwal in the discipline of 'Forest Conservation (Biodiversity and Ecology)'.
2. Dr. T. Sekar, IFS, Coimbatore in the discipline of 'Forest Education'.
3. Shri R. Vijendra Rao, Scientist IWST, Bangalore in the discipline of 'Forest Utilization'.