



Chapter 2

INDIAN COUNCIL OF FORESTRY RESEARCH AND EDUCATION

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

FORESTRY RESEARCH

1. BIODIVERSITY AND CLIMATE CHANGE (BCC) DIVISION

Biodiversity and Climate Change (BCC) Division, ICFRE has taken up several short and long term policy programmes to address the problems of Biodiversity Conservation and Climate Change.

A. Biodiversity

- i. The Ninth meeting of the Conference of Parties (COP-9) to the Convention on Biological Diversity (CBD) was held in Bonn, Germany from 19th to 30th May 2008. The COP-9 to the CBD has adopted 37 decisions on various issues such as protected areas, forest biodiversity, invasive alien species, biodiversity and climate change etc. The Ministry of Environment and Forests, Government of India asked ICFRE to provide suggestions on invasive alien species as per the decision IX/4 on invasive alien species of COP-9 to the CBD. Accordingly, the BCC Division prepared a brief note on Forest Invasive Species and submitted to the Ministry of Environment and Forests, Government of India, New Delhi.
- ii. The United Nations has proclaimed 22nd May as the International Day for Biological Diversity (IBD) to increase understanding and awareness of biodiversity issues. The IBD on 22nd May 2008 was observed in different regional Institutes of ICFRE. The events organized on this day were attended by children, general public, officers, scientists, and staff of regional Institutes of ICFRE. The BCC Division compiled a detailed report on the celebration of the IBD and submitted to The Ministry of Environment and Forests for its incorporation in the draft National report to the CBD Secretariat.

B. Climate Change

The BCC Division has taken up two externally aided projects related to climate change:

- i. **Assessment of soil carbon stocks and dynamics in forest soil of India for the period 1995-2007:** The project is funded by the UNDP-GEF; the project activity is subcontracted to ICFRE by the Ministry of Environment and Forests, Government of India through Winrock International India under its project: 'Enabling activity for preparation of India's Second National Communication to the UNFCCC'. ICFRE is executing the project in collaboration with Indian Institute of Remote Sensing (IIRS), Dehradun. The BCC Division of ICFRE, the nodal point of communication with collaborator and regional Institutes of ICFRE, initiated all activities pertaining to the project.

The BCC Division organized a two days inception meeting of the SNC project activity on 9th and 10th May 2008 at Dehradun under the Chairmanship of Shri Jagdish Kishwan, DG, ICFRE, Dehradun. The inception meeting was attended by the Dean and scientists of



IIRS, and all the nodal officers of regional institutes to finalise the sampling plan and methodological details of the project. A manual providing methodological details along with sampling sites, sampling protocol and sample analysis was also developed for conduct of studies.

- ii. **Measurement of forest carbon exchange using eddy covariance and CDM potential studies in India:** The project is a partnership study between the Department of Forest Science and Resources (DISAFRI), University of Tuscia (Italy), Indian Institute of Remote Sensing, Indian Council of Forestry Research and Education, and Uttarakhand Forest Department.

The BCC Division, the nodal point of ICFRE for the project, organized a one day inception meeting of the project on 14th May 2008 under the chairpersonship of Shri Jagdish Kishwan, DG, ICFRE; and discussed about the ongoing activities and progress made so far under the project.



Inception meeting of the SNC Project

C. Other Activities

- i. **Participation of ICFRE delegation in the 28th SBSTA/SBI meeting of UNFCCC (United Nations Framework Convention on Climate Change), held in Bonn (Germany) from 2nd to 13th June 2008:** The ICFRE delegation, comprising Shri Jagdish Kishwan, DG, ICFRE, Dr. Renu Singh, Head, Biodiversity and Climate Change Division, Shri V.R.S. Rawat, Scientist-D, Biodiversity and Climate Change Division, and Dr. A. Ramachandran, Director, Centre for Climate Change and Adaptation Research, Anna University Chennai, Tamil Nadu participated in the meeting along with the Government of India Delegation.



Participation of ICFRE delegation in the 28th SBSTA/SBI meeting of UNFCCC

The delegation was fully involved in negotiations in respect of SBSTA Agenda item 5 on Reducing Emissions from Deforestation in Developing (REDD) Countries : Approaches

to stimulate action; AWG-KP Agenda item 3(b) on Land Use, Land Use Change and Forestry (LULUCF); and, SBSTA Agenda item 8(c) Good Practice Guidance for Land Use, Land Use Change and Forestry activities under articles 3.3 and 3.4 of Kyoto Protocol during the Conference.

- ii. **Participation of DG, ICFRE in Accra Climate Change Talks from 21st to 27th August 2008, Accra, Ghana:** Shri Jagdish Kishwan, DG, ICFRE attended the Accra Climate Change meeting from 21st to 27th August 2008, and made a presentation on Reducing Emissions from Deforestation and Degradation in Developing (REDD) Countries at Accra, Ghana.
- iii. **Participation of ICFRE delegation in the Fourteenth Conference of the Parties to the UNFCCC and Fourth Meeting of the Parties to the Kyoto Protocol held in Poznan, Poland from 1st to 12th December 2008:** The ICFRE delegation, comprising Shri Jagdish Kishwan, DG, ICFRE, Dr. Renu Singh, Head, Biodiversity and Climate Change Division, Shri V.R.S. Rawat, Scientist-D, Biodiversity and Climate Change Division, and Dr. A. Ramachandran, Director, Centre for Climate Change and Adaptation Research, Anna University Chennai, Tamil Nadu participated in the conference along with the Government of India Delegation.

The ICFRE personnel were involved in the negotiations on the following agenda items of the SBSTA and AWG-KP related to forestry during the conference:

1. SBSTA 29 Agenda item 5: Reducing Emissions from Deforestation in Developing Countries (REDD): Approaches to stimulate action,
2. AWG-KP 6 Agenda item 3 (b) Land Use, Land Use Change and Forestry (LULUCF).

India in its statement supported a comprehensive approach on REDD that encompasses all actions by country Parties contributing directly in reducing emissions from deforestation at the global level.

- iv. **Participation of ICFRE in International technical workshop in Brazil:** Dr. Renu Singh, Head, BCC Division, ICFRE attended the international technical workshop on "Land Area Change Assessment: The experience of the existing operational system" in Sao Paulo, Brazil from 4th to 6th February 2009. The workshop discussed land cover and land use change detection by using remote sensed data. The objective of the workshop was to introduce developing countries' experts to techniques and scientifically sound practices of detection and tracking of forest land cover changes due to changes in land use (deforestation) and in carbon density (forest degradation including forest fires).



Participation of Dr. Renu Singh, ICFRE and Smt. Rajasree Ray MoEF in International Technical Workshop in Sao Paulo, Brazil

- v. **Shri Jagdish Kishwan, DG, ICFRE: Visit to Suriname:** Shri Jagdish Kishwan, DG, ICFRE was invited by the Ministry of Physical Planning, Land and Forest Management of the Republic of Suriname to participate in the Symposium "REDD Negotiations: the Case of High Forest Cover Low Deforestation Countries" in Paramaribo, Suriname on 13th March

2009, and to make a presentation before the senior officers and negotiators of Suriname. The purpose was to sensitize the Suriname officers with the history of the SBSTA agenda item 5-Reducing emissions from deforestation in developing countries: approaches to simulate action (REDD), the ongoing negotiations relating to technical, methodological and policy aspects in SBSTA and AWG-LCA, and the possible strategy for HFLD countries in the ongoing process under the UNFCCC. The presentation was received very well and was followed by an intense question-answer session.

vi. Participation of ICFRE in Expert Meeting of the UNFCCC in Germany: Shri V.R.S.Rawat, Scientist D, ICFRE attended the Expert Meeting on methodological issues relating to reference emission levels and reference levels in Bonn, Germany on 23rd and 24th March 2009.

vii. Climate News Letter: The BCC Division prepared quarterly Climate News Letters regularly covering latest developments and upcoming events in the field of Climate Change which were placed on the ICFRE website during 2008-09.

D. Training

A one week refresher training course sponsored by the Ministry of Environment and Forests, Government of India, New Delhi for Indian Forest Service Officers on “Climate Change and Relevance to Forestry Sector” was organized by the BCC Division at ICFRE Dehradun from 3rd to 7th November 2008. Twenty five IFS officers of different states participated in the training course. The programme was highly appreciated and rated by the participants.



Participants and organizers of one week refresher training course for IFS Officers

2. RESEARCH PLANNING (RP) DIVISION

Research Planning Division under the Directorate of Research deals with the planning, processing and execution of new research project proposals funded by ICFRE following bottom-up, transparent and participatory approach.

During the year 2008-09, following achievements have been made by this division :

- **Research Planning (RP) Division** coordinated the Research Advisory Group (RAG) meetings at Institute level on the dates mentioned below:

IFGTB, Coimbatore	-	28-29 August 2008
TFRI, Jabalpur	-	04-05 September 2008
IFP, Ranchi	-	23-24 September 2008
AFRI, Jodhpur	-	29-30 September 2008
IWST, Bangaluru	-	13-14 October 2008
HFRI, Shimla	-	23-24 October 2008
FRI, Dehradun	-	14-15 November 2008
RFRI, Jorhat	-	17-18 November 2008

This year, the Research Advisory Groups were made more broad based by including PCCFs of the states, different strata of scientists, a range of forest officials, diverse stakeholders viz. NGOs, industries, progressive farmers and Universities. From 2008-09 initiation of seeking comments from peer group was also initiated and accordingly projects were modified to suit requirement of user industry.

- **Research Policy Committee (RPC) Meeting:** The projects approved by RAGs were placed before RPC which was convened from 11th to 13th February 2009 under the chairmanship of Shri Jagdish Kishwan, DG, ICFRE to give the final approval to the new research proposals submitted by eight research institutes under ICFRE.

During X RPC, 89 new projects were discussed by RPC members out of which eighty one projects were approved for ICFRE funding amounting to Rs. 810.3 Lac, two projects were approved for external funding and six projects were not approved. Approval was also given for two All India Coordinated Projects. The abstract of institute-wise sanction of new research project proposals is as under :

Abstract of Sanctions of New Projects in X RPC

Name of the Institute	Number of Projects	Total Amount Sanctioned (Lac)
HFRI, Shimla	2	55.85
IFP, Ranchi	7	84.63
TFRI, Jabalpur	3	32.85
IWST, Bangaluru	17	107.33
RFRI, Jorhat	14	143.536
FRI, Dehradun	23	200.503
IFGTB, Coimbatore	12	146.18
AFRI, Jodhpur	3	39.51
Total	81	810.389

The All India Coordinated Projects (AICPs) were approved in principle and the chairman desired that the different components of the AICP may be submitted to the donor agencies as

per their requirement and the format. Directors of the institutes were requested to pursue the matter for external funding at their level also in consultation with ICFRE.

Directors' Meet

On 18th September, 2008, III Directors' meet was organized in the Board room of ICFRE hqrs, under the chairmanship of Shri Jagdish Kishwan, DG ICFRE. The Directors' Meet was organized to discuss some of the important issues for which agenda was fixed by different directorates in consultation with the Directors of the Institutes. Some of the issues discussed were bridging the gap between the states and the Institutes in calling PCCF/ State research representatives of the concerned states in RAGs, independent evaluation of research projects, requirement of external funding of research projects and status of All India Coordinated Research Projects.

Bamboo Technical Support Group (BTSG) - Indian Council of Forestry Research and Education (ICFRE), Dehradun:

Bamboo Technical Support Group - ICFRE, Dehradun was constituted by National Bamboo Mission, Govt. of India to provide technical and scientific support for the states of Jammu & Kashmir, Punjab, Haryana, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Madhya Pradesh, Chhattisgarh, Rajasthan and Gujarat. The following tasks were undertaken by BTSG of ICFRE :

Trainings conducted:

- (i) Five days Training for the Field Functionaries of Eastern Uttar Pradesh: Conducted by CSFER, Allahabad from 13-17 October 2008.
- (ii) Five days Training for the Field Functionaries of Himachal Pradesh: Conducted by HFRI, Shimla from 13-17 October 2008.
- (iii) Five days Training for the Field Functionaries of Rajasthan: Organized by AFRI, Jodhpur from 4-8 November 2008.
- (iv) Five days Training for the Field Functionaries of Gujarat: Organized by AFRI, Jodhpur from 12-16 November 2008.
- (v) Five days Training for the Field Functionaries of Gujarat: Organized by TFRI, Jabalpur from 13-17 October 2008.

Printing of Bamboo Literature:

Five thousand copies of an illustrated Hindi Book "Bans Ropan evam Upyogita" were published for the benefit of forest personnel, farmers and field functionaries. It was distributed free of cost to State Bamboo Missions under BTSG-ICFRE, ICFRE Institutes conducting Trainings, Sister Organizations, SFRIs and NFLIC etc.

Organizing International/National Seminars:

National Seminar on Bamboo "Plantation, Management and Its Utilization" was organized by Arid Forest Research Institute (AFRI), Jodhpur from 17-19 March 2009.

Quinquennial Review:

Quinquennial Review Teams (QRTs) of FRI, Dehradun; RFRI, Jorhat, IFGTB, Coimbatore, and FRC Hyderabad completed their review work and submitted their respective Quinquennial



Review Reports. The quinquennial review report of AFRI was nearing completion at the close of the year under report (2008-09).

3. MONITORING AND EVALUATION (M&E) DIVISION

Monitoring and Evaluation Division under the Directorate of Research deals with the review and evaluation of all the ongoing research projects of ICFRE institutes. It suggests corrective measures for timely completion of the projects and achievements of the objectives with perfection.

During 2008-09, the review/evaluation of 380 (ICFRE funded- 255 and 125 externally aided) ongoing research projects of all ICFRE institutes was done. Apart from the above, independent review of 20 (completed/ongoing) research projects has also been carried out through independent subject matter experts/agencies.

This division of directorate of research also collects information on Annual Action Plan from the Institutes for preparation of consolidated Annual Action Plan for ICFRE.

4. PROJECT FORMULATION (PF) DIVISION

This Division acts as a facilitator between the ICFRE Institutes / Centres and potential donor agencies for the formulation of Research Projects in the identified thrust areas and their submission to various National and International donor agencies funding as per their submission to various National and International donor agencies for funding as per their funding requirements. It also co-ordinates the release of the funds to ICFRE Institutes/Centres and evaluates the project proposals with regard to their suitability in the identified thrust areas.

Externally Funded Projects:

The Division is collaborating with a number of National and International donor agencies for project funding. Presently, 146 projects funded by National donor agencies and 6 projects funded by International donor agencies are being implemented in eight Institutes and three Centres of ICFRE. Besides this, 76 projects and 4 projects are in the pipeline for funding by National and International donor agencies respectively.

Main National donor agencies are Ministry of Environment & Forests (MoEF), Department of Biotechnology (DBT), Department of Science and Technology (DST), National Medicinal Plant Board (NMPB), Council of Scientific and Industrial Research (CSIR) and National Mission of Bamboo Applications (NMBA) etc.

Main International Donor Agencies are Japan International Co-operation Agency (JICA), Swedish International Development Agency (SIDA), International Foundation for Science (IFS), International Tropical Timber Organisation (ITTO), United State Department of Agriculture (USDA) and Department for International Development (DID) etc.

The Division coordinated the formulation of a number of project proposals of ICFRE Institutes as per the guidelines and funding requirements of donor agencies in the identified thrust areas. Suitable proposals were processed for their approval and submission to National / International donor agencies such All India Coordinate Project (AICP) of IFGTB, Coimbatore on Eucalyptus Gall Wasp; All India Coordinate Project (AICP) of FRI, Dehradun on Poplar; All India Co-ordinate Project (AICP) of AFRI, Jodhpur on Jatropha.

Also, a number of MOUs and Agreements for the implementation of collaborative projective projects / programmes of ICFRE Institutes / Centres were scrutinised and processed for the approval of the competent authority.



Bihar Project:

The Division Coordinated the execution of comprehensive Bihar Project titled, "Samudai Adharit Samanvit Van Prabandhan Evam Sanrakshan Yojana in Bihar State" (Phase-I) being implemented by ICFRE with Environment & Forest Department of Bihar State. Activities related to ICFRE Component on Poplar based agroforestry programme on farmer's fields in Vaishali's district of North Bihar were monitored through field visits. Review meetings were organized through Video Conferencing too and that has helped in continuous monitoring of the project.

History of Forests of India-After 1947:

In continuation with the Book titled "The Forests of India" written by E.P. Stebbing in 4 volumes which gives the chronology of forest development in India from 1796 to 1947, it has been decided to document the History of Forests in India for the subsequent period from 1947 to 2005 and the work has been entrusted to ICFRE. After detailed consultations with the experts, the Chapters of this book have been finalized which include Forest Policy, Forest Acts and Laws, Forest Administration, Forest Management, Wildlife Management, Forestry under Five Year Plan, Social Forestry, Participatory Forest Management and Out-turn Revenue etc.

Eleven Chapters have been finalized and the first part of the proposed book "Post-Independence Developments in Indian Forestry", Vol. I is likely to be published very soon.

FORESTRY EDUCATION

5. EDUCATION DIVISION

Financial Support were provided to the Universities imparting forestry education in the country in order to strengthen the infrastructural facilities of the forestry faculties such as Infrastructural Development, purchase of scientific equipments, books/journals, to make mist chambers and similar other teaching/research facilities at teaching manuals, organization of workshop/seminars etc., participation of teachers in workshop/seminar etc and students' educational tours. Overall Rs. 502.71 lakhs as Grant-in-aid released to the 14 universities in the financial year 2008-09 from April 2008 to March 2009 as detailed below:

Sl. No.	Name of University	Amount released (Rs. in Lakhs)
1.	Dr. Y.S.P. University of Horticulture & Forestry, Solan	7.35
2.	Tamil Nadu Agricultural University, Coimbatore	27.50
3.	Kerala Agricultural University, Trissur	3.00
4.	FRI, Deemed University, Dehradun	172.70
5.	HNB Garhwal University, Srinagar	6.75
6.	Birsa Agriculture University, Ranchi	49.00
7.	Orissa University of Agricultural & Technology, Bhubneshwar	23.00
8.	Dr. BSS Konkan Krishi Vidyapeeth, Dapoli	10.21
9.	Panjab Rao Deshmukh Krishi Vidyapeeth, Akola	2.00
10.	Jawahar Lal Nehru Krishi Vishwavidyalaya, Jabalpur	7.00
11.	University of Agriculture Sciences, Bangaluru	39.70
12.	Maharana Pratap University of Agriculture & Technology, Jhalawar (Rajasthan)	51.50
13.	Allahabad Agricultural Institute Deemed University, Allahabad	38.00
14.	Navsari Agricultural University, Navsari (Gujrat)	65.00
	Total	502.71 Lakh

Standardization & Unification of Forestry Syllabus for Under Graduate/Post-graduate Courses:

This directorate has taken up work related to standardization and unification of syllabus of B.Sc/M.Sc (Forestry) courses being run in various state agricultural universities so as to ensure delivery of quality education to safeguard the interests of shed out community in general and forestry sector in particular.

Accreditation of Forestry College/Course Curriculum:

To validate the course curriculum and the forestry colleges/universities imparting the same, process of accreditation on the pattern of AICTE has been initiated and the Forestry Courses are being accredited by this Directorate. The Forestry Syllabii of Kerala Agricultural University, Trissur (Kerala) has been accredited by this directorate in the year 2008-09 and several universities have offered for accreditation of their forestry courses which are in process in this Directorate.

Trainings:

The Directorate of Education, ICFRE also dealt with the cases of deputation of officials/scientists for up gradation of their knowledge/skills through various courses/training programmes within the country and abroad as follows:

1. Fifty seven Forest Officers/Scientists individually from the Council have been deputed/ permitted to attend/participate in the International seminars, symposia, conference etc. in the foreign countries.
2. One hundred sixty two Forest Officers/Scientists individually from the Council have been deputed/permitted to attend/participate in the National seminars, symposia and conference etc. within the country.

Research Support System:

To provide research support to the scientists of the Council, various JRFs/SRFs/RAs have been appointed through interviews and walk-in-interviews made by the ICFRE and its Institutes for which this Directorate has played key role in constituting/approving the selection committees for selection of JRFs/SRFs/RAs/SRFs/RAs to work in the important projects being run in the ICFRE and its Institutes.

H.R.D Programmes :

This Directorate has also a HRD Cell for imparting training for capacity building of the managerial cadre, scientific cadre and the technical cadre. This Directorate organized 7 training courses on various subjects. One hundred fourty two officers/scientists of the Council have been trained in the year 2008-09 to build up their knowledge/skills.

6. POLICY RESEARCH (PR) DIVISION

1. The Directorate of Education is mandated to conduct "Policy Research" works in the arena of forestry. The work is being continued on the following subjects:
 - Scientific basis to assess the proportion of forest and tree cover in the country.
 - Analyze the linkages of forestry to national priority of poverty alleviation, thus, bringing policy prescriptions in tune with the goals/objectives of National Development Perspective.



- Formulation of policy and legislative measures on certification mechanism for regulation and marketing of quality seeds/planting stock for tree improvement to give an impetus to plantation activities at regional/national levels.
 - Desk review for identification of inconsistencies in policies of related sectors with National Forestry Policy 1988 and suggestions for addressing the inconsistencies.
2. To carry out the Policy Research Studies, the consultancies were awarded to the following consultants:
 - Academy of Forest & Environment Sciences, Dehradun.
 - TNS-India Pvt. Ltd., New Delhi.
 - Shri Piare Lal and other, Phagwara (Punjab).
 3. The Consultancy “Need for Institutional and Regulatory Mechanism for Certification of Planting Stock / Material of Forest Seeds and Vegetative Origin” provided to Consultants Shri Piare Lal and others, Phagwara (Punjab) has successfully been completed in 2008-09.

Disaster Management:

ICFRE proposes to hold consultancies, workshops, training and awareness campaign so that role of forest ecosystem in maintaining nature's balance and, thus, ameliorating impacts of such hazardous events could be fully understood at all levels. The Council and its Institutes shall also be networked with Institutes/Organizations at National/International levels so as to be essential part of consultancies aimed at planning measures at regional/national levels.

FORESTRY EXTENSION

7. MEDIA AND PUBLICATION (M&P) DIVISION

Media and Publication Division, Directorate of Extension 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 various R&D activities of ICFRE Institutes and keeps MoEF apprised of them. The division publishes the Quarterly Newsletter of ICFRE (that brings out the latest and significant achievements made by the ICFRE Institutes) and the ICFRE Brochure. The reports of ICFRE and its Institutes are collected, compiled, edited and published as the Annual Report of ICFRE, which is tabled in Parliament.

Work on establishment of Van Vigyan Kendras (VVKs) in collaboration with SFDs and selections of Demo Villages for adoption by ICFRE Institutes have progressed considerably. Twenty two VVKs have been established in different states. Eight Demo Villages have been established in different eco-climatic zones of the country.

National Workshop on “Extension Strategies in Forestry Research”

Directorate of Extension, ICFRE Dehradun conducted a two-day National Workshop on “Extension Strategies in Forestry Research” on 15 and 16 January 2009 at Dehradun to evolve Extension Strategies in Forestry Research for the Council. The workshop was inaugurated by the Chief Guest Shri Jagdish Kishwan, Director General, ICFRE, Dehradun. Padma Bhushan Shri Chandi Prasad Bhatt, the celebrated Environmentalist graced the occasion as Guest of Honour.



Inauguration of National Workshop on "Extension Strategies in Forestry Research"

Dr. Rabindra Kumar, Deputy Director General (Extension), ICFRE welcomed the Chief Guest, Guest of Honour and participants from all over the country. The Chief Guest, Shri Jagdish Kishwan in his key note address informed that the Council has succeeded in establishment of 22 Van Vigyan Kendras in different states of the country with active cooperation of the State Forest Departments.



Plenary session in progress

Padma Bhushan Shri Chandi Prasad Bhatt shared his experiences with the August gathering. He emphasized that while prioritizing the research needs, it is essential to consider the priorities of women folk. He expressed his happiness on the establishment of Van Vigyan Kendras.

8. STATISTICS DIVISION

The following works were carried out by the Division of Statistics in 2008-09:

- ICFRE-ITTO projects was extended up to July 2009. Under this project, five capacity building programmes were taken up at five Institutes of ICFRE, i.e. AFRI, Jodhpur; TFRI, Jabalpur; IFGTB, Coimbatore; FRI, Dehradun and IFP, Ranchi. The new formats and manual were explained to the Nodal Officers (Statistics) of ICFRE Institutes.
- Four issues of Timber/Bamboo Trade Bulletin were compiled and published.
- The 2005 issue of Forestry Statistics of India was compiled, validated and scrutinized. The final copy was prepared for approval and publishing.

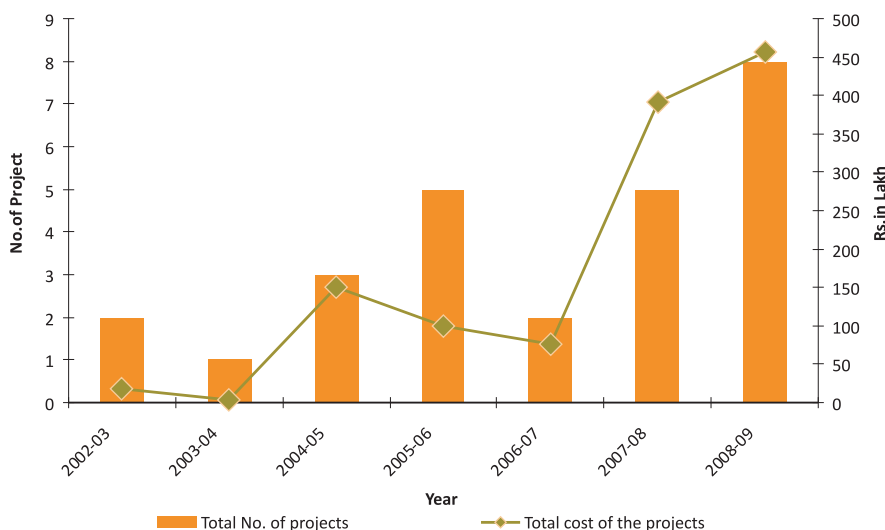


ITTO workshop in progress

9. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) DIVISION

Environmental Impact Assessment Division under the Directorate of Extension has been providing scientific services to leading project proponents such as Jindal South-West Group of Companies (JSWGC), Singareni Collieries Company Ltd. (SCCL), Tehri Hydro Development Corporation Ltd. (THDCL), New Delhi Municipal Council (NDMC), Himachal Pradesh Power Corporation Ltd. (HPPCL), National Thermal Power Corporation (NTPC), Chandigarh Administration, National Medicinal Plants Board (NMPB), Ministry of Health & Family Welfare, Government of India, Chhattisgarh State Electricity Board (CSEB), Raipur, Reliance India Limited (RIL), National Hydropower Corporation (NHC), Andhra Pradesh Tourism Development Corporation (APTDC), Andhra Pradesh Mineral Development Corporation Ltd. (APMDCL), National Afforestation Eco-development Board (NAEB), MoEF and ESSR Global Limited. The Division acts as a pool of expertise of in house scientists of ICFRE Institutes in partnership with subject experts nationwide from other Institutions for evolving the best practice to achieve the environmental protection for sustainable management of various ecosystems facing development interventions.

Yearwise Scientific service through EIA and evaluation studies by the Council



The following studies have been undertaken by the Environmental Impact Assessment Division during the year 2008-09:

1. Preparation of EIA and EMP report for integrated Kashang Hydroelectric Project (243 MW), Himachal Pradesh awarded by Himachal Pradesh State Electricity Board, Shimla.
2. Preparation of EIA and EMP report for Kuthar Hydroelectric Project (KHEP) (260 MW) Chamba, district Himachal Pradesh awarded by JSW Energy Ltd. Mumbai.
3. Evaluation of Catchment Area Treatment (CAT) Plan of Loharinag Pala Hydro Electric Project (4 x 150 MW) to be constructed by National Thermal Power Corporation (NTPC) in Uttarkashi district, Uttarakhand awarded by MoEF, Government of India.
4. Preparation of detailed Catchment Area Treatment Plan (CATP) and sub plan for implementing Bodhgaht Hydroelectric Project awarded by Chhattisgarh State Electricity Board (CSEB) Raipur.
5. Rapid EIA and EMP with one season data for DPR updation of Sankosh multipurpose project in Bhutan for reservoir portion (4060 MW) and in India, for canal portion awarded by Tehri Hydro Development Corporation Ltd. (THDC), Rishikesh.
6. Rapid EIA and EMP with one season data for DPR updation of Jadhganaga (50MW) and Karmoli (140MW) project awarded by Tehri Hydro Development Corporation Ltd. (THDC), Rishikesh.
7. Biodiversity assessment report for the 2000 MW Pit Head Thermal Power Station at Jharkhand awarded by ESSAR Power Limited, Jharkhand.
8. Rapid EIA and EMP with one season data for DPR updating of Bunaka Hydro Electric Project (180MW), Bhutan awarded by Tehri Hydro Development Corporation Ltd. (THDC), Rishikesh.



Phoenix rupicola - A rare plant recorded from the submergence area



Sankosh river - Proposed dam site

DIRECTORATE OF ADMINISTRATION

10. INFORMATION TECHNOLOGY (IT) DIVISION

The Information Technology Division, Directorate of Administration, ICFRE caters to all the Information Technology needs of the users at ICFRE and its Institutes / Centres. Being a part of e-Governance activities at ICFRE, the IT Division has taken a lead in e-Governance initiatives through some major projects which have been implemented or are under implementation.

E-GOVERNANCE

The name ICFRE has, now, become synonymous to e-Governance by virtue of Futuristic Information and Communication Technology initiatives undertaken in the field of forestry research and various field of management through planning of comprehensive enterprise level software solution namely Indian Forestry Research Information System (IFRIS).

Indian Forestry Research Information System (IFRIS)

IFRIS aims to transform the present manual working environment into an automated system, Enhance responsiveness through workflow automation and knowledge management, real time information management of research projects, monitoring of ICFRE engagements with external stakeholders, convenience of users, stakeholders in accessing the information and services. Taking into account the IFRIS success, many national agencies are using it as a road map for induction of e-Governance programme and are approaching ICFRE to generate in-house talent pool.

IFRIS broadly comprises of two main parts viz.;

- Indian Forestry Research Management Information System (IFRMIS) and
- Indian Forestry Research Administration Information System (IFRAIS)

They Cover all the key research and non-research service areas at the enterprise level viz.; ICFRE and its Regional Institutes and centres.

The development of IFRIS was planned in three stages viz.:

Stage I : Conceptualization (June 2006 to January 2007) wherein a detailed study on services to be delivered, IT infrastructure requirements, Process Re-engineering of the services, and Functional Architecture was conducted.

Stage II : Project Development (March 2007 to August 2007) wherein M/s Wipro, Gurgaon was appointed as Project Development Consultant. The potential improvement areas were identified and Analysis Report “As-Is” Report and the “To-Be” processes for ICFRE was prepared with detailed functional and Technical Architecture. The Request for Proposal (RFP) for engagement of system developer was also finalized and finally the

Stage III : Software Development and Implementation (January 2008 to March 2009) under which the software has been developed and is under implementation.

The Project Institutional Framework has played an effective role wherein four ICFRE Apex Committee Meeting and around 50 other Institute Apex and Technical Committee Meetings were conducted to highlight the expectations and concerns of the stake holders. The Change Management has brought about four intensive trainings of e-Champions (the change agents) and gradual exposure to the new IFRIS application at Dehradun, Bangaluru, Shimla and a Pre-Go-Live training at Jorhat and also through lectures by external dignitaries. During these trainings, the officials from the local institutes were also involved to give them a look and feel of the newly developed application.

Apart from the e-Champions training, several rounds of training at Institute level and also the User Acceptance Training have been done to increase the acceptability of the application.

It has been planned that the IFRIS shall be put to use in an incremental way with four basic modules in the first phase viz.; Research Information System, Personal Information Management System, Payroll Management System and Financial Accounting System, which are almost ready and shall be rolled out as per schedule and the next phase of roll-out has been planned in the month of August 2009.

ICFRE Server Farm (Data Centre)

To host the upcoming IFRIS application, the process of establishment of ICFRE Server Farm has been initiated through a tendering process and the facility is likely to be in place by July 2009. Apart from hosting the envisaged IFRIS Application, the ICFRE Server Farm shall be hosting other allied services with state of art technologies like Mail and Messaging etc.

Multi-Protocol Level Switching – Virtual Private Network

With the induction of MPLS-VPN, the ICFRE hqrs. has enabled dedicated links with its regional Institutes and Centres spread all across the nations in various geographical locations viz.; Jodhpur, Jabalpur, Jorhat, Coimbatore, Bangaluru, Ranchi, Shimla, Hyderabad, Chhindwara, and Allahabad with ICFRE hqrs at Dehradun. This arrangement facilitates the secured transmission and sharing of information within ICFRE. To utilize this facility, the IT Division has hosted a Intranet portal wherein the users can host the circulars, orders requiring wide circulation. This effort has increased the reach of the users and also reduced the use of paper for such activities. A FTP server has been established and is being utilized for transaction and sharing of voluminous research and administration data within the ICFRE Institutes.

Video Conferencing

Further, to harvest this network connectivity (MPLS-VPN), the Video Conferencing (VC) facility has been established which is proving to be a boon for e-Governance development at ICFRE and Institutes. Around 100 VC sessions ranging from one-on-one to a gathering of around 100 people have been taken care and materialized during this span of one year. These had the participation of researchers and administrators to interact in real-time irrespective of the geographical distances and take active participation in trainings and workshops conducted across Institutes of ICFRE since May 2008.

A major value addition through the ICT was done during Research Policy Committee meeting held from 11 to 13 February 2009, wherein the greater participation and involvement of Scientists from ICFRE Institutes viz.; Shimla, Jabalpur, Jorhat, Jodhpur, Coimbatore, Bangaluru and Ranchi was ensured through Video Conferencing, which was earlier restricted to RAG at Institute Level only. This has improved the quality of research proposals and enabled them to understand the requirement of the stake holders.

Apart from the e-Governance Activities, the Information Technology Division, Directorate

of Administration, ICFRE caters to all the Information Technology needs of the users at ICFRE and its Institutes / Centres. The other major activities of the Division are broadly classified in the following:

- LAN-WAN Support
- Procurement and Maintenance of Hardwares
- New Proposals
- Trainings
- Providing IT Support for the technical presentations in the Video Conference, Meetings, Conferences, Seminars, Workshops etc.

LAN - WAN - Support

- Regular Maintenance / Monitoring of MPLS VPN viz.; 11 MPLS Leased Line and 2 Mbps 1:1 Internet bandwidth.
- Regular Maintenance and reporting of e-mail, Internet etc. for around 1100 users across ICFRE hqtrs and its institutes.
- Updation of the existing website of ICFRE (www.icfre.gov.in) a CMS based website.
- Regular Maintenance of Proxy Server / Web Server for providing uninterrupted service to its users of ICFRE hqtrs and ICFRE's institutes.
- Regular Maintenance and reporting of Network Antivirus facility at the ICFRE hqtrs and FRI campus through a centralised AV Server.

Procurement and Maintenance of Hardware

The IT Division undertakes the Maintenance of computer and peripheral hardware installed at ICFRE hqtrs and FRI. The Hardwares have been categorized and inventorised accordingly for its proper maintenance and coordination with the vendors.

The IT Division is also managing AMC for Photocopiers, of ICFRE hqtrs through different vendors looking after their own brand of machines broadly, Xerox, HCL and Ricoh.

Rate Contract of Consumable items and Printers cartridges is also processed and operated for provisioning of consumables to the users of ICFRE hqtrs through different vendors.

Initiatives

- The upgradation of old hardware (Desktops, Printers and Laptops) are being taken up on priority basis.
- The ICFRE Institutewise maintenance of Local Area Network is being consolidated for Maintenance and Facility Management Service through a third party vendor.
- A ICFRE wide single central antivirus has been created and an centralized Antivirus have been installed across Institutes of ICFRE.

Training

- Imparted in-house training to officers and staff of ICFRE and its Institutes.

Providing I.T. Support

- Division provides technical support in conducting Video Conferencing among ICFRE

institutes. IT Division provided support to ICFRE hqtrs and FRI with regards to the IT and Visual Arrangements in all the Meetings, Conferences, Seminars and Workshops etc. organized at ICFRE hqtrs and FRI in the year 2007-08.

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