

CHAPTER-XV

FORESTRY RESEARCH

Directorate of research is responsible for coordinating, monitoring and evaluating research activities of ICFRE. It has three sub-directorate – Programming, Planning and Monitoring & Evaluation.

Sub-directorate of Programme

Directorate of Research, ICFRE deals with following activities: -

Planting Stock Improvement Programme (PSIP): One of the mandates of the Indian Council of Forestry Research & Education (ICFRE) is to increase the productivity of forests from 0.7m³/ha/yr to atleast 2.5 m³/ha/yr. World Bank assisted Forestry Research Extension and Education Project (FREEP) has the Planting Stock Improvement Programme as one of the components of FREEP.

The planting stock improvement through different ways like establishment of Seed Production Areas (SPA), Clonal Seed Orchards (CSO), Seedling Seed Orchards (SSO), Vegetative multiplication and improved nursery techniques is reported to increase productivity by 10 percent in the first generation. Follow up efforts carried out for a long time period, can help u attain the potential productivity.

The activities carried out under sub-component of the PSIP and the achievements made so far are mentioned below: -

Seed Production Areas (SPAs)	-	997 ha
Seedling Seed Orchards (SSO)	-	340 ha
Clonal Seed Orchards (CSO)	-	156 ha
Vegetative Multiplication Gardens (VMGs)	-	52 ha

Model nurseries- 6 model nurseries created in various eco-regions of the country under various ICFRE Institutes for production of superior quality seedlings.

Research Grant Fund (RGF): The objectives of RGF component of the FREEP is to finance forestry research being taken up by the State Forest Depts., Universities, NGOs and Private Sectors.

With the help of RGF, ICFRE has been able to widen the support to research in priority areas and provide forestry research a definite direction. It has also ensured dispersal of research activities in all the regions spread all over the country and establish research linkages with the various organizations like universities, industrial research aspects of various departments and NGOs.

Out of the total outlay of Rs. 17.00 Crores, disbursement of Rs. 11.50 Crores has made up to Sept. 2000. The distribution of RGF projects organization wise is as below: -

Organization	No. of Projects sanctioned
- NGOs	6 projects
- Other Research Institutes	12 projects
- Private Sector Industries	2 projects
- State Forest Depts.	43 projects
- Universities	162 projects

Out of the 225 Research Projects sanctioned to various organizations 37 projects have been completed and final report received upto March 2000.

During 1999-2000, 18 CTAs Workshop/Peer-review meeting were organized in the ICFRE Institutes where progress of research projects of ICFRE/RGF were reviewed and recommendation made.

SUB-DIRECTORATE OF PLANNING

- Research Priority Setting :
- A comprehensive methodology for setting research priorities for ICFRE based on transparent, participatory and competitive system was developed. The methodology was based on Weighted Criteria Method. It was implemented by organizing 27 state level workshops in 26 states and A&N till December 1998. Eight Institute / regional level workshops were also organized till April 1999. During these workshops, prioritization of research problems was done at state, regional and national level and themes were prioritized at state and national level by research users, managers and researchers.

Formulation of National Forestry Research Plan (NFRP)

Based on prioritised problems and themes, State Forestry Research Plans (SFRPs) were formulated by the respective states and Institute Research Plans were prepared by all the ICFRE institutes. Draft National Forestry Research Plan (NFRP) was prepared by integrating SFRPs and Institute Plans. The document was finalized by incorporating the results of Research Policy Committee (RPC) and National workshop. The final document was printed, released and is under implementation now. It contains a total of 588 research projects consisting of 109 ongoing projects and 157 new projects of ICFRE institutes; 280 independently run projects of SFDs and 42 independently run projects of Universities, NGOs and industries etc. with a total budget requirement of Rs. 2338.837 million.

Development of modern nurser y technologies including root trainers, agroforestry models, biodiversity conservation, wood biodegradation, bio-ecological management of pest and diseases, bio-technology and tree improvement, non-wood forest produces including medicinal plants, clonal propagation, mangrove ecosystems, eco-restoration of degraded forests and sustainable development of forests by people's participation are some of the important areas identified for the research programme for the coming years.

SUB DIRECTORATE OF MONITORING AND EVALUATION

Development of Implementation of Computer based Indian Forestry Research Information System

Development of Management Information System (MIS)/Research Information System (RIS) has been completed with following modules and is under implementation from the financial year 2000-2001.

- Financial Accounting & project Budgeting/Costing
- Procurement and Inventory management
- Pension and GPF Management
- Personal Information System & Payroll
- Research Prioritization & Planning

- Research Information System
- Grants (Research/Extension/Education/Fellowships)
- Estate Management

The Development of MIS/RIS was carried out on Case Application Development Methodology (CADM).

Monitoring and Evaluation

Steps have been taken to develop the evaluation procedures for research programs. CTA (Chief Technical Advisor) have been designated from amongst senior scientists in specific disciplines. The CTA have conducted workshops cum peer reviews for research programs under their respective areas of specialization. For evaluation of research programs, comprehensive checklists have been developed to facilitate objective oriented and focused approach.

The M & E software module has been prepared and integrated to IFRIS.

The MIS/RIS Development work was carried out during this period. The methodology used for development of MIS is Case Application Development Methodology (CADM). The different phases of CADM methodology are: Strategy, Pre-analysis, Analysis, Pre-design, Database design, Application design, Build, Test, Implementation and Maintenance.

Around 100 user meetings and Joint Application Development (JAD) Sessions were conducted with users for information gathering and requirement analysis. During pre-design, working prototype were demonstrated to users to have a clean understanding of functionality of the modules. The build phase deliverable of following modules was achieved in a phased manner.

- Financial Accounting & project Budgeting/Costing
- Procurement and Inventory Management
- Pension and GPF Management
- Personal Information System & Payroll
- Research Prioritization & Planning
- Research Information System
- Grants (Research/Extension/Education/Fellowships)
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For introducing uniform accounting procedure, a series of workshops were organized. The first workshop was organized on 26th June, 1999 and demonstration of Financial Accounting System was carried out for FRI and ICFRE personnel. During this workshop the procedure formats (for voucher) was finalized. On 1st October, 1999 the demonstration after development of the software were carried out for FRI and ICFRE.

Around 14 training programmes were organized on operation of these modules and around 80 Scientist/staff member were trained from November, 1999 to January, 2000. Five day training programme for computer scientists of ICFRE institutes on "Managing MIS Server" was also organized during 27th March, 2000 to 31st March, 2000.

Monitoring and Evaluation:

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M&E formats for monitoring and evaluation were developed and user testing completed. The M&E software modules has been integrated to IFRIS.