

CHAPTER-XIII

CENTRE FOR FORESTRY RESEARCH AND HUMAN RESOURCE DEVELOPMENT, CHHINDWARA

Centre for Forestry Research and Human Resource Development, Chhindwara, presently working under TFRI, Jabalpur, came in to existence on 30 th March 1995. But from 3rd January' 1996, it has been declared as a 'Satellite Centre of TFRI with the idea to develop human resource especially tribal population. The Centre also works on various research projects. The main objectives include :

- To increase forest productivity through modern scientific forest management based on sound principles of ecology and genetics for sustainable forest management.
- To improve utilization of forest produce.
- To address socio-economic aspects related to resource management and environment protection.
- To develop human resource through training.

OLD PROJECTS CONTINUED DURING 1998-99

Project 1: “ Junior/Senior Certificate Course in Nursery and plantation Technology”.

Objectives: To develop human resource for rural self employment and conservation of forests, and enhancement of productivity.

Achievements

Nine trainees were trained under the Junior Certificate Course.

Project 2: “ Phyto-chemical examination for utilization of bark, leaves fruits and roots of some native forest species”.

Objectives: To explore the possibilities of utilization of leaves, fruits and roots of some native forest species.

Achievements

Plant species viz. *Shuteria hirsuta* and *Bryonia lanciniosa* were collected. Chemical characterisation of the isolated constituents is in progress. Preliminary biological screening of the extracts was carried out for antifungal and insecticidal activities.

About 45 traditionally used medicinal plant species were collected. Essential oils were extracted from *Chloroxylon swietenia*, *Pogostemon plactronthoides*, *Ocimum* sp., Lemon grass oil (*Cymbopogon flexuosus*) and *Curcuma caesia*. *C. caesia* was found to be a good source of natural d-champhor. Fatty oils were extracted from *Madhuca* spp., *Semecarpus anacardium*, *Caesalpinia bonduc*, *Ventilago caliculata*, *Jatropha curcus*, *Pongamia pinnata* and *Buchanania lanzan*. Their chemical characterisation is in progress.

Project 3: “Identification of key pests of *Emblica*, *Gmelina*, *Terminalia* in nurseries, plantations, natural forests and their control measures.”

Objectives: (a) To identify the key pest. (b) To assess the loss and disease control measures.

Achievements

Ten insect pests were identified on *E. officinalis*, *G. arborea* and *Terminalia* spp.

Laboratory and field trials were conducted to assess the effect of insecticides and plant based products against bahera seed weevils/borer (*Mecobaris terminalae*). Detailed seasonal history of gall forming black caterpillar *Betousa stylophora* on *E. officinalis* is in progress in four varieties of *E. officinalis* (Chakaiya, N.7, Kanchan and Banarsi). Pest problem of *G. arborea* in Thane and Nasik region (FDCM Ltd., M.S.) was studied.

Project 4: “Structure and function (Biomass and nutrient cycling) of tropical dry deciduous forests as per the degradation status with especial emphasis on forest management and regeneration.

Objectives: To analyse the structure and functioning of tropical deciduous forests as per their disturbance magnitude.

Achievements

Comparative quantitative structure analysis and regeneration behaviour of important tree species of three sites in tropical dry deciduous teak forests of south Chhindwara Division (range - Sillavani) of Satpura Plateau has been analysed as per the disturbance magnitude and classified, further study is in progress. Concentration of dominance showed reverse trend to diversity index. The disturbance magnitude had adverse effect on regeneration of teak. Besides, stand age also affected the regeneration.

Project 5: “Standardization of vegetative propagation methods of *Buchanania lanzan*”.

Objectives: (a) To standardize suitable vegetative propagation methods for *B. lanzan* and preserve genetically superior species/clones. (b) Mass multiplication of the species and establishment of clonal vegetative seed orchards.

Achievements

Nursery was established. Locally fabricated low cost mist chamber has been established. The impact of different length, thickness and hormones on the vegetative propagation of *Buchanania lanzan* root cutting is in progress.

Project 6: (NABARD Project) - “Development of Agro-forestry models at Karaboh Micro Watershed at Chhindwara (M.P.).

Objectives: To develop different agroforestry models.

Achievements

Different species of forestry and horticulture seedlings (10587) have been planted to develop various agro-forestry models. Biofertilizers have been applied to enhance production. Data obtained are being analysed.

EXTENSION

Facilities generated and services rendered :

- i. The work on microplanning for twelve Villages Forest Committee was completed and revenue to the tune of Rs.60,000/- has been generated.
- ii. Library service extended to local forest department, non-government organisation and academic institute.
- iii. The centre has a good number of video films collection on various aspects of forestry. These were shown to trainees of JCC/SCC and farmers during workshops.

Transfer of Technology :

- i. Junior Certificate Training Course was conducted on nursery and plantation technology to improve the technical skills among grass root level workers.
- ii. Five village level workshops were organised under Joint Forest Management at Chourai, Chhindi, Harrai, Batkakhapa and Amarwara.
- iii. One day workshop on "Chironji *Buchanania lanzan*" was organised.

Linkages with other organisation/Institutes/States etc.

Effective linkages were developed with State Forests Department, Krishi Vigyan Kendra, Udhyaimita Vikas Kendra, Academic Institution, NGOs and Farmers.

Publications and Extension literature brought out by the Institute

1. "Forest Pest Control : A work book" Dr. P.B. Meshram & Dr. A.K. Pandey
2. "Brochure on Bhilawa (*Semecarpus anacardium*).Dr. A.K. Pandey & Dr. P.B. Meshram.

FINANCIAL STATEMENT

| I. PLAN | | |
|----------------------------|---|------------------------------|
| Sl.No. | SUB-HEAD | Expenditure (Rs. in lakh) |
| 1. | A. REVENUE EXPENDITURE | |
| | (a) Research | 21.79 |
| | (b) Administrative Support | 12.06 |
| | Total for Revenue Expenditure 'A' | 33.85 |
| | B. LOAN AND ADVANCES | |
| | (a) Loan Advances (Conveyance) | - |
| | (b) House Building Advance | 0.75 |
| | Total for 'B' | 0.75 |
| | C. CAPITAL EXPENDITURE | |
| | (a) Building & Roads | |
| | (b) Equipments, Library Books | 2.19 |
| | (c) Vehicles | |
| | Total for 'C' | 2.19 |
| | GRAND TOTAL FOR A+B+C(PLAN) | 36.79 |
| II. NON-PLAN | | |
| 1. | A. REVENUE EXPENDITURE | |
| | (a) Research | - |
| | (b) Administrative Support (Salary) | - |
| | Total Non-Plan | - |
| | TOTAL FOR PLAN + NON-PLAN | 36.79 |
| III. FUNDED PROJECT | | |
| | A. World Bank Project | 0.97 |
| | B. UNDP Project | - |
| | C. NABARD Project | - |
| | D. FORTIP | - |
| | GRAND TOTAL for (A+B+C+D) FUNDED PROJECT | 0.97 |