

## ONGOING EXTERNALLY AIDED PROJECTS

### **Project 1: Validation, testing and locational trial of micro/macro propagated planting stock of selected bamboo species in Northeast India. (RFRI/EP/08/2004-2007 extended up to 2009)**

**Status:** Technical guidance to FIAs in Plantation management, observation recording at eight locational trials of NE states was given. Replacement of dead seedlings at locational trial sites has been done. Monitoring of growth and performance of plantations and tabulation of recorded data has been done by RFRI and TERI collaboratively.

### **Project 2: Sustained capacity enhancement of economically backward scheduled tribes of North east region through composite R&D technologies (RFRI/EP/11/2006-2009)**

**Status:** Ginger and turmeric rhizomes (2 quintals each) were planted in 2 ha mixed plantation area in participation with the villagers of the adopted village. Fertilizer dosages were applied in the plantation area. Fish fingerlings were released in the fish pond that produced about 150 kgs fish and sold in the local market. Honey was also extracted by the villagers and sold in the local market. The amount received from sale of fish and honey was deposited in the bank account of the society formed by the villagers. Three-fourth of the earnings was distributed among the villagers and remaining one fourth was kept for purchase of fish fingerlings and feed for fish.

### **Project 3: Biological control of *Mimosa invisa*, a destructive alien weed threatening Kaziranga National Park (Grassland). (RFRI/EP/12/2006-2009)**

**Status:** Survey was conducted for association of bio-agent in the *Mimosa* infested areas. One insect larva was found to feed upon young leaves and twigs. Few fungal samples were also collected and further laboratory studies were done using pot planted *Mimosa* plants. However, fungal species failed to produce any disease on the *Mimosa* plants when applied artificially.

### **Project 4: Genetic improvement and conservation of genetic resources of some economically more important bamboo species of Northeastern India (RFRI/EP/13/2006-2009)**

**Status:** Survey continued for selection of CPCs of bamboo, collection of clonal materials from selected CPCs. These clones have been multiplied and conserved in gene bank at RFRI Jorhat. Yearly observations on survival, growth and performance of species-cum-clonal trial plantations

established at all six sites in different North-east states have been recorded. The performance trial is better in Tripura (Teliamura) as compared to that in Nagaland (Jalukie), Assam (Kamrup and Hailakandi) and Mizorum (Aizawl and Virengte). Among species, *Bambusa balcooa* has been found to be performing better in terms of survival and growth attributes. Staggering plantation trial of *Melocana baccifera* has been established on permanent plot in RFRI campus. A new block has also been prepared and plantation of seed collected in year, 2008 has been established. Bamboo nursery has been regularly monitored for incidence of disease and pests. No such incidence has been observed in Muli trial and clonal trial sites.

### **Project 5: Biodiversity studies of orthoptera in Kaziranga National Park, Assam (RFRI/EP/14/2006-2009)**

**Status:** A total of 36 species of Orthoptera belonging to 30 genera and 4 families were recorded in different habitats *viz.*, forest lands, savannahs and grass lands of Kaziranga National Park, Assam. The number of species found to be the highest (19 no.) in case of *Acrididae* family, followed by *Tettigoniidae* (9 species) and *Mantidae* (5 species); and the grasslands harbours greater number of Orthoptera species followed by savannahs and forestlands in Kaziranga National Park, Assam.

### **Project 6: Mapping and Quantitative Assessment of Geographic Distribution and Population Status of Plant Resources of Eastern Himalayan Region (Upper Assam unit) (RFRI/EP/15/2006-2009)**

**Status:** Survey and sampling of 87 belt transects of 80 sampling grid (6.5 km x 6.5 km of size approximately) of Upper Assam have been completed so far. Information on tree, shrub and herb species of sampled area has been documented. Collection of specimens for preparation of herbarium has been done. About 60 herbarium were prepared. Photographs of all the species available have been taken. Data feeding for 53 belt-transect is completed so far. Data feeding is in progress for rest of the transects and will be completed soon. Periodic updating of the database is in progress. Creation of a GIS based dynamic data-base for upper Assam is under process.

### **Project 7: On-farm innovation in macro proliferation technique and promotion for commercial plantations of edible bamboo species (RFRI/EP/18/2008-2010)**

**Status:** The site was selected after extensive survey of nearby area of Edible Bamboo Shoot Processing Unit at Rongbonhat, Karbi Anglon district, Assam. Being potential species for edible bamboo shoot production, *Bambusa balcooa*, was selected for study. The Kisan nursery was established after imparting systematic training on raising planting stock using

macroproliferation technique. Bamboo was planted at four different spacings i.e. 3m x 3m, 3m x 4m, 4m x 4m & 5m x 5m in RBD design with three replications. Weeding operation done in every three month interval. Survival percentage, growth parameter and no. of culms produced per clump were recorded after every six months. The SHGs were motivated to participate in the activity through capacity building approach.

## **Project 8: Sustainable development of quality bamboo resource for employment generation and socio-economic development in NE India (RFRI/EP/19/2008-2011)**

### **Sub-project-I-Development of suitable agro forestry models for promoting bamboo cultivation outside forests in NE region**

**Status:** Conducted field survey in the four northeastern states namely Arunachal Pradesh, Assam, Nagaland and Tripura as proposed in the project and finalized 3 sites of 1 ha each in each of the states. Participatory appraisals have been conducted in the villages where the selected sites are located. Based on the appraisals, designs of agroforestry field trials for different locations have been prepared.

A Bamboo Nursery of 10000 plantlet capacity has been established at Sotai village, Jorhat. Propagules of different bamboo species viz, *Bambusa balcooa*, *B. nutans*, *B. tulda*, *Dendrocalamus hamiltonii* collected from the Bamboo Germplasm Bank of RFRI have been used for multiplication and production of required planting stock.

The first phase of Farmers' Training on Bamboo Propagation, Cultivation and Management was organised on 12<sup>th</sup> to 14<sup>th</sup> May 2008 for the participating farmers from different sites selected under the project.

### **Sub-project-II- Development of Clump Management practices for economically important bamboo species for enhanced production of quality culms and edible shoots**

**Status:** Collected soil samples from three experimental sites from Agchia (Palasbari), Kamrup, Madhapur, (Titabor), Jorhat and Sotai to determine the initial nutrient content. 30 clumps of 3 species in three sites finalized on the basis of uniform clump diameter in the farmers field to lay out experimental trial.