Some Transferable Technologies Developed at Forest Management Branch, BFRI

Technology-1 : Simple Technique for Propagation Of Bamboos.

Description

- Traditionally bamboo propagated through planting rhizomes
- Branch cutting technique developed

Transfer status

- Series of training arranged
- Large scale plantations raised by FD, NGOs, private planters, farmers.

Impact

- Cost effective, adaptable, ensure mass production of genetically improved planting materials

Technology-2 : Tissue Culture Techniques for Bamboo and Tree species.

Description

- Tissue culture techniques for 11 bamboo species and six tree species developed.

Status

- May have potential use to FD, NGOs and others.

Impact

- Ensures mass production of planting materials of bamboo and tree species.

Technology-3 : Selection of Mainland Species for Raised Land in the Sundarban and Coastal Areas.

Description

- 3 species (raintree, jarul and sadakoroi) selected for Sundarban
- 6 species jhau, raintree, sadakoroi, babla, pyra and shonboloi) selected for coastal areas

Status

- FD is using the technology

Impact

- Helps cover non-productive areas in the Sundarbans and coastal areas
- Increases overall production of the forest

Technology-4 : Selection of Suitable Species for Underplanting in the Existing Keora Plantations.

Description

- 10 mangrove species have been found suitable for various site conditions

Status

- FD is using the technology

Impact

- Ensure sustainability of coastal plantation

Technology-5 : Nursery and Plantation Techniques for Indigenous and Exotic Tree Species.

Description

- Nursery and plantation techniques for 30 indigenous and exotic species developed
- Optimum spacing and species composition for increasing productivity determined

Status

- FD, NGOs, private planters and general mass using the techniques

Impact

- Reduces plantation cost
- Increases production
- Improves environment

Technology-6 : Nursery Techniques for Important Mangrove Species.

Description

- Nursery techniques for 17 important mangrove species developed and standardized

Status

- FD using the techniques in the afforestation program

Impact

- Reduces costs and ensures better survival and growth

Technology-7 : Nursery and Plantation Technique of Golpata and Tal.

Description

- Nursery and plantation techniques have been developed

Status

- FD and farmers are using the technology for raising plantations in the Sundarbans and coastal areas

Impact

- Increase productivity

Technology-8 : Aided Natural Regeneration in the Sundarban.

Description

- Site specific mangrove species have been selected for plantation in the low regenerated areas of the Sundarban

Status

- FD is using the technology

Impact

- Increased productivity of the Sundarban

Technology-9 : Propagation and Conservation of Medicinal Plants.

Description

- Propagation techniques of 20 species of medicinal plants developed
- Conservation plots of 43 species established

Status

- FD, herbal medicine practitioners and rural people using the techniques

Impact

- Improves status of declining resources
- Ensures additional income

Technology-10 : Nursery and Plantation Techniques for Cane and Patipata.

Description

- Nursery and plantation techniques of cane and patipata developed

Status

- FD, BSCIC, NGOs and farmers using the techniques
- Series of training arranged

Impact

- Ensures successful nursery and plantation

Technology-11 : Production of Improved Quality Forest Seeds and Seedlings.

Description

- Seed orchards and Seed Production Area (SPA) of 20 forest tree species established
- Improved seeds and other planting materials distributed

Status

- FD, NGOs, tea estates and individuals using supplied improved seeds and other planting materials

Impact

- Ensures supply of quality seeds and other planting materials.
- Increases forest productivity in quality and quantity

Technology-12 : Pests and Disease Management for Major Plantation Species.

Description

- Major pests and diseases of important plantation species identified
- Information on biology, ecology of the pests and diseases generated
- Techniques for managing the pests and diseases devised

Status

- FD, NGOs, private planters and general people using the techniques

Impact

- Saves nursery and plantation from pests and diseases
- Ensures healthy growth and increase productivity

Technology-13 : Planting Tree Seedlings with Minimum Tillage and Cost.

Description

- Easy planting by auger hole method.
- Minimizes labour cost, tillage and planting time.
- Seedling survival greater than traditional technique.
- Most suitable for hilly terrain and roads/embankments.

Status

- NGOs and farmers in Bandarban using the technique.

Impact

- Contributes to soil conservation and better survival of seedlings

Technology-14 : Agro-forestry Techniques for Hill Farming.

Description

- Slopping Agricultural Land Technology (SALT), row cultivation along contour, natural vegetative cover stripes and differentiated slope agro-forestry as hill farming method adopted.
- Trees, crops and livestocks integrated to get maximum benefit.

Status

- NGOs and farmers in Bandarban using the technique.

Impact

- Improves socio-economic conditions of hill farmers.
- Minimizes soil erosion and restores soil fertility.
- Watershed managed effectively through participatory approach.

Technology-15 : Volume, Biomass, Growth and Yield Tables of Forest Tree Species.

Description

- Volume tables of 29 natural forest, 21 plantation and 11 home garden species prepared
- Biomass tables of 4 plantation species and growth and yield tables of 13 plantation species prepared
- Diameter increment of 6 major mangrove species determined

Status

- BFRI, FD, BFIDC, NGOs and universities using the tables

Impact

- Provide reliable and quick estimates of volume, biomass of standing trees
- Ensure proper management of forests

Technology-16 : Identification of wood, bamboos and cane.

Description

- Simple anatomical hand lens key for identification of 105 commercial timbers developed
- Easy field taxonomic identification keys for important tree species, bamboos and canes developed

Status

- Keys being used by foresters, students, teachers and others.

Impact

- Ensures correct identification of bamboos, canes and wood

Technology-17 : Enhancement of Latex Production in Rubber Trees.

Description

- Latex production of rubber increased by 15% through appropriate dose of NPK

Status

- Used by BFIDC and others concerned with rubber plantation

Impact

- Enhances production of rubber

Technology-18 : Clonal propagation technique for hybrid acacia.

Description

- Vegetative propagation technique of hybrid acacia developed

Status

- SDC, NGOs and farmers are using the technology.

Impact

- Ensure fast growing and improved quality plants of hybrid acacia