RAIN FOREST RESEARCH INSTITUTE
(Indian Council of Forestry Research & Education)
Ministry of Environment, Forest & Climate Change, Govt. of India
Jorhat (Assam)

Short Term Training Courses
Converting Biomass into Green Gold
About RFRI

Rain Forest Research Institute (RFRI), Jorhat is one of the nine Institutes of Indian Council of Forestry Research & Education (ICFRE), Dehradun. The Institute was established in 1988 to cater the forestry research needs of North Eastern region of India. RFRI is tuning its research, extension and education to contribute effectively to bring prosperity in the Northeast and to provide appropriate technologies to catalyze the process of converting “Green Biomass” into “Green Gold.”

In the field of forestry, a lot of appropriate technologies for different agro-ecological zones relating to more efficient land use and effective utilization of timber and non-timber forest produce have been developed and some of these have already been adopted by various user groups including State Forest Departments, JFMCs, Farmers, SHGs, NGOs and Entrepreneurs.

Since the establishment of the Institute, efforts have been made to disseminate information generated to the various stakeholders through extension strategies for effective dissemination of developed, tested and implementable technologies. The focus is on awareness generation, dissemination of knowledge and technologies to the users, field demonstration and interactive meets for technology transfer from lab to land, to explore the possibilities and opportunities for market development for forest products and employment and income generation for the people.

RFRI has professionally qualified, technically trained and well experienced manpower to provide training on various forestry related aspects. The Institute has well-developed infrastructure of Laboratories, Library, Nurseries, Bambusetum, Bamboo Composite Centre, Orchidarium, Bamboo Shoot Processing Unit, Vacuum Pressure Impregnation Unit for Bamboo Treatment and Experimental Fields for conducting research and training programmes. The training modules have been designed to cater the needs of various levels of stakeholders of North Eastern Region of India.

All the Training Courses are residential. Course fees are inclusive of boarding and lodging facilities available at Institutes premises. Trainings can also be tailor-made to suit the requirements of stakeholders, on request.
COURSES AND CONTENTS

Training on Bamboo Propagation and Management: (3 days)
Importance of bamboo, its ecology, area, distribution, species diversity, propagation techniques, nursery management, commercial cultivation, pest and disease management, agroforestry. Practical demonstration on propagation methods and nursery practices.
Eligibility: Officials of Departments like Forest, Soil Conservation, Agriculture, Horticulture, Panchayat and Rural Development, Members of NGOs, SHGs and JFMCs, Autonomous/ Development Councils, Entrepreneurs, Individual Farmers and Students.
Course Fees: Rs. 6000/- per person (inclusive of boarding, lodging and training kit)
Rs. 5000/- per person (excluding lodging for local candidates)

Training on Bamboo Shoot Processing and Value Addition (3 days)
Sensitization on Bamboo, Bamboo shoot, Economics of Bamboo Shoot Entrepreneurs, Marketing of Bamboo Shoot Products, Hands-on sessions on processing of Bamboo Shoots, preparation of various value added products of Bamboo Shoot etc
Course Fees: Rs. 7000/- per person (inclusive of boarding, lodging and training kit)
Rs. 6000/- per person (excluding lodging for local candidates)

Training on Bamboo Preservation and Charcoal Making: (5 days)
Importance of bamboo preservation, causes of bio-deterioration of bamboo, hands-on training of various methods of bamboo preservation techniques.
Importance of bamboo charcoal, applications of bamboo charcoal, hands-on training on methods of charcoal making, briquetting, marketing of bamboo charcoal.
Eligibility: Members of NGOs, SHGs and JFMCs, Autonomous/ Development Councils, Bamboo Entrepreneurs, departmental sponsored candidates, any general public.
Course Fees: Rs. 8000/- per person (inclusive of boarding, lodging and stationeries)
Rs. 7000/- per person (excluding lodging for local candidates)

Capacity Building and Skill Development Training for Livelihood Generation through Bamboo Handicrafts Making:

<table>
<thead>
<tr>
<th>Bamboo Products (Indicative)</th>
<th>Duration (days)</th>
<th>Course Fee *(per Trainee)</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining Table + Chair + Beds</td>
<td>14</td>
<td>Rs.15000/-</td>
<td>Educated unemployed Youth, members of NGOs, SHGs and JFMCs, Autonomous/ Development Councils, Entrepreneurs, Individual Artisans, Department sponsored candidates</td>
</tr>
<tr>
<td>Sofa Set (Two Single &amp; One Double Chair)+ Centre Table + Corner Rack</td>
<td>12</td>
<td>Rs.1300/-</td>
<td>-do-</td>
</tr>
<tr>
<td>Easy Chair, Single Chair, Bench, Arm Chair</td>
<td>12</td>
<td>Rs.13000/-</td>
<td>-do-</td>
</tr>
<tr>
<td>Murha, Trolley Tray</td>
<td>12</td>
<td>Rs.13000/-</td>
<td>-do-</td>
</tr>
<tr>
<td>Lamp with Stand + Tray Hanger + Flower Vase + Hair Clips + Pen etc</td>
<td>12</td>
<td>Rs.13000/-</td>
<td>-do-</td>
</tr>
<tr>
<td>Traditional Items (Like Dola, Kula, Past Khorahi, Saloni, Fishing item, etc) + Model Making</td>
<td>12</td>
<td>Rs.13000/-</td>
<td>-do-</td>
</tr>
<tr>
<td>Beds</td>
<td>10</td>
<td>Rs.10000/-</td>
<td>-do-</td>
</tr>
<tr>
<td>Tray, Cloth Hanger, Flower Vase, Wall Hangings, Combs, Spoon, Forks, Incense sticks etc</td>
<td>10</td>
<td>Rs.10000/-</td>
<td>-do-</td>
</tr>
</tbody>
</table>

# Inclusive of boarding, lodging and training kit
Training on **Quality Planting Stock Production**: (5 days)
**Eligibility:** Officials of departments like Forest, Soil Conservation, Agriculture, Horticulture, Panchayat and Rural Development, Members of NGOs, SHGs and JFMCs, Autonomous/Development Councils, Entrepreneurs, Individual Farmers, Students etc.
**Course Fees:** Rs. 8000/- per person (inclusive of boarding, lodging and training kit)  
Rs. 7000/- per person (excluding lodging for local candidates)

Training on **Agarwood Cultivation and Artificial Inoculation**: (3 days)
Nursery and Plantation Management, Hands on training on artificial inoculation of agar Tree
**Eligibility:** Officials of departments like Forest, Members of NGOs, SHGs and JFMCs, Autonomous/Development Councils, Agarwood Growers, Entrepreneurs, Students etc.
**Course Fees:** Rs. 6000/- per person (inclusive of boarding, lodging and training kit) 
Rs. 5000/- per person (excluding lodging for local candidates)

Training on **Lac Production**: (2 days)
Nursery Management of lac host plants, artificial rearing and inoculation of lac insect, harvesting and preliminary processing of raw lac.
**Eligibility:** Officials of departments like Forest, Members of NGOs, SHGs and JFMCs, Autonomous/Development Councils, Farmers, Entrepreneurs, Students etc.
**Course Fees:** Rs. 4000/- per person (inclusive of boarding, lodging and training kit) 
Rs. 3000/- per person (excluding lodging for local candidates)

Training on **Cultivation of Wild Edible Mushroom**: (5 days)
Importance of mushrooms in human diet, medicinal properties of mushrooms, diversity of mushroom fungi, differentiation between edible and poisonous mushrooms, selection of cultivable species, pure culture preparation, substrate preparation, sterilization, spawn preparation, steps in cultivation processes, precautions during cultivation and harvesting technology.
**Eligibility:** Members of NGOs, SHGs and JFMCs, Autonomous/Development Councils, Departmental sponsored candidates, Entrepreneurs, any general public.
**Course Fees:** Rs. 8000/- per person (inclusive of boarding, lodging and training kit)  
Rs. 7000/- per person (excluding lodging for local candidates)

Hands-on Training on **Composting and Vermicomposting Technology**: (5 days)
Managing organic wastes-conversion of garbage into compost, advantages of application of organic manures, biological degradation/decomposition of organics - aerobic and anaerobic composting processes, factors affecting the composting process, limitations of composting, Vermicomposting, biology of earthworm, species suitable for processing organic wastes, substrate, preparation of low cost vermicomposting units, beneficial effects of Vermicompost.
**Eligibility:** Members of NGOs, SHGs and JFMCs, Autonomous/Development Councils, Farmers, Departmental sponsored candidates, Entrepreneurs, any general public.
**Course Fees:** Rs. 8000/- per person (inclusive of boarding, lodging and training kit)  
Rs. 7000/- per person (excluding lodging for local candidates)
Training on **Plant Taxonomy and Herbarium Techniques**: (3 days)
Plant diversity in India at glance, fundamentals of plant classification, glimpses of plant morphology, identification of common flora, importance of herbarium, basic techniques of preparation of herbarium sheets.

**Eligibility**: College and University Teachers and Students, Research Scholars.

**Course Fees**: Rs. 6000/- per person (inclusive of boarding, lodging and training kit)
Rs. 5000/- per person (excluding lodging for local candidates)

Hands-on Training on **Basic Techniques of Plant Tissue Culture**: (5 days)
Fundamental lectures along with hands-on experience in a variety of plant tissue culture techniques like media preparation, sterilization, explants preparation, aseptic inoculation, callus induction, direct multiple shoot induction, multiplication, in vitro and in vivo rooting, potting mixture preparation and acclimatization of tissue culture plants etc. Special emphasis will be given on activities involved in micro-propagation of bamboo and orchids.

**Eligibility**: College and University Teachers and Students, Research Scholars, Entrepreneurs.

**Course Fees**: Rs. 9000/- per person (inclusive of boarding, lodging and training kit)
Rs. 8000/- per person (excluding lodging for local candidates)

Training on **Remote Sensing and GIS**: (5 days)
Basics of remote sensing, satellite images, False and true colour composites, spatial, spectral, temporal and radiometric resolution, response of various vegetation types to EMR, vegetation indices, Basics of Geographical Information System, scale concept, data representation (Raster and Vector), attribute and location based queries, functions of GIS, Concepts of latitude and longitude, projection system, datum, bearing, toposheet reading, Visual interpretation of a satellite image, digitization of features like road, drainage, contour, preparation of slope, aspect, altitude map and DEM.

**Eligibility**: Officials of Departments like Forest, Soil Conservation, College and University Students, Research Scholars.

**Course Fees**: Rs. 8000/- per person (inclusive of boarding, lodging and training kit)
Rs. 7000/- per person (excluding lodging for local candidates)
HOW TO APPLY
Application on plain paper for the Course to be conducted may be sent to:

HEAD, EXTENSION DIVISION
RAIN FOREST RESEARCH INSTITUTE
P.O. Sotai, Jorhat 785010 (Assam)
Phone: 0376-2305124 (Off) / 0376-2305163 (Res), Mobile: 09435351736
E-mail: kalitark@icfre.org, rkkalita1969@gmail.com

The Trainings will be conducted in groups, of not less than 10 and not more than 20 in number. Trainings can also be tailor-made to suit the requirements of stakeholders, on request.

The requisite Course Fees may be paid either through Demand Draft drawn in favour of Director, RFRI, Jorhat (Assam) and payable at Jorhat or may be transferred through NEFT/RTGS to SB Account No. 393102010056470, IFSC UBIN0539317, Union Bank of India, Jorhat Branch.

The payment should be made at least 30 days before the commencement of the respective courses. Participants are advised to commence their journey for the training only after getting confirmation of the programme from the Course Director/ Head, Extension Division, RFRI, Jorhat.

HOW TO REACH:
RFRI is located about 10 km east of Jorhat City, towards Sivasagar on NH-37 (New NH 715).

By Air
Jorhat Airport, commonly known as Rawriah Airport, is located approximately 15 km from the Institute.

By Rail
Jorhat Town Station and Mariani Junction are major stations of Jorhat. A few short distance trains connect Jorhat Town Station with other places of Assam. All important trains, viz. Rajdhani Express, Kamrup Express, Brahmaputra Mail etc. run through Mariani Junction, which is about 26 km from the Institute. A computerized reservation facility is available at the Jorhat Town Station.

By Road
Jorhat is well connected with all major cities of Northeast India. Jorhat is the only town in upper Assam to have Inter State Bus Terminus (ISBT) service that provides connectivity with other regions of the Northeast with regular buses for major cities and tourist destinations of the neighbouring states. National Highway 37 (New NH 715) connects Jorhat with all major cities of Assam. Jorhat is 300 km from Guwahati and it takes about 6/7 hours to reach Jorhat from Guwahati by road.