

RFRI CONDUCTS TWO CERTIFICATE COURSES ON BAMBOO UNDER GREEN SKILL DEVELOPMENT PROGRAMME

Rain Forest Research Institute, Jorhat (Assam) conducted two Certificate Courses on Bamboo from 3rd February, 2020 under Green Skill Development Programme (GSDP), sponsored by Ministry of Environment, Forest and Climate Change, Government of India. One Certificate Course was on 'Bamboo Craft' from 3rd February to 20th March, 2020 and another Course was on 'Bamboo Propagation and Management' from 3rd to 29th February, 2020. This is the second time that RFRI conducted this training programme at its Campus. There were 40 (forty) participants from various States of North East India.

Dr. Ashok Bhattacharyya, Vice Chancellor, Assam Agricultural University, Jorhat, inaugurated both the Certificate Courses on 3rd February, 2020. In his inaugural address, he mentioned about rich cultural linkage of greater Assamese culture with bamboo. He appreciated the effort of RFRI for organizing such training programmes for scaling up of skills of youths of this region. He appealed to all to take up plantation activities of bamboo wherever possible. He mentioned about the bright future of bamboo in coming days.

Shri S. K. Thakuria, Divisional Forest Officer, Majuli also spoke on the occasion as 'Guest of Honor'. He expressed his concern on the reducing areas of forests in this region.

Dr. R. S. C. Jayaraj, Director, RFRI, Jorhat earlier welcomed all the guests and participants and spoke in details about the Green Skill Development Programme (GSDP) of Government of India.

Shri R. K. Kalita, Course Director of two Certificate Courses under Green Skill Development Programme (GSDP) at RFRI illustrated the Courses.

I. CERTIFICATE COURSE ON BAMBOO PROPAGATION AND MANAGEMENT:

Certificate Course on Bamboo Propagation and Management started with a presentation by Shri R. K. Kalita, Course Director on 'Overview on bamboo sector of India with special emphasis of North East India'. He gave a detailed presentation on various issues related to bamboo sector of India. He sensitized the participants on importance of bamboo as resource for social and economic upgradation. He clearly spoke about the objectives of the training programme and illustrated the role of bamboo in livelihood generation.

Shri Bibhuti Deka, STO and Shri N. C. Das, TO, guided the trainees to the various laboratories and facilities of the Institute. The trainees visited RFRI Bambusetum where Shri Debojit Neog, TO, taught different identification characters of bamboo to the trainees.

Dr. T. C. Bhuyan, Consultant, CBTC, Guwahati, Jorhat delivered detailed presentation on Propagation Methods, Nursery Management and Bamboo Plantation Management. He mainly emphasized on establishment and management of bamboo nursery and shared his experience on standardization of

nursery techniques for propagation of commercially important bamboo species through culms and branch cuttings and selection of superior planting material. Hands-on sessions were organized at nursery where basic techniques of nursery preparation were demonstrated. The trainees practised various works by themselves. Different bamboo propagation methods such as culm cutting, branch cutting, rhizome extraction from mother clumps, macro-proliferation etc were demonstrated to the trainees. Soil Solarization techniques, preparation of soil media for nursery and polypots were taught.

Bamboo plantation techniques, site selection, spacing, pit digging, intercropping, tending operation were also demonstrated to the trainees. Mrs. Ellora Borah, Shri Kumud Bora and Shri Debojit Neog were involved in practical sessions.

Md. Ibrahim, Scientist D delivered presentation on selection of plus clump in bamboo. He conducted the practical classes on selection of plus clump at farmers fields as well as at RFRI plantations. He put emphasis on selection of good quality mother clump so that healthy and disease free culms can be selected for developing quality planting stock.

Shri Satyam Bordoloi, Scientist C conducted theory as well practical classes on micro-propagation of bamboo. His team conducted the hands on session on tissue culture practicals and sensitized the trainees.

Shri R. K. Kalita, Scientist E delivered presentation pest and diseases of bamboo. He dealt at length about the causes, symptoms, predisposing factors and control measures of different bamboo diseases. He also taught about insect problems of bamboo. He taught about bamboo preservation treatment and conducted hands-on sessions on different methods of bamboo treatment such as sap displacement, Boucherie treatment, dipping methods etc.

Shri Bhabesh Gogoi, Assistant Professor, Assam Agricultural University, Jorhat delivered a presentation on “Bamboo based agroforestry system”.

Mrs. Sabi Gogoi, ACTO taught about the integrated nutrient management in bamboo.

Shri Rajarshi Bhattacharyya, Technical Officer, RFRI imparted training on composting and vermicomposting technology. He demonstrated the construction of low cost bamboo vermicomposting units, which are easy to construct.

Dr. D. J. Das, Scientist E delivered presentation on application of Geospatial tools in Bamboo Mapping. Practical demonstration on use of GPS technology was also conducted by Dr. Girish Gogoi, Technical Officer and Shri Abhijit Medhi, Senior Technician.

Shri Pranjal Kr. Goswami, Bamboo Shoot Entrepreneur, Guwahati was invited to educate the trainees on development of bamboo shoot entrepreneurship.

To provide a useful guidance on various avenues for self-employment by the trainees, Shri Rajib Sabhapandit, GM, DICC, Jorhat was invited. He sensitized the trainees on various schemes of central as well as state governments.

Shri Tarun Basumatary, Branch Manager, SBI, Phesual, Jorhat was also invited to educate the trainees on financial avenues for bamboo sector development. He told about MUDRA loan and other schemes of banks.

In order to provide widespread exposure on various aspects of bamboo sector, extensive field visits were planned during the training programme. The field visits were found very effective in getting more practical knowledge by the participants. Shri Bibhuti Deka, STO and Shri N. C. Das, TO guided the trainees during the field tour. The trainees embarked upon weeklong field tour to different places of Assam. During this tour, the trainees visited academic and research institutions, interacted with agri-based entrepreneurs, visited natural bamboo forests and also visited bamboo plantations by Joint Forest Management. The trainees also visited Hollongapar Gibbon Sanctuary which is situated around 16 km from Jorhat Town.

To expose the participants to industrial experience, the trainees visited Nagaland Bamboo Recourses Centre (NBRC), Dimapur. NBRC is a centre of excellence for facilitating technology and information for resource and enterprise developments, creating awareness on the potentials of bamboo, building the capacity of bamboo farmers and entrepreneurs, house pilot demonstrative bamboo processing units for entrepreneurs to train on.

Certificates were distributed to the Trainees at the end of the Training on 29th February, 2020.

II. CERTIFICATE COURSE ON BAMBOO CRAFT:

Certificate Course on Bamboo Craft was designed to impart hands-on training in four modules. There were initially 21 participants, but due to certain unavoidable reasons, two participants withdrew from the training. The Training ended on 20th March, 2020.

1. **Making of bamboo furniture items:** It has been observed that there are sufficient demands for bamboo furniture items such as bed, chair, table, dining table, easy chair, centre table, stool, bench etc. Therefore, basic techniques involved in making of such items such as cutting, sizing, knot removing, polishing, measurements, sliver making etc. were taught in this module. Shri Mohan Saikia, Master Craftsman from Sivasagar was engaged to impart hands-on training for a period of about one week.
2. **Making of Utility Products:** In this module, making of various items such stackable stool, knitting, cap making, flower vase making, flower stands making and few other ornamental items were taught. Shri Dipak Gogoi, Craftsman from Jorhat was engaged for one week period. Shri Dipak Gogoi is a trained Craftsman under GSDP (Bamboo Craft) training conducted by this Institute last year.
3. **Making of bamboo-coconut hybrid products:** Hands-on training was imparted on making of bamboo-coconut shell fusion products. Shri Sagir Ahmed, Jorhat who is an expert of making such products was engaged to impart hands-on training to the participants for a period of one week. Shri Sagir Ahmed is also a trained Craftsman under GSDP (Bamboo Craft) training conducted by this Institute last year.

4. **Bamboo in construction:** A modern ‘Demonstration Bamboo Hut’ (24 ft x 12 ft) was constructed to demonstrate applications of bamboo in construction. Here, various techniques such as joinery, cutting, polishing, washing, treatment, fitting, weaving of slivers for making wall and other basic techniques were demonstrated. Different industrial products such as bamboo mat boards were demonstrated and used. The plinth and foundation of the Hut constructed using Reinforced Cement Concrete (RCC) on which entire bamboo structure was installed. Bamboo poles were fastened with iron rods of the foundation pillars. Shri Priyam B. Goswami, Architect, trained the participants during training.

Trainees were also exposed to extensive field visits in order to provide widespread exposure on various aspects of bamboo sector. They visited Nagaland Bamboo Recourses Centre (NBRC), Dimapur. Weeklong field visit was conducted to Guwahati and Agartala. They visited Eses Bio-Wealth Pvt. Ltd., Morigaon, Cane and Bamboo Technology Centre, Guwahati, and a few other Bamboo Entrepreneurs. In Agartala, the trainees visited BCDI, Bans Gram, Bamboo Park, Bamboo Plantation, Epiteome Bamboo Industry, and a few bamboo handicraft units.

Certificates were distributed at the end of the training on 20th March, 2020.

GLIMPSES OF THE TRAINING PROGRAMME

BANNERS AT RFRI GATE



INAUGURAL SESSION



Welcomimng of Chief Guest



Welcomimng of Guest of Honour



Certificate Courses on Bamboo under GSDP | 2020



Lighting of Lamp by Dignitaries



Welcome address by Director, RFRI



Address by Guest of Honour



Address by Group Coordinator (Research), RFRI



Address by Course Director, GSDP Training

Certificate Courses on Bamboo under GSDP | 2020



Address by Chief Guest



Trainees and other audience



Group Photo with Dignitaries

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Ice breaking Session by Shri R. K. Kalita



CERTIFICATE COURSE ON BAMBOO PROPAGATION AND MANAGEMENT





Visiting to different Laboratories, Facilities of the Institute





Trainees at Pratical Sessions





Trainees at Practical Sessions



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Trainees at Practical Sessions



Md. Ibrahim at session on Plus Clump Selection





Dr. D. J. Das, Scientist E at session on Application of Geospatial tools in Bamboo Mapping



Tractical Demonstration on GPS Use by Shri Abhijit Medhi, Senior Technician



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Presentation by Shri Bhabesh Gogoi, Assistant Professor, AAU, Jorhat on Agroforestry



Presentation by Mrs. Sabi Gogoi, ACTO on Integrated Nutrient Management



Collection of raw materials for vermicomposting

Certificate Courses on Bamboo under GSDP | 2020



Construction of lowcost vermicomposting bins using bamboo



Field visit to Hollongpara Gibbon Wildlife Sanctaury, Jorhat



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Field Visit to Biswanath College of Agriculture, Biswanath Chariali





Field Visit to Pabhoi Greens, Biswanath Chariali





Field Visit to Van Vigyan Kendra, Chessa, Arunachal Pradesh





Field Visit to natural bamboo forest in Doomdoom Forest Divison, Doomdooma (Assam)



Visit to Arboretum, Digboi under Digboi Forest Divison (Assam)



Visit to Dehing Patkai Wildlife Sanctuary under Digboi Forest Forest Division

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Field Visit to Garopaban Joint Forest Management Site at Athkhel, Geleki, Sivasagar (Assam)



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Visit to Nagaland Bamboo Resources Centre, Dimapur (Nagaland)

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Shri Pranjal Kr. Goswami at Session on Bamboo Shoot Based Entrepreneurship Development



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Certificate Courses on Bamboo under GSDP | 2020



Practical Session on Bamboo Shoot Making Process





Field Visit to North East Institute of Science & Technology, Jorhat





Field Visit to Assam Agricultural University, Jorhat

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Shri Rajib Sabhapandit, GM, DICC, Jorhat at Session on Self-Employment Opportunities



Shri Tarun Basumatary, BM, SBI, Phesual at Session on Financial Avenues for self-employment



Certificate Courses on Bamboo under GSDP | 2020



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Valedictory Session and Distribution of Certificates



CERTIFICATE COURSE ON BAMBOO CRAFT







Certificate Courses on Bamboo under GSDP | 2020







Certificate Courses on Bamboo under GSDP | 2020

