

### RFRI CONDUCTS OTHER STAKEHOLDERS' TRAINING

**Rain Forest Research Institute, Jorhat (Assam)** organized three-day training on *“Role of Forestry in Sustainable Livelihood and Rural Development”*, sponsored by Ministry of Environment, Forest & Climate Change, Govt. of India from 20<sup>th</sup> to 22<sup>nd</sup> September, 2017. At the outset, Dr. R.S.C. Jayaraj, Director, RFRI welcomed the trainees and spoke on the importance of training. He emphasized on importance of forest resources such as bamboo, agar, lac, forest silk, honey etc. for improvement of rural livelihood in the state. Dr. Jayaraj also appealed to the trainees to spread the message of forestry based livelihood opportunities among other colleagues of their respective work places.



Shri R.K. Kalita, Course Director of the training addressed the trainees coming from different parts of Assam and explained the aim and objective of the training programme. He briefed the participants about the three days activities of the training programme. The training is aimed at sensitizing the Stakeholders on the linkage between forestry and livelihood, so that conservation and sustainable development can go hand in hand.



Speaking on the occasion, Dr. T.C. Bhuyan, Retired Scientist of RFRI, Jorhat explained the importance of people's participation in livelihood generation through forestry and agriculture related activities.

A total of 30 participants from different sectors participated in the training programme.

In the first technical session, Dr. R.S.C. Jayaraj delivered a presentation on Role of Forestry in Rural Development-an Overview. He highlighted the major issues of Assam such as poverty, unemployment, dropout rate from schools, poor children health, and prevalent environment issues (floods, soil erosion, sand deposition in agricultural land), gender inequity and decreasing forest resources. He discussed role of forest sector in gainful employment

generation through sustainable utilization of bamboo resources, agarwood, broom grass, forest silk, Non Timber Forest Produce (e.g. lac, honey and medicinal plants). He explained the linkages between sustainable utilization of forestry resources for livelihood generation, gainful employment and better children health. The presentation covered various aspects of forestry based livelihood opportunities and human development in Assam. Some of the participants discussed about bamboo based markets, sources of bamboo planting stock, awareness generation and role of NGOs.

Dr. T.C. Bhuyan, Scientist (Retd.), RFRI, delivered a presentation on “Bamboo and Cane based entrepreneurship development”. He explained the scope of entrepreneurship development, division of labour, profit sharing and market potential of bamboo and cane based industries. He emphasized on skill development, value addition, employment opportunities, and role of sectoral industries with respect to bamboo and rattans. Development of micro-Common Facility Centres, local talent encouragement, product development as well superior plant selection



for raw material generation was also discussed. Besides bamboo and cane based livelihood resources of North East India, Dr. Bhuyan also highlighted the potential of *Schumannianthus dichotomus* (commonly called as *Patidoi* in Assam) habitat, distribution and traditional uses in rural areas. He explained that the plants are used for making the *Shital Pati*, a traditional bed mat in Eastern India and Bangladesh. Traditional artisans make strips from the outer portion of the stem including the epidermal part. These split strips are processed and plaited into mats. Murta splits are also used for making prayer mats, baskets, bags, novelty items, etc.

Shri R.K. Kalita, Scientist, RFRI, Jorhat delivered a presentation on “Agarwood based livelihood options” where he emphasized on nursery techniques and cultivation of *Aquilaria malaccensis*. The agar wood research activities of RFRI, Jorhat were also highlighted during the interactive session.

Shri R.K. Kalita, Scientist, RFRI, Jorhat guided the participants to the RFRI bambusetum and nursery. He also explained the participants on lac and its applications. He showed demo lac plantation and the lac insects to the participants. Dr. T. C. Bhuyan, Shri Kumud Bora and



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Shri Debojit Neog showed the various activities to the participants. Shri Kumud Bora demonstrated different bamboo propagation methods to the trainees. Shri Budheswar Rajkhowa, nursery attendant assisted Shri Kumud Bora. The participants also visited Bambusetum. Shri Debojit Neog showed various species of bamboo and explained their indentifying characters. The participants visited Bamboo Composite Center of the Institute where they witnessed variety of bamboo products which have direct impact on livelihood of people. Shri R. K. Kalita demonstrated different bamboo preservation treatment methods to the participants.





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On the second day of training programme (21<sup>st</sup> September, 2017), a field visit was arranged for the participants to two premier Institutes of Jorhat such as Central Eri Muga Research & Training Institute (CMER&TI) and Assam Agricultural University, Jorhat. Dr. Kartik Neog, Scientist, CMERTI welcomed the participants. A brief presentation was given by Dr. B. Gogoi, Scientist. He highlighted various research and developmental activities of the Institute. He informed the participants that a large section of people in Assam are fully dependent on sericulture for their livelihood. He told that Muga silk is only found in Assam for which it was conferred GI recognition. The participants visited the Museum of the Institute. Dr. Kartik Neog took the participants to the Farm No. 2 of the Institute and showed the Muga insect in the field condition. He also explained different problems associated with Muga rearing, particularly Pebrine disease.

In Assam Agricultural University, Jorhat the participants were exposed to various ventures which are directly related to rural economy. The participants visited composite fishery unit. Various activities were explained to the trainees by Mr. Jogen Neog. The participants visited poultry and goat sections. They also witnessed high yielding breeds of buffalo and cow. The participants highly appreciated the works conducted by AAU, Jorhat.



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On the third day of the training programme (22<sup>nd</sup> September, 2017), Dr. N. D. Barthakur, Scientist, RFRI delivered a presentation on “Prospect of Lac cultivation and processing for livelihood generation”. She discussed various research and training programmes undertaken by the Institute for cultivation of lac insect using different host plants of North East India. She also covered lac cultivations methods, sustainable harvesting, processing of lac, uses in different sectors (Medicine, cosmetic etc), market potential and livelihood opportunities.



Dr. Dipanwita Banik, Scientist, CSIR-NEIST, Jorhat, delivered a presentation on “Prospects of Medicinal and Aromatic Plants in Rural Development”. Dr. Banik made a comprehensive presentation on ethno-medicinal history, traditional practices, and market potential of medicinal and aromatic plants (MAPs) in the world, India and North eastern Region (NER). She discussed the MAPs



diversity in north east India and their commercial exploitation in sustainable manner for economic and societal development of NER. The presentation also covered various aspects of MAPs cultivation through model farming (Mix farming), trade, livelihood systems, market potential, employment generation and overall economic development of rural people. She highlighted the importance of some MAPs and their specific uses such as *Curcuma caesia*, *C. longa*, *C. aromatica*, *Alpinia galanga*, *A. nigra*, *Amomum dealbatum*, *Zanthoxylum* sp., citronella and lemon grass etc. The participants were also enriched with information on various herbal medicinal products developed by CSIR-NEIST, Jorhat and technology transfer to user groups as well as the CSIR AROMA Mission for mass cultivation of citronella and lemon grass using high yielding improved varieties across the country.

Shri Bhobesh Gogoi, Assistant Professor, Assam Agricultural University, Jorhat delivered a presentation on “Agro forestry in Rural Development”. He discussed the scope, importance, current scenario and need of agroforestry, promotion of agro-forestry, impacts, and choice of species, tree crop combinations and various agro forestry models prevalent in North East India. He also emphasized on certain bamboo based agro forestry models, viz.- bamboo-mango-ginger, bamboo-mushrooms, bamboo-medicinal plants, bamboo-*Gmelina arborea*, bamboo-*Gmelina arborea*-*Cajanus cajan*-Turmeric/ Ginger etc and income generation through agro forestry practices. The presentation covered other allied aspects of agroforestry such bee keeping, composting, vermicomposting, application of bio-fertilizers and sustainable development issues linked with agroforestry practices. The presentation was highly appreciated by the participants.



Shri Indukalpa Bharali, a young entrepreneur from Majuli, Assam shared his success stories of establishment of agri-based entrepreneurship in Majuli. He showcased two of his agri-based products viz. Mustard oil and Bhim vita (a baby food prepared from *Musa balbisiana*, commonly called as *Bhim kol* in Assam). Participants from





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different sectors interacted with Mr. Bharali and discussed about the establishment of similar enterprises in other places of the state.

Dr. Indrani P. Bora, Scientist, RFRI, Jorhat made a presentation on “Broom grass cultivation and its role in income generation”. She discussed broom grass cultivation practices undertaken by RFRI in degraded *jhum* Lands of Ri-Bhoi district, Meghalaya economic potential, intercropping patterns, harvesting technologies, cost-benefit analysis as well as value addition of Broom grass (*Thysanolaena maxima*).



Shri Rana Jafri, Cluster Head, Bandhan Bank, Jorhat along with the team consisting of Shri Bijendra Pal Singh, Shri Pradip Pramanik, Cluster Head, Micro banking and Shri Bhairab Bhuyan, Branch Manager, Bandhan Bank, Jorhat made a presentation on “Role of Financial Institutions in sustainable livelihood and rural development” and explained the objective, and functioning of the bank as well as various schemes such as procedures of account opening and loans, micro banking, general banking etc. Many participants interacted with the bank personnel and discussed about the loans for establishment of small scale agri-based enterprises.



During valedictory session, participants shared their views on three days training programme.

Mr. Pranjal Borah from *Rengoni* complimented that RFRI has maintained a very systematic approach of conducting training programmes. Dr. B. Basumatary told that he has learnt new things such as bamboo nursery, agro forestry and agribased livelihood options and suggested that other banks may also be involved in future training programmes. One participant suggested inclusion of Orchids in the training module. The participants were very much impressed with the presentation made by Shri Bhubesh Gogoi on Agroforestry and appreciated the training coordinator for including such kind of activities.



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The participants submitted the feedback forms on the training programme. Certificates were distributed to the participants in the valedictory session. The training was concluded with the concluding remarks by Dr. R.S.C. Jayaraj, Director, RFRI, Jorhat.





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At the end, Shri R.K. Kalita, Scientist and Course Director proposed the customary vote of thanks to all the resource persons and participants.