

CELEBRATION OF AZADI KA AMRUT MAHOTSAVA

Rain Forest Research Institute, Jorhat (Assam) celebrated *Azadi Ka Amrut Mahotsava* on 30th April, 2021 at its Institute. A Seminar on the theme, ‘Conservation and sustainable use of Bamboo in North-Eastern Region’ was organized to mark the occasion. The Seminar was inaugurated by Dr. R. S. C. Jayaraj, Director, RFRI, Jorhat. Around twenty five Scientists and Technical staff attended the Seminar. Participation was made limited following COVID-19 protocol.

At the beginning, a short video on *Azadi Ka Amrut Mahotsava* was played where Hon’ble Prime Minister inaugurated the programme on 12th March, 2021. Shri R. K. Kalita, Head, Extension Division spoke about the importance of celebration of this Programme and informed about the activities carried by this Institute.

Dr. R. S. C. Jayaraj, Director, RFRI, Jorhat delivered a presentation on ‘Overview on Bamboo Sector of India with special reference to North East India’. He illustrated latest development of bamboo sector in India. He also gave an account of work done by RFRI, Jorhat. In his presentation, he touched on bamboo biodiversity in India, bamboo growing stock, priority species, constraints in bamboo resource use and steps required for resource and productivity enhancement. Addressing utilization aspects he described the traditional, industrial and value added product diversity in terms of various uses, demand and supply bamboo processing chain and preservation technology for enhancement of durability. He also touched upon policy and legal issues for improvement of supply, utilization and investment in R&D.

Md. Ibrahim, Scientist D, RFRI, Jorhat delivered a presentation on Bamboo Improvement Programme at RFRI, Jorhat. He said that RFRI has standardized nursery propagation techniques of six important bamboo species of North East India through culm cuttings and branch cuttings. These bamboo species are *Bambusa balcooa*, *B. bambos*, *B. tulda*, *B. nutans*, *B. pallida* and *Dendrocalamus hamiltonii*. Techniques for plantation and management of these bamboo species have been worked out and standardized. Moreover, saplings were raised in the nursery from seed sources of different species of Bamboo from the sporadic flowering. Under genetic improvement, selection of plus culms was also done. In Northeast India, Rain Forest Research Institute (RFRI) started selection and *ex-situ* conservation of bamboos in 1990s. During 1998-2000 carried out selection of 6 commercially important species in Assam and Meghalaya. During

2006-07, 91 accessions were collected. In a vegetative multiplication garden (VMG) more than 280 accessions of 6 bamboo species viz. *Bambusa balcooa*, *B. bambos*, *B. nutans*, *B. tulda*, *B. pallida* and *Dendrocalamus hamiltonii* were planted. Conservation and genetic improvement for 16 commercially important bamboo species of the region has been carried on by RFRI, Jorhat. As a part of *Ex-situ* conservation 49 species have been raised in RFRI Bambusetum. *Ex-situ* conservation of 28 species has been done at ARCBR, Aizawl (Mizoram). A total of 16 high yielding clumps were selected for four bamboo species i.e. 7 for *B. tulda*, 4 for *B. balcooa*, 3 for *B. nutans* and 2 for *D. hamiltonii*. Moreover, license agreement has been made with Devleela Biotech, Chhattisgarh, MP State Bamboo Mission, Bihar Forest Department etc to produce plant on commercial scale using the selected genotypes. Multi-locational trials of selected bamboo clumps will be established in different geographically and agro-climatically distinct locations. Species/ clone specific molecular marker will be developed

RFRI has developed tissue culture protocols/ refined the existing protocols for three species viz. *Bambusa tulda*, *B. balcooa*, *Dendrocalamus hamiltonii*. Upgradation of the lab as per DBT standard was done. Also RFRI shall be transferring cultures and non-exclusive licence for multiplication to industries. Apart from this, post flowering regeneration status of *Melocanna baccifera* in Tripura was worked out.

Shri Priyam B. Goswami, Principal Architect, MAGNIDUS DESIGN, Jorhat/Delhi gave a presentation on Bamboo in structural construction. He described the traditional house making material of people under the rule of Ahom dynasty, when most of them were making with bamboo except the royal families. Presently, bamboo is considered as suitable construction material particularly for making houses, pavilions etc. He also cited the use of bamboo by Colombia, Germany etc. For example, he cited of bamboo architecture of low cost handmade bamboo house of Bangladesh. John Hardy, Australian designer in Bali is known for bamboo ornaments making and he started with 'Green School' in Bali which is a three storied structured made of Bamboo.

Shri R. K. Kalita, Scientist F, RFRI, Jorhat delivered a presentation on 'Utilization of bamboo for livelihood generation: Initiatives of RFRI, Jorhat'. He sensitized the participants on various applications of bamboo and role of bamboo in livelihood generation. He also gave detailed account of initiatives undertaken by RFRI on bamboo and its applications.

GLIMPSES OF THE PROGRAMME



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