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INSTITUTE OF WOOD SCIENCE AND TECHNOLOGY, BENGALURU

Indian Council of Forestry Research and Education

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BHUPENDER YADAV



FOREWORD

Bamboo is a wonder plant which is a fast-growing sturdy grass that can be important nature-based solution to a number of pressing global challenges, for livelihood development, green trade, climate change mitigation and environmental protection. A grove of bamboo release 35% more oxygen than an equivalent stand of trees. Because of this, planting bamboo is a great way to reduce the carbon footprint and address the challenges of global warming. Bamboo thrives in a wide range of climates and bamboo litter and root mass would help to conserve the soil and moisture to a great extent.

Apart from its ecological value, bamboo is an excellent raw material for furniture and construction industries. Moreover, bamboo can be harvested within four to five years whereas the hardwood species like Teak would take at least forty years to mature before they can be harvested. Bamboo's versatility as a substitute for hardwoods offers a great chance to reduce pressure on natural forests. Bamboo was termed as poor men's timber but perception about bamboo has changed gradually and now it is considered as a most sustainable alternative to wood which can match steel and plastic in strength and the elasticity. The government of India recently amended the Indian Forest Act, 1927, and the new changes can transform the bamboo sector. After amending Section 2(7) of the Act, bamboo is no longer a tree and felled bamboo too is not timber. So any bamboo grown in private or homestead land by millions of farmers does not require a felling permission or transit permission from any state forest department. The Prime Minister of India has rightly pointed out that, "thousands of small scale farmers and other livelihoods dependent on bamboo trade and cultivation will be positively impacted" by this amendment.

There are more than 1600 species which contribute in livelihood of more than 1 billion people. During last decades of 20th century more than 1500 uses of bamboo were highlighted which are increasing further with novel uses. Bamboos are being used in sectors like construction and housing, paper and boards, wood and furniture, food, energy, fibre and handicrafts. Presently in India, bamboo products are manufactured in cottage industries with traditional designs and low quantity production. Though there is a traditional domestic market, globally Indian bamboo products have to find a better market which has already been captured by Chinese, Vietnamese, Indonesian and Italian products. This sector needs

॥ प्लास्टिक नहीं, कपड़ा सही ॥

premium products, process improvement, contemporary designs, appropriate testing and adoption of standard operational protocols, joineries and better finishing for global as well as mainstream domestic market .One may also explore the possibility of innovative Production Linked Incentive Scheme for promoting manufacturing of Bamboo based Products to upscale the utilization and development of this vast eco-friendly resource.

India has a great responsibility as it has committed itself to create an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent by the year 2030. This also creates farmers to double their agricultural income by taking up bamboo based agroforestry along with regular farming. Institute of Wood Science and Technology, Bengaluru (an institute under the Indian Council of Forestry Research and Education) has been continuously striving to enhance the knowledge on adoption of emerging techniques and prudent utilization of wood and bamboo based materials. The institute has been successfully publishing a quarterly magazine "Wood is Good: Grow more, Use More" to disseminate the scientific information and applied knowledge in this sector. The magazine is widely circulated and it has generated great interest among concerned industries and end-users about the latest developments in wood science and technology. The present issue of the magazine is dedicated to various aspects of Bamboo as a promising resource in the construction and furniture industry. I hope that this popular magazine will act as a useful source of information to recognize and realise the country's potential and capture the domestic and export markets and sustained income to bamboo based farming community.

Date: 11.08.2021



(Bhupender Yadav)



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The Mission envisages promoting holistic growth of bamboo sector by adopting area-based, regionally differentiated strategy and to increase the area under bamboo cultivation and marketing. Under the Mission, steps have been taken to increase the availability of quality planting material by supporting the setting up of new nurseries and strengthening of existing ones. To address forward integration, the Mission is taking steps to strengthen marketing of bamboo products, especially those of handicraft items.

Contact : Ms. T. Pooja Mobile: +91-900 899 6091 Email: t.pooja@jaatre.live

Going Live on "World Bamboo Day" on Sep 18th, 2021



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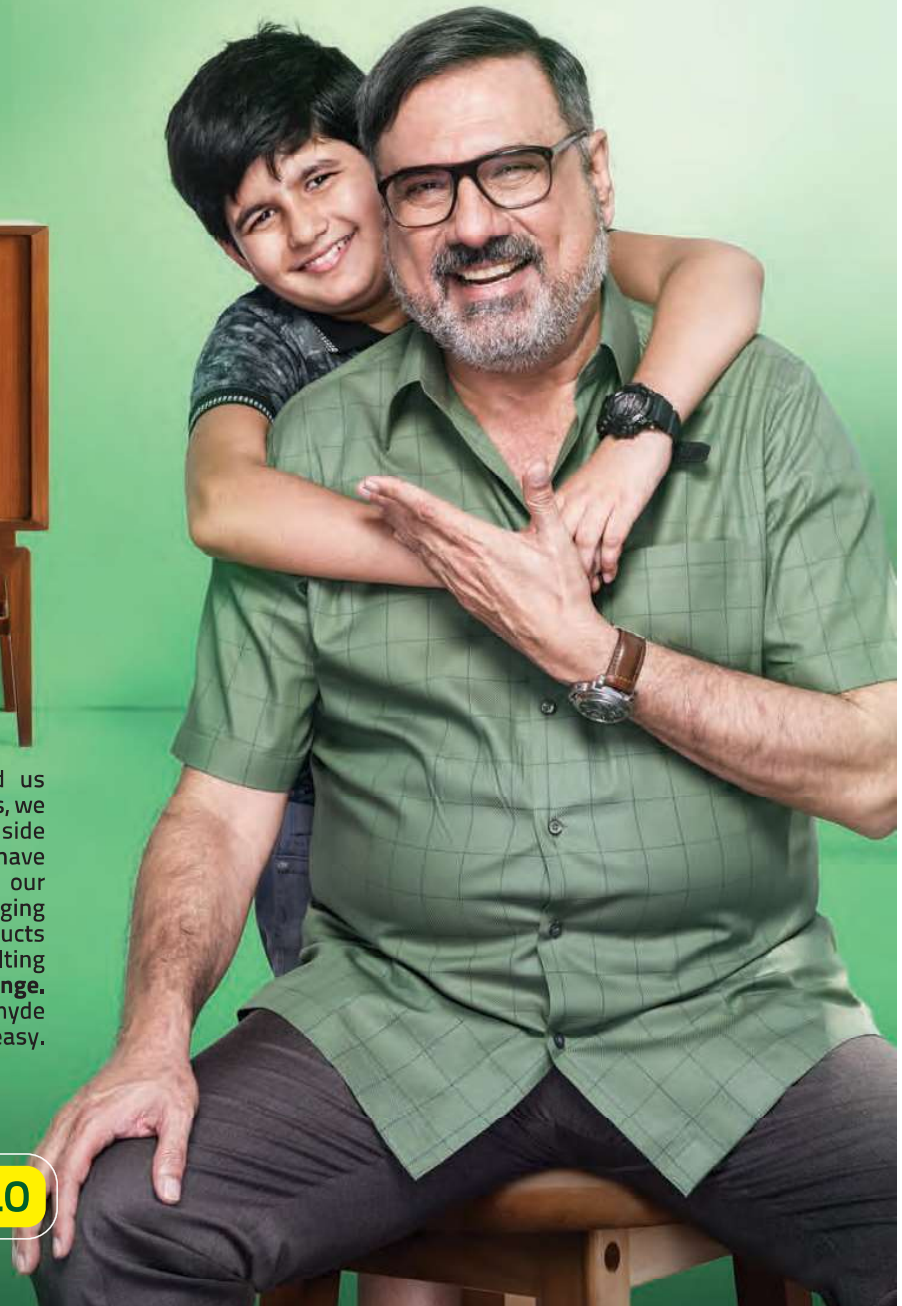
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