

**GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA**

UNSTARRED QUESTION NO:3907
ANSWERED ON:06.08.2014
BAMBOO RESOURCE
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the details of bamboo resource in the country, State-wise;
- (b) whether the Government proposes to promote bamboo industry in the country in a big way to help the North Eastern Region and other backward regions to improve their economic status;
- (c) if so, the details thereof along with the action plan chalked out in this regard;
- (d) the details of progress made under National Mission on Bamboo Application; and
- (e) the existing incentives as well as those proposed to be extended to this sector to withstand competition with other countries like China in the world?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY; MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF EARTH SCIENCES; MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE; AND MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS; (DR. JITENDRA SINGH)

(a) The information is being collected and will be laid on the Table of the House.

(b) Yes Madam.

(c) National Mission on Bamboo Applications (NMBA) was originally set up as Technology Mission under Department of Science and Technology for promoting bamboo industry in India. NMBA supports setting up of bamboo processing units at grass root level by providing Technology Development Assistance (TDA). NMBA has successfully demonstrated use of bamboo technology for employment generation among the rural masses.

However, being in Mission mode, NMBA had limited life and its own limitations. Now with the formation of North East Centre for Technology Application and Reach (NECTAR) as an Autonomous Society under Ministry of Science & Technology, the National Mission on Bamboo Applications (NMBA) stands subsumed in it. The Centre is an institutional model for creating opportunities so as to generate socio-economic benefits for the people of North Eastern Region (NER).

(d) Ever since NMBA came into existence in 2004, several technologies have been developed, validated, implemented and commercialized, details of which are as follows:

- # Development and standardization of technology for application of natural colorants on bamboo and products.
- # Development of commercial level kilns for production of bamboo charcoal.
- # Designing of process to enhance the storability of bamboo through process of torrifaction.
- # Preservation of bamboo through pressure treatment technology.
- # Utilizing bamboo fiber for non-woven application such as absorbent material for hygiene application and wound dressing.
- # Extraction of bamboo fiber through pulping route.
- # Design and development of prototypes of primary and secondary processing machinery for bamboo applications.
- # Development of prototype and testing of bamboo dust based palletizing machines.
- # Development of processing and packaging technologies for edible shoots and developing technology package for community level processing.
- # Evaluating nutraceuticals, antimicrobial and anticarcinogenic properties of bamboo shoots.
- # Technology, validation and commercialization for bamboo based thermoplastics.
- # Development of macro and micropropagation techniques of bamboo species- *Guadua angustifolia*.
- # Composite - Development of new products and processes. The NMBA as part of its activities has developed and disseminated a corpus of information related to bamboo in user friendly formats in the form of its publications and video CDs. NMBA's activity of bamboo mat board production has involved approximately around 8.50 lakh man days in a unit annually. NMBA has till date constructed more than 41 lakh sq.ft. of space using bamboo boards in various locations in India which additionally provided

employment to workers involved in construction activity. NMBA has ensured Incense stick making industry to generate employment of around 20.5 lakh person days. With NMBA`s technology intervention, nearly 57,000 jobs were created on a round the year basis. To further develop the sector, NMBA has now introduced the mechanized method of rolling.

The economic activity of Mission`s technological interventions in the sector is an investment of Rs.175 crore and private sector investment mobilized is more than Rs.600 crore, in which the incremental employment generated is around 50 million man days.

(e) The incentives extended to bamboo sector to withstand competition with other countries in the world could be of three types:

Providing fiscal incentives to the Indian units.

Creating critical mass by setting up production facilities in the technology, processes and products developed for the sector.

Providing updated regulator} structure to overcome restriction on transit and harvest of bamboo.

NMBA/NECTAR has assisted in setting up of bamboo based industries for production of bamboo sticks, agarbatti, boards, furniture, processed bamboo shoots etc, at Assam, Nagaland, Tripura, Meghalaya, Mizoram, Manipur, Arunachal Pradesh and other states of the country. Fiscal incentives like tax rebate, tax exemption and anti dumping duty¹ etc are also being contemplated for the said Centre.