

BAMBOO CULTIVATION-A NEW ERA OF REVOLUTION

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INTRODUCTION:-

Bamboo is one of the commercially cultivated crops in India and this is considered as a “poor man’s timber”. India is a second largest producer of bamboo next to China in the world. In Asia, bamboo is the most integrated part of the culture and used as wood substitute. Bamboo is mainly used as construction material, furniture, pulp and plywood. India is very fortunate to be blessed with rich bamboo resources. Bamboo shoots are consumed as a food and they are good source of nutrition.



Even though there are about 136 species exist in India, only some of them are commercially viable. *Bambusa nutanus*, *Bambusa balboa*, *Bambusa bambos*, *Bambusa tulda*, *Thyrostachys oliverii*, *Ochlandra travancorica*, *Schizostachyum dullooa*, *Melocanna bambusoides*, *Oxytenanthera stocksii*, *Bambusa pallida*, *Bambusa vulgaris*, *Bambusa polymorpha*, *Dendrocalamus strictus*, *Dendrocalamus hamiltonii*, *Dendrocalamus giganteus* and *Dendrocalamus brandisii*.

Bamboo is the fastest-growing plant and there is no recurring expense incurred on irrigation, fertilizers, weedicides and pesticides.

DIVERSE USES OF BAMBOO:-

	USES
FOOD PURPOSES	Bamboo shoots are rich source of protein, carbohydrates, vitamins, fibres and minerals.
ORNAMENTS	Jewellery, boxes, art pieces, etc.
MAKING HOUSEHOLD ITEMS	Used in construction purposes.

MUSICAL INSTRUMENTS	Flutes, Taranga, rain sticks, xylophones, guitars, violins
KITCHEN UTENSILS	100% biodegradable, durable and long lasting.
MEDICINAL USES	Juice from young bamboo shoots is used to make medicines to cure asthma, cough, gallbladder and digestive disorders according to Unani and Chinese medicine.

HOW BAMBOOS ARE CULTIVATED?

1. **Natural regeneration**: - it occurs after the gregarious flowering. It proceeds from one end of the forest and entire forest completes its flowering in 2-3 years cycles. Since Bamboos are monocarpic plants, it is difficult to go for natural regeneration.
2. **Artificial regeneration**: -
 - **Propagation by seeds**: It includes direct sowing and in nurseries. In direct sowing, seeds are placed 10-15 cm in the soil either in lines or in patches of 3X3 m or 5X5 m. In nursery plantations, seeds are soaked in water for about 24-48 hours and after that, spread in soil bed of thickness 1-2 cm. The seedlings are transplanted in the field when their size is about 30-45 cm.
 - **Vegetative propagation**: In bamboos, vegetative propagation is carried out by **rhizome cuttings, rhizome planting, offsets** (it gives better establishment in shortest time), **entire Culm planting** (it is very simple and hence, farmers can also adopt it and it gives more success rate i.e., about 75%) and **layering**.

CONCLUSIONS:-

Bamboo's multiple uses as well as rapid regeneration make it the ideal agro-forestry choice, vis-a-vis monoculture plantations. Bamboo is part of rural livelihood in many countries, especially in developing countries like India. Due to its versatile nature and multiple uses, it is also called 'poor man's timber'. India is second only to China in terms of bamboo diversity. The North-Eastern States are a storehouse of bamboo diversity, home to 58 bamboo varieties. Bamboo is grown on 10 million hectares in India and covers almost 13 per cent of the total forest area. The total production of bamboo is five million tons per year. About 8.6 million people depend on bamboo for their livelihood. The value of bamboo in India is estimated at \$4.4 billion. Realizing the diversified importance of



bamboo in India, the Finance Minister has allocated \$200 million in the 2018 Budget to provide new impetus to the bamboo sector, with huge support to the North-Eastern States. A proper understanding of bamboo culture and technical support could unleash a bamboo revolution that has the capacity to uplift the people in this region and provide economic, social and ecological sustainability. Therefore, we can put that the Bamboo cultivation is unleashing as a new era of revolution.

