



Greening India by Planting Bamboo

Recently World Bamboo Day (September 18) was celebrated to create awareness about the importance of bamboo as a **versatile material** for sustainable lifestyle. The theme of World Bamboo Day 2018 is: bamboo as a tool for achieving economic and social sustainability.

- Bamboo's multiple uses as well as rapid regeneration make it ideal agro-forestry choice, vis-a-vis monoculture plantations.

Importance of Bamboo in India

- Bamboo can be used in 1,500 different ways including as **food, a substitute for wood, building and construction material, for handicrafts and paper.**
- 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**'.
- Though it grows tall like a tree, it belongs to the **grass family**. It can withstand drought as well as flood.
- **India is second only to China** in terms of bamboo diversity. The **North-Eastern States** are a storehouse of bamboo diversity, home to more than 50 bamboo varieties.
- Bamboo covers almost **13 per cent of the total forest area** in India. About 8.6 million people depend on bamboo for their livelihood.
- Though **Madhya Pradesh has the largest area under bamboo forests**, bamboo culture thrives in the North Eastern region. From the tender shoots as a delicacy food item to the rice cooked in the hollow of raw bamboo, it is part of everyday life.
- Further, from house construction to flooring, agricultural implements, bamboo pervades all aspects of life and culture. Artistic skills are used in bamboo weaving in these regions.
- The advantage of bamboo is manifold compared to monoculture tree plantations. Post planting, **bamboo clumps start yielding after 4-7 years**. It can become part of **agro forestry** practice in small land holdings. New bamboo plantations may curb the pressure from deforestation by serving as wood substitutes.
- It is the fastest growing canopy, **releasing 35 per cent more oxygen than trees**. There are studies reporting that bamboo stands sequester 12 tonnes of carbon dioxide from per hectare.
- It can be planted to **reclaim severely degraded sites and wastelands**. It is **good soil binder** owing to its peculiar clump formation and fibrous root system and hence also plays an important role in soil and water conservation.
- Bamboo is an **integral part of our life and culture**, as it is used in religious ceremonies, art and music.
- However, we have failed to tap this renewable resource to rebuild green economy to achieve the goals of sustainable social and economic development, especially of the weaker sections of society who are engaged in bamboo resources.
- In contrast to India, China has achieved great success in growing and showcasing bamboo forests and products.

Government Initiatives

- **Restructured National Bamboo Mission** launched by the Government 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**.
- Recently the Government **relaxed the restrictions on harvesting**, transit and trade of bamboo in non-forest areas to boost the bamboo economy across the country.
- Further, the Government has allocated **\$200 million in the 2018 Budget** to provide new impetus to the bamboo sector, with huge support to the North-Eastern States.

Way Forward

- India needs to support farmers to establish bamboo plantations in barren slopes.
- To arrest the pace of land degradation in the country, a national programme of **intensive bamboo plantation involving all stake-holders** needs to be undertaken beyond 2019-20.
- The **National Housing Scheme (Pradhan Mantri Awas Yojana)** should utilise bamboo as construction material.
- Though bamboo has been used in various pioneering structural applications in the past, it is still seen as a “poor man’s material”. Developing bamboo as a load-bearing structural element would pave the way for its high value application in construction, which can make bamboo cultivation an economically viable way of greening the vast wastelands.
- **Edible bamboo has a huge demand in East Asian cuisines and medicine**. Bamboo grown in the Northeast (which is 66 per cent of the growing bamboo stock in India) can be exported to East Asian countries like Japan and Taiwan for competitive prices with the Government's support.
- A proper understanding of bamboo culture and technical support could unleash a bamboo revolution that has the capacity to uplift the people from poverty and provide economic, social and ecological sustainability.

International Bamboo and Rattan Organisation (INBAR)

- It is a multilateral development organisation which promotes environmentally sustainable development using bamboo and rattan. In addition to its Secretariat headquarters in China, INBAR has regional offices in India, Ghana, Ethiopia, and Ecuador.
- Since its founding in 1997, it has been making a real difference to the lives of millions of people and environments around the world with achievements in areas such as: raising standards; promoting safe, resilient bamboo construction; restoring degraded land; capacity-building; and informing green policy and sustainable development objectives.
- Guided by its 2015-2030 strategic plan, INBAR’s priority is to work with countries to focus the use of bamboo and rattan as strategic resources that support sustainable development and their green economy action plans. Its strategy and performance contribute directly to six sustainable development goals (SDGs):
 - SDG 1: End poverty in all its forms
 - SDG 7: Provide affordable, sustainable and reliable modern energy services for all
 - SDG 11: Access to adequate and affordable housing
 - SDG 12: Efficient use of natural resources
 - SDG 13: Address climate change
 - SDG 15: Protect and restore terrestrial ecosystems.

