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## A Comparative Study of Indian Farmers on Bamboo Crop in Pre and Post-Independence Era.

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### **Abstract :**

Bamboo is one of the most versatile and widely used crops in India. It has been an important source of livelihood for rural farmers in the country for centuries. This paper aims to compare the status of bamboo cultivation and its impact on the livelihood of Indian farmers in the pre and post-independence era.

Bamboo cultivation has been an important source of income for rural farmers in both the pre and post-independence era. However, the policies and regulations related to bamboo cultivation have changed significantly after independence. The paper discusses the various policies related to bamboo cultivation and their impact on farmers' livelihood. It is found that in the pre-independence era, bamboo was freely available to farmers, and they were allowed to harvest and sell it without any restrictions. This led to a high demand for bamboo and helped farmers earn a good income.

However, after independence, the government started regulating bamboo cultivation and harvesting, which led to a decline in its production and affected the livelihood of farmers. The paper discusses the various policies introduced by the government to promote bamboo cultivation and how effective they have been in improving farmers' livelihood. It is found that some policies have been successful in promoting bamboo cultivation and generating income for farmers. The paper suggests that the government should introduce policies that promote bamboo cultivation and ensure that farmers have easy access to the crop. This will not only help improve farmers' livelihood but also contribute to the country's economic growth.

**Keywords :** Bamboo cultivation, Indian farmers, pre-independence era, post-independence era, livelihood, government policies.

### **Introduction :**

Bamboo is one of the most versatile and widely used crops in India. It has been an important source of livelihood for rural farmers in the country for centuries. The bamboo plant is known for its ability to grow quickly upto 10-40 meters in height and is used for various purposes, such as building materials, furniture, handicrafts, and paper production. It is also an important source of food for animals. It takes about 1-5 years for full maturity. 600 Kgs of carbon fixed by the tree. It is closely linked with livelihoods and culture of Asian countries including India for thousands of years. Till 1970s, its use was very widespread in the rural areas of India, but its position declined because of plastic and use of other material like concrete in construction. The market of Bamboo based lifestyle products, cutlery, home decors, handicrafts and cosmetics also is in a growth path. Bamboo is the "The Green Gold" of the 21<sup>st</sup> century. It has multiple uses and is a gift of mother nature. Across the world there is a search for eco-friendly materials, which can be

harvested and used sustainably. Globally there are 110 genera and 1500 species, includes herbs, shrubs, tree, forms and climbers, In India there are 23 genera and 136 species with more than 50% in North eastern region. China is the largest exporter of bamboo in the world. Bamboo forest are home to several endangered species of animals such as the Giant Panda, Mountain Gorilla, and Golden Lemur. Many species of birds and insects also depend on bamboo for their habitat and food.

### **Bamboo in India :**

The interest in bamboo as a 'resource' started in the late 1990s, when India became a member of International Bamboo and Rattan Network (INBAR). Government of India prepared an action plan for bamboo and cane sector and held a big seminar in August 1999. There was good participation by policy planners, designer and architects, botanists, NGOs, Government departments working individually for bamboo to come together. The total area of bamboo cover in India is 9.57 million hectares. Assam is the

largest bamboo producer state in India, while Madhya Pradesh has largest area under bamboo of around 18394 sq. km. India has world's 20% Bamboo resources.

#### **Bamboo in Maharashtra :**

Maharashtra has about 21% area under forests and bamboo grows copiously in the forests along with teak and other species. It is reported that about 4800 km are under good bamboo cover. Outside the forests, bamboo is also grown widely in farm bunds and it is always seen in bunches and clumps in rural Maharashtra. Specially, it grows profusely in much of the 600 km Konkan coast and also in Vidharbha and the tribal areas of Northern Maharashtra.

#### **Objectives :**

- To analyze the changes in the cultivation of bamboo crop in India in the pre and post-independence era.
- To identify the factors that have influenced the changes in bamboo cultivation practices, such as government policies, market demand, land use patterns, and socio-economic factors.
- To highlight the challenges faced by farmers in the post-independence era, such as land-use patterns and environmental concerns.
- To recommend policy interventions that promote sustainable bamboo cultivation practices and support the welfare of small farmers.
- To contribute to ongoing policy discussions on sustainable agriculture practices and the role of non-timber forest products in rural development.

#### **Status of Bamboo Cultivation in Pre-Independence Era :**

Bamboo cultivation has been an important source of income for rural farmers in India for centuries. In the pre-independence era, bamboo was freely available to farmers, and they were allowed to harvest and sell it without any restrictions. This led to a high demand for bamboo and helped farmers earn a good income. The bamboo plant was used for various purposes, such as building materials, furniture, handicrafts, and paper production.

Bamboo cultivation in India has been practiced for centuries, primarily by small farmers for subsistence purposes. During the pre-independence era, bamboo cultivation was unorganized, and there was no formal system of cultivation, processing, or marketing. The

cultivation practices were primarily traditional and based on indigenous knowledge. The farmers used to grow bamboo in small patches of land, mostly as a part of their agroforestry system. The bamboo was primarily used for domestic purposes such as fuel wood, fencing, and construction material.

#### **Status of Bamboo Cultivation in Post-Independence Era :**

The post-independence era witnessed significant changes in the cultivation of bamboo in India. The government recognized the potential of bamboo as a cash crop and initiated several policy interventions to promote its cultivation. The establishment of the National Bamboo Mission in 2006 was a significant step in this direction. The mission aimed to develop a bamboo industry in India by promoting research and development, technology transfer, and market development.

The government policies led to the expansion of bamboo cultivation in India, particularly in the north-eastern states, where bamboo is abundant. The cultivation practices became more organized, and there was a shift towards commercialization and large-scale cultivation. The farmers started cultivating bamboo in larger areas, and new varieties were developed to meet the growing demand for industrial uses. The improved irrigation facilities, pest control measures, and modern techniques of propagation were adopted to improve the yield and quality of bamboo.

However, the post-independence era also witnessed some challenges in bamboo cultivation. The expansion of bamboo cultivation led to the displacement of traditional crops and the conversion of forestlands to bamboo plantations, leading to environmental concerns. The farmers faced challenges such as lack of credit, limited access to markets, and inadequate infrastructure. The quality of the bamboo produced also declined due to the use of chemical fertilizers and pesticides.

#### **Some of the significant government policy interventions are :**

1. **National Forest Policy :** The National Forest Policy of 1952 recognized the importance of bamboo as a source of livelihood for rural communities. The policy aimed to promote the development of bamboo cultivation, processing, and marketing.
2. **Forest (Conservation) Act :** The Forest (Conservation) Act of 1980 aimed to regulate the diversion of forestland for non-

forest purposes. The act provided for the Conservation of forests and the promotion of sustainable forest management practices.

3. **Forest Policy** : The Forest Policy of 1988 recognized the importance of bamboo as a major forest resource in India. The policy aimed to promote the sustainable management of forests and the development of bamboo-based industries.
4. **Bamboo Development Agency** : The government established the Bamboo Development Agency (BDA) in 1989 to promote the development of the bamboo sector. The BDA aims to create sustainable livelihood opportunities for farmers and artisans through the promotion of bamboo-based industries.
5. **National Bamboo Mission** : The National Bamboo Mission was launched in 2006 to promote the growth of the bamboo sector in India. The mission aimed to address Issues such as research and development, market development, and technology transfer.
6. **National Agroforestry Policy** : The National Agroforestry Policy was launched in 2014 to promote agroforestry practices, including the cultivation of bamboo. The policy aimed to increase the area under agroforestry and promote the diversification of farmincome.
7. In Maharashtra forest department has set up a center for excellence for bamboo at Chichpalli, Chandpur and artisans have received skill enhancement training on bamboo. Realizing its importance and its future value, the government has already set up Maharashtra Bamboo Development Board in august 2016.
8. Indian Forest Act 1927 was amended in 2017 to remove bamboo for the category of trees. As a result, anyone can undertake cultivation and business in bamboo and its products without the need of a felling and transit permission.
9. Formation of clusters for bamboo sector development : NBM has formed 23 clusters of farmers, artisans, entrepreneurs etc. in 9 states. The implementation of the NBM through cluster is leading to focused

developmental activity to create a vibrant bamboo economy.

Overall, the government policies have played a significant role in promoting the cultivation and use of bamboo in India. The policies aimed to address issues such as research and development, market development, and sustainable forest management, and promote the diversification of farm income through bamboo cultivation.

**Bamboo has been used for various purposes in India for centuries :**

In the **pre-independence era**, bamboo baskets, mats, furniture, musical instruments, and toys were popular.

**Post-independence**, the use of bamboo expanded to include bamboo pulp for paper and paperboard, bamboo handicrafts, bamboo flooring, bamboo shoots as food, and bamboo charcoal for air purification, medicinal important for blood purification, ecological benefits such as: neutralizing acidic soil, Bamboo is also used in different fishing methods, bamboo farming, Ornamental and aesthetic uses, house construction, Laminated bamboo is emerging as a novel material in design and construction. As a natural fiber composite, it has unique mechanical properties that allow for innovations that are not possible in other materials. Recently, the Prime Minister inaugurated the new terminal of the Bengaluru (Kempagowda) Airport in which the versatility of bamboo as an architectural and structural material has been proved and the destiny of this green resource defined as the 'green steel'. Bamboo has a long life span and can provide a sustainable source of income for farmers in the long run.

**Conclusion :**

Bamboo cultivation in India has undergone significant changes in the pre and post- independence era, with the post-independence era witnessing a shift towards commercialization and large-scale cultivation due to government policies and market demand. While this has provided livelihoods to millions of small farmers, it has also raised concerns about the environmental impact and the welfare of small farmers.

The study highlights the need for sustainable bamboo cultivation practices that take into account the ecological and social dimensions of bamboo cultivation. The study recommends that the government promote sustainable practices such as agroforestry and the integration of bamboo with traditional crops. This can help in promoting soil health, reducing the use of

chemical fertilizers and pesticides, and diversifying the income sources of small farmers.

The study also recommends the development of market infrastructure that can provide better prices for bamboo products to small farmers. This can be achieved through the establishment of farmer-producer organizations, the development of value chains, and the promotion of bamboo-based industries in rural areas.

Overall, the study emphasizes the importance of sustainable and inclusive bamboo cultivation practices that balance the economic, environmental, and social aspects of bamboo cultivation.

The findings of the study can inform policymakers and researchers in developing strategies that promote sustainable agriculture practices and support the welfare of small farmers, contributing to the broader goal of sustainable rural development in India

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