

Role of Horticulture in Economic Development of Bihar

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Abstract

As we know horticulture is the art and science of cultivating plants. This term is derived from the two Latin words namely hurts, it mean garden and culture it mean to cultivate. Horticulture as the part of agriculture plays key role in the economic growth and development of the state. Bihar is the top agriculture producing state in India. The state is major producer of paddy with proper farming in kharif and rabi crops. In Rabi season the Bihar is producing also producing good amount of pulses like lentils, gram and peas. Again maize is widely grown crop across the Bihar. Different types of oilseeds like mustard soybean and groundnut is properly grown in the state. Further sugarcane and makhana is also famous product of Bihar.

Key words: Fruit, Mango, Minerals, Potato, Rice, Vegetables

Introduction

In Bihar mango is extensively grown. This fruit is known as king of fruits in the state. Winter season in the Bihar is most suitable for vegetable cultivation the major crop of horticulture in Bihar.

The state of Bihar has practiced and adopted the objectives of green revolution and adopted various methods for promoting high yield variety seeds, better fertilizers and irrigation system for high horticulture (agriculture) productivity. In spite of that many farmers of the state still make their dependency on traditional system of farming. Further several rivers like Ganga, Bhagirathi and Hooghly cross the different part of the state, which helps in proper irrigation of the state and prunes natural irrigation apart from this various canals like some canals have also been developed in the state for fulfilling's irrigation requirement. For most of the part of the state tube wells and ground water system of irrigation is most common and popular. Corona (Covid-19) Pandemic had changed the fate and future of business of the world. The year 2021-22 has been free from COVID-19 restrictions that prevented the proper functioning of production and business. Further the agro-based industry has witnessed big growth in yester years, accountable for 18.9 percent (2021-22) in GVA (Gross Value Added) of the country registering a growth of 3.6 percent in 2021-22 and 3.8% in 2022-23. Presently India is producing near about 320.49 MT of horticulture products and has surpassed the food grain production in too much less area (25.67 million Ha. For horticulture against 127.7 million ha for food grains. Total horticulture production in 2022-23 has been 352.28 million tonnes, which has been 352.28 million tonnes, which has been 4.75 million tonnes more (1.38 percent) as compared to 2021-22. During this period production of vegetables, fruits, flowers and plantation crops and honey has also been increased.

Impact of horticulture on culture in Bihar

Horticulture has important impact on the culture of Bihar, impacting traditions, festivals arts and the overall path of life. The ways by which horticulture influence the culture are stated follows:

Celebrations

- **Mango:** Bihar is famous for delicious mangoes, organize mango festivals where different varieties of mangoes are showcased. These festivals bring communities together to celebrate the soundness of state horticultural produces.
- **Litchi:** Like wise, litchi festivals are celebrated in litchi harvest season. These festivals include cultural performances, music, dance in the state.

Tradition

- **Fruit Cultivation:** Horticulture has deep-rooted traditions in the state, with families passing down techniques of fruit cultivation from generation to generation.
- **Gardens:** Many households in Bihar have small home gardens where they grow fruits, vegetables, and herbs. These gardens are part of the cultural heritage, representing self-sufficiency and sustainable living of the people in Bihar.
- **Use of Local Produce:** Further Bihar cuisine is heavily influenced by its horticultural produce. Dishes often feature seasonal fruits and vegetables such as mangoes, litchis, potatoes, and tomatoes.

- **Traditional Recipes:** Traditional recipes in Bihar make use of local fruits and vegetables in innovative ways. For example, “Aom Panna” Amaut, Litti Chokha and Kachri Sabzi, Chura-Dahi are common and popular dishes of Bihar.

Crafts

- **Decorations:** Flowers play a important role in State art craft and culture. Floral decorations are used in weddings, festivals religious ceremonies for adding beauty to the surroundings of the events.
- **Handicraft:** The abundance of horticulture produce inspires several forms of handicrafts. Artisans use flowers and leaves to create designs for home decorations and flowers and leaves to create designs for home decorations and flowered ornaments.

Songs

- **Songs and Poems:** Horticultural produce in Bihar folk songs and poems, Mangoes, litchis, and other fruits are celebrated in verses reflecting the cultural significance of the products.
- **Folk Tales:** Folklore stories and legends are woven around horticultural products, highlighting their importance in the lives. Stories about the origin of mangoes or the virtues of different fruits are commonly found in the state.

Medicinal Practices

- **Herbal:** Horticultural plants and herbs are used in traditional medicinal practices in Bihar. The knowledge of using plants for healing has been passed down through generations, forming an integral part of the local culture.

- Ayurvedic: Ayurveda, the ancient system of medicine incorporates horticultural herbs for treatments. This reflects connection between horticulture, and culture.

Religion Importance

- Rituals: Fruits and flowers are offered in religious ceremonies. They are considered blessings from the gods.
- Festivals: Many festivals in Bihar include the use of horticultural products as offerings to deities. Mango leaves and flowers are used in worshipping rituals every where in Bihar. Horticulture in Bihar is not only agricultural practices; it is in built with the cultural fabric of the state. From festivals celebrating to traditional using local produce, horticulture plays a key role in shaping the traditions, arts, folklore, and spirituality in the state.

Horticulture and women's empowerment

Horticulture plays a important role in empowering women, mainly in rural areas, by providing them opportunities for economic and socially independence, skill development, decision-making power, and social recognition. Below ways highlights the contribution of horticulture to women's empowerment.

Economic independence

- Income: Women involved in horticulture can generate more income by selling fruits, vegetables, flowers, and other horticultural products. This financial independence allows them to contribute to their households income and their families living standards.

- **Access to Markets:** Many horticultural products have very good market demand. Women farmers can sell their produce directly to markets by cutting middlemen and getting more prices for produces.
- **Entrepreneurship:** Horticulture opens ways for female to become entrepreneurs. They can their own processing units, value-added businesses, creating employment for themselves and also for others.

Skill Development

- **Training:** Again governments and NGOs conduct training programs and workshops targeted at women in horticulture sector. These programs teach modern farming techniques, pest management, post-harvest handling, and financial literacy to them.
- **Knowledge:** By horticulture, women learn for seed selection, soil management, irrigation methods, and organic farming system. These knowledge enhances their farming skill and improve crop productivity.

Decision-Making Power

- **Farm Arrangement:** Women involved in horticulture are actively involved in farm management decisions. They decide which crops to grow, when to plant, how to manage pests, and where to sell the produce for better price.
- **Financial Management:** With their incomes, women find proper control over household finances. They can allocate resources further for education, healthcare, and other requirement.

Social Empowerment

- **Community Leadership:** women who properly handle the become leaders in their communities they serve as role models and mentors, for other women for encouraging them to participate in agricultural activities.
- **Confidence:** Successful management of horticultural work boosts women's self-esteem and confidence. They become more positive in family and community discussions, asserting their opinions and ideas for others.

Nutritional Security

- **Gardens:** several women cultivate small gardens with a variety of fruits and vegetables. This ensures a regular supply of nutritious food for their families, contributing to improved health.
- **Dietary:** Women are more likely to include a different types fruits and vegetables in family food, leading to a more balanced and diverse diet for all family.

Empowerment through Groups

- **(SHGs):** women in horticulture form SHG (self-help groups) to market their produce, access credit and share experiences.
- **Cooperative Farming:** Participating in cooperative farming ventures allows women to attract resources, share risks, and get benefit through collective bargaining power.

Legal Awareness

- Awareness Programs: Horticulture include awareness programs on women's rights, legal protections, and access to government schemes.
- Advocacy and Support: women involved in horticulture gain a platform to advocate for their needs. They become aware of their legal rights related to land ownership, and property rights.

Further horticulture serves as a powerful tool for female empowerment, enabling them to achieve economic independence, gain valuable knowledge make decisions in farm management and create social recognition. By investing in women's participation in horticulture, societies can promote gender equality, improve livelihoods, and create sustainable development opportunities in rural areas.

Status of Women in Bihar

- Education: The State has made various attempts and efforts to promote female literacy rates, but it still lag behind male literacy rates till today.
- Empowerment Programs: Further Several schemes focus on women's empowerment, like and the Bihar women development corporation and the Mukhyamantri Nari Shakti Yojana.
- Health services schemes: The Government has launched Janani Suraksha Yojana and without charge medical services for female improve mental and physical health.

- **Self-Help Groups (SHGs):** Self-Help Group plays a important role in empowering women socially and economically by fostering access to credit, skills training, and providing business opportunities.
- **Political Participation:** Bihar has seen an increase in the participation of women in local governance through Panchayati Raj System.
- **Legal Right:** Efforts are made to raise awareness regarding women's legal rights and ensure better access to justice for making has equal to male.

Horticulture in Bihar can provides female with an opportunities for income generation, through activates such as vegetable production and food processing. Again training programs in horticulture system and post-harvest management method empower women to become self-reliant by developing their skill. By the participation in farming activates and marketing of horticulture products produce, women develop decision-making within their communities. Horticulture products contribute to promote and improved nutrients for families, addressing for better health. Horticulture crops are termed as high-value crops, providing better income compared to traditional crops such as wheat and rice. Several activities are under process cold storage chain facilities, food processing units, and marketing infrastructure for horticulture product, which compel female to progress. Schemes like NHM (national Horticulture Mission) has located many market linkage for the farmers of horticulture.

Role of Horticulture in Economic Development in Bihar

Horticulture plays a important role in the economic development of Bihar, contributing to agricultural development employment, farmers income and overall rural prosperity. Horticulture contributes to Bihar's economic development which are below:

Diversification

- **Income Generation:** Horticulture offers farmers the opportunity to diversify their income sources. Instead of relying solely on traditional crops like rice and wheat. Farmers can grow high-value horticultural crops like fruits, vegetables, and flowers, which provides better prices in the market.
- **Risk Mitigation:** By diversifying crops, farmers can mitigate the risks associated with crop failures and price fluctuations. This leads to good incomes throughout the year.

Employment

- **On-Farm Employment:** Horticulture requires labour- intensive practices as planting, harvesting, and post-harvest handling. This creates employment opportunities for a large scale of people in rural areas where agriculture is the primary occupation.
- **Off-Farm Opportunities:** The development of Horticulture also stimulates the growth of other industries as packaging, processing, transportation, and marketing. These sectors provide additional employment for the local population.

Agriculture Growth

- **Productivity:** Modern horticultural practices, improved seeds and better crop management techniques result in higher productivity per unit of land in Bihar.
- **Export:** Bihar's horticulture products, like fruits such as mangoes and litchis, have good export potential. This opens new markets and good revenue for farmers and the state.

Government Initiatives

- Incentives: The Bihar government provides incentives to promote horticulture, including for seeds, equipment, and for infrastructure.
- Training and Capacity Building: Farmers are trained in modern horticultural, pest management, and post-harvest handling through workshops, and extension programs.

Horticulture plays a pivotal role in the economic development of Bihar by providing income opportunities, employment agricultural growth, adding value to produce, and promoting sustainable farming practices. With continued government support, investments in infrastructure and adoption of modern techniques, the horticulture sector in Bihar is good for further growth, benefitting farmers and the overall economy of the state.

In the state horticulture plays a crucial role in the Bihar agricultural sector contributing to the economy, providing food security and employment opportunities. Some key points highlighting the significance of horticulture in Bihar are stated below. Agro-climatic zones diverse agro-climatic conditions, ranging from the fertile plains of the Genetic basin to the hilly regions of the south, support wide range of horticultural produces are supportive for horticulture products in the state. The state cultivates wide range of horticultural crops like mangoes, bananas, litchis, guavas potatoes, onions, tomatoes, brinjal flowers, and medicinal plants. In Bihar various types of horticulture crops is cultivated.

Conclusion

Horticulture provides a source of income for cultivators mainly small and marginal farmers who have not large land holdings suitable for traditional crops such as rice and wheat. In this regard it is important to say that women can grow nutritious fruits and vegetables in gardens and improving their families' diets and overall health. Horticulture encourages the cultivation to cultivate a variety of crops, promoting dietary diversity and better nutrition for families. By promoting women-led community gardens foster cooperation, leadership skills and a sense of belonging within communities of Bihar. Further women involved in horticulture can give focus on sustainable farming practices, environmental conservation, and proper access to resources. Economic independence for horticulture activates leads to increased decision-making power within households for women. Participation in horticulture groups can provide women more support networks, boosting confidence and self-esteem. Again horticulture empowers female in taking decisions. Engaging in horticulture activities promotes physical health through exercise and other work. Gardening is known to have therapeutic benefits which reducing stress and improving mental well-being of the people. Horticulture development in Bihar has been apriority for the government in Bihar, as it plays a crucial role in enhancing agricultural productivity, farmer income and overall rural prosperity. Regarding the development of horticulture in Bihar, following points must be considered.

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