**Sustainable Horticulture Opportunities**

[Dr Muhammad Ahsan Qureshi](https://dailytimes.com.pk/writer/dr-muhammad-ahsan-qureshi/)

April 1, 2023

Sustainable horticulture is a critical component of modern agriculture. It involves the cultivation of fruits, vegetables, flowers, and other crops in a manner that is both economically viable and environmentally friendly. In Pakistan, the China-Pakistan Economic Corridor (CPEC) presents an excellent opportunity to promote sustainable horticulture, boost agricultural productivity, and improve the livelihoods of farmers. The CPEC is a massive infrastructure and economic development project that aims to connect China’s Xinjiang region with Pakistan’s Gwadar Port via a network of highways, railways, and pipelines. The project encompasses a wide range of sectors, including energy, infrastructure, transportation, and agriculture. The agriculture sector is a critical component of the CPEC, as it provides food security and income to millions of people in both China and Pakistan. The CPEC has the potential to transform Pakistan’s agriculture sector by promoting sustainable horticulture practices. These practices involve using natural resources in a way that preserves the environment and conserves natural resources. Sustainable horticulture can improve crop yields, reduce input costs, and protect soil and water resources. One of the main benefits of sustainable horticulture is its ability to reduce the use of synthetic fertilizers and pesticides. These chemicals are expensive and can harm the environment, wildlife, and human health. Sustainable horticulture, on the other hand, involves using organic fertilizers and biological controls to manage pests and diseases. This approach is both cost-effective and eco-friendly. Another key benefit of sustainable horticulture is its ability to conserve water resources. In Pakistan, water scarcity is a significant challenge, and sustainable horticulture can help reduce water consumption by using techniques such as drip irrigation and rainwater harvesting. These methods can significantly reduce water usage and increase crop yields. Sustainable horticulture can also promote biodiversity and conservation by using techniques such as intercropping, crop rotation, and agroforestry. These practices promote the growth of a variety of crops and provide habitats for wildlife. Additionally, sustainable horticulture can reduce greenhouse gas emissions by promoting the use of renewable energy sources, such as solar and wind power, in agriculture. The CPEC can promote sustainable horticulture in Pakistan by providing the necessary infrastructure and investment. For example, the CPEC can provide farmers with access to modern irrigation systems, high-quality seeds, and advanced farming technologies. Additionally, the CPEC can support the development of value chains and markets for horticultural products, ensuring that farmers receive fair prices for their produce. To promote sustainable horticulture under the CPEC, it is essential to involve all stakeholders in the agriculture sector. This includes farmers, government agencies, research institutions, and private sector actors. By working together, these stakeholders can identify challenges, share knowledge and expertise, and develop innovative solutions to promote sustainable horticulture.

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The adoption of sustainable horticulture practices in Pakistan is crucial for the country’s economic and environmental sustainability. Horticulture is an important sector of the Pakistani economy, contributing significantly to the country’s agricultural GDP and providing employment opportunities to millions of people. However, traditional horticultural practices in Pakistan are often unsustainable, relying heavily on the use of chemical fertilizers, pesticides, and water. This approach has led to environmental degradation, soil erosion, and water scarcity, threatening the long-term viability of the sector. To promote sustainable horticulture in Pakistan, a number of measures can be taken. These include education and awareness.

Farmers and other stakeholders in the horticulture sector need to be educated about the benefits of sustainable practices, such as the use of organic fertilizers, integrated pest management, and water conservation. Research and development: The government and private sector need to invest in research and development to identify and promote sustainable horticulture practices that are suitable for the local environment and conditions. Policy and regulatory frameworks: The government needs to develop policies and regulations that incentivize and support sustainable horticulture practices, such as subsidies for organic farming, tax breaks for sustainable inputs, and strict enforcement of environmental regulations. Infrastructure development: Infrastructure such as irrigation systems, storage facilities, and transportation networks need to be developed or upgraded to support sustainable horticulture practices.

The government plays a crucial role in promoting sustainable horticulture practices. Here are some ways in which the government can promote sustainable horticulture: Policy and regulatory frameworks: The government can develop policies and regulations that incentivize and support sustainable horticulture practices. For example, the government can provide subsidies for organic farming, tax breaks for sustainable inputs, and strict enforcement of environmental regulations. Research and development: The government can invest in research and development to identify and promote sustainable horticulture practices that are suitable for the local environment and conditions. This can include funding for research institutions and programs that focus on sustainable horticulture practices. Infrastructure development: The government can develop or upgrade infrastructure such as irrigation systems, storage facilities, and transportation networks to support sustainable horticulture practices. This can include investments in water-saving technologies, solar-powered irrigation systems, and better roads to transport crops. Market development: The government can work with the private sector to develop markets for sustainable horticultural products, such as organic fruits and vegetables. This can include promoting the benefits of these products to consumers and providing support for small-scale producers to access markets.

In conclusion, sustainable horticulture has the potential to transform Pakistan’s agriculture sector and promote economic growth under the CPEC. The benefits of sustainable horticulture include reduced input costs, increased crop yields, improved water and soil conservation, and enhanced biodiversity. The CPEC can play a critical role in promoting sustainable horticulture by providing the necessary infrastructure and investment, and by involving all stakeholders in the agriculture sector. By promoting sustainable horticulture, Pakistan can improve food security, protect the environment, and enhance the livelihoods of farmers.

*The writer is PhD Horticulture and currently works as Assistant Professor at the Department of Horticulture, University of Sargodha, Pakistan. He can be reached at ahsanuaf3@gmail.com.*