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"CULTIVATING A GREENER TOMORROW: THE POWER OF ORGANIC FARMING IN JAMMU AND KASHMIR"

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Abstract

Organic farming is a method of farming in which the use of chemical fertilisers, pesticides, herbicides, and growth hormones is restricted to a large extent, and soil fertility is maintained through the use of organic manures, green manures, crop rotation, etc. The purpose of this study is to highlight the role of organic farming in enhancing agricultural sustainability in Jammu and Kashmir. Organic farming is a sustainable method that attempts to utilize as little artificial input as possible and as much of the environment's natural resources as possible. The study examines the situation of organic farming practices in Jammu and Kashmir, looking at how they affect the health of the soil, the availability of water, biodiversity, and farmer livelihoods. The study's key findings indicate that organic farming has the potential to improve agricultural sustainability by boosting soil fertility, saving water resources, maintaining biodiversity, and delivering economic advantages to farmers. The study also examines market access, legislative assistance, public awareness initiatives, and obstacles and possibilities related to the adoption of organic farming in Jammu and Kashmir. Overall, the study highlights the relevance of organic farming as a sustainable agricultural practise that may improve the long-term welfare of farmers and the environment in Jammu and Kashmir.

Keywords: Agriculture, sustainability, organic farming, soil health, water resources, biodiversity.

Introduction

Since the beginning of the industrial age, technology has eased the burden on the agricultural sector and enabled farmers to adopt various methods and techniques to make farming a viable source of income and gainful employment. Organic farming is gaining momentum worldwide as people become increasingly concerned about their health and the environment. In organic farming, non-toxic methods are used to control insect-pests, diseases, and weeds, thereby enhancing the soil's natural resources, including the quality of soil and water. Organic farming reduces the risk of yield failure, stabilises crop production, and enriches people's quality of life. This study attempts to highlight the sustainability of agriculture in Jammu and Kashmir through organic farming. Agriculture is the backbone of Jammu and Kashmir Union Territory. This sector provides direct or indirect employment to approximately 70% of the population of Jammu and Kashmir. Agriculture contributes approximately 65 percent of J&K's revenue, indicating the state's overreliance on agriculture. The Environment Sustainability Index of Jammu and Kashmir is deteriorating, which is of grave concern to scientists and policymakers. Multiple factors

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are responsible for the environmental catastrophe in Jammu and Kashmir. In J&K, the use of fertilisers and other agrochemicals has begun to increase, resulting in a decline in soil health. It is a farming method that maintains the agro ecosystem, including biodiversity and biological soil activities. Particularly in the hilly regions of J&K, organic farming can serve as a key component of the second green revolution.

Organic Forming in Jammu and Kashmir

The farmers of the Union Territory of Jammu and Kashmir have introduced new agricultural technologies throughout the years, but the yield of almost all crops in J&K remains poor. As Jammu and Kashmir has great potential for organic farming, it is necessary to design a systematic method and plan for its growth. Additionally, the demand for organic crops is growing. Organic agriculture is not new in Jammu and Kashmir, as it is performed on over 50,000 hectares of land and the former state had 22,316 hectares of organically certified land. The environment of Jammu and Kashmir, which having optimum meteorological conditions and climatic patterns, gives a great deal of opportunity for organic agriculture in the Union Territory. Previously, Jammu and Kashmir, along with a few other states, was given priority by the national government to develop organic farming on account of its favorable climate and lower fertiliser usage than other states. In J&K, 1180 hectares of land have been designated for organic agriculture, 300 hectares for vegetable production under the urban cluster plan, 380 hectares for horticulture and 500 hectares for the Krishi Vikas Yojana. Approximately 3409 state farmers have been trained in organic farming.

J&K has tremendous potential for organic farming as a big portion of the state is currently under semi-organic agriculture in hilly districts due to the lack of availability of chemical fertilisers and the farmers of these areas hardly apply the chemical fertilizers. Organic vegetables, ginger and turmeric from the district of Reasi, Basmati rice from R. S. Pura, rajmah from Bhaderwah, potatoes from Gurez and Machil, and red rice from Tangdar, Kupwara are the most important organic products in Jammu and Kashmir, and they have the potential to receive higher prices on the market. J&K must explore domestic and international markets for saffron, basmati rice, vegetables, rajmah, spices, and other agricultural products. Farmers in Jammu and Kashmir may take advantage of the rising demand for organic goods. In general, organic agriculture is environmentally beneficial, protects soil health, and increases biodiversity. There is a need to commercialise, scientificize, and organise organic farming in J&K so that farmers may get high profits and farming can become a sustainable source of revenue for farmers. In J&K, the organic agricultural approach has been used since ancient times. It is a system of agriculture whose primary objective is to cultivate the land in a manner that preserves soil health. Modern agriculture has expanded food grain output, but it has caused many problems to the environment and human health. In addition, it has contributed to global warming, producing many illnesses in humans and animals. In addition to harming soil bacteria, fungi, actinomycetes, etc., the uncontrolled use of agrochemicals in soil and on plants not only damaging but has given birth to phenomena such as pest resistance and pest resurgence. Dependence on external inputs such as fertilisers, insecticides, and machinery, among others, has increased rural debt and created dependencies. The number of our



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farmers who use chemical fertilizers and pesticides without discrimination is growing. In order to boost agricultural productivity and manage insect-pests and illnesses, our farmers rely on agrochemicals more and more. Now, individuals are questioning the environmental, economic, and social effects of modern agriculture. Numerous farmers are investigating new agricultural approaches that are more sustainable and productive. Organic agriculture is the only solution that considers all ecological factors. The agricultural production system must preserve a natural balance in order to be sustainable.

Organic farming is market-driven and seeks higher profits. Crop wastes after harvest may be used to their maximum capacity. Due to heightened awareness of food security and environmental safety, organic farming has undergone a significant growth across all crops. Organic farming is expanding annually due to awareness-cum-trainings. Demand for organic goods now exceeds availability. Due to a rise in people's health awareness, the market for organic crops is expanding at a highly rapid rate each year. Organic farming's lower input costs result in greater economic net returns. Organic farming may reduce the impending threat to food security and environmental sustainability posed by COVID-19. A favourable market demand for organic goods would improve the socioeconomic situation of farmers. J&K farmers may achieve wealth via organic farming. J&K need a comprehensive plan to promote organic farming. To ameliorate the issue of climate change, health, and sustainability in Jammu and Kashmir, An integrated approach from government and non-government organisations is needed to promote organic farming.

Initiatives for Agricultural Sustainablity through Organic Farming

In 2013, Ghulam Hassan Mir, the former minister for agricultural production in Jammu and Kashmir, launched a study to start a systematic approach and development plan for organic farming in the state. As the state has a tremendous amount of potential in this area, we will need to make all-out efforts to promote organic farming. Due to the increasing usage of chemical fertilisers, soil fertility is declining; thus, we must practice organic farming. "He emphasised that organic farming is gaining momentum in India, but the sector has been struggling with a lack of awareness, knowledge, and confidence about organic farming and food products among both farmers and consumers, so it is necessary to open a number of institutes in the state that will provide training and awareness programmes on Organic Farming."

In the following years, the central government started the Jammu Kashmir Arogya Gram Yojna programme to promote the cultivation of aromatic plants in one thousand villages in Kathua, Jammu, and Udhampur. Scientists and aroma experts from the Council for Scientific and Industrial Research (CSIR) were supposed to find the land where it could be grown. Science and technology minister Jitendra Singh said that farmers will be able to earn between Rs 1 lakh and Rs 1.5 lakh per acre annually through the scheme. The national govt promised to initially invest more than Rs 25 crore in this initiative. The institution of the Council of Scientific and Industrial Research (CSIR) participated in the study. It was adopted in 10 J&K districts. The CSIR was responsible for providing the farmers with professional instruction and seedlings of up to nine species of medicinal and aromatic plants. Five distinct types of lemongrass (Cymbopogon), rose (Rosa), mint (Mentha), ashwagandha (Withaniasomnifera), and phalsa fruit plant were chosen for J&K. The Times

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of India stated in 2014 that around 305 farmers in Ramban, Doda, Udhampur, Kishtwar, and Kathua cultivating 152.5 acres of land were identified as beneficiaries of the scheme.

During the last two years, the agriculture department has done a terrible job of making this sector grow. In 2020, the Kashmir Agriculture Department created a comprehensive organic market in Srinagar with the intention of providing a market for organic goods and reviving vermin compost culture. Secondly, in Pulwama, the department has just developed a model organic hamlet.

In J&K, several non-government projects to promote organic agricultural methods were also pursued. In 2019, Insha Rasool, a research scholar, commenced organic farming on her family's land rather than of conventional farming, due to a shortage of genuine seeds, Insha faced several difficulties in achieving this goal. Showkat Hussain, a programme officer at the Indo Global Social service group, initiated a second non-governmental initiative (IGSSS). Hussain has been working to promote organic farming in two districts in north Kashmir since 2017. IGSSS opened two farming field schools in two villages in the Bandipora district to teach people how to grow vegetables and rice. They trained 25 mediators and address the issues of farmers. Tahir Maqsood Wani took an additional initiative in 2017. He began organic farming with his agricultural scientist companion. They got a huge response from farmers, but he had to move his work to Punjab because of "unprecedented circumstances." But these efforts were not enough to boost and expand organic farming in J&K on a large scale.

Conclusion

For improving agricultural sustainability in Jammu and Kashmir, organic farming has enormous potential. The study shows that this environmentally friendly method enhances farmer livelihoods, protects biodiversity, conserves water resources, and increases soil health. Organic farming reduces the environmental dangers connected to conventional agriculture by lowering reliance on synthetic inputs and adopting natural agricultural practices. However, the region needs the combined efforts of a number of stakeholders, including the government, farmers, researchers, and consumers, in order to successfully implement organic farming. Accelerating the adoption of organic agricultural practices requires assistance from policymakers, capacity-building programmes, awareness campaigns, and enhanced market access. Adopting organic farming in Jammu and Kashmir may not only preserve the ecological balance but also guarantee the region's agricultural sector's long-term viability and development.

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