The Public and Private Benefits from Organic Farming in Pakistan

Organic agriculture can benefit both the environment and farmers in Pakistan. Growing organic crops can be at least as profitable as growing conventional crops because of lower input costs and higher output prices. For instance, in the Punjab area, input costs per hectare in organic wheat and rice farms are 20% and 10% lower than their conventional counterparts. While yields in organic farms also tend to be lower than conventional farms, these farms do better in terms of soil health. Reducing subsidies for conventional farming, more careful zoning, and market development would encourage more sustainable farming practices in Pakistan.

Background

Agriculture is an important part of Pakistan’s economy. It contributes 21 per cent to the country’s GDP and employs more than 44 per cent of its total labor force. Current farming practices in Pakistan rely heavily on the use of chemicals. This has led to a decline in soil fertility, which represents a serious threat to future food security.

Organic agriculture is one solution to the increasing environmental costs faced by farmers. It is a well-defined method of production that minimizes the use of costly synthetic fertilizers, pesticides and herbicides. It avoids nutrient exploitation and improves soil quality. Markets for organic produce exist in Pakistan and many farmers have already adopted the approach.

Examining organic agriculture

In order to assess the economic viability of organic agriculture in Pakistan, Muhammad Iftikhar ul Husnain and Muhammad Khan, from COMSATS Institute of Information Technology, compared organic and conventional wheat and rice production, in terms of yields, costs, soil health and profits in the Sheikhupura, Gujranwala and Okara districts in Punjab. 220 organic and 224 conventional farmers were interviewed and the status of three soil nutrients (nitrogen, potassium and phosphorous) recorded. On average, conventional farmers in the study area owned 4.6 ha of land, while organic farmers owned 4 ha of land. Organic farmers relied on organic fertilizers and pesticides, while conventional producers applied pesticides like Logran, Bernoxil, Safinor and Proton. On average, organic farmers were better educated.

Organic Agriculture in Punjab, Pakistan

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Costs and benefits of organic farming

The average organic farm in the study area produced 14% less wheat and 44% less rice per hectare, in comparison to the average conventional farm. However, organic crops were at least as profitable as conventional crops. For instance, the average profit per hectare of organic wheat farming in Punjab, Pakistan is PKR 30,482, which is higher than that of conventional wheat farming (PKR 28,216). This is because of the higher prices obtained for organic produce in niche markets (often double that of conventional produce) and because organic farming is less costly. Conventional fertilizer costs are, on average, more than twice as much as those for organic farms. Water costs for organic agriculture are about the same as those for conventional agriculture, while labor costs are higher.

Organic farms have healthier soils

Organic farming is better for soil health. Soils analysis shows that the availability of key nutrients is significantly higher in organic fields than in conventional fields. Overall, organic farms tend to better conserve soil fertility and system stability than conventional farms.

Challenges and Recommendations

Markets for organic products in Pakistan are under-developed, organic farming inputs are not easily available and farmers are constrained in the pest control methods they can use. In addition, there is little institutional support for organic farming. The lack of zoning regulations for organic farming, in particular, can lead to pests migrating from conventional to organic fields, which can severely damage organic crops. Organic agriculture can be economically viable and is better for the health of agricultural land. The labor-intensive nature of the organic farming also provides more employment for rural unskilled workers, especially women. By switching to organic farming Pakistan can also save valuable foreign exchange, which is currently used to import chemical fertilizers and pesticides, and direct it towards other social needs. However, for organic agriculture to succeed in Pakistan, policies need to address key issues, such as subsidies for conventional inputs, land zoning and markets for organic produce.