

Commentary

The organic farming in the transition towards sustainable agriculture

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DESCRIPTION

Organic farming is a sustainable, economically viable, and socially acceptable method of food production. The impact of the practise on the environment, international markets, and local and global food security are all examined in this report. The many tactics and policies used for organic agriculture in India were reviewed using first-hand expertise from throughout India and the world. The scenarios presented here represent millions of individuals from all walks of life who have adopted this agricultural technique of assuring food safety. Animal manures, off-farm organic wastes, crop residues, green manures, and bio-fertilizers are all used in organic farming. It is a viable alternative to traditional agricultural methods for reducing negative externalities. Despite rising demand for organic hog meat, farmers are under social pressure to stay conventional. As a result, social relations between farmers must be considered in order to comprehend the spread of organic farming. Conservation tillage is being pushed as a way to boost carbon reserves in arable soils Agriculture has a significant impact on the environment, and it has the potential to maintain biodiversity, diversify and improve landscape quality, as well as reduce agricultural biodiversity has created specialised measures in response to rising environmental concerns, such as the “Organic Farming” (OF) Measure, which is implemented under the Rural Development Program. The use of alternative agricultural techniques, particularly in water-scarce places, is crucial for the sector’s long-term viability. Organic agriculture provides a chance to save freshwater while also enhancing biodiversity and human health. A dynamic research of the linkages between organic farming dissemination and freshwater sustainability is limited, despite literature efforts on the driving causes of organic farming and the influence of the latter on freshwater resources. When comparing how soil health changes

between organic and conventional agricultural methods, meta-analysis is frequently utilised. However, the growing primary literature on organic farming now allows for direct evaluation of organic farming systems’ Best Management Practises (BMPs) on soil health benefits. As a result, the primary goal of this meta-analysis was to look at the impact of BMPs on soil health in organic farming systems, such as organic amendments, conservation tillage, and cover cropping. Soil deterioration and biodiversity loss have come from the overuse of chemical fertilisers in intensively managed agricultural areas across the world. This has fuelled a surge in interest in environmentally friendly practises like organic farming. Until far, the majority of research examining the influence of conventional and organic management on soil biodiversity and functioning have concentrated on arable farming, with only a few reports on vegetable production accessible. Vegetable farming is of special importance since the management intensity is often extremely high, and the demand for vegetable products is growing. Because they occupy numerous trophic levels in soil micro-food webs and play a critical role in nutrient cycling, insect control, and microbial regulation, soil nematodes are effective indicators of management intensity on soil ecosystem functioning.

Organic food production is becoming increasingly important owing to its superior environmental performance compared to traditional farming. Organic farming is a system that is conducive to long-term success. Because appropriate nutrition promotes growth and development, avoids illnesses, and boosts productivity and life expectancy, functional foods are recognised and listed as one of the essential state policies in many nations, especially industrialised ones. The number of people who want healthier organic meals is growing every day, so it is becoming ever more important to find the relationship between organic farming and functional foods.

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