

Green Kerala

Unveiling the Scope and Significance of Natural and Organic Farming

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In recent years, Kerala, the lush south western state of India, has witnessed a growing movement towards natural and organic farming. This shift marks a significant departure from conventional farming methods and signals a deeper connection to sustainable

and eco-friendly agricultural practices. As the world grapples with climate change, environmental degradation, and health issues linked to food production, Kerala's embrace of natural and organic farming stands as a beacon of hope and innovation.

Understanding Natural and Organic Farming

Natural Farming: This approach emphasizes minimal human intervention and promotes farming methods that mimic natural ecosystems. Pioneered by Masanobu Fukuoka in Japan, natural farming involves no-till, no chemical fertilizers or pesticides, and a strong focus on biodiversity. It relies on natural inputs and processes, such as composting, green manure, and crop rotation.

Organic Farming: Similar to natural farming, organic farming avoids synthetic chemicals and genetically modified organisms (GMOs). Instead, it uses organic fertilizers, such as compost and manure, and natural pest control methods. Certification standards for organic farming ensure that products meet strict guidelines, offering consumers a trustworthy label for sustainably produced food.

Why Kerala?

Kerala's unique geographical and cultural context makes it an ideal candidate for natural and organic farming:

1. **Rich Biodiversity:** Kerala's diverse flora and fauna provide a fertile ground for implementing biodiversity-friendly farming practices. The Western Ghats, a UNESCO World Heritage Site, are home to numerous endemic species, and maintaining this biodiversity is crucial for ecological balance.
2. **Cultural Heritage:** Traditional farming practices in Kerala have long embraced sustainable methods. The state's

- agricultural heritage, including the famous Pokkali rice cultivation in the coastal areas, is naturally aligned with organic principles.
3. **Health Consciousness:** Kerala boasts a high literacy rate and a well-informed population that is increasingly aware of health and environmental issues. The demand for organic products has surged as consumers seek safer and healthier food options.
4. **Government Support:** The Kerala government has been proactive in promoting natural and organic farming. Initiatives such as the "Organic Kerala

Mission" aim to convert a significant portion of the state's farmland to organic by

providing training, subsidies, and certification support to farmers.

Benefits of Natural and Organic Farming in Kerala

1. **Environmental Sustainability:** By avoiding synthetic chemicals, natural and organic farming reduce soil and water pollution, enhance soil fertility, and promote biodiversity. These practices are crucial for preserving Kerala's fragile ecosystems.
2. **Health Benefits:** Organic produce is free from harmful pesticides and chemical residues, making it safer for consumers. Additionally, organic farming supports healthier diets by providing nutrient-rich and chemical-free food.
3. **Economic Viability:** Although the transition to organic farming can be

challenging, it offers long-term economic benefits. Organic products often fetch higher market prices, and the growing demand for organic food opens up new market opportunities for farmers.

4. **Resilience to Climate Change:** Natural and organic farming practices enhance soil health and water retention, making crops more resilient to extreme weather conditions. This resilience is vital for farmers in Kerala, who face the challenges of erratic monsoons and changing climate patterns.

How the Integrated Farming System (IFS) Eases the Adoption of Organic and Natural Farming?

Kerala has a longstanding tradition of implementing diverse integrated farming system models tailored to specific locations and their suitability. Incorporating multiple components within these systems fosters mutually beneficial interactions and sustains ecosystem balance. This approach facilitates the cycling of farm resources, where the output of one component becomes the input for another. This closed-loop system ensures nutrient recycling and reduces dependence on chemical fertilizers.

Kerala boasts a unique tradition of homestead farming, an integrated farming system distinguished by the diverse combination of elements in and around their homes. Usually, there is minimal use of chemical inputs in such systems as they are mostly grown to be consumed by the family. Through the use of newer technologies and scientific knowledge, they can be easily converted to organic or natural farming. Multi-tier or multi-storied cropping system with coconut as main crop is also popular integrated cropping model in Kerala with efficient utilisation of space and sunlight. These diversified farming systems has the potential to be part of sustainable natural or

organic farming practices without compromising productivity.

By incorporating multiple farming activities, IFS promotes biodiversity, which is a cornerstone of natural farming. Diverse crops and livestock create a balanced ecosystem that naturally controls pests and diseases. This reduces the need for synthetic pesticides and fosters a healthier farming environment. Integrating different farming practices enhances soil health through natural fertilization and reduced soil erosion. Crop residues, animal manure, and cover crops add organic matter to the soil, improving its structure, fertility, and water-holding capacity. Healthy soil is fundamental to successful organic and natural farming.

Natural and organic farming relies on ecological pest management. IFS supports this by creating a habitat for beneficial organisms and natural predators. Livestock can help control weeds and pests, while diverse crops can break pest and disease cycles, reducing the reliance on chemical interventions. Thus, IFS helps put the concept of agro-ecological engineering into practice. IFS enhances the resilience of farms to climate change by diversifying production systems. Integrated

farms can better withstand extreme weather events and shifting climate patterns, ensuring continuous production and reducing the risk of crop failure. This resilience is crucial for the sustainability of organic and natural farming. IFS diversifies income sources, making farms more economically resilient. Farmers can generate income from various activities, such as selling crops, milk, eggs, fish, and timber. This financial stability encourages farmers to invest

Success Stories from Kerala

Numerous success stories highlight the positive impact of natural and organic farming in Kerala. For instance, the village of Kanjikuzhi in Alappuzha district has transformed into an entirely organic farming community. By adopting organic methods, farmers in Kanjikuzhi have seen improved soil health, higher yields, and increased income from organic produce.

The Way Forward

While Kerala has made significant strides in promoting natural and organic farming, there is still much work to be done. The state needs to continue supporting farmers through education, subsidies, and market access. Encouraging research and innovation in sustainable agriculture will also be crucial in addressing the challenges of pest management, soil fertility, and crop diversity.

in organic and natural farming practices, which might initially require more labour and time. Adopting IFS encourages farmers to share knowledge and resources. Communities practicing integrated farming often form networks to support each other in adopting organic and natural farming methods. This collective approach provides farmers with the confidence and practical know-how to transition successfully.

Similarly, the PDS Organic Spices initiative in Idukki district has empowered small farmers to cultivate organic spices like cardamom, black pepper, and turmeric. This collective effort not only preserves the environment but also enhances the livelihoods of local farmers through premium pricing and international market access.

In conclusion, the significance of natural and organic farming in Kerala extends beyond agriculture. It embodies a holistic approach to sustainability, health, and economic development. As Kerala continues to champion these practices, it sets an inspiring example for the rest of India and the world, proving that a harmonious relationship with nature is not only possible but also essential for our future.