



CRISPR-Cas gene-editing to Disease Treatment in Clinics

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Article History

Received: 4. 11.2023

Revised: 9. 11.2023

Accepted: 15. 11.2023

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INTRODUCTION

Organic farming, also known as ecological farming or biological farming, is an agricultural system that uses fertilizers of organic origin such as compost manure, green manure, and bone meal and places emphasis on techniques such as crop rotation and companion planting.

Worlds

The world's population is predicted to expand to approximately 10 billion by 2050. It is expected that in a situation of modest economic growth, this will boost agricultural demand up to 50%, in comparison to 2013 (FAO 2017, The future of Food and Agriculture– Trends and challenges). Expanding food production and economic growth have often come at a heavy cost to the natural environment. There has been significant decrease in forest cover and biodiversity over the years. Groundwater sources are also getting depleted rapidly. High-input, resource-intensive farming systems have caused massive deforestation, water scarcity, soil depletion and high levels of greenhouse gas emissions.

A transformational process towards 'holistic' approaches such as agro-ecology, agro-forestry, climate-smart agriculture, and conservation agriculture is a necessity. Practices such as agro-ecology, including Natural Farming, result in better yields without compromising the needs of the future generations. They are advocated by FAO and other international organizations.

Chhattisgarh

In recent years, Chhattisgarh has witnessed a commendable shift towards organic farming, reflecting a growing awareness of sustainable agricultural practices. The state's farmers are increasingly embracing organic methods, fostering a healthier environment and producing high-quality crops.

Chhattisgarh's agricultural landscape is evolving, with a notable surge in organic farming initiatives. This shift is fueled by a desire to reduce reliance on chemical inputs, promote biodiversity, and address environmental concerns. Farmers are recognizing the long-term benefits of organic practices in preserving soil fertility and ensuring food safety.

One key aspect of the current scenario in Chhattisgarh's organic farming is the adoption of traditional and indigenous farming techniques. Farmers are rediscovering age-old practices that are inherently sustainable, contributing to the preservation of local biodiversity. This resurgence is not only economically viable but also culturally significant, as it strengthens the connection between communities and their agricultural heritage.

The state government has played a pivotal role in supporting organic farming initiatives. Various schemes and subsidies are in place to encourage farmers to make the transition. Training programs on organic farming methods are also being organized, empowering farmers with knowledge and skills to make informed choices.

The adoption of organic farming in Chhattisgarh is not without its challenges. Farmers face the need for initial investments, a transition period where yields might be lower, and the establishment of reliable markets for organic produce. However, the long-term benefits, including improved soil health,

reduced environmental impact, and increased market demand for organic products, outweigh these challenges.

Consumer awareness and preferences are significant factors driving the demand for organic produce. People are becoming more conscious of their food choices, opting for products that are free from harmful chemicals and pesticides. This shift in consumer behavior has created a niche market for organic farmers in Chhattisgarh, encouraging more to join the movement.

Benefits

- Improve Yield..
- Increased Farmers' income..
- Minimize cost of production and increase farmer's income.
- Ensure better health.
- Employment Generation.
- Eliminate the application of chemical inputs.
- Environment Conservation.
- Reduce Water Consumption.

CONCLUSION

In Chhattisgarh's organic farming landscape is evolving positively, reflecting a harmonious blend of traditional wisdom and modern sustainability practices. As farmers continue to embrace organic methods, supported by government initiatives and growing consumer demand, Chhattisgarh is poised to become a model for sustainable agriculture in the region.