

## Overview of Greenhouse Farming in India

A.Mariselvammurugan\*<sup>1</sup>, M.Santhosh Kumar<sup>2</sup>, S.Manickavasagam<sup>3</sup> and M.Ponmani<sup>4</sup>

<sup>1</sup>M.F.Sc Research Scholar, Kerala University of Ocean Studies, Panangad, Kerala

<sup>2</sup>M.F.Sc Research Scholar, Central Institute of Fisheries Education, Mumbai, Maharashtra

<sup>3</sup>Assistant Professor, TNJFU – Directorate of Sustainable Aquaculture, Thanjavur Centre for Sustainable Aquaculture, Thanjavur, Tamil Nadu

<sup>4</sup>Ph.D. Research Scholar, Department of Aquatic Environmental Management, TNJFU – Fisheries College and Research Institute, Thoothukudi, Tamil Nadu

### SUMMARY

India's agricultural landscape is evolving rapidly to meet the demands of a changing environment and a growing population. Greenhouse farming, also known as poly house farming, has emerged as a sustainable solution to enhance food production while mitigating the challenges posed by traditional farming methods. This blog explores the significance of greenhouse agriculture in India, highlighting its benefits such as year-round cultivation, protection from harsh weather conditions, and the ability to grow non-native crops. By adopting modern techniques like automatic irrigation and hydroponics, India's commercial greenhouse industry is experiencing exponential growth, offering opportunities for increased crop yields, water efficiency, and land conservation. Despite initial investment costs, government subsidies and increasing demand for organic produce make greenhouse farming a profitable venture for farmers. With a focus on crop diversity, technological advancements, and environmental sustainability, greenhouse farming is poised to revolutionize India's agricultural sector, ensuring food security and economic prosperity in the face of climate change.

### INTRODUCTION

India's agriculture has fed a sizable population for millennia, supporting millions of people financially. However, the changing environment and rising demand for food require new farming techniques. To address the increased need for food, farmers are turning to ecologically friendly new practices like greenhouse agriculture. This blog will explore India's intriguing greenhouse farming industry, which uses a creative and sustainable method that has the potential to revolutionize agriculture. In India's agricultural environment, greenhouse farming often referred to as poly house farming, is an innovative approach that has gained major relevance. In India, greenhouse farming is changing the country's agricultural environment, promoting sustainable food production, and employing cutting-edge technology to address issues brought on by traditional farming methods. The sector of efficient and sustainable agriculture has also undergone a change with the advent of poly house farming. The practice of growing food in controlled surroundings, protected from pests and unfavorable weather, has revolutionized food production. Greenhouse cultivation has given farmers in India, where agriculture is essential to the country's economy and millions of people's livelihoods, new opportunities.

### What is greenhouse farming?

A regulated climate is created inside a glass or plastic structure to raise crops in greenhouse agriculture, a modern agricultural technique. This protective enclosure lets sunlight in to boost the crops' growth while shielding them from pests and external climate changes.

**Greenhouse farming: its significance and benefits** there are multiple reasons why poly house farming is so important in Indian agriculture.

1. It makes cultivation possible all year round. Cultivating perennial plants has some advantages. It lessens reliance on seasonal variations, for example.
2. It guards against harsh weather conditions for crops. This is so that the plants are protected from extreme weather, including storms, rain, and wind, as the greenhouse contains all the plants. A steady and consistent yield is thus guaranteed as a result.
3. It helps crops that aren't indigenous to the area to grow. For instance, if you live in a cooler climate, you can produce crops that do better there. The amazing capacity of greenhouses to develop such unusual kinds opens up new opportunities for agriculture.

Given the significance of greenhouses in agriculture, it is clear that these cutting-edge techniques are essential to maintaining agricultural sustainability and food security in the face of climate change.

### India's Greenhouse Technology



India has used contemporary greenhouse farming techniques to increase the output of its agriculture. Modern methods such as automatic irrigation, hydroponics, and climate control systems provide ideal growing conditions for crops.

### Benefits of Farming in Greenhouses

Benefits of greenhouse farming include higher crop yields, less reliance on chemicals, efficient water use, and lower land use. For regions that are sensitive to climate change, greenhouse farming serves as an ideal barrier against natural calamities. India may benefit from greenhouse farming in many ways, as it is a climate-resilient and sustainable farming method. Better crop yields, water efficiency, less reliance on chemicals, and land conservation are a few of them.

### India's Commercial Greenhouse Market

India's commercial greenhouse industry has grown at an exponential rate. The year-round increase in demand for fresh fruit has made commercial greenhouse farming an attractive venture for investors and entrepreneurs.

### Beginner's Guide to Greenhouse Farming

Beginners may find greenhouse agriculture frightening. However, the rewards might equal the challenges. You can satisfy the needs of a populace that has never previously had access to such an extraordinary range of unusual goods. You already know that this means there is more opportunity for profit! Therefore, get to know the fundamentals of crop selection, greenhouse technology, and monitoring systems as soon as possible. Undoubtedly, acquiring such proficiency or skill is necessary before beginning greenhouse farming.

### India's Greenhouse Farming Subsidy or Cost

although the initial cost of greenhouse growing can be high, there are several government programs that provide subsidies in an effort to encourage this productive and environmentally friendly form of farming. It's important to familiarize yourself with various subsidies for financial planning, such as the "Greenhouse Farming Subsidy" program.

### Types of Crops Grown in Greenhouses

you may grow a wide variety of plants in greenhouses, including flowers like roses and carnations and crops like tomatoes, cucumbers, and peppers. Comprehending the distinct requirements of every crop is vital for efficacious greenhouse farming.

### Is India's Greenhouse Farming Profitable?

Greenhouse agriculture can be quite profitable if it is run well. It's an appealing alternative for farmers because of the possibility for exports and the ability to command premium prices for off-season goods. Consequently, the

secret to realizing the full economic potential of this cutting-edge agricultural technique in India is to cultivate crops that are profitable in greenhouses.

### India's Top Crops for Greenhouse Farming

In India, some crops are especially well-suited for greenhouse farming. Exotic veggies, herbs, and expensive flowers are a few examples of products that are in high demand both domestically and internationally.

### Growing Organic Food in Greenhouses

Growing popularity in greenhouse farming is organic farming since more people are becoming aware of sustainable agriculture. This procedure guarantees that produce is free of chemicals, satisfying the growing market for organic goods.

### Vast-Area Greenhouse Agriculture



Crops are extensively cultivated in large enclosed spaces as part of large-scale greenhouse farming. This strategy greatly aids in supplying the nation's food needs while also satisfying commercial needs. Meeting the many demands indicates that the government is also interested in it. With the help of training programs and government incentives, you can equip yourself with both financial strength and knowledge. This will therefore further empower you to satisfy the substantial demand and propel your company's growth to previously unheard-of levels.

### Comparing Traditional and Greenhouse Agriculture

Higher yields, greater crop protection and control, and less water usage are all benefits of poly house farming over traditional open-field farming. But it does demand more upfront cash and technological know-how.

### CONCLUSION

The agricultural sector in India has seen a radical transformation in crop cultivation and food security due to greenhouse farming. With the government's backing of modern, environmentally friendly farming practices, farming will play a major role in India's agricultural future. Farmers, customers, and the environment can all benefit from the rich and healthy farming ecosystem that this technology can build.

### REFERENCE

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