



## Hydroponic Farming: A New Concept

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### Is hydroponics the future of food without soil?

To put it simply, hydroponics is the practice of growing plants without soil in liquid, sand, or gravel with additional nutrients. Therefore, the technology of hydroponics is assisting farmers in producing food in areas with poor soil, small enclosures, and even locations where farming was previously impractical.



### Market Potential of Hydroponic farming in India

From 2020 to 2027, the hydroponics market in India is projected to expand at a Compound Annual Growth Rate of 13.53 percent. By contrast, the hydroponics business is expected to grow by only 6.8% globally.

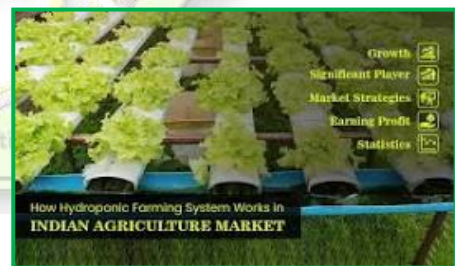
### What is the use of hydroponics in agriculture?

Hydroponics and sustainable agriculture: The use of hydroponics is proposed as a way to mitigate the effects of climate change, lessen environmental harm, and stop the extinction of species brought on by overuse and intense farming. It also enables a more sensible use of water, a resource that is becoming increasingly limited.



### Is hydroponic farming successful in India?

Hydroponic farming has a higher beginning cost than traditional farming techniques, but it also has a larger potential profit. Hydroponic farming presents an appealing return on investment due to its ability to produce larger yields, quicker crop cycles, and organic produce that is valued more highly.



### Why hydroponics is better than soil?

Hydroponic farms require no soil and occupy much less land. They can be cultivated practically anywhere, even in arid climates and crowded cities. Plants grown hydroponically are shielded from most diseases, weeds, pests, and pollution. This translates into considerably lower chances of food recall and more consistent yields.

### What is the future of hydroponics in India?

Estimates place the hydroponics industry in India growing at a CAGR of 13.53% between 2022 and 2029.



That is a significant growth! The potential of hydroponics to revolutionize Indian agriculture is becoming more and more apparent. There are steps being taken to realize this dream.



### **Disadvantages of Hydroponic Farming**

- Expensive Set-Up. A hydroponic system's setup costs are high.
- Dependency on a Constant Power Source or System.
- Advanced Upkeep & Supervision.
- Waterborne Disease Propensity;
- Need for Specialized Knowledge;
- Contentious Character of Organic Labels.

### **What is the success of hydroponics**

Consistently monitoring and maintaining your system is a crucial strategy for success in hydroponics. This is making sure that your plants are receiving the ideal growing circumstances by regularly monitoring and modifying the pH level, nutrition levels, water temperature, and water flow.

### **What is the scope of hydroponics?**

Hydroponic Farming Scope in New India: In India, hydroponic farming has the potential to be a significant force in the agriculture sector. The climate that is favorable to the expansion of hydroponic farming has been established by government investments in research and development.

### **Can hydroponics be organic?**

In reality, in 2010, the NOP received an official recommendation from the National Organic Standards Board (NOSB) encouraging action to remove hydroponic techniques from organic certification. As of right now, nothing has changed, and vegetables cultivated hydroponically can still be certified organic in the United States.

### **Is hydroponic farming chemical free?**

Fresh veggies and chemical-free crops are produced through hydroponic and organic gardening. Both agricultural methods adhere to the notion that wholesome, safe food is essential.