

## Organic Farming: Concept

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### SUMMARY

Organic farming can be defined as an agricultural process that uses biological fertilisers and pest control acquired from animal or plant waste. Organic farming was actually initiated as an answer to the environmental sufferings caused by the use of chemical pesticides and synthetic fertilisers. In other words, organic farming is a new system of farming or agriculture that repairs, maintains, and improves the ecological balance.

### INTRODUCTION

Organic farming system in India is not new and is being followed from ancient time. It is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (biofertilizers) to release nutrients to crops for increased sustainable production in an eco-friendly pollution free environment. As per the definition of the United States Department of Agriculture (USDA) study team on organic farming “organic farming is a system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection”. FAO suggested that “Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs”.

### Requirements of organic farming

With the increase in population our compulsion would be not only to stabilize agricultural production but to increase it further in sustainable manner. The scientists have realized that the ‘Green Revolution’ with high input use has reached a plateau and is now sustained with diminishing return of falling dividends. Thus, a natural balance needs to be maintained at all cost for existence of life and property. The obvious choice for that would be more relevant in the present era, when these agrochemicals which are produced from fossil fuel and are not renewable and are diminishing in availability. It may also cost heavily on our foreign exchange in future.

### The key characteristics of organic farming

- Protecting the long term fertility of soils by maintaining organic matter levels, encouraging soil biological activity, and careful mechanical intervention
- Providing crop nutrients indirectly using relatively insoluble nutrient sources which are made available to the plant by the action of soil micro-organisms
- Nitrogen self-sufficiency through the use of legumes and biological nitrogen fixation, as well as effective recycling of organic materials including crop residues and livestock manures
- Weed, disease and pest control relying primarily on crop rotations, natural predators, diversity, organic manuring, resistant varieties and limited (preferably minimal) thermal, biological and chemical intervention
- The extensive management of livestock, paying full regard to their evolutionary adaptations, behavioural needs and animal welfare issues with respect to nutrition, housing, health, breeding and rearing
- Careful attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats



### Advantages of Organic Farming

**Economical:** In organic farming, no expensive fertilisers, pesticides, or HYV seeds are required for the plantation of crops. Therefore, there is no extra expense.

**Good return on Investment:** With the usage of cheaper and local inputs, a farmer can make a good return on investment.

**High demand:** There is a huge demand for organic products in India and across the globe, which generates more income through export.

**Nutritional:** As compared to chemical and fertiliser-utilised products, organic products are more nutritional, tasty, and good for health.

**Environment-friendly:** The farming of organic products is free of chemicals and fertilisers, so it does not harm the environment.

### Disadvantages of Organic Farming

**Incompetent:** The major issue of organic farming is the lack of inadequate infrastructure and marketing of the product.

**Less production:** The products obtained through organic farming are less in the initial years as compared to that in chemical products. So, farmers find it difficult to accommodate large-scale production.

**Shorter shelf life:** Organic products have more flaws and a shorter shelf life than that of chemical products.

**Limited production:** Off-season crops are limited and have fewer options in organic farming

### CONCLUSION

With greater political will and investment in research, extension and marketing infrastructure more of this potential could be realized. Therefore to feed the world's hungry and poor and to ensure present and future food security right policies, increased public and private investments and technologies, knowledge and capacity building, grounded in sound ecosystem management and harmony between organic farming and food security goals are required.

### REFERENCE

[https://agritech.tnau.ac.in/org\\_farm/orgfarm\\_introduction.html](https://agritech.tnau.ac.in/org_farm/orgfarm_introduction.html)