

## Organic Farming: Its Objectives, Principles, Types, Techniques, Favourable Circumstances & Downsides.

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### **Introduction:-**

- Organic farming is that the production of crops and farm animals while not the employment of artificial chemicals and inorganic fertilizers suggests that cultivation of crops in natural ways.
- This method involves the utilization of biological materials, avoiding synthetic substances to require care of soil fertility and ecological balance thereby minimizing pollution and wastage.

### **Organic Farming :-**

Organic farming system in India isn't new and is being followed from past .The term organic farming was initial employed by lord northbourne in the book of look at the land. Organic agriculture in Asian nation started long back 1900 by Sir Albert Howard, a British Agronomist ,in a native village of north Asian nation and Organic farming initial coined by North Bourne in 1946.The state of Sikkim associate degreeed Uttaranchal Pradesh declared an organic state.

Organic farming system in Asian nation isn't new and is being followed from past. It's however of farming system that primarily aimed toward cultivating the land and raising crops in such a way, on keep the soil alive and in physiological condition by use of organic wastes (crop, animal and farm wastes, aquatic wastes) associate degree biological materials in conjunction 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 might even be a system that avoids or largely excludes the utilization of synthetic materials such as fertilizers, pesticides, hormones, feed additives etc and to the maximum extent feasible depend on crop rotations, crop residues, animal manures,

off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection”.

FAO recommended that “Organic agriculture might even be a singular production management system that promotes and enhances agro-ecosystem health, as well as variety, biological cycles and soil biological activity, and usually often accomplished by victimisation on-farm agronomic, biological and mechanical ways in exclusion of all artificial off-farm inputs”

**Key Facts:-**

- It’s a farming methodology that involves growing and nurturing crops while not the utilization of artificial primarily based fertilizers and pesticides. Also, no genetically modified organisms are permitted.
- It depend upon the ecologically balanced agricultural principles like crop rotation, manure, organic waste, biological blighter management, mineral and rock additives.
- Organic farming makes use of pesticides and fertilizers if they're thought about natural and avoids the utilization of varied petrochemical fertilizers and pesticides.
- Crop rotation is one amongst the constituents of this type of farming during this methodology of farming an excellent emphasis is laid on maintaining the health of the soil by crop rotation.
- After one crop, the farmers grow or cultivate leguminous plants on that land with other crops for recharge or fill the soil with atmospheric Nitrogen which may be a crucial mineral required for bumper crop production.
- These leguminous plants through their roots nodules fix Nitrogen into the soil to form it fertile once more.

**Main crops organically grown in India :-**

1. Cereals	Paddy,maize, wheat
2. Pulses	Redgram,blackgram ,greengram, bengal gram
3. Spices	Cardamom ,black pepper ,ginger ,turmeric clove , vanilla
4. Vegetables	Okra ,brinjal ,tomato,potato,onion,garlic

**Objectives of organic farming:-**

- To seek out the presence of chemical contaminants in conventional vs organically big crops.
- Promote a lot of usage of natural pesticides.
- Management pests, diseases and weeds.
- Cultivate the soil in right time in right manner.
- To push sensible soil structure, texture and fertility.
- To grief, read summary of organic agriculture.
- To check regarding the benefits and downsides of organic farming.
- To review the worldwide and indian situation of organic products.
- To seek out corporation dealing in organic products.
- To check the market scenario of organic products India.
- To check SWOT analysis of organic products in India.
- To seek out the opportunities and challenges of organic products in India.
- Turn out food with higher organic process / nutritional quality.
- Work with the natural system.
- Maintain and increase soil fertility.
- Use renewable resources as so much as attainable.
- Avoid pollution.
- Enable satisfaction to an agricultural producer.
- To integrate completely different farming systems like dairy farms, poultry, livestock, fishery, horticulture, sericulture, apiculture etc. with agricultural crop production.
- To extend farm resources use potency (land, labour and production/by-products) thus on increase farm financial gain and profitable employment opportunity.
- To push multi-cropping (out of the entire cropped areas of 2,65,816 ha only 46,697 ha (18%) is sown more than once) , for multi-layered crops of measure thus on sustain land productivity.
- To take care of environmental quality and ecological stability.

**Principles of organic farming:**

- 1 Principle of health.
- 2 Principle of ecology.
- 3 Principle of fairness.
- 4 Principle of care.

**The Principle of Health:-** Organic agriculture ought to sustain and enhance the health of soil, plant, animal, human and planet along and inseparable.

**The Principle of Ecology:-** Organic agriculture ought to supported living ecological systems and cycles, work with them, emulate them and facilitate sustain them.

**The Principle of Fairness:-** Organic agriculture ought to build upon relationships that guarantee fairness with relation to the common environment and life opportunities.

**The Principle of Care:-** Organic agriculture ought to managed during a preventative and accountable manner to protect the health and well-being of current and future generations and thus the environment.

**Types of Organic Farming:-**

- 1. Pure organic farming :** - It involves the utilization of organic manures and biopesticides with complete dodging of inorganic chemicals and pesticides.
- 2. Integrated organic farming:-** It includes integrated nutrients and blighter management. It is the kind of farming during which production of crops from natural resources has the whole nutritious price and manages to forestall the crop or plants from the pests.
- 3. Integration of various farming systems:-** Integration of various farming systems involves many alternative elements of farming like poultry, mushroom production, goat rearing, and pool at the same time with regular crop elements.

**Techniques:-**

**Crop Rotation:-**

- It's the technique to grow numerous varieties of crops within the same space, consistent with the various seasons, during a sucessive manner.

**Green Manure:-**

- It refers to the dying plants that square measure uprooted and became the soil to form them act as a nutrient for the soil to extend its quality.

#### **Biological tormentor Control :-**

- With this methodology , we have a tendency to use living organisms to manage pests with or while not employment of chemicals.

#### **Compost :-**

- Extremely made in nutrients, it's a recycled organic matter used as a fertiliser within the agricultural farm.

#### **Mulching :-**

- Mulching suggests that covering the bottom with a layer of loose material like dry grass, compost, straw, leaves, or crop manures.

#### **Vermicomposting:-**

- Vermi compost may be a stable fine granular organic matter ,when supplemental to soil and provides passage to air.

#### **Favourable Circumstances and Downsides of Organic Farming:-**

##### **Advantages / Favourable circumstances of organic farming :-**

- It creates higher natural levels of resistance to pests and illness.
- Organic farming permits for specialization opportunities.
- It helps to keep up environmental health by reducing the extent of pollution.
- It helps keep agricultural production at a property level .
- Organic farmers will usually produce their own fertilizers at their farming location.
- It helps to enhance the soil health.
- It ensures optimum utilization of natural resources for brief resources term profit and helps in protective them for future generation.
- It not solely saves energy for each animal and machine ,but conjointly reduces risk of crop failure.
- It improves the soil physical properties like granulation ,good tilth,good aeration ,easy root penetration and improves water holding capability and reduces erosion.
- It controls pests and diseases while not harming the surroundings.

- It improves the chemical properties like offer supply and retention of soil nutrients ,reduces nutrient loss into water bodies and surroundings and promotes favourable chemical reactions.
- It reduces human and animal health hazards by reducing the extent of residues within the product.
- Organic food style is best than typical .
- Organic farming doesn't leach any harmful chemicals into waterways .
- Eliminating the employment of synthetic fertilizers and pesticides .
- Organic food free from harmful chemicals,artificial flavors and preservatives.
- Ingestion organic foods might if truth be told, reduce the chance of heart attacks ,strokes and cancer.
- It produces nutrient food ,feed for animals and top quality crops to sell at an honest worth.
- In organic farming ,the emission of gas is a smaller amount than 40%
- Organic farming earns 3-6 \* higher profitvfor farms .
- It performs better than conventional in adverse conditions like drought by as much as 40%.
- It will increase future soil fertility.
- It will curtail warming.
- It helps to extend the employment as a result of in organic farming a lot of sure – handed labour ought to be needed and during this manner it helps to decrease state.

#### **Disadvantages/Downsides of organic farming :-**

- Organic manure isn't profusely on the market and on plant nutrient basis it should be dearer than chemical fertilizers if organic inputs square measure purchased.
- Production in organic farming declines particularly through out the primary few years, that the farmer ought to be premium costs for organic manufacture.
- The rules for organic production, processing, transportation and certification etc square measure on the far side the understanding of normal Indian farmers.
- Selling of organic produce is additionally not properly efficient.
- Lack of technology information.



- Organic materials square measure large nature, terribly tough to store and high in worth.
- Bio management agents square measure on the market with solely a number of hand picked insect pests.
- Organic food is dearer than typical food as a result of farmers don't get the maximum amount out of their land as typical farmers do.
- Needed sure-handed labour.
- There are not any subsidies offered for many organic farming.
- Organic farmers should have specific information concerning the localized growing system.
- Organic farms and foods should under go a rigorous certification method.
- Due to the need for more labours for working labour the cost is also high.
- It takes a while in complete conversion of typical farming into organic farming .
- We've got no package for absolutely adopted organic farming.
- It needed a lot of work to supply product that square measure able to sell.
- Organic crops typically spoil quicker as a result of typical foods square measure treated with waxes or preservatives to keep up their freshness throughout the shipping process.

### **Conclusion:-**

From the prior conversation, it tends to be construed that organic farming seems, by all accounts, to be a practical, financial, and eco-accommodating, since there is no danger of lingering poisonousness. It improves soil fruitfulness and yielded amount creation. An expansion of fertilizer arranged from squanders that is FYM, neem-cake, bio gas slurry, vermicompost and so forth keeps up organic manure in soil and now, we know that it has some disadvantages but also has lots of advantages that cover up or that have ability to ignore the downsides of organic farming.