

# ORGANIC FARMING – A TOOL FOR SUSTAINABLE ECONOMIC DEVELOPMENT

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## Abstract:

*Organic farming is a farming technique that sustains, enhances and maintains the quality of the ecosystem. Consequently, organic farming does not have harmful and deteriorating effects on the ecosystem. The traditional farming system focuses heavily on output. With the advent of green and the golden revolution, India was self-reliant and a major producer of various crops. It also introduced output oriented technologies like HYV seeds, new fertilizers, pesticides etc. of course; this changed the course of Indian agricultural history and pulled our country out from famines. But eventually, such techniques led to the deterioration of the various ecosystems. Thus organic farming, bringing eco-friendly techniques, began to change this aspect of traditional farming. A simple search for sustainable development brings us to the most basic definition that is an economic development conducted without depletion of natural resources. In essence, organic farming is intimately connected to every principle of sustainable development. Organic farming is helping us to restore the ecological balance.*

**Keywords:** Organic Farming, Sustainability, HYV, Sustainable Development.

## 1. Introduction:

With the beginning of Green Revolution in Indian Agriculture in 1965-66, the fertilizer consumption got a huge momentum for sustaining the needs of burgeoning population. Consequently, we reached our targets and became self-sufficient in food grain production. However, the hazards of the intensive agricultural system are threatening as they drastically affect the ecological balance. Thus, we started thinking towards organic farming (OF) systems approach which was existing earlier (ancient time) in our society. “Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved”. The essence of OF can be viewed as a suitable tool for promoting sustainability in agricultural production of system includes:

- Biological farming.
- Nature farming.
- Regenerative agriculture.
- Alternate agriculture
- Permaculture.
- Low input sustainable agriculture.

## 2. Background of the study:

This production management system largely promotes the use of organic materials or on farm resources (crop residues, animal manures, green manures, on and off farm wastes, growth regulators, bio-fertilizers, biopesticides, etc.), and discourages the use of synthetic off farm inputs (fertilizers, fungicides, herbicides, pesticides, etc.) for maintaining the balance of nature without polluting soil, water, and air to obtain yield for a longer time. It integrates site specific agronomic, biological and mechanical methods to foster cycling of resources and enhance agro-ecosystem health.

## 3. Objective of the study:

- Exclusion of agrochemicals.
- Maintenance of natural balance.
- Production of nutritious food.
- Enhancement of rural livelihoods with profitable OF.
- Conservation of soil and water resources.
- Systematic raising of livestock along with crop production.

- Conservation or enhancement of biodiversity and eco-system services.
- Prevention of pollution.
- Reduction in use of fossil fuel energy in agriculture.
- Development of more sustainable and productive agricultural system.

#### 4. Components of organic farming:

- Crop And Soil Management.
- Nutrient Management.
- Plant protection Livestock Management.
- Soil and Water conservation.

Selection of crop is very important in farming to serve many purposes like pigeonpea and moth bean are drought resistant legumes, forage, and cover crops. These can be grown in arid and semi-arid regions to earn maximum benefits. They can be used for combating soil erosion problems and recycling the nutrients.

#### 5. Importance of organic farming:

Any activity that causes deterioration of environment, will definitely impact productivity of crops and health of humans. OF is a system that is based on the four basic principles of health, ecology, fairness and care for humans as well as ecosystems Crop diversification, livestock management and manuring helps in protection of natural resources along with the biodiversity. Low use of non-renewable energy helps in reduced emission of greenhouse gases (GHGs). Nitrate leaching is considerably low in organic system, thus groundwater pollution is prevented. The biological activity of soil is enhanced with the addition of organics and this also helps in maintaining long term fertility of soil. With reduction of costly external inputs, the production cost also reduces. The risk of main crop failure is minimized by diversification, agro forestry, crop rotation, and intercropping. Farmers get high price of organic products, and get access to organic markets. The purchasing power is enhanced. In OF, farmers are less exposed to chemicals Organic foods are nutritious, tasty, and fresh. In most cases, these products are higher in vitamin C, antioxidant, etc. content. They are known for their quality and safety issue. The living standard of the farmer increases with continuation of OF practices.

#### 6. Limitation of organic farming:

- Time taking process
- Initially low yields are observed.
- Easy availability of chemicals.
- Requirement of large organic inputs
- Low availability of quality inputs.
- Marketing facilities are less.
- Certification process.
- Research facilities are less.

#### 7. Transformations in post independence period in Agriculture sector in Indian Scenario:

- **1947 to 1968** – Expansion of sowing area. Increase in irrigation resources and the land reform laws have played a key role.
- **1968 to 1980** – Use of high yield dwarf varieties, fertilizers, pesticides and new techniques. It is called the period of the evolution of the Green Revolution.
- **1981 to 1991** – The policy of minimum support price for agricultural products and arrangement of ensured nationwide government procurement and storage and distribution took place.
- **1991 to 1998** – Which is said to be the period of liberalization, industrialization and the establishment of the World Trade Organization.
- **1999 to 2014** – National Commission for Farmers was constituted under the chairmanship of Prof. MS Swaminathan in November 2004 to promote traditional organic farming, development of rural infrastructure, such as road, electricity, education, medical etc., and for removal of the discrepancies in the agriculture sector. The Commission handed over its fifth and final report to the Central Government on October 4, 2006.

In 1951, the food grain production was 51 million tons while today it has reached 277.49 million tone mark. With food grains, there has been record production of fruits, vegetables, milk and fish. There are no two opinions that we have successfully achieved increased production and food security goals. Due to the increase

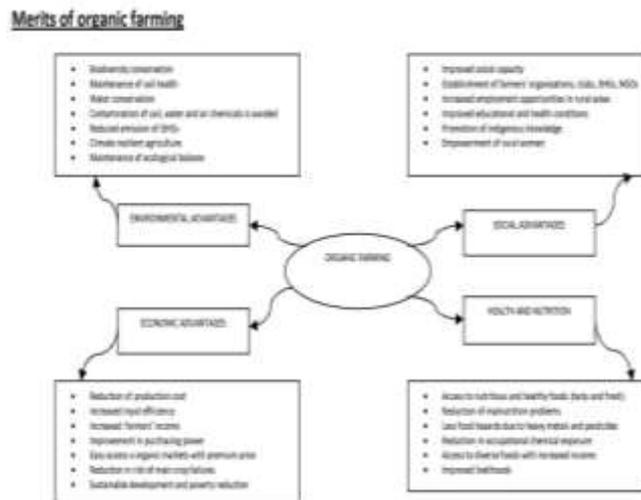
in population, the size of the farmer's holding has reduced. As compared to earlier times, the burden of population dependent on agricultural land has also been more than two and a half times.

### 8. Organizations and Govt. Schemes / initiatives promoting organic farming:

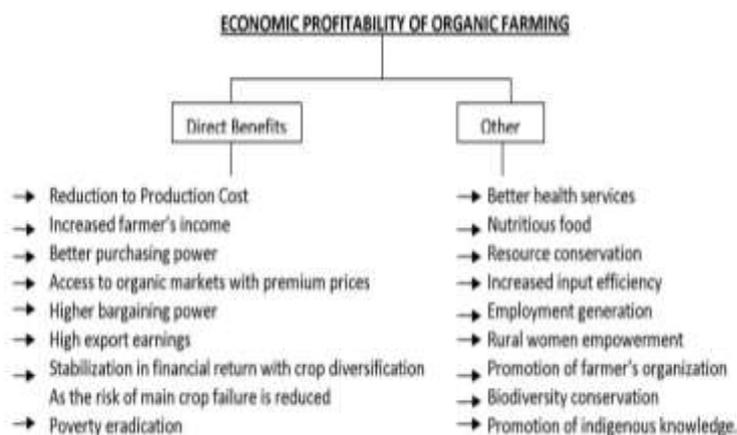
The following list of research institutes/ National Centers related to organic farming is enumerated below:

- National Organic Farming Research Institute, Gangtok, Sikkim.
- National Centre of Organic Farming, Ghaziabad, Uttar Pradesh.
- Participatory Guarantee System (PGS).
- Paramparagat Krishi Vikas Yojana.

### 9. Merits of Organic Farming:



### 10. Organic Farming & Its Economic Feasible:



### 11. Conclusion:

The agriculture centric rural development is the key to transforming rural lives. To achieve this, all out efforts are needed to enhance crop productivity through adoption of improved farm technologies in a holistic way and ensuring reasonable price of the farm produce. Diversification of agriculture on the principle of Integrated Farming involving agriculture and allied sector (dairy, fisheries, bee keeping, sericulture, goatery, piggery, mushrooms, food processing, fruit preservation) etc. would be essential and inevitable. Organization is the need of the hour to resolve the challenges of agriculture. Low economic returns in the initial stage restrain farmers to adopt OF practices. But this indicates the lack of knowledge about the merits of OF among farmers. Government agencies and schemes should try to fill this gap by giving demonstrations of the techniques of OF to make the farming community expert in the alternative methods of the conventional farming. More research should be conducted for validation of organic methods in field, as India has huge potential for organic crop production. Let us make our economic development through the OF.

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