

Organic Farming as the Ecological Farming

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Introduction

Agriculture is one of the oldest occupations of human civilization. Generally, crops cultivation and livestock management mean agriculture. That means agriculture has been originated with crop cultivation & livestock management and so while studying agriculture origin, the role of human being should be taken into consideration. So, human existence is before than that of agriculture. Where did agriculture originate from? Scientist shares nothing in common. Even though scientist believes that agriculture might have originated before 10,000 E.C.

Human beings skilled in collecting food in the Stone Age. In this era because of the efforts of finding large quantities of food for human life its habitat was temporary. Therefore, perhaps due to the introduction of various types of plant and animal species for food grain supply and for the special development of agriculture, agriculture has begun to improve the ecosystem so that agriculture can reach beyond the natural limits of human beings and satisfy human needs better.

While studying history, India was not only prosperous but also prosperity was retained for many years. Traditionally farming was being done. The tools needed for the farm were available in the village, so the village was self-sufficient. Not only this, the fame of agriculture commerce in India was spread far and wide. Aggregate farming business was considered to be a prestigious. The British formed the East India Company in 1600Ad. This company took the raw material to the British prison in England. With the export of raw material in England, the country's natural wealth started reducing. The result of all this Indian farming income has decreased in false proportion. Food problems arose independent India. Green Revolution was announced as a solution plan and due to the very low yields of technologies, machinery, hybrid seeds, chemical accounts, synthetic pests and disease disasters to increase the



production capacity, agriculture income has increased in a little over a period of time, but this increase in production has become a temporary phenomenon. Due to the high consumption of chemical fertilizers and pesticides, the soil fertility was reduced and due to the decrease to find country's income, the financial condition of farmers. The concept of organic farming came forward to avoid the adverse effects of the use of chemical fertilizers, insecticides and to reap the benefits of soil fertility. Organic farming practices which provide sustainable income for low cost are a boon for farmers.

The Importance of Organic Farming

India's population is consistently increasing. The increasing population needs are continuously growing. The area under cultivation has reduced due to citizenship. To meet the growing population's food requirement, it is necessary to get more and more yield from available land. From this large number of chemical fertilizers and additional use of pesticides causes imbalance in the environment and the adverse impact on human health. Organic farming enhances soil fertility and productivity and provides a balanced solution to the essential nutrients. The lesser the cost is generated the farmers become self-sufficient. Organic farming provides people nontoxic and nutrients rich food. Today many ill health diseases are causing people to suffer from chemical fertilizers and pesticides used in agriculture. Organic farming is an important solution. Organic farming helps to reduce the pollution of land, water and air by making it healthier and nutritious. Today organic farming has gained immense importance in man's life. Today there is a huge demand for organic farming and market is also available which helps in increasing the financial status of the farmers.

Benefits of Organic Farming

- Organic farming relies on natural breakdown of organic matter and hence allows the production of nutrients in soil. It improves soil fertility and effective method of soil management.
- 2. Using fertilizers and pesticides, underground water is polluted but organic farming replaces with organic fertilizers hence it helps to prevent water pollution.



- 3. By using organic farming ecological services such soil farming and conditioning, water recycling, nutrient cycling, stabilization of soil, carbon sequestration, predation pollination and habitats are improved.
- 4. Organic foods are rich in nutritional value.
- 5. Organic farming controls other organisms with help of methods such as biological pest control and integrated pest management.
- 6. Crop diversity can be used in organic farming in conventional farming. Mass production of crop on focused while in organic farming it is possible to grow multiple crops in same place.
- 7. Initial investment in crop production in reduced and product has guarantee income making farmers self-contained.
- 8. Local & International markets are available for the organic products.

Sir Albert Howard a English Botanist an organic farming pioneer and a principal figure in early organic movement also an agriculture adviser to states in central India and Rajputana had observed and came to support traditional Indian farming practices over Conventional agriculture science. Sir Albert Howard has spread his knowledge regarding organic farming, soil & water management, mixed cropping benefits, Importance of humus, role of mycorrhiza to inspire many farmers and agricultural scientists who furthered the organic movements.

Organic Farming System

Efforts to change from conventional agriculture to organic farming are necessary but the change should be slowly placed by organic fertilizers. The principal methods of organic farming include crop rotation, green manures and compost, biological pest control and mechanical cultivation. These measures use of natural environment to enhance agriculture productivity. Soil and soil conservation are important aspects of organic farming. The soil contains billions of different living organisms that carryout various function to help facilitate plant health; organisms include larger creatures like earthworms and nematodes to microscopic organisms including bacteria, fungi, algae and protozoa. The Earthworm eats plant material and organic matter and excretes worm castings in soil as food for other organisms. They also leave channels that they burrow in increases the infiltration. Some microbes absorb nutrients and incorporate them into



organic matter, which is the basis for the carbon cycle. Legumes are planted to fix atmospheric nitrogen into soil; natural insect's predators are encouraged. Crops are rotated to confuse pest and renew soil. Root colonizing mycorrhizal fungi increase tolerance of heavy metal contamination and drought.

Organic Fertilizers

Organic Fertilizers derived from animal matter, animal excreta, human excreta and vegetable matter is not the food for crops but soil microorganisms and earthworms. The life cycle of these organisms is based on all organic material. Different crop has different requirement of nutrients. The role of nutrients in take change with growth of crop. The role of proper fertilizer management in essential for crop production.

Following are the organic fertilizer used in common:

- 1. Manure comes from cow, sheep, poultry and horses.
- 2. Bone meal & fish meal
- 3. Cotton seed meal, olive mill pomace, groundnut cake, oil seed cakes etc.
- 4. Gaumutra & types of amruts
- 5. Green manure like glyricidia, Dhaincha etc.
- 6. Molasses by product up beating sugarcane, grapes or sugar beets into sugar
- Microorganisms Rhizobium, Azotobacter, Phosphate solubilizing bacteria etc.

Biological Crop Protestants

- 1. Azadiracta Indiaca
- 2. Garlic, Chili and Ginger extracted oil
- 3. Gaumutra added in water & sprayed on crops

All these specimens have medicinal values in them, so extracts of these specimens are used to control and protect plants from pests and diseases.



Results

- 1. Organic Farming ensures to dependable development.
- 2. Health hazards can be controlled & protected by organic farming products.
- 3. Cultivation by organic farming system reduces cultivation costs, there by guarantee profits.
- 4. Organic farming generated employment opportunities and help to keep a balanced ecosystem.
- 5. Overall economic development of rural people in encouraged.

Conclusion

Everyone is aware of the hazards of excessive use of chemicals in agriculture produce as a result there is great demand for organic farm produce. Agriculture is restricted more in rural areas, so use of organic farming is boon for the rural people for their prosperity and overall development. Thus, helping them to raise their life standards.

References

- 1. Sir Albert Howard, An Agriculture Testament, Other India Press Mhapusa, Goa.
- 2. Gorade Savaji, Sendriya Shetitun Samruddhi.
- 3. Rachel Carson, the classic that launched the environmental moment, silent spring, 1960.
- 4. Shiva Vandana, The corporate war of nature and culture, 2018
- 5. Thombre Shivaji, Upyukt Tane, Continental Prakashan, Pune, 1991.
- 6. WHO, Classification of Pesticide by hazards organization, 1992.