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ORGANIC AGRICULTURE-AIM, NEED AND IMPORTANCE

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Introduction

Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It depends on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved. Organic agriculture focuses on locally grown products and large scale use of local products and local wisdom. It excludes the need and demand for external fertilizers for crop production and management. In order to re-establish previously damaged or destroyed ecological balance in nature, organic agriculture aims to correct unwanted results of wrong production practices by using; biological methods to control pests and diseases, to improve soil fertility, to contain environment and human friendly production systems, to ban the use of synthetic and chemical fertilizer and pesticides while encouraging organic and green fertilizing, crop rotation and soil conservation. From farm to table, organic farming has control methods for each and every farm practices and provides certificates for organic products and their producers. Organic agriculture can provide quality food without adversely affecting the soil's health and the environment; however, a concern is whether large-scale organic farming will produce enough food for India's large population. Certified organic products including all varieties of food products including basmati rice, pulses, honey, tea, spices, coffee, oilseeds, fruits, cereals, herbal medicines, and their value-added products are produced in India. Non edible organic products include cotton, garments, cosmetics, functional food products, body care products, and similar products. Organic Agriculture also is known as "Organic Farming".

Aim of Organic Agriculture

The aims for organic farming are:

- Conserving environment and natural resources, re-establishing ecological balance, encouraging sustainable agriculture, improving soil fertility, conserving flora and fauna, increasing genetic diversity, and putting an end to chemical pollution and toxic residues.
- In addition to banning the use of every kind of synthetic and chemical pesticides and fertilizers, organic agriculture encourages practicing organic and green fertilization, crop rotation, soil conservation, improving plants resistance to pests and diseases, benefiting from parasites and predators. The main goal of organic agriculture is not raising the quantity, but improving the quality of food products.
- Now, by practicing organic agriculture, it is possible to produce agricultural goods without polluting soil, water resources, and air while protecting environment, plant, animal, and human health.

Need of Organic Agriculture

Lots of agricultural land have been affected from pollution and instability in nature as a results of synthetic chemical inputs (synthetic mineral fertilizers and synthetic chemical pesticides, etc.) and

their excessive use without any control, Besides loss of soil, erosion decreases the amount of organic material and humus in soil and causes loss of horizon A in soil profile. And this results the loss of beneficial soil microorganisms. The use of environment friendly organic Farming Practices is essential to prevent these harms while producing and consuming nutritious food. Following all these negative effects, conscious consumers in many countries, especially in the most developed countries, have been getting organized to urge and encourage farmers to practice environment and human friendly organic agricultural production.

Advantages of Organic Agriculture

- It helps to maintain environment health by reducing the level of pollution.
- It reduces human and animal health hazards by reducing the level of residues in the product.
- It helps in keeping agricultural production at a sustainable level.
- It reduces the cost of agricultural production and also improves the soil health.
- It ensures optimum utilization of natural resources for short-term benefit and helps in conserving them for future generation.
- It not only saves energy for both animal and machine, but also reduces risk of crop failure.
- It improves the soil physical properties such as granulation, good tilth, good aeration, easy root penetration and improves water-holding capacity and reduces erosion.
- It improves the soil's chemical properties such as supply and retention of soil nutrients, reduces nutrient loss into water bodies and environment and promotes favourable chemical reactions.
- It creates higher natural levels of resistance to pests and disease.
- Organic farming allows for specialization opportunities.
- This farming process supports a healthier soil and supports pollinators.
- There are no worries about genetically modified foods with organic farms.
- The working environment for organic farmers is healthier.
- Organic farmers can often create their own fertilizers at their farming location.
- It can be implemented in almost any geographic location or growing season.

Techniques Involved In Organic Agriculture



Figure 1: Techniques involved in Organic Agriculture

Importance of Organic Agriculture



Figure 2: Importance of Organic Agriculture

- Organic agriculture ensure better productivity and more profit to the local farmers.
- Organic agriculture also helps in strengthen the people's belief in them, encourage them to use their knowledge to improve the productivity of their fields.
- Introduction of sustainable agriculture, which means an integrated approach to increasing farm yield and managing resources in an efficient way that future generations should not bear its consequences.
- The practice of organic farming ensures the productivity and sustainability of the field and field crops.
- Organic agriculture ensures the use of organic wastes like crop, animal and farm wastes and other biological components to make the farming more environment-friendly.

Strategies to successful Organic Agriculture

- In organic production, farmers choose not to use some of the convenient chemical tools available to other farmers. Special attention is being given for choosing crop rotation and tillage practices to avoid or reduce crop problems.
- Cereal and forage crops can be grown organically relatively easily to due to relatively low pest pressures and nutrient requirements. Corn is being grown more frequently on organic farms but careful management of weed control and fertility is needed. Meeting nitrogen requirements is particularly challenging.
- Fruit and vegetable crops present greater challenges depending on the crop. The yield reduction varies by crop and farm.
- Livestock products can also be produced organically. Animals must be fed only organic feeds Feed must not contain mammalian, avian or fish by-products. All genetically engineered organisms and substances are prohibited. Antibiotics, growth hormones and insecticides are generally prohibited. If an animal becomes ill and antibiotics are necessary for recovery, they should be administered. The animal must then be segregated from the organic livestock herd and cannot be sold for organic meat products. Vaccinations are permitted when diseases cannot be controlled by other means.

Conclusion

Organic agriculture is viable alternative because it enlivens the soil, strengthens the natural resource base and sustains biological production at levels to commensurate the carrying capacity of the managed agro eco-system. Organic agriculture utilize practices that: Maintain and improve fertility, soil structure and biodiversity, and reduce soil erosion. Farmers can reduce their production costs because they do not need to buy expensive chemicals and fertilizers. Yield of organic agriculture is more nutritious and safe food. The popularity of organic food is growing dramatically as consumer seeks the organic foods that are thought to be healthier and safer. Thus, organic food perhaps ensures food safety from farm to plate.