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ORGANIC FARMING: AN ECOLOGICALLY SUSTAINABLE APPROACH TO AGRICULTURE PRODUCTION

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Introduction :

The modern concept of organic farming combines the tradition, innovation and science. The movement for organic way of life recognized in 1905, it could gain ground after realizing the ill effects of modern agriculture in the late 1990's. In 1905, the British botanist Sir Albert Howard, often referred to as the father of modern organic agriculture, documented traditional Indian farming practices, and came to regard them as superior to conventional agriculture science. Organic farming aims for human welfare without harming the environment and follows the principles of health, ecology, fairness and care for all including soil. Many other practices such as Krishi Krishi, Natueco farming, homa farming, panchagavya Krishi and bio dynamic farming are associated with organic agriculture. The reports indicates organic farming can minimize energy consumption by 30.7 % per unit of land by eliminating the energy required to manufacture synthetic fertilizers and pesticides and by using internal farm inputs, thus reducing fuel used for transportation. India can emerge as global leader due to the presence of large number of organic producers (almost 7 lakh producers) and they needs to be supported with technical knowledge and inputs besides marketing infrastructure.

Why we adopt organic farming ?

1. Build healthy soil – soil is the foundation of our food chain. Organic farming practices aim to restore, maintain, and enhance the soil's ecosystem and health, thus creating healthier, tastier, more nutritious foods. Weed killers and pesticides used in conventional agriculture, gardening and landscaping bind to essential minerals in our soil, which leaves our soil and crops deficient in minerals. Some organic farmers supplement their soil with mulch, organic fertilizer and compost, all of which adds more nutrients to the soil making their crops more nutrient dense.

2. Respect our water resources – the elimination of polluting chemicals and nitrogen leaching, done in combination with soil building, protects and conserves water resources.

3. Keep rural communities healthy – organic agriculture can be a lifeline for small farms because it offers an alternative market where sellers can command fair prices for crops.

4. Preserve biodiversity – the loss of a large variety to species (biodiversity) is one of the most pressing environmental concerns. The good news is that many organic farmers and gardeners have been collecting and preserving seeds, and growing unusual varieties for decades.

5. Drive innovative research – organic farmers have led the way, largely at their own expense, with innovative on-farm research aimed at reducing pesticide use and minimizing agriculture's impact on the environment.

6. Reduces energy use – thus reducing the carbon footprint and fight climate change. A typical organic farm can use 30-50% less energy than a typical conventional farm.

7. Increase organic abundance – foods and non-foods alike. Now every food category has an organic alternative. And non-food agricultural products are being grown organically – even cotton, which most experts felt could not be grown this way.

World Wide Status of Organic Farming :

The Government of India has implemented the National Programme for Organic Production (NPOP) in the year 2001. The national programme involves the accreditation programme for certification agencies, norms for organic production, promotion of organic farming etc. States like; Uttaranchal, Karnataka, Madhya Pradesh, Maharashtra, Gujarat, Rajasthan, Tamil Nadu, Kerala, Nagaland, Mizoram, Sikkim have been promoting organic farming. Organic agriculture is practiced in 162 countries and 37 m ha of land are managed organically by 1.8 million farm households. The regions with the largest areas of organically managed agricultural land are Oceania (12.1 million hectares or 33 % of the global organic farmland), Europe (10.6 million hectares or 29 % of the global organic farmland) and Latin America (6.8 million hectares or 23 %). On a global level, the organic agricultural land area increased by three per cent compared with 2010. The countries with the most organic agricultural land are Australia (12 million hectares), Argentina (3.8 million hectares) and the United States (1.9 million hectares). Organic agricultural export market is one of the major drivers of organic agriculture in India. India exports 31 organic products. It is estimated that more than 85% of total organic production, excluding wild herbs from Uttar Pradesh and Madhya Pradesh, is exported. India is best known as an exporter of organic tea and also has great export potential for many other products.

Benefits of organically grown crops :

Free of poison: Organic farming does not make use of poisonous chemicals, pesticides and weedicides. Studies reveal that a large section of the population fed on toxic substances used in conventional agriculture have fallen prey to diseases like cancer. As organic farming avoids these toxins, it reduces the sickness and diseases due to them.

Organic foods are highly authenticated: For any produce to qualify as organic food, it must undergo quality checks and the creation process rigorously investigated. The same rule applies to international markets. This is a great victory for consumers because they are getting the real organic foods. These quality checks and investigations weed out quacks who want to benefit from the organic food label by delivering commercially produced foods instead.

Better Nutrition: As compared to a longer time conventionally grown food, organic food is much richer in nutrients. Nutritional value of a food item is determined by its mineral and vitamin content. Organic farming enhances the nutrients of the soil which is passed on to the plants and animals.

Helps us stay healthy: Organic foods do not contain any chemical. This is because organic farmers don't use chemicals at any stage of the food growing process like their commercial counterparts. Organic farmers use natural farming techniques that don't harm humans and environment. These foods keep dangerous diseases like cancer and diabetes at bay.

Lower prices: There is a big misconception that organic foods are relatively expensive. The truth is they are actually cheaper because they don't require application of expensive pesticides, insecticides, and weedicides. In fact, you can get organic foods direct from the source at really reasonable prices.

Longer shelf-life: Organic plants have greater metabolic and structural integrity in their cellular structure than conventional crops. This enables storage of organic food for a longer time.

Enhanced Taste: The quality of food is also determined by its taste. Organic food often tastes better than other food. The sugar content in organically grown fruits and vegetables provides them with extra taste. The quality of fruits and vegetables can be measured using Brix analysis.

Organic farming methods are eco-friendly: In commercial farms, the chemicals applied infiltrate into the soil and severely contaminate it and nearby water sources. Plant life, animals, and humans are all impacted by this phenomenon. Organic farming does not utilize these harsh chemicals so; the environment remains protected.

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