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## ORGANIC FARMING: A BIOLOGICAL POTENTIAL TOOL FOR HIGHER CROP YIELD AS WELL AS ECO-FRIENDLY TO ENVIRONMENT

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This article highlights the importance of Organic Farming in reference to crop yield as well as environment. Organic farming refers to a biological potential tool which is eco-friendly to environment and used to obtain higher crop yield without causing any adverse effect to environment. It is holistic approach and harmonized with nature. There will be more chance of Input optimization compare to Conventional farming. In today's changing scenario of agriculture, Organic Farming is must to avoid excess pesticides (harmful to environment as well as human). Organic agriculture is a holistic approach which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity (FAO 2001). It has been argued that organic farming is productive and sustainable, but there is a need for strong support to it in the form of subsidies, agricultural extension services and research (Reddy B. Suresh, 2010). Modern agricultural farming practices have resulted in not only loss of natural habitat balance and soil health but also caused many hazards like soil erosion, decreased groundwater level, soil salinization, pollution due to fertilizers and pesticides, genetic erosion, ill effects on environment, reduced food quality and increased cost of cultivation, rendering the farmer poorer year by year (Ram, 2003).

**Present status of Organic Agricultural Land in World:** International Federation of Organic Agriculture Movements (1972) is organic farming organization in all over the world. Organic agriculture is a holistic management system, which enhances agro-ecosystem health, utilizing both traditional & scientific knowledge. Organic agriculture systems rely on ecosystem management rather than external agricultural inputs. (IFOAM, 2006). According to the IFOAM survey 2012, total land use under organic agricultural in Africa, Asia, Europe, Latin America, North America, Oceania is 1075892, 2778291, 10002087, 2652624, 12144984, 37041004 hectare respectively. Oceania region possesses highest land use under the organic farming then rest of world which is 2.9 percent of its total land use under the agricultural activities.

**Present status of Organic Farming in India:** Currently India's organic trade is above than Rs. 2500 crores rupees. For promoting, organic farming practices Ministry of commerce, started National Program on Organic Production (NPOP). This national programme used for organic production and promotion of organic farming. Besides this, Ministry of Agriculture also started various promotion schemes for small farmers. Fifteen Indian states are involved in organic farming since 2004, which is a good indication for Indian agriculture.

**Applications of organic farming:**

**1. Social security:** It is eco-friendly to human health due to avoiding harmful effect of chemical, pesticide, fertilizer etc. It is helpful in meet out demands of needy people by providing employment. In organic farming use of external inputs is minimized therefore cost of production reduced to great extent. Further, due to quality production organic produce get 10-15% premium price.

**2. Ecological Security:** Organic Farming is biological potential tool for maintaining ecological balance. It helps in ecological security by preservation of biodiversity and reducing effect of climate change. Organic farming avoids monoculture and promotes crop rotation. This maintains ecological balance. Organic farming thus reduces CO<sub>2</sub> emission by eliminating synthetic fertilizers, and at the same time reduces atmospheric concentration of this gas by storing in the soil, a win-win system. It is reported by Niggli in 2008.

Various Aspects covered under Organic Farming

**1. Maintenance of soil health:** Organic system improves soil physical, chemical and biological properties resulting in higher productivity.

**2. Low cost with comparable yield to conventional farming:** In organic farming, no external artificial chemical is used; moreover emphasis is given on recycling of locally available resource. With this approach, cost of production can be reduced as compared to conventional chemical farming (CF) in irrigated areas.

**3. Growing demand of organic food:** At present, demand for organic food is increasing compare to artificial food that is not good for health.

**4. Extenuating effect of climate change:** Organic farming is a tool of reducing CO<sub>2</sub> emission by eliminating synthetic fertilizers, and at the same time reduces atmospheric concentration of this gas by storing in the soil. Further, soils with higher humus content can adapt to the harmful and adverse effect of climate change. It is found that organic farming system gives better yield during climatic extremes as compared to conventional system. Therefore, organic farming is a need of present time and becoming more reliable and popular to meet out the demands of needy people and challenges of future agriculture.

#### **Conclusion:**

Organic farming is a boon for environment as well human being. Organic farming is efficient and holistic approach of recycling of locally available resources. It not only enhances the economy but also sustain the productivity of natural resources. There is worldwide concern and area under organic farming practices is increasing at faster rate. Therefore, Organic farming is essential tool to overcome ill effects of conventional (chemical) farming.

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