



A REVIEW ON: ROLE OF ORGANIC FARMING FOR SUSTAINABLE AGRICULTURE PRODUCTION

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ABSTRACT

Agriculture is said to be the backbone of Indian economy. 65 percentages people are directly and indirectly involved in this agricultural business. It is because of this agriculture that the progress of many businesses such as secondary and tertiary of any country depends on this primary business. Hence primary business is considered as the soul of any business. Along with the growing population of the entire world, chemical fertilizers and seeds are being used in large quantities in modern times to increase agricultural production. However, on the one hand, we can see the harmful effects of large quantities of chemicals and drugs on health and the environment. Although the ecosystem, environment and human health are in danger due to these chemical factors, organic agriculture has a lot of scope for development. So doing organic farming is the need of the nowadays.

KEY WORDS: Environment, Organic Farming, Sustainability, Chemicals, Bio-fertilizers

INTRODUCTION

Organic farming is the need of modern times. Because of we get to see degradation of agricultural production, soil quality, environment quality and human health due to chemical factors. Organic farming should be used as an alternative to conventional farming methods. In this organic farming, instead of chemical fertilizers and pesticides, fertilizers prepared from biological and natural ingredients are used. In this method mainly mulch, fertilizers prepared from various insects, animal-bird droppings or cow dung are mainly used. Due to this, pollution of the environment is prevented, crops grow properly, soil fertility is preserved, the ecosystem of micro-organisms in the soil is preserved, food is supplied to humans in a good form, and pollution is reduced. Such various factors have a positive effect on the environment, human health and various elements of nature. Sustainable agriculture is farming in such a way to protect the environment, aid and expand natural resources and to make the best use of non-renewable resources. The goal of sustainable agriculture is to meet society's food and textile needs in the present without compromising the ability of future generations to meet their own needs.

METHODOLOGY

The main objective of this research is to study the literature review related to organic farming. Mainly secondary data has been used for this research paper. The said data is taken from various websites, government office websites, research articles and online information.

LITERATURE REVIEW

Rajesh Kumar (2022) Organic farming is native to India. The farmers of ancient India are known to have evolved nature friendly farming systems and practices such as mixed farming, mixed cropping, and crop rotation. The first "scientific" approach to organic farming can be quoted back to the Vedas

of the "Later Vedic Period", 1000 BC to 600 BC. The essence is to live in partnership with, rather than exploit, nature. In this regard, the "Vrikshayurveda" (Science of plants), the "Krishisastra" (Science of agriculture) and the "Mrugayurveda" (Animal Science) are the main works.

The Green Revolution has resulted in significant advancements in agricultural technology and policy in order to increase food production in order to meet the demands of an ever-increasing global population. Although food availability and production have expanded as a result of the usage of chemical fertilizers, herbicides, insecticides and pesticides, consumers have become more quality conscious in recent years and are increasingly demanding ecologically safe, chemical-free healthful foods (Chander *et al.*, 2011).

Organic farming maintains the health of the soil, while maintaining the quality of the water. Because due to the use of chemical fertilizers, the chemical fertilizers dissolve with water and seep into the soil, which again goes to wells, sub-channels, rivers and drains. Such forms also lead to water pollution and soil quality deteriorates to a great extent⁽¹⁾.

Although the agricultural production is increasing due to the use of chemical fertilizers and seeds, it has an adverse effect on the water on the land. In short, water quality is not maintained due to the use of chemical agents, which has a negative impact on human health⁽²⁾.

Soils rich in organic matter are easy to till, have good texture, seed set well and plants grow vigorously. Due to the slow availability of nutrients in organic matter, they are continuously available during the growth period of crops and the growth of crops is better. Maintaining such lands is beneficial to the farmers. Fertilizing the crops improves the growth characteristics of the crops and the growth of roots and stems in



the soil. Crops need to be fertilized as the organic matter in the soil is left behind after the crops grow ⁽³⁾.

The biological and chemical elements present in the soil do not disturb the natural cycle. Instead, if chemical agents are used, the biological process can be terminated. But with the use of organic fertilizers, this cycle can be continued continuously, thereby maintaining soil fertility and improving agricultural yields ⁽⁴⁾.

Sustainable agriculture is farming in such a way to protect the environment, aid and expand natural resources and to make the best use of non-renewable resources ⁽⁵⁾.

The problem of salinity land is becoming more serious day by day. Re-cultivation of such land may not be possible; the main reason for this is the use of chemical fertilizers used in the soil ⁽⁶⁾.

Soil is a thin layer of the earth's crust that supports plants and provides nutrients. Soil is a mixture of fine rock particles and humus. Although soil is considered an inanimate object, it serves a variety of living things, from small bugs and insects to reptiles. Plant life depends on soil and animal life depends on plants. A healthy environment requires healthy soil ⁽²⁾.

The type of soil depends on the rock from which the soil is formed and the type of plants that grow on it. Soil is mainly made up of four components first is Minerals (45%), second is Organic matter (5%), third is Water (25%) and last four is Air (25%)⁽⁵⁾.

Even though organic farming results in shortfalls in production, it is environmentally sound sustainable agriculture. This reduces the pollution in short the soil quality is maintained ⁽⁷⁾.

Humans are responsible for the deterioration of the quality of various elements in the environment. Because of technology is the link between human resources and natural resources. The economic development of human beings with their intellectual skills and technology, human beings are continuously degrading the environment. From this point of view, sustainable agriculture can be useful as an important thing or an important alternative ⁽⁸⁾.

Organic farming is considered as an important alternative as we see soil fertility decreasing due to modern agricultural technology and chemical fertilizers ⁽⁹⁾.

Charyulu, and Dwivedi, (2016) Organic farming systems have attracted increasing attention over the last one decade because they are perceived to offer some solutions to the problems currently besetting the agricultural sector. Organic farming has the potential to provide benefits in terms of environmental protection, conservation of non-renewable resources and improved food quality.

Yadava, (2019) Organic farming is a societal need; it is not only from the consumer's perspective but also from a farmer point of view. For the transformation of rural agriculture into a well sustainable agriculture, organic farming might become a

panacea which can build a plinth for sustainable agriculture and reimburse conversion cost and maintain the sustainability of soil.

Varkey, (2020) and Magnaye, (2018) contend that countries, developing as well as developed are emphasising environment sustainability of agricultural production, methods, and practices. The traditional wisdom of farmers on indigenous agrarians practices increasingly being into question owing to a host of factors.

Giovannucci, (2007) examines the relationship between smallholder organic farming and entrepreneurship considering the environmental conservation approach of organic farming and the economic enhancement features of entrepreneurship. Furthermore, it intends to determine, through qualitative analysis using case studies, how smallholder organic farming can be planned, and the competencies needed by an organic farmer when venturing into an organic farm enterprise.

Yadav, et al., (2013) assert that, find that there is significant evidence that organic methods could be favourable for small farmers. In fact, most of the cases clearly noted several direct benefits and related externalities from which it is reasonable to conclude that the promotion of organic agriculture methods among small and resource-poor farmers can be well warranted.

CONCLUSION

Organic farming can produce good quality food. This organic farming does not have any harmful effect on the health of the soil and the environment. Due to this, human can get food and food grains in proper form without the effect of organic fertilizers on human health. Due to all these factors, it is necessary for the next generation to get the use of these environmental factors. Even though organic farming is not affordable, it is needed in modern times. Because various problems of human health and environment are arising due to various factors, we also see that human health is in great danger.

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