

Review Article

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## Promotion of Nutritional Security through Organic Farming

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### ABSTRACT

Agriculture is the driving force of economy of our country. There is growing awareness on health, food safety and environmental issues associated with the indiscriminate use of pesticides and fertilizers. The alternative form of production such as organic farming is the spectrum of production methods that is supportive of the environment and safety food. Based on the principle of organic agriculture on 7<sup>th</sup> of every month paid training programme on organic agriculture is organizing at this Department of Sustainable Organic Agriculture since 2015 onwards. Ninety responders were selected based on random sampling procedure from North Western zone (Coimbatore, Erode, Tiruppur districts) and Western zone (Dharmapuri Salem districts) based on maximum number of certified organic farmers attended the training programme during 2017-18. The respondents were interviewed personally by a semi structured interview schedule. Cent per cent of the trainees were adopted the organic principle of health because organic agriculture would sustain and enhance the health of soil, plant, animal, human and planet as one and individual. 83.00 per cent of the trainees adopted the principle of ecology followed by principle of fairness (78 %) and principle of care of organic farming (52%). The principles organic agriculture were addressed on healthy and quality foods, preserves the environment improves public health and also significant benefits both to the economy as well as to the social cohesion of rural areas. Majority of the respondents expressed that maintaining of good health and price of the organic products was low when compared with synthetic products.

#### Keywords

Nutritional security,  
Organic farming,  
Ecology, Fairness,  
Care, Quality,  
Health

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### Introduction

Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, soil biological activity and safety foods. It emphasizes, the use of management practices in preference to the use of off-farm inputs, taking into account

that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfill any specific function within the system (FAO, 1999).

Organic products are grown under a system of agriculture without the use of chemical

fertilizers and pesticides to get organic products. This is a method of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, good plant nutrition and sound soil management, produces nutritious food rich in vitality which has resistance to pests and diseases

**Adoption of organic farming principles**

Understand the motivation of organic farmers, the practices they use and what they want to achieve, it is important to understand the guiding principles of organic agriculture. These principles encompass the fundamental goals and caveats that are considered important for producing high quality food, fiber and other goods in an environmentally sustainable way.

The principles of organic agriculture have changed with the evolution of the movement

and are now codified. The principles apply to agriculture in the broadest sense, including the way people tend soils, water, plants and animals in order to produce, prepare and distribute food and other goods. They concern the way people interact with living landscapes, relate to one another and shape the legacy of future generations.

The principles of organic agriculture serve to inspire the organic movement in its full diversity. They are the roots from which organic agriculture grows and develops. They express the contribution that organic agriculture can make to the world and a vision to improve all agriculture in a global context. The Principles of Organic Agriculture serve to inspire the organic movement in its full diversity.

The International Federation for Organic Agriculture Movement’s (IFOAM) definition of Organic agriculture is based on

The principle of health	Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible. This principle points out that the health of individuals and communities cannot be separated from the health of ecosystems - healthy soils produce healthy crops that foster the health of animals and people
The principle of ecology	This principle roots organic agriculture within living ecological systems. It states that production is to be based on ecological processes, and recycling. Nourishment and well-being are achieved through the ecology of the specific production environment.
The principle of fairness	It aims to produce a sufficient supply of good quality food and other products
The principle of care	This principle states that precaution and responsibility are the key concerns in management, development and technology choices in organic agriculture

As per the concept of NPOP (2005) organic agriculture is a system of farm design and management to create an ecosystem, which can achieve sustainable productivity without

the use of artificial external inputs such as chemical fertilizers and pesticides. The above reasons the respondents were interviewed and distributions of respondents details below.

**Materials and Methods**

The Department of Sustainable Organic Agriculture, TNAU is conducting on 7<sup>th</sup> of every month paid training on organic agriculture since August 2015. The yesteryear 2017-18 was taken for study purpose because more number of trainees attended the training programme due to awareness on health and food safety among the trainees. Twenty five trainings were conducted, in which 1294 trainees were participated the training on organic agriculture. North Western comprises Dharmapuri, Krishnagiri, Salem, Namakkal and Western zones comprises Coimbatore, Erode and Tirupur were selected based on number of organic growers were attended the organic agriculture trainings organized by this department. Among 1294 trainees 342 trainees from North Western zone and Western zones. Ninety responders were selected based on random sampling procedure from Coimbatore, Tiruppur, Erode, Dharmapuri and Salem districts (Table 1).

**Results and Discussion**

It inferred that high percentage of farmers, farm women, youth and housewife’s were attended the training on organic agriculture due to growing demands on organic agriculture among farmers, farm women, youth, house wife and others in the society. There is to be needed for more training to change the attitude of farmers and enhance

their confidence about the role of organic farming in the nutritional security. The finding derived is consistent with the results of Sasidharan (2015) and Azam (2015).

Table 2 inferred that Cent per cent of the trainees were adopted the principle of health because organic agriculture would sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible. 83.00 per cent of the trainees adopted the principle of ecology followed by principle of fairness (78 %) and principle of care (52%).

Reasons were environmental damages and poisoning of food chain is raising consumer concerns as well. Therefore, generating need to promote organic farming. Organic farming is a sustainable method which depends upon natural way of farming and using techniques like crop rotation, vermi-composting, bio-fertilizers, crop management, animal manure, off-farm organic waste, crop residues etc., instead of synthetic chemicals, which allows soil to stay alive and food to be safe.

Majority of the respondents expressed that price of the organic products was low when compared with synthetic products. The finding is line with the results of Sathyendra Kumar (2015). In conclusion, the trainees had strong belief on the principle of health through adoption of organic farming in their field and households.

**Table.1** Popularization of organic agriculture through trainings

S.No	Details	Name of the participants	No. of Trainees attended 2017-2018
1	Monthly paid training on Organic Agriculture	Farmers , Farm women youth and housewife	1294

**Table.2** Distribution of respondents according to their adoption of organic farming principles

N-90

S.No	Adoption of organic farming principles	No. of Respondents	%
1	The principle of health	90	100.00
2	The principle of ecology	75	83.00
3	The principle of fairness	70	78.00
4	The principle of care	60	52.00

It concluded that organic agriculture principles were on soil health, quality foods, preserves the environment, improves public health and also significant benefits both to the economy as well as to the social cohesion of rural areas. Majority of the respondents expressed that price of the organic products was low when compared with synthetic products.

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