Reasons for Resorting to Organic Farming and Advantages Perceived by the Organic Farmers

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ABSTRACT

The study mainly focused on reasons for resorting to organic farming and advantages and benefits perceived by the organic farmers. The study was conducted in Coimbatore, Erode and Dharampuri districts of Tamil Nadu. A sample of 100 organic farmers were the respondents for the present study. The data were collected from each respondent through personal interview method with the help of interview schedule. The results revealed that, major reasons for resorting to organic farming were premium price (75.00%) conservation of environment (72.00%), production of high quality, toxic and pesticide free product (68.00%) and negative experiences face with inorganic farming(50.00%) and perceived benefits of organic farming were increased soil properties(100.00%), reduced cost on external inputs (82.00%), efficient use of local on- farm resources(77.00%) and water holding capacity of soil (75.00%)

In India before 1960, only organic farming practice was followed without chemical fertilizers and pesticides. During late 1960s, there was threaten to food security due to population raise and frequent droughts, which brought "Green revolution" in our country. Green revolution has ensured food security to the growing population leading to selfsufficiency in food grain production. Due to intensive agriculture, using high yielding varieties, more fertilizers, chemicals and irrigation to increase yields was introduced. Excessive use of chemical fertilizers, pesticides, and herbicides has long lasting and deterious effects on soil health, soil erosion, pollution of air, effects on environment, reduce quality of food produce, consumers of agricultural produce and increased cost of cultivation. Therefore we look for organic farming which is a holistic production

management system that promotes and enhance agro –eco system health, including bio diversity, biological cycles, and soil biological activity. Promoting organic farming practices among the farming community in a large scale will be a promising strategy to face these challenges.

Organic farming is a production system which avoids or largely excludes the use of synthetically compound fertilizers, pesticides, growth regulators, genetically modified organism and live stock food additives. To the maximum extent possible organic farming system relies upon crop rotations, use of crop residues, animal manures, legumes, green manures, off farm organic wastes, bio fertilizers, mechanical cultivation and aspect of biological control to maintain soil productivity (Lamkin, 1990)

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Organic agriculture in India is being adopted by farmers for different reasons. First category of farmers are those who are situated in no-input or low-input use zones, for them organic is a way of life and they are doing it as a tradition. Second category of farmers are those who have recently adopted the organic in the wake of ill effects of conventional agriculture, may be in the form of reduced soil fertility, food toxicity or increasing cost and diminishing returns. The third category comprised of farmers and enterprises which have systematically adopted the commercial organic agriculture to capture emerging market opportunities and premium prices.

According to Lukas and Cahn (2008) the major motivation for the farmers to adopt organic agriculture was their negative experiences with conventional farming, e.g. deteriorating natural assets, continuous pest and disease problems, high costs for external farm inputs and health problems that were related to the use of pesticides.

According to Food and Agriculture Organization (2008) organic agriculture promotes ecological resilience, improved biodiversity, healthy management, off-farms and the surrounding environment, and building on community knowledge and strength.

According to Adesope *et al.* (2012) benefits perceived by the organic farmers were, 41.10% of the respondents perceived that organic farming practices increased soil organic matter content, 22.20% perceived that they reduced input cost of farming, 26.7% perceived that they involved low risk in crop failure. Also, 81.10% indicated that it has a high social value of general acceptability. About 84.00% indicated that organic farming practices are compatible with their own cultural systems, 77.80% stated that they are inexpensive, 55.60% stated that organic farming practices are natural form of farming, while 22.20% indicated that they are environmentally friendly.

Keeping all these facts in mind the present investigation "Reasons for resorting to organic farming and advantages and benefits perceived by the organic farmers" was undertaken.

METHODOLOGY

A diagnostic cum exploratory research design was used for the research study. Based on interaction with officials from Tamil Nadu Organic Seed Certification Department (TNOCD), Coimbatore and MYRADA KVK, Gobichettipalayam the researcher came to know that the farmers in the three districts, namely, Coimbatore, Erode and Dharampuri have been successfully practising organic farming. Moreover organic farming association has been functioning effectively in Coimbatore, Erode and Dharampuri. Hence these three districts were selected. By reviewing the record and documents from TNOCD, Coimbatore and MYRADA KVK Gobichettipalayam, a list of farmers practising was prepared and a total of 100 farmers were selected and personally interviewed and data were collected using semi structured interview

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schedule. Data were analyzed by using percentage analysis and the significant findings are given here under.

FINDINGS AND DISCUSSION

Reasons for resorting to organic farming

The results on reasons for resorting to organic farming by the farmers are presented in Table 1.

Premium price

An overview of the data presented in Table 1 Indicate that, three-fourth of the respondents (75.00%) resorted towards organic farming because of to get high price premiums for their farm produces. The farmers, who realized the middle man problem under inorganic system and marketing opportunities under organic farming system such as premium price, demand for healthy food, marketing trends and export opportunity would have resorted towards the same. They

Table 1.					
Distribution of Respondents According to Reasons for Resorting					
to Organic Farming					

Sl.No. Reasons for resorting to organic farming Number Percentage 1. Premium price 75 75 2. Conservation of environment 72 72 Production of high quality, toxic, pesticide 3. free and nutritious product 68 68 4. Negative experiences face with inorganic farming 50 50 To reduce cost of production 44 44 5. 6. Participation in organic farming related training and field visit 32 32 7. Awareness created through broadcasting program in mass media and publications such as magazines, journals and news dailies 22 22 8. Gaining independence and self sufficiency under organic farming system 18 18

*Multiple responses obtained

exposed to the existing organic marketing system under organic farming in their area. Moreover farmers realized and opined that the organic product is normally priced 20-30 % higher than a conventional product.

(n=100)*

Conservation of environment

Nearly three fourth (72.00%) of the respondents were switched over to organic farming to conserve environment. They experienced various long lasting effects of chemical farming in soil, air and water such as depletion of soil health, loss of soil fertility, increased level of soil $P_{\rm H}$, reduced population of microorganism and earth worms, pollution due to pesticides and fertilizers, depletion of ground water level and contaminated water due to excessive spraying of fertilizers and pesticides which might be influenced them for resorted to organic farming.

Production of high quality, toxic, pesticide residue free and nutritious product

More than half (68.00 %) of the farmers expressed that they resorted towards organic farming to produce high quality, toxic, pesticide residue free and nutritious product. They aware about ill effects of chemical food which cause adverse effects on human health. Some farmers perceived that chemical would agriculture causes health hazard for themselves. However, personal health was not the only reason to convert to organic farming. The farmers who are conscious about their own health and of their families were more likely to be considered about their farm workers as well as consumers health by avoiding contact with toxic inputs and therefore it might be influenced them for resorting towards the organic farming.

Negative experiences faced with inorganic farming

The farmers who resorted towards the organic farming as a result of negative experiences faced with inorganic farming were exactly 50.00 per cent. Farmers converted to organic farming because of uneasiness experienced, with existing farming system which was predominantly based on chemicals. They experienced various negative experiences of chemical farming such as continuous pest and disease problem, pest resistance problem, pollution due to fertilizers and pesticides, pest resurgence problem, increased cost of cultivation, high cost of external farm inputs, reduced food quality and declining yield. As a result of realizing these long lasting effects of chemical farming at particular point they resorted towards organic farming.

To reduce cost of production

Nearly half (44.00%) of the farmers were resorting towards organic farming in order to reduce the cost of production. They felt that under chemical farming system they had spent more money for purchasing fertilizers and pesticides which increased the cost of cultivation and also pushed them towards dept trap, also they aware of organic farming reduced the cost of cultivation by efficient utilization of local on farm resources. Hence in order to lower the cost of production they might be resorted towards the organic farming.

Participation in organic farming related training and field visit

More than one fourth (32.00%) of the farmers resorted to organic farming as a result of participation in organic farming related training and field visit. They had participated in different training programmes which were conducted by Krishi Vigyan Kendra and organic farmers associations in which they visited to other successful organic farmer's fields and discussed with organic farmers and learned organic farming technologies which might be influenced them for resorting to organic farming.

Awareness created through broadcasting program in mass media and publications such as magazines and journals

Nearly one fourth (22.00%) of the respondents resorted towards organic farming as a result of awareness created through broadcasting program in mass media and publications such as magazines, journals and news dailies.

Gaining independence and self sufficiency under organic farming system

A very few only 18.00 per cent of the respondents were resorted towards organic farming to gain independence and to attain self sufficiency. After realizing that every requirement of farm should be met out within the farm itself and also who expected the final product alone reach the consumer might be resorted towards the organic farming.

Advantages and benefits

The findings related to the advantages and benefits of organic farming as experienced by the organic farmers are presented in Table 2.

Soil properties

Improved soil organic matter, soil structure, soil texture, soil nutrient enhancement, soil microorganisms, microbial activity, abundance of earthworms and fertility of soil were the major advantages of organic farming as experienced by all the respondents. They increased the soil organic matter with the application of vermicompost and manures such as farm yard manure, poultry manure and goat manure. They also expressed that application of various organic amendments like neem seed cake, ground nut cake, coconut cake and illupai cake are making the soil more friable. Soil organic matter contributes to good soil structure, soil texture and soil nutrient enhancement.

They also expressed that application of various organic inputs such as jeeva mruthum, amirtha karaisal, panchakavya, cow dung slurry, humic acid and fish amino acid at appropriate intervals enhanced the soil nutrients, soil microorganisms, microbial activity, earthworms and fertility of the soil.

Production of good quality, healthy and toxic free product

Production of good quality, healthy and toxic free product were also the major advantage of organic farming as experienced

Sl.No.	Advantages experienced	Number	Percentage
1.	Soil properties	100	100
2.	Production of good quality, healthy and toxic free product	100	100
3.	Longer storability of organic products	94	94
4.	Reduced cost on external inputs	82	82
5.	Efficient use of local on- farm resources	77	77
6.	Water holding capacity of soil	75	75
7.	Conservation of environment	71	71
8.	High preference by the consumers	68	68
9.	Premium price	58	58
10.	Balance of pest and predators	55	55
11.	Increased yield	54	54
12.	Consistency of profit	46	46
13.	Preservation of natural agro biodiversity	44	44

Table 2.Advantages and Benefits of Organic Farming

*Multiple responses obtained

by all the respondents. The farmers expressed that they have not used any chemicals, fertilizers and pesticides according to the certification norms hence the organic product always free from toxic and pesticides residues which improved the produce quality. They also realized that the quality attributes of product such as size, colour, appearance, smell, taste and nutritive value were found better compare to inorganic product.

Longer storability of organic products

Almost all the respondents (94.00 %) felt that longer storability of organic products as a major advantage. They felt that keeping quality, shelf life and storability of organic products were more than that of inorganic farm product.

(n=100)*

Reduced cost on external inputs

Reduced cost on external inputs were also the major advantage of organic farming as experienced by 82.00 per cent of the respondents. The farmers reported that they did not purchased costly organic inputs like growth promoters, organic manures and organic bio pesticides etc., rather they used self- produced inputs such as seeds, seed treatment solution like beejamurutha, manures like jeevamruthum, amirtha karaisal, panchakavya, fish amino acid, effective microorganism and farm yard manure, botanical formulations like eindhu ilai karaisal and agni astram. Hence farmers realized reduced cost on external inputs as one of the major advantages.

Efficient use of local on- farm resources

Efficient use of local on- farm resources were the major advantage of organic farming as experienced by 77.00 per cent of the respondents. Availability of inputs within their own field decreased their dependence on borrowings and prevented them from dept trap. They recycled various on farm resources such as cattle shed wastes, cow dung, cow urine, droppings of goats and sheep and fish wastes as a manures and crop wastes such as, sugar cane trashes, dried leaves, green manure, green leaves manure and weeds as a mulching material as well as manure. Hence organic farmers were conscious about the importance of efficient use of local on farm resources.

Water holding capacity of soil

Water holding capacity of soil was the major advantage of organic farming as experienced by 75.00 per cent of the respondents. They expressed that the mulching with green manures, green leaves manures, dried leaves and weeds prevented the entering of sunlight into the soil and making the soil always with sufficient moisture which improved the water holding capacity of soil, obviously farmers experienced these benefit.

Conservation of environment

Conservation of environment was the major advantage of organic farming as experienced by 71.00 per cent of the respondents. Organic farmers claimed that organic farming practices conserved various components of environment like soil, air and water. As they strictly avoided the spraying of any synthetic chemicals and pesticides it does not pollute soil, air and water. Hence it will conserve environment for future generation also.

High preferences by the consumers

High preferences by the consumers were the major advantage of organic farming as perceived by 68.00 per cent of the respondents. Farmers opined that after realizing the ill effects of consuming chemical foods consumers were preferred to buy organic food products. The growing awareness created among the consumers would have provided the marketing opportunity for organic products.

Premium price

Better price for the organic products compare to market price were the major advantage of organic farming as experienced by 58.00 per cent of the respondents. The farmers getting better price for the product compare to market price. The certified organic farmers who sold their produces to various organic shops were getting premium price at the rate of 20% more than inorganic farming product also one of the advantages perceived among the farmers.

Balance of pest and predators

Balance of pest and predators were the major advantage of organic farming as experienced by 55.00 per cent of the respondents. Organic farmers primary strategy in controlling pest and disease was prevention of through good plant nutrition and management. They considered pest and disease are part of nature. They used cover crops and mulching with green manure and green leaves manures and effectively disrupting habitat of weeds, insects and disease organism. They also used certain botanical formulations for control of pests. Avoidance of chemicals and use of alternative under organic farming system helps to conserve biodiversity as it encourages a natural balance within the eco system. Their aim was not to eradicate them altogether. Their aim was nature will take care of it which restores natural balance between pest and predators.

Increased yield

Increased yield was the major advantage of organic farming as experienced by 54.00 per cent of the respondents. After experiencing temporary decreased yield during the initial transition period the farmers were realizing the yield was increased.

Consistency of profit

Consistency of profit was the major advantage of organic farming as experienced by 46.00 per cent of the respondents. Farmers opined that consistency of profit due to resorting towards organic farming was regular. They have opined that organic farming did not involved capital investment as high as that required in chemical farming which reduced that cost of inputs and their by increasing profit.

Preservation of natural agro biodiversity

The finding of the present study show that 44.00 per cent of the respondents perceived that, preservation of natural agro biodiversity as a major advantage of organic farming.

CONCLUSION

The study has shown that the major reasons for resorting to organic farming were premium price, conservation of environment, production of high quality, toxic and pesticide free product, negative experiences faced with inorganic farming, to reduce cost of production, and to gain independence and self sufficiency under organic farming system. It was also found that perceived benefits of organic farming are increased soil properties, reduced cost on external inputs, efficient use of local on- farm resources, water holding capacity of soil, conservation of environment and premium price. To promote organic farming, farmers should be given training by emphasizing the advantages of organic farming. According to Seyed Jamal Hosseini and Zahara Ajoudani (2012) there is need for more training and education to change the attitude of farmers and enhance their confidence about the role of organic farming in agriculture. It is also important to develop policies that benefit small-scale farmers.

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