

Reasons for Practicing and Not Practicing Organic Farming as Perceived by Farmers

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ABSTRACT

In India, the area under organic farming has been increasing steadily since 2000 after launching National Programme for Organic Production. The study was conducted to find out the reasons for practicing and not practicing organic farming. A total of 240 farmer comprising 120 organic farmers and 120 inorganic farming randomly from four districts in Tamilnadu constituted the sample for the study. The most important reasons for practicing organic farming were concern for human health improvement in health soil and lower production cost. The most important reasons for not practicing organic farming were unorganized market for organically grown produce, low premium for organic produce and lack of knowledge about organic farming.

Organic farming is a production system in which the environment is preserved, farmers and workers have fair access to the means of food production while receiving a fair return for their labour and consumers have their food at fair prices. National Programme for Organic Production (NPOP) was launched in May 2000 with the objective of promoting organic farming in India. There is a distinct movement in Tamil Nadu among the farmers, agriculture experts and scientists in favour of organic farming. NGOs, Tamil Nadu Agricultural University, State Department of Agriculture and other government and private agencies have started advocating organic farming in major crops. What are the reasons for practicing and not practicing organic farming becomes an important issue to be explored. The study was undertaken to find out the reasons for practicing and not practicing organic farming.

METHODOLOGY

Ex-post facto research design was used for this study. A total of 240 farmers comprising 120 organic Farmers and 120 inorganic farmers drawn randomly from 8 taluks of four districts, namely, Kancheepuram, Erode,

Dindigul and Karur constituted the sample for the study. Two taluks namely, Chengalpattu and Madurantagam of Kancheepuram and two taluks such as Sathiyamangalam and Bavani of Erode were selected purposively considering the maximum number of organic paddy growers. Likewise, two taluks namely, Dindigul and Attur of Dindigul and two taluks such as Kulithalai and Krishnarayapuram of Karur were selected purposively on account of maximum number of organic banana growers. Based on the list of organic farmers collected from Non Governmental Organizations, Krishi Vigyan Kendras and experts on organic farming, 15 organic Farmers were selected randomly from each taluk. To know the reasons for not practicing organic farming, 15 inorganic farmers were also interviewed in the same locale where organic farmers were interviewed.

As there was no standardized scale for knowing the reasons for practicing and not practicing organic farming, an explorative methodology was employed. The selection of reasons was done in two stages. In the first stage, 25 reasons for practicing and 20 reasons for not practicing organic farming were identified based on review

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of literature and in consultation with experts of various fields in agriculture. In the second stage, 30 scientists representing different disciplines in agriculture comprising Agronomy, Horticulture, Soil Science and Agricultural Chemistry, Agricultural Extension and other related fields were requested to serve as judges to indicate the degree of relevance of these reasons for practicing organic farming on a three point: continuum of most relevant, relevant and least relevant. The degree of relevance was quantified by assigning a score of 3 for the most relevant, 2 for the relevant and 1 for the least relevant. The total score of all judges for each reason was arrived at and the mean value was also calculated. The overall mean of all reasons was also worked out. The reasons which were having a mean value more than the overall mean were selected. The mean values of twelve reasons were found to be more than the overall mean and they were selected for the study.

The same above mentioned procedure was followed for selecting the reasons for not Practicing organic farming. Finally ten reasons were selected for inclusion in the schedule.

The responses were collected on a three point continuum, such as most important, important and least important and score of 3, 2 and 1 was given respectively. Mean score for each reason was calculated and the reasons were ranked based on the mean score.

RESULTS AND DISCUSSION

Reasons for practicing organic farming

The reasons for practicing organic farming were collected from organic farmers and the reasons were ranked in the order of importance based on the mean score value. It is revealed from the Table 1 that the reason 'concern for human health' was ranked first with the mean score value of 2.77 out of maximum obtainable score of 3. The other reasons in the order of importance were 'improvement in health of soil' (2.71), 'lower production cost' (2.65), 'influence of other organic farmers, naturopathy and other organic movement' (2.59), 'sustained farmer livelihood system' (2.38), 'minimal negative environmental effects' (2.29), 'self dependence and freedom in farming' (2.27), 'minimal use of external inputs' (1.89), 'high level of competitiveness' (1.82), 'respecting and building on indigenous knowledge and value systems' (1.63), 'efficient use of production factors' (1.58) and 'diversification of agriculture' (1.21).

Organic farmers knew the ill effects of chemical farming on the health of human beings. Knowingly/ unknowingly farmers used excess quantity of fertilizers and pesticides to increase the yield of crops. The excess quantity not only polluted the soil, water and air but also human beings. Farmers felt that chemical farming was the source for most of the diseases of human beings. This changed their mind set to go for organic farming and made them to rank 'concern for human health as a first reason for practicing organic farming. Similar finding was reported by Molder et al., (1991).

'Improvement in health of soil' was ranked as second reason for practicing organic farming. Farmers believed that soil is the source of life. For healthy life, healthy plants are required. Likewise for healthy plants, healthy soil is required. Indiscriminate use of chemicals resulted in poor physical, chemical and biological properties of the soil. The farmers friend earthworm was rarely found in the field and other beneficial micro-organisms also were killed. To change the condition of the soil from unfertile to fertile, farmers decided to practice organic farming. The third reason as perceived by farmers was 'lower production cost'. Farmers had bad experience in chemical farming that most of the farmers were trapped into vicious cycle of poverty. The financial needs for purchasing agricultural inputs were met with the help of money lenders. Farmers could not settle their dues to money lenders even after selling their harvested produce. This cycle continued for long time and yield had not been increased even with increased use of inputs. Farmers started practicing organic farming to reduce the production cost. Chong (1994) finding is in line with this finding.

The other important reason was 'influence of other organic farmers, naturopathy and other organic movement'. Farmers attended many training programmes and meetings on organic farming conducted by organic experts. The efforts of Centre for Indian Knowledge Systems (Chennai), Green Shop (Erode), Saraswathi KVK (Karur), MSSRF (Chennai), Tamil Nadu Agricultural University and State Department of Agriculture were also noteworthy. Farmers also visited various successful organic farmers' fields in Tamil Nadu and other states. These external influences changed farmers to go for organic farming. Chong (1994) and Anandakumar (1998) reported similar kind of findings.

The fifth reason was 'sustained farmer livelihood system'. Farmers had the problem of indebtedness in chemical farming because of high cost of inputs. Gradually

they came to know that if they switch over to organic farming they will be free from indebtedness since organic families relies on locally available inputs. According to farmers after practicing organic farming there was no debt among farmers.

'Minimal negative environmental effects' was perceived as sixth reason by the farmers. Farmers realized the ill effects of chemical farming on environment. They believed that indigenous varieties of plants, animal breeds, birds etc had been destroyed by chemical farming. Chemical farming also disturbed the agricultural ecosystem as a result minor pests and diseases have become major one. Contamination of water, soil, air etc and ground water depletion were other negative effects of inorganic farming. So farmers were interested in practicing organic farming to minimize the negative effects on environment. Svensson (1991) and Veeresh (1996) reported similar findings.

Farmers perceived 'self dependence and freedom in farming' as a seventh reason. In inorganic farming, farmers were dependent on outsiders for inputs like seeds, fertilizers, pesticides etc. Moreover they had to wait for long time for the inputs. Farmers could not do the operations timely that led to yield loss. By practicing organic farming farmers were self dependent and enjoyed freedom in doing agricultural operations since most of the inputs were available within the farm itself. This finding is in line with the findings of Anandakumar (1998).

'Minimal use of external inputs was perceived as a eighth reason. Most of the inputs were available within

the farm so farmers hardly purchased external inputs for farming. Since inputs were costly and were not available in time most of farmers switched over to organic farming. Ninth reason for practicing organic farming was 'high level of competitiveness'. Winners don't do different things but they do things differently. Likewise, organic farmers wanted to do farming differently. They were competent enough to cultivate the crops organically and produce the same yield as that of inorganic farmers with minimal use of organic inputs. Farmers took it as a challenge to compete with inorganic farmers.

'Respecting and building on indigenous knowledge and value systems' was perceived as a tenth reason. Organic farmers wanted to be the custodians of indigenous knowledge and value systems. Since all indigenous knowledge was organic in nature they fitted into the organic farming system.

The eleventh reason for practicing organic farming was 'efficient use of production factors'. Production factors namely, land, labour, capital and other natural resources should be used with care in order to meet the future generation needs. This was possible in organic farming, so farmers changed to organic farming.

The last reason for practicing organic farming was 'diversification of agriculture'. Inorganic farming advocates intensive cropping rather than diversification. On the contrary, organic farming encourages crops, livestock, trees, poultry and allied agricultural activities. Diversification not only helped in maximizing the income of farmers but also helped in balancing the ecosystem.

Table 1: Reasons for practising organic farming

S. No.	Reasons	Most important		Important		Least Important		Mean score	Rank
		f	%	f	%	f	%		
1.	Concern for human health	92	76.67	28	23.33	0	0	2.77	I
2.	Improvement in health of soil	85	70.83	35	29.17	0	0	2.71	I
3.	Lower production cost	79	65.84	40	33.33	1	0.83	2.65	II
4.	Influence of other organic farmers, naturopathy and other organic movement	71	59.17	49	40.83	0	0	2.59	IV
5.	Sustained farmer livelihood system	58	48.33	50	41.67	12	10.00	2.38	V

6. Minimal negative environmental effects	41	34.17	73	60.83	6	5.00	2.29	VI
7. Self dependence and freedom in farming	48	40.00	56	46.67	16	13.33	2.27	VII
8. Minimal use of external inputs	15	12.50	77	64.17	28	23.33	1.89	VIII
9. High level of competitiveness	21	17.50	56	46.67	43	35.83	1.82	IX
10. Respecting and building on indigenous knowledge and value systems	10	8.33	56	46.67	54	45.00	1.63	X
11. Efficient use of production factors	12	10.00	46	38.33	62	51.67	1.58	XI
12. Diversification of agriculture	0	0	25	20.83	95	79.17	1.21	XII

Reasons for not practicing organic farming

The data on reasons for not practicing organic farming from inorganic farmers were collected with the help of interview schedule. Based on the mean values, the reasons were ranked and are presented in Table 2. It is observed from the Table 2 that 'unorganized market for organically grown produce' was ranked first with the mean value of 2.77 out of maximum possible score of 3. The other reasons in the order of importance were 'low premium for organic produce' (2.23), 'lack of knowledge about organic farming' (2.14), 'No experimental evidence on the cost benefit ratio of organic farming' (2.07), 'No subsidies for organic farming' (2.06), 'large quantities of organic inputs are required' (2.03), 'economic loss due to transition from conventional to organic' (2.01), 'difficult to get organic fertilizers' (2.00), 'time consuming' (1.93) and 'chemicals are easily available and easy to use' (1.72).

The first reason for not practicing organic farming was 'unorganized market for organically grown produce'. Farmers felt that they should not work for no reward. Moreover, they did not know the place of markets where organic produce were sold. So these farmers did not switch over to organic farming. Loganandhan (2002) reported similar kind of findings.

'Low premium for organic produce' was ranked as second reason for not practicing organic farming. Farmers believed that if they go for organic farming there would be yield loss. They also knew that there was no fixed

premium for organic produce over inorganic produce. Loganandhan (2002) finding is in concordance with this finding.

Farmers perceived 'lack of knowledge about organic farming as a third reason, Knowledge is a prerequisite for any action. Without proper knowledge one can't execute any activity successfully. Farmers lacked knowledge about organic farming especially on different preparations for meeting the nutrient requirements and pest and disease management. Wynen (1992) and Nadia (1998) reported the same findings in their studies.

'No experimental evidence on the cost benefit ratio of organic farming was perceived as a fourth reason. Farming was considered to be a business, so Farmers wanted to increase their profits every year and they were ready to switch over to other farming techniques only if they were convinced with cost benefit ratio. Farmers did not know about the cost benefit ratio of organic farming that made them not to practice organic farming.

Farmers perceived 'No subsidies for organic farming' as a fifth reason. Unlike inorganic farming there were no subsidies for practicing organic farming. Since most of the farmers' belonged to small and marginal category they expected some financial help from the government side. This made the farmers not to switch over to organic farming. Similar findings were reported by Shanna (2002) and Loganandhan (2002).

'Large quantities of organic inputs are required' was perceived as a sixth reason. Farmers faced difficulty in replacing chemical fertilizers with organic inputs. Moreover, they felt that handling inorganic fertilizers were easy since they were applied in small quantities when compared to organic manures. Requirement of large quantities of organic inputs influenced farmers not to practice organic farming. Sharma (2002) narrated the same finding.

Seventh reason for not practicing organic farming was 'economic loss due to transition (from conventional to organic)'. Farmers believed that if they go for organic farming there would be yield loss because their farms had been cultivated inorganically for the past five-six decades. They did not want to take risk in practicing organic farming as they were already facing some other problems in agriculture. Sharma (2002) reported similar kind of result.

Farmers perceived 'difficult to get organic fertilizers' as a eighth reason. Livestock is the very important source of organic manures. In the modern life

style, most farmers were interested in keeping one two cattle for milk purpose. But at least 5-6 animals were required for 4 acres of land for practicing organic farming. There was shortage of organic manures so farmers faced the difficulty in getting organic fertilizers.

'Time consuming' was the ninth reason for not practicing organic farming. Time is a very precious resource. Farmers felt that, organic farming will consume more time in comparison to inorganic farming. They feared that if they go for organic farming they won't be able to devote time to other activities. Sharma (2002) reported similar kind of finding.

The last reason for not practicing organic farming was 'chemicals are easily available and easy to use'. Modern day farmers believed in simplified life and were ready to devote only part time in agricultural activities. So they preferred chemicals instead of going for organic inputs. Moreover, chemicals were easily available in the market and easy to use as well. The negative consequences were not noticed by these farmers.

Table-2 Reasons for not practising organic farming

(N=120)

SNo	Reasons	Most important		Important		Least Important		Mean score	Rank
		f	%	f	%	f	%		
1.	Unorganized market for organically grown produce	93	77.50	27	22.50	0	'0	2.77	I
2.	Low premium for organic produce	36	30.00	76	63.33	8	6.67	2.23	II
3.	Lack of knowledge about organic farming	37	30.83	63	52.50	20	16.67	2.14	III
4.	No experimental evidence or the cost benefit ratio of organic farming	32	26.67	64	53.33	24	20.0	2.07	IV
5.	No subsidies for organic farming	34	28.33	59	49.17	27	22.50	2.06	V
6.	Large quantities of organic inputs are required	29	24.17	66	55.00	25	20.83	2.03	VI
7.	Economic loss due to transition (from conventional to organic)	28	23.33	65	54.17	27	22.50	2.01	VII
8.	Difficult to get organic fertilizers	30	25.00	60	50.00	30	25.00	2.00	VIII
9.	Time consuming	25	20.83	61	50.84	34	28.33	1.93	IX
10.	Chemicals are easily available and easy to use	17	14.17	52	43.33	51	42.50	1.72	X

CONCLUSION

Both organic and inorganic farmers had their own reasons for practicing and not practicing organic farming. Organic farmers had concern about health of human beings and health of the soil. But, inorganic farmers had concern about marketing and premium price for agricultural products. Training institutions, NGOs and extension functionaries who are in constant contact with farming community need to take into account the reasons of both organic and inorganic farmers while planning and executing the agricultural development programmes related to organic farming.

REFERENCES

- Anandakumar, S. (1998). Motivating farmers to convert to organic farming and strategies for organic extension. *IFOAM Ecology and Farming* 18: 21-28
- Chong, W. H. (1994). *Organic Farming and the Sustainability of Agricultural Science Institute Rural Development Administration, Suweon*, 705 p.
- Loganandhan, R. (2002). Socio- economic and ecological implication of Tamil Nadu. Ph. D. thesis, Division of. Agricultural Extension, Inc Research Institute, New Delhi.
- Molder, P. J. Negrave, P. D. and Schoney, R. A. (1991). Descriptive analysis organic producers. *Canadian J. Agricultural Economics* 39 (2): 891-895
- Nadia, S. (1998). Evaluating the potential contribution of organic agriculture goals. FAOs technical contribution to IFOAM's Scientific Conference 19, 1998. Scientific Publishers, Argentina, pp.20 1-215
- Sharma, A.K. (2002). *A Handbook of Organic Farming*. Agrobios, Jodhpur, Svensson, I. (1991). Governmental subsidy to organic farming - *A mail inc Agriculture* 7: 112-119
- Veeresh, G .K. (1996). *Organic farming and its relevance to present condii Man and Ecology*, Bangalore, 115 p.
- Wynen, E. (1992). Conversion to organic agriculture in Australia: Problems a the cereal - livestock industry. *National Association for sustains Australia*, 156 p.