

Research Article

# Attitude of farmers towards organic vegetable cultivation

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**SUMMARY :** Realizing the adverse effects of conventional farming, organic farming is gaining momentum in India. The general public started searching for organic produce. Conventional farmers are aiming for higher productivity and profitability. There exists a wide gap between demand and production of organic produce. Therefore, a systematic study was conducted with the objective of analyzing the attitude of farmers towards the cultivation of organic vegetables who are now engaged in organic and conventional vegetable cultivation. Majority of the organic farmers (86.67%) had a favourable attitude towards organic farming practices followed by more favourable (10%) and less favourable (3.33%) attitude. More than 80 per cent of the conventional farmers had favourable attitude towards organic farming practices. Above 90 per cent of the organic as well as conventional farmers believed that use of organic farming practices was essential for better quality of vegetables. Nearly cent per cent of the conventional farmers reduced the chemical application over the years and increased the application of organic manures.

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## BACKGROUND AND OBJECTIVES

The production and consumption of vegetables are most important to human diet for better health, because they possess high nutritive value and are rich source of carbohydrates, proteins, vitamins and minerals. In spite of this the vegetable production is low, because improved vegetable production technologies are not fully adopted by the farmers at their own fields (Suman, 2008).

The need for organic farming in India arises from the un-sustainability of agriculture production and the damage caused to ecology through the conventional farming practices. Organic farming has been receiving increased attention in India also with various promotional measures initiated by the central and state governments, such as setting up a National Institute of Organic Farming in Ghaziabad, Uttar Pradesh, appointment of accreditation and

certifying agencies for organic farm products, developing norms for certifying organic products and providing financial support to implement promotional activities for organic farming.

Organic farming systems differ from conventional systems in several aspects such as no artificial pesticides or fertilizers are used on organic farms, organic farms generally have a wider crop rotation scheme, and also have larger areas of non-crop habitats (Seyed *et al.*, 2010). By not using soluble chemical fertilizers and limiting the use of natural biocides in organic farming, thus that means that it is largely dependent on biological processes for the supply of nutrients and for protection of crops from pests and disease (Gosling *et al.*, 2006). Organic farming produces safe and nutritious food as it helps prevent soil pollution by stopping risky chemical reactions in the soil and avoiding produce contamination, as well as soil erosion, by wind and rain. Hadriman (2004) in his study has found that the nutritional value was

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an important factor that influences consumers' preferences in purchasing chemical free vegetable, followed by desire, freshness, health effect and taste.

To identify the market opportunities for organic produce and convince the farmers regarding the recent change in consumer behavioural pattern, an objective was framed to analyse the attitude of farmers towards the cultivation of organic vegetables.

## RESOURCES AND METHODS

Thrissur district of Kerala state was selected for conducting the study. Nadathara, Pananchery and Puthoor Panchayats were selected purposively as these Panchayats were having maximum area under vegetable cultivation in Thrissur district. Two groups of respondents such as farmers who were adopting organic farming and conventional farming practices in vegetable cultivation were selected randomly with a sample size of thirty in each group. To measure the degree of attitude of the farmers towards organic farming practices, an attitude scale was constructed by following the method of Likert summated ratings suggested by Edwards (1969). All possible statements which discriminated the positive and negative attitudes of the farmers towards organic vegetable cultivation were collected and included in the scale. The attitude scale developed by Jaganathan (2004) was adopted and modified according to the requirements of the study. Primary data were collected using a pre-tested questionnaire during the year 2011.

## OBSERVATIONS AND ANALYSIS

Table 1 shows the attitude of organic farmers towards

organic vegetable cultivation. Cent per cent of the respondent farmers strongly agreed to the statement, 'organic farming improves fertility status of the soil'. Nearly three fourth of the farmers agreed to the statement, 'it is worthwhile to adopt organic farming practices even by borrowing money' (73.33%). Most of the farmers (93.33%) strongly disagreed with the statement 'use of organic farming practices is only a waste of money and time'. Majority of the farmers (93.33%) disagreed to the statement, 'adoption of organic farming practices is practically not feasible'. More than three-fourth of the farmers (86.67%) agreed to the statement, 'It is possible to get good yield by adopting organic farming practices'. For the statement, 'It is not profitable to adopt organic farming practices in vegetable cultivation', 86.67 per cent of the farmers disagreed. Most of the farmers (86.67 %) agreed for the statement, 'adoption of organic farming practices is highly risky'. For both the statements, 'use of organic farming practices is essential for better quality of vegetables' and 'it is possible to solve our environmental problems through organic farming' 96.67 per cent of the farmers strongly agreed. From the above findings, it is understood that majority of the farmers had positive attitude towards organic vegetable cultivation. The results of farmers' attitude towards sustainability of vegetable cultivation were in line with the results of Dahlberg (1986) and Cohen (1977).

Farmers' attitude towards organic vegetable cultivation was studied by giving scores to the responses, mean score was 53.47, standard deviation was 2.62 and the findings are given in the Table 2. From the table it is clear that majority of the organic farmers (86.67%) had a favourable attitude towards organic farming practices followed by more favourable (10%) and less favourable (3.33%) attitude. These findings are in

**Table 1: Attitude of organic farmers towards organic vegetable cultivation**

Sr. No.	Statements	(n=30)				
		SA (%)	A (%)	UD (%)	DA (%)	SDA (%)
1.	Organic farming improves fertility status of the soil	100	0	0	0	0
2.	It is worthwhile to adopt organic farming practices even by borrowing money	13.33	73.33	13.33	0	0
3.	Use of organic farming practices is only a waste of money and time	0	0	0	6.67	93.33
4.	The way our forefathers cultivated seems to be good	96.67	3.33	0	0	0
5.	Adoption of organic farming practices is practically not feasible	0	0	3.33	93.33	3.33
6.	It is possible to get good yield by adopting organic farming practices	13.33	86.67	0	0	0
7.	It is not profitable to adopt organic farming practices in vegetable cultivation	3.33	0	0	86.67	10
8.	Organic farming practices should be practiced by all farmers	13.33	80	6.67	0	0
9.	Cultivation of organic vegetables has brought a new light in the field of agriculture	6.67	86.67	3.33	0	3.33
10.	Adoption of organic farming practices is highly risky	3.33	86.67	0	0	10
11.	It is better to give more importance to other occupation than following organic farming practices	0	86.67	0	3.33	10
12.	Use of organic farming practices is essential for better quality of vegetables	96.67	3.33	0	0	0
13.	It is possible to solve our environmental problems through organic farming	96.67	3.33	0	0	0

SA- Strongly agree, A-Agree, UD-Undecided, DA-Disagree and SDA-Strongly disagree

line with the results of the study conducted by Meena (2010) which also showed positive attitude towards organic farming. The awareness and knowledge about organic farming practices might have led them to develop an interest towards organic farming practices. The results born out of the intensive research in Kerala Agricultural University and disseminated in scientist's meet, research council and extension council meetings also proved the worthiness of organic farming practices.

Table 3 reveals that majority of the conventional farmers (86.67%) strongly believed that organic farming improved the fertility of the soil and which was essential for better quality of vegetables. In the meantime, 43.33 per cent of the farmers strongly disagreed that the adoption of organic farming practices was a waste of money and time, even though 26.67 per cent of the farmers agreed with the

statement.

Majority of the farmers (63.33 %) agreed with the statement that adoption of organic farming practices was highly risky and they added that vegetable cultivation itself was risky job whether it was organic or not. Most of the conventional farmers (83.33%) strongly agreed that for better quality of vegetables, organic farming practices were essential. More than three-fourth of the farmers (76.67%) agreed that environmental problems could be solved through organic farming practices. The results of farmer's response on different components of attitude towards sustainability scale were in conformity with the results of Beus and Dunlap (1991), Berry (2000) and Shivrain and Yadav (2006).

Conventional farmers' attitude towards organic vegetable cultivation was studied by assigning scores to

**Table 2 : Distribution of organic farmers according to their attitude towards organic vegetable cultivation**

				(n=30)	
Sr. No.	Category	Score range	Frequency	Percentage	
1.	More favourable	>56.09	3	10	
2.	Favourable	50.84?56.09	26	86.67	
3.	Less favourable	<50.84	1	3.33	

Mean= 53.47 ; SD= 2.62

**Table 3 : Attitude of conventional farmers towards organic vegetable cultivation**

		(n=30)				
Sr. No	Statements	SA (%)	A (%)	UD (%)	DA (%)	SDA (%)
1.	Organic farming improves fertility status of the soil	86.67	10	3.33	0	0
2.	Use of organic farming practices is only a waste of money and time	10	26.67	13.33	6.67	43.33
3.	The way our forefathers cultivated seems to be good	70	13.33	16.67	0	0
4.	Adoption of organic farming practices is practically not feasible	6.67	16.67	43.33	20	13.33
5.	One need not bother about undesirable consequences when chemicals are used in vegetable cultivation	0	0	6.67	40	53.33
6.	It is not profitable to adopt organic farming practices in vegetable cultivation	10	16.67	23.33	43.33	6.67
7.	Adoption of organic farming practices is highly risky and hence, it is not advisable to follow the same	26.67	63.33	6.67	3.33	0
8.	It is better to give more importance to other occupation than following organic farming practices	10	0	90	0	0
9.	Use of organic farming practices is essential for better quality of vegetables	83.33	13.33	3.33	0	0
10.	It is not correct to support organic farming practices	6.67	3.33	10	53.33	26.67
11.	It is possible to solve our environmental problems through organic farming	20	76.67	3.33	0	0
12.	Organic farming practices have no advantages over conventional practices	0	16.67	73.33	10	0

SA- Strongly Agree, A-Agree, UD-Undecided, DA-Disagree and SDA-Strongly disagree

**Table 4 : Distribution of conventional farmers according to their attitude towards organic vegetable cultivation**

				(n=30)	
Sr. No.	Category	Score range	Frequency	Percentage	
1.	More favourable	>48.47	2	6.67	
2.	Favourable	39.39?48.47	24	80.00	
3.	Less favourable	<39.39	4	13.33	

Mean= 43.93; SD= 4.54

the responses and the findings are given in the Table 4. From the table it is clear that majority of the conventional farmers (80 %) had a favourable attitude towards organic vegetable cultivation, 6.67 per cent of the farmers had more favourable attitude and 13.33 per cent had less favourable attitude towards organic vegetable cultivation. This finding is in concurrence with the findings of Jaganathan (2004) and Assis and Ismail (2011) who reported that majority of the vegetable growing farmers had a favourable attitude towards organic farming practices.

### Conclusion:

Majority of the organic and conventional farmers had a favourable attitude towards organic farming practices. Above 90 per cent of the organic as well as conventional farmers believed that use of organic farming practices was essential for better quality of vegetables. Nearly cent per cent of the conventional farmers reduced the chemical application over the years and increased the application of bio fertilizers. Based on the findings, it was concluded that it was easy to motivate farmers to produce organic vegetables for higher profit since majority of them had favourable attitude towards organic vegetable cultivation. Simultaneously they should also be educated on the procedures of organic cultivation, standards certification and labelling. Extension machineries may also be geared up, to supply quality organic inputs required for organic vegetable cultivation.

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