



Research Article

IMPACT OF TRAINING ON KNOWLEDGE OF ORGANIC FARMING IN GUJARAT STATE

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Received: May 09, 2016; Revised: June 24, 2016; Accepted: June 25, 2016; Published: October 15, 2016

Abstract- Organic agriculture is one of the fastest growing sectors of agricultural production. Considering the potential environmental benefits of organic production and its compatibility with integrated agricultural approaches to rural development, organic agriculture may be considered as a development vehicle for developing countries like India, in particular with this context research study was undertaken for 90 farmers in capacity building through training on organic farming practices and 90 untrained farmers of Surendranagar, Jamnagar and Rajkot district of Gujarat state, where researcher observed that a majority of the respondents had medium level of knowledge about organic farming practices. It was also found that almost all the independent variables of trained farmers except size of land holding and annual income had significantly relationship with knowledge of organic farming practices. While in case of untrained farmers all the independent variables except social participation, mass media exposure, innovativeness, market of organic produce and heard size had significantly relationship with knowledge of organic farming practices.

Keywords- Organic farming, Knowledge, Training, Correlation coefficient

Citation: Sharma Rohan, et al., (2016) Impact of Training on Knowledge of Organic Farming in Gujarat State. International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 8, Issue 47, pp.-1955-1956.

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Academic Editor / Reviewer: Kanani P R

Introduction

Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimum use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony. Day by day use of chemical based farming increases but some people are being vigilance about their side effect. Farmers and other peoples are find way of sustainable agriculture practices, eco-friendly practices and organic farming practices is the only way to achieve it. Organic agriculture has grown from 15.8 million hectares to 37.2 million hectares worldwide and India rates fifth in the world for speed of uptake and this has occurred with some support from the Indian government. India ranks seventh in the world with 1.2 million hectares of certified organic agriculture, which constitutes about 0.6 per cent of India's total cultivable area. Total geographical area of Gujarat State has an about 189.3 thousand sq. km. land under organic management is only 0.5 per cent found in Gujarat state.

More and more area increased under organic farming, which is becoming demand of present and coming era. All are eager to know how to improve the organic farming practices. One way is exists and that is Training. Farmers follow many organic farming practices for their crops, health consciousness and increasing crop yield. On the basis of this question arise on mind that, why they have to follow organic farming, what is covered under training and what is about training method and level of knowledge of organic farming practices followed by respondents. Keeping in view the above facts present study was planned to carried out with the following specific objectives:

- 1) To study the knowledge of trained and untrained farmers regarding organic farming practices.
- 2) To ascertain the association of characteristics of trained and untrained

farmers and their level of knowledge of organic farming practices.

Materials and Methods

The study was under taken in Surendranagar, Rajkot and Jamnagar district of Gujarat State which are having major dominance over organic farming practices. Six talukas were selected from each district and three villages from each taluka were selected randomly. Thus total eighteen villages from three districts were considered for the study. Five trained and five untrained respondents were selected randomly from each selected village. Total one hundred eighty respondents were selected from the selected villages by random sampling method. To measure the trained and untrained farmers' knowledge about organic farming practices, elaborate about knowledge test and its components in methodology section, the knowledge parameters can be mentioned in results also. The respondents were personally interviewed with the structured interview schedule. The data so collected were analyzed with the help of mean score, per cent and correlation coefficient.

Discussion

A critical perusal of the [Table-1] indicated that more than one half (58.89 %) of the trained farmers possess moderate knowledge about organic farming practices followed by 24.44 per cent trained farmers possess high level of knowledge where as only 16.67 percent trained farmers possessed low level of knowledge about organic farming practices.

In case of untrained farmers 43.33 per cent farmers had medium level of knowledge about organic farming practices followed by 35.56 per cent and 21.11 per cent had low level and high level of knowledge respectively.

Table-1 Distribution of Trained farmer based on their knowledge about Organic farming practices. n=90

Category	Knowledge score	Frequency	Percentage
Low	Below 25.07	15	16.67
Medium	Between 25.07 to 45.59	53	58.89
High	Above 45.59	22	24.44
Mean: 35.33		S.D.:10.26	

Table-2 Distribution of Untrained farmer based on their knowledge about Organic farming practices. n=90

Category	Knowledge score	Frequency	Percentage
Low	Below 20.31	32	35.56
Medium	Between 20.31 to 39.21	39	43.33
High	Above 39.21	19	21.11
Mean: 29.76		S.D.:09.45	

This might be due to the fact that knowledge of organic practices is obtained mainly as an ancestral property. Other reasons might be that the respondents had medium extension participation and high innovativeness. These facts may be helped to trained farmers in acquiring medium knowledge about organic farming practices, lacking of above aspects were found in case of untrained farmers.

This finding was in conformity with the findings of Thippeswamy *et al.* (2008), Munir *et al.* (2009), Sidram *et al.* (2009), Jaitawat *et al.* (2010), Oyesola *et al.* (2011), Rekha *et al.* (2012) [1-6].

Relationship of selected characteristics with knowledge:

It was evident from [Table-3] that out of 14 variables, size of land holding and annual income were non significant association with the knowledge of trained as well as untrained farmers' about organic farming practices. It can be inferred that there was no relationship between knowledge of organic farming practices of trained as well as untrained farmers and their size of land holding and annual income. This might be due to the fact that, irrespective size of land holding; any farmers need to acquire the technical know-how of organic farming practices equally. In case of annual income, respondents irrespective of annual income were going for recommended technologies to ensure higher production and they did not have any concern about the organic farming. In this way, they were aware of different recommended technologies.

Table-3 Correlation between knowledge about organic farming practices followed by the farmers and the independent variables.

Sr. No	Name of the independent variables	r- Value	
		Trained Farmers n= 90	Untrained Farmers n = 90
1	Age	-0.2493*	-0.2113*
2	Education	0.3326**	0.2275*
3	Size of land holding	0.0869 ^{NS}	0.0524 ^{NS}
4	Social participation	0.2055*	0.1255 ^{NS}
5	Annual income	-0.1019 ^{NS}	-0.0893 ^{NS}
6	Organic Farm Experience	0.2188*	0.2070*
7	Extension participation	0.3233**	0.2014*
8	Mass Media Exposure	0.2237*	0.0715 ^{NS}
9	Innovativeness	0.2335*	0.0950 ^{NS}
10	Risk orientation	0.3001**	0.2245*
11	Localite-cosmopolite value orientation	0.3102**	0.2008*
12	Market of Organic Produce	0.2146*	0.1427 ^{NS}
13	Scientific Orientation	0.2952**	0.2206*
14	Herd Size	0.2048*	0.1214 ^{NS}

There was a significant association of the knowledge of trained farmers' about organic farming practices with their social participation, mass media exposure, innovativeness, market of organic produce and heard size while in untrained farmers all five variables were non significantly associated with their knowledge of organic farming practices.

This might be due to higher social participation in various village organizations, lead to close contact with voluntary and cooperative organizations might have

motivated them to adopt the organic farming, which resulted in increasing the knowledge of organic farming practices. The trained respondents having higher exposure to mass media including farm magazine could get more information that is useful for their farming. They could get more benefits of the mass media. Therefore, they might have positively opined about various components under the knowledge of organic farming practices. Innovativeness of the respondents increased their level of knowledge about organic farming might be due the frequent contact with extension functionaries and had training regarding organic farming practices in their jurisdiction while no such type of task were found in case of untrained farmers condition. It can be concluded that trained farmer had more interest and awareness towards organic market and information about organic produce like selling cost etc. while in case of untrained farmers' lower level of awareness towards organic market. Trained farmer had possessed more livestock, like bullock, buffaloes, sheep etc as useful in organic farming purpose, while in case of untrained farmers' case lower level of herd size.

Age was negatively and significantly associated with the knowledge of organic farming practices in trained as well as untrained respondents. The remaining characteristics like education, extension participation, organic farm experience, localite-cosmopolite value orientation and risk orientation had positive and significant relationship with both trained and untrained farmers. In addition to this trained farmers' had positive and significant association with the social participation, innovativeness, mass media exposure, scientific orientation, market of organic produce and herd size.

Conclusion

It can be concluded that more than one half (58.89 %) of the trained farmers possess moderate level of knowledge followed by high level of knowledge about organic farming practices. In case of untrained farmers 43.33 per cent farmers had medium level of knowledge followed by low level of knowledge about organic farming practices. Majority trained and untrained farmers had high and low level of knowledge about organic farming practices respectively. It was also found that almost all the independent variables of trained farmers except size of land holding and annual income had significantly relationship with knowledge of organic farming practices. While in case of untrained farmers all the independent variables except social participation, mass media exposure, innovativeness, market of organic produce and heard size had significantly relationship with knowledge of organic farming practices. With a view to promote organic farming practices, it is essential to increase level of knowledge of train as well as untrained farmers. The independent variables which had significant relationship with knowledge should be considered during dissemination of organic farming practices.

Conflict of Interest: None declared

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