

RESEARCH NOTE

A Scale to Measure Attitude of Farmers' towards Organic Farming

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Paper Received on October 23, 2015, Accepted on November 27, 2015 and Published Online on December 10, 2015

ABSTRACT

A scale was developed to measure the attitude of farmer towards Organic Farming. A total of 55 statements were prepared, for which 'Likert method of summated ratings' was followed. And these statements were administered to the 30 numbers of farmer from non-sample area from two villages each covering of 15 farmers. A final list of 21 statements were selected based on the 't' values ($e = 2.145$) obtained from the item analysis.

Key words: Attitude; Farmers; Organic farming; Scale;

Organic farming is very much native to the India and there are continuum of thought from earlier days to the present, the modern organic movement is radically different from its original form, and now it has environmental sustainability and productivity at its core in addition to the founders concerns for the healthy soil, healthy food and healthy people, therefore it has become a paramount importance to study the attitude of farmers towards the organic farming, as attitude forms an essential component for better implementation and success of any innovative farming practice. Attitudes are acquired through experience and exert a directive influence on subsequent behavior and moreover, help individuals to interpret new information and to make decisions more efficiently than would otherwise be the case (Baron and Byrne, 1991). Hence, in order to study the attitude of farmers towards organic farming, a scale has been developed.

METHODOLOGY

The method of summated rating suggested by Likert (1932) was followed in the development of scale to measure the attitude of farmer towards the organic farming. A total of 55 statements, expressing the attitude of farmers towards the organic farming were collected based on the applicability of statements to study area. For this study 30 farmers were selected from two non-

sample villages each covering of 15 farmers. The responses were obtained on a five point continuum viz.- Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA) and Strongly Disagree (SDA) with a score of 5, 4, 3, 2 and 1 respectively for the positive statement and for the negative statement reverse scoring was adopted. The respondents were arranged in descending order based on the obtained score for each and every statement. After that criterion group was selected, i.e 25 per cent of the respondents having the high score and 25 per cent of the respondents having the low score were taken. The 't' value for each statement was calculated by using the following formula given by Edwards (1969).

$$t = \frac{\bar{X}_H + \bar{X}_L}{\sqrt{\frac{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}{n(n-1)}}$$

$$\text{Where, } \sum(X_L - \bar{X}_L)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$$

$$\sum(X_H - \bar{X}_H)^2 = \sum X_H^2 - \frac{(\sum X_H)^2}{n}$$

\bar{X}_H = The mean score on given statement of the high group

\bar{X}_L = The mean score on given statement of the low group

$\sum X_H$ = Summation of score for high group

$\sum X_H^2$ = Sum of squares of the individual score on a given statement for high group

$\sum x_L$ = Summation of score on a given statement for low group
 $\sum x_L^2$ = Sum of squares of the individual score on a given statement for Low group
 n = Number of respondents in each group
 \sum = Summation

The final scale to measure the attitude of farmers' towards organic farming has been developed, where 21 statement were included and some of the statement

areorganic farming will keep environment free from pollution, organic farming do maintain the soil fertility better than inorganic farming, organic farming should be done for commercial purpose, success and future of organic farming lies in the hand of end users, organic farming will balance the nutrient status and farm eco-system for long time and so on. And these 21 statements represent the various aspects of organic farming being practiced.

Table 1 The statements of item analysis by farmers of non-sample area

Statements	't' Values
I am interested in organic farming, because it is popular in my locality	1.48
I believe that organic farming will keep environment free from pollution	2.96*
The rule and regulation for the product to be certified as organic is complicated	4.20*
Organic farming do maintain the soil fertility better than Inorganic farming	2.39*
I feel that the amount required to convert the field to organic farming is much higher	5.61*
I will have the problem in sourcing and purchasing of organic inputs	2.87*
I am the right kind of person to convince others farmers of locality to adopt organic farming	2.39*
Organic farming should be done for commercial purpose	-2.16*
I prefer to do the organic farming because of high demand of its product	1.23
I feel young farmers should take up the organic farming to encourage the local people	1.42
Adoption of organic farming is a boon to agriculture	1.16
The quality of organic product is better than the product from conventional(Chemical)	1.82
Organic farming will give the less income as the yield is lower	4.26*
Success and future of organic farming lies in the hand of end users	6.76*
I believe that the organic farming will not be able to feed the whole population of country	6.05*
Organic farming will balance the nutrient status and farm eco-system for long time	3.74*
Changing to organic system is an exciting new challenge	-0.40
Organic farming is more future-oriented and optimistic	1.26
Production of food grain has declined, because organic farming taking place of conventional farming	4.03*
Organic farming is of little or no value in these modern days of life	2.35*
There will be no proper farming without fertilisers and chemicals	2.62*
Farmers get opportunity to use skill in organic farming	-1.14
I feel that the inorganic means should be used to save crops from severe damage, if others organic means are not available	3.98*
Profits are more important for the farmers than the environmental issue	2.11
Organic farming works better when farmers operates in groups than individually	0.00
I will not recommend organic farming to the fellow farmers as it is difficult to manage	2.12
Future market will be more for organic products, because nowadays people are quality and health conscious	-0.42
I can obtain optimum production level in organic farming if we rear livestock at our farm	-0.86
Farmers need technical and financial assistance to convert to organic farming	-1.58
Organic farming is a way to preserve old tradition and traditional value	-1.11
Organic farming is a new road forward for agriculture	-1.44
Nature of farming practices has no role in ecological problem/environmental pollution	1.47
Organic foods do need to get premium prices for encouragement to farmers to do organic production	-0.65
Organic farming has the problem in controlling weeds without herbicides	2.18*
Organic farming has the less risk of soil pollution or environmental pollution	1.98

Locally adaptable and disease resistant varieties are preferable in organic farming	1.21
It is difficult to do farming without fertilisers, pesticides and insecticides	0.00
I can manage my farm as per organic standard	0.42
Land should be used to its maximum extent with the help of synthetic chemicals and fertilisers	1.50
Organic farming requires less input and also requires less investment	1.98
My farm location is not at all suitable for organic production	1.98
Organic farming is labour intensive	4.58*
If I do organic farming then my family members will have better health condition	4.82*
Organic products are popular among urban people	1.93
Preventive management practices is better than curative management practices in organic farming	3.12*
Certification of product of organic farm should not be mandatory	0.88
Day to day supervision of organic farm activities will be very difficult	0.73
Disease infected part of plant should not be removed in organic farming	0.34
Changing/Converting of mind is more important in organic farming than converting of farm to organic farming	0.82
I would like to convert to organic farming, even if I do not get the due price of the product	5.51*
Organic farming follows the intrinsic values as we know, It is not being controlled by the external agent	1.73
Talking about organic farming is very easy but it is very difficult when we come to reality of doing organic farming	1.42
There are only few people who can afford to buy organic product in Indian context	5.00*
My forefather's way of doing farming is having close proximity with organic farming	1.00

CONCLUSION

The organic farming is an integrated approach, where all aspects of farming systems are interlinked with each other and work for each other, therefore it is

very much necessary to know the attitude of farmers, and for the same purpose a scale has been developed comprising of 21 statements which can be used to measure the attitude of farmers towards organic farming.

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