

ADOPTION OF ORGANIC FARMING PRACTICES BY ORGANIC FARMERS IN NORTH GUJARAT

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ABSTRACT

During the last decade organic farming has gained international recognition as a viable option to conventional farming. In many parts of the country farmers practice organic farming by default or in absence of resources. The organic farming movement is spreading gradually in all most all states of the country. Indian organic sector is steadily making inroads into world organic food market. India having variety of geographical and climatic regions has great potentiality to export various agricultural commodities in world market. The present study was undertaken in three districts viz., Sabarkantha, Bansakantha and Mehsana of North Gujarat state. These districts were purposively selected for the study having the more number of organic farmers. For selection of Taluka, villages and respondents, multistage random sampling technique was employed. All the organic farmers were selected from each village. All the organic farmers were selected from 24 villages of 10 talukas, consisting a sample of 100 farmers.

Keywords: adoption , organic farming practices

INTRODUCTION

India is one of the few geographical locations of the world where agriculture was initiated by aboriginals. Old farmers had developed understandings of natural laws, climate and available resources,

India has great treasure of indigenous technological knowledge too. Looking back to the status of Indian agriculture before 1947, it seems important to remember Sir Albert Howard who noted that people were following natural rules. Mixed cropping of cereals with pulse crops was perhaps most universal. He promoted the system and established method of composting (Howard, 1940) In spite of such proven facts, Indian government preferred to take western path to meet the food security. To increase food grain production, the chemical farming based on high-tech advances in agriculture has been developed. This is embodied in Green revolution strategy of external inputs viz, hybrid seeds, fertilizers, pesticides and irrigation water. Agricultural growth and development under modern agriculture in form of Green revolution during sixties and seventies till the 1990s has been quite remarkable to move and push the country from

sever food shortage and crisis of past to self-sufficiency and surplus in food grain for the time being. Nearly after four decades the miracle of Green Revolution felt becoming gray. Indian agriculture is at cross road again (Chhonkar and Dwivedi, 2004).

The scientists have realized that the green revolution with high input use has reached a plateau and is now sustained with diminishing return and falling dividend. The intensive use of inputs has not only polluted the soil, water and the environment causing their slow degradation but also affected the human beings. Thus a natural balance needs to be maintained for survival and well being of the human beings, plant and animal kingdom. The obvious choice for that would be adoption of organic farming without compromising agricultural production.

OBJECTIVES

- (a) To know the Adoption of Organic Farming Practices
- (b) Relationship between selected characteristics of organic farmers and their extent of Adoption

METHODOLOGY

The North Gujarat covers six districts and with the help of the various institutions and NGOs viz. JATAN trust (Baroda), and National Horticulture Mission the information regarding organic farming was collected. Based on the information collected, a district wise list of organic farmers was prepared. District in which more member farmers engaged in organic farming was selected for the study and such three districts viz., Sabarkantha, Mehsana and Banaskantha were selected purposively.

Sabarkantha district is having 13 talukas and among these five talukas, Banaskantha district is having 12 talukas and among these three talukas, Mehsana district is having 9 talukas and among these two talukas having highest organic farmers were selected. The villages were selected from each taluka on the basis of members of organic farmers. Looking to these, 24 villages were selected. All the organic farmers of village were selected. The total sample size for the study was consisted of 100 respondents/farmers Attitude was measured with the help of statements score toward Attitude scale developed by Patel (2006).

There were 20 statements in the scale which were administered to the farmers and asked to express their reactions on five point score continuum viz. strongly agree, agree, undecided, disagree and strongly disagree. The scores given for the positive statements were 5, 4, 3, 2 and 1 respectively. The scoring for negative statements was just reversed. The maximum scale value thus one can obtained was 100 and minimum 20. The total attitude score for each respondent was obtained by adding the weight of his responses made to individual scale item. The respondents were grouped into three categories on the basis of attitude towards organic farming by using $X \pm S.D.$ formula.

RESULTS AND DISCUSSION

Adoption of Organic Farming Practices

According to Sengupta (1967) adoption is a decision to make full use of an innovation at the best course of action available. Adoption in this study is operationalised as organic farming practices followed by organic farmers on their own field. Extent of adoption of farming practices by organic farmers was measured with the help of teacher made type test. The result regarding extent of adoption is depicted in Table 1.

Table 1: Extent of adoption of organic farming practices by organic farmers n=100

| Sr. No. | Extent of adoption | Organic farmers | |
|---------|-------------------------|-----------------|---------|
| | | Frequency | Percent |
| 1 | Low (Below 42.19) | 22 | 22.00 |
| 2 | Medium (42.19 to 60.00) | 65 | 65.00 |
| 3 | High (Above 60.00) | 13 | 13.00 |

SD: 8.93

Mean: 51.12

The data in Table.1 reveal that 65.00 per cent of the organic farmers had medium level adoption. Remaining 13.00 per cent and 22.00 per cent of them had high and low extent of adoption respectively.

Hence, it can be concluded that majority (65.00 %) of organic farmers possess medium extent of adoption of organic farming practices. Such a high adoption has been observed may be due to highly favourable attitude of organic farmers towards organic farming. Moreover they all were found educated, having good contact with NGOs, other progressive farmers and were receiver of farm literature too.

The same findings are reported by those of Patel (2000), Jaganathan *et al.* (2009), Ananthnag *et al.*, (2014), Patel *et al.*, (2015) and Pandya (2011).

Relationship between selected characteristics of organic farmers and their extent of Adoption

To ascertain the relationship between selected independent variables and the extent of adoption of organic farming practices by the organic farmers, the correlation coefficient was calculated. On the basis of operational measures developed for the variables null hypotheses were stated for testing the relationship and their significance on zero order correlation. The values of zero order correlation are given in Table 2

Table 2 : Correlation coefficient of selected independent variables with extent of adoption n=100

| Sr. No. | Variables | 'r' value |
|---------------------------|----------------------------|----------------------|
| Personal variables | | |
| X ₁ | Age | -0.2180* |
| X ₂ | Education | 0.2675** |
| X ₃ | Organic farming experience | 0.2828** |
| X ₄ | Social participation | 0.0597 ^{NS} |
| Economic variables | | |
| X ₁ | Land holding | 0.2052* |
| X ₂ | Herd size | 0.2068* |
| X ₃ | Annual income | 0.2437* |
| X ₄ | Cropping intensity | 0.0741 ^{NS} |
| X ₅ | Irrigation facility | 0.0770 ^{NS} |

| Psychological variables | | |
|-------------------------|--------------------------------|----------------------|
| X ₁ | Innovation proneness | 0.3003** |
| X ₂ | Economic motivation | 0.0173 ^{NS} |
| X ₃ | Rationality in decision making | 0.2746** |
| X ₄ | Risk orientation | 0.3108** |
| X ₅ | Market orientation | 0.0287 ^{NS} |
| Communication Variables | | |
| X ₁ | Sources of information | 0.3330** |
| X ₂ | Extension participation | 0.2842** |

* Significant at 0.05 level of probability NS = Non significant

** Significant at 0.01 level of probability

Relationship of extent of adoption was observed significant and positive with ten variables viz., education, organic farming experience, land holding, herd size, annual income, innovativeness, rationality in decision making, risk orientation, source of information and extension participation. While, the variable age was found negatively and significantly correlated with extent of adoption.

CONCLUSION

The finding Of this study Revealed That Majority OF the farmers Had Medium to Low level of extent of adoption Organic Farming . Government & Extension Functionary Should Contact Persons And Encourage Him And also Doing Training At Grass root Level in Oder to Create awareness. Effort should be made to manipulate the attitude in desirable direction by providing training as per their felt needs.

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