

## A Pilot Study on Awareness and Attitude among Farmers towards Organic Farming with reference to Bhal - Bara Region of Gujarat

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### **Abstract:**

India is an agro based economy and agriculture is the growing sector. It is also required to consider the methods and techniques of farming to improve the output of the farming business. Simultaneously with the growth of output, other factors such as conservation of natural resources like land, water etc. are also required to be consider as their quality is deteriorating. Moreover, health of the society is also required to be considered as the people are going to consume the crop production directly. The economic conditions are also required to consider. Hence, this paper covers several aspects of one of the important method of farming i.e. organic. The attempt is made to examine the awareness and knowledge of the landholders for the method of agriculture selected under present study.

**Keywords:** Organic farming, Bhal-bara region, Rural community.

### **Introduction:**

In layman's language, the Organic farming is the practice carried on by the farmers to produce crop in a natural way without using chemical fertilizer. Moreover, it is noted that, such kind of crop production is having positive impact on the human health and environmental resources viz. land, water etc. can also be protected. Here, attempt is made to emphasize on the awareness and attitude of the farmer's community towards such practices carried on for the organic farming with reference to the region selected under study. The territory known as the Bhal region spans the political borders of the districts of Anand, Ahmedabad, and Bhavnagar. This area's name is most likely derived from the fact that it is essentially as level as a forehead and that there are no stones, pebbles, or gravel in nearly the whole soil. In the area, bhalia wheat is a significant agricultural crop.

### **Literature Reviews:**

The primary goal of Mithun Kumar Ghosh's study, Farmers Attitude towards Organic Farming: A Case Study in Chapainawabganj District, was to assess the socioeconomic standing, attitudes, and relationships of farmers towards organic farming. Five upazilas in Bangladesh's

Chapainawabganj district participated in the study. A basic random selection method was employed to choose 40 participants. Twenty statements were used to gauge respondents' attitudes toward organic farming using five-point Likert scales. The correlation coefficient ( $r$ ) was calculated in order to examine the relationship between the variables in question. Descriptive statistics were used to describe the variables. Majority of the respondents were male (90%), average age was 44 years. About 80% of the respondents had positive attitude towards organic farming.

Uma. K, Dr. Rechanna, "A study on perception of organic farmers towards organic farming in mandya district", Analyzing farmers' opinions about organic farming and the problems associated with it was the goal of this study, which was carried out in the Mandya District of Karnataka. The district is made up of seven taluks, from which 200 respondents were chosen using a convenient and purposeful sampling technique. The study's findings are presented using descriptive statistics, and its hypotheses are tested using one-way ANOVA and one sample t test. Ninety-five percent of the respondents had a positive opinion of organic farming.

### Research Gap:

Researchers have gone through the several studies on organic farming but the present study of awareness and attitude among the farmers' community of Bhal-Bara region of Gujarat was not found. Hence honest efforts have been made here to understand the two dimensions i.e. awareness and attitude among the rural community of Bhal-Bara region.

### Objectives:

1. To study about the awareness among farmers about the organic farming in the selected region.
2. To find out the attitude of selected respondents (Farmers) towards the organic farming and chemical farming

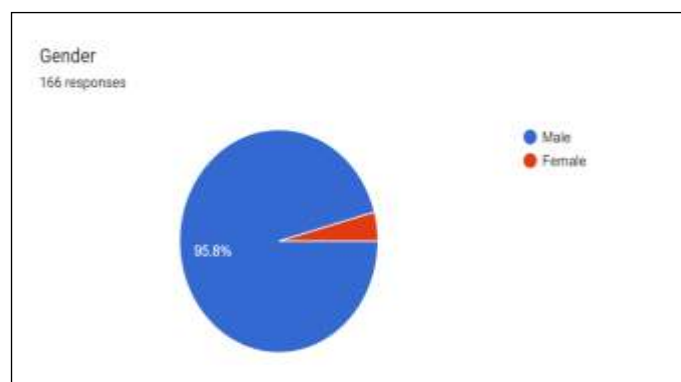
### Research Design:

The present study is descriptive as well as analytical. The research is based on primary data, which have been

collected by circulating questionnaire in google form. Total 166 respondents have submitted the responses from the 47 villages. Data were tabularized and analyzed in the statistical software. Attempt is made to classify the types of farmers based on Gender, land holdings and geographical variables. Further, it is to determine relationship between the type fertilizer used and health of people and animal.

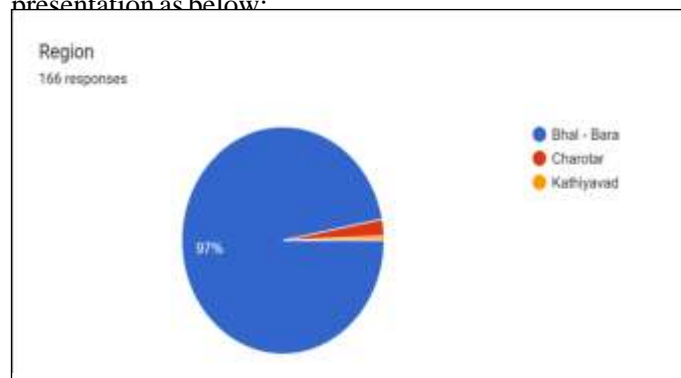
### Demographic Variables:

The respondents are here classified based on the demographic variables. The chart below mentioned indicates the gender of the respondents. Out of total number of respondent's majority, i.e. 95.8% are male and remaining are female.



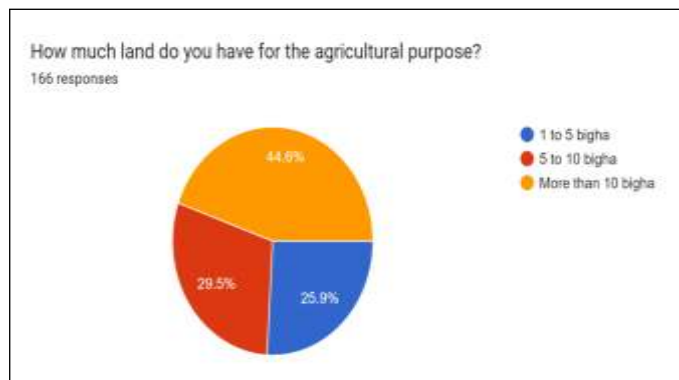
### Geographical Variables:

The respondents are also classified based on the region. The majority of the respondents i.e. 97% are belong to bhal-bara region. And a very small portion i.e. 3% are belong to charotar and kathyawad, which is revealed in the graphical presentation as below:



**Land Holdings:**

The chart below indicates the portion of land holdings by the respondents. Majority of them are holding more than 10 Bhiga of land where as 29.5% are holding 5 to 10 Bhiga and rest of them



**Analysis & Interpretations:**

H0: There is no significant correlation between the type fertilizer used and health of people and animal

Crosstab							
Count							
		Use of chemical inputs is negative for health of people and animals					Total
		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	
In case fertilizers are applied, which kinds do you use?	Organic	27	20	16	19	21	103
	Chemical	8	11	5	27	12	63
Total		35	31	21	46	33	166

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.691 <sup>a</sup>	4	.008
Likelihood Ratio	13.753	4	.008
Linear-by-Linear Association	4.764	1	.029
N of Valid Cases	166		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.97.

Here, the attempt is made to study the awareness of the farmers of the selected region with reference to the impact of organic and chemical fertilizer on the human health and it is observed that, majority of the farmers are well informed about the impact and majority of them opined that the use of chemical fertilizer is injurious to health in long run.

From the above table, it can be observed that the significance value is less than 5, hence the null hypothesis is rejected. Meaning thereby, there is significant relationship between type of fertilizer used and public health. It means the organic farming creates positive impact on the health of the society. Therefore, it is expected to promote organic farming to improve public health.

**H0: There is no significant correlation between type of fertilizer used and Farm Yield**

Crosstab							
Count							
		Organic yields are too low					Total
		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	
In case fertilizers are applied, which kinds do you use?	Organic	20	23	26	25	9	103
	Chemical	6	11	9	12	25	63
Total		26	34	35	37	34	166
Chi-Square Tests							
		Value	Df	Asymp. Sig. (2-sided)			
Pearson Chi-Square		23.876 <sup>a</sup>	4	.000			
Likelihood Ratio		23.666	4	.000			
Linear-by-Linear Association		13.812	1	.000			
N of Valid Cases		166					
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.87.							

Here, the attempt is made to study the awareness of the farmers of the selected region with reference to the impact of organic and chemical fertilizer on crop production and it is observed that, majority of the farmers are well informed about the impact and majority of them opined that the farm yield is greater in case of application of chemical fertilizer compare to organic in short run. Further, they are more concern for farm yield and hence, majority of them are using chemical fertilizer.

From the above table, it can be observed that the significance value is less than 5, hence the null hypothesis is rejected. Meaning thereby, there is significant relationship between type of fertilizer used and farm production. It means the organic farming creates positive impact on the output of farming. Therefore, it is expected to promote organic farming to improve gross production.

**H0: There is no significant correlation between the techniques of organic farming and soil fertility**

Crosstab							
Count							
		Organic farming gives a positive image to a farm					Total
		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	
How do you preserve soil fertility?	Fertilization	27	7	10	30	16	90
	Crop Rotation	5	1	0	15	9	30
	Tillage	3	3	0	4	6	16
	Intercropping	1	2	1	5	3	12
	Other	3	2	6	7	0	18
Total		39	15	17	61	34	166

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.000 <sup>a</sup>	16	.010
Likelihood Ratio	36.373	16	.003
Linear-by-Linear Association	.377	1	.539
N of Valid Cases	166		
<sup>a</sup> . 15 cells (60.0%) have expected count less than 5. The minimum expected count is 1.08.			

Here, the attempt is made to study the awareness of the farmers of the selected region with reference to the impact of organic farming on Soil preservation and it is observed that, majority of the farmers are well informed about the practices to be adopted to conserve the soil and majority of them opined that the organic farming gives positive image to farm in long run. Further, they are more concern for farm yield and hence, majority of them are using chemical fertilizer.

#### Reliability Statistics:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.971	.971	26

The above table reveals the reliability statistics of the variables used under present study. It is required that the Cronbach's alpha value should be greater than 0.7 or higher, which reveals acceptable internal consistency. Here, in the study the same value is 0.971, which indicates higher level of acceptability.

#### Conclusion:

Out of total 166 respondents, 28 respondents are found to be unaware about the organic farming. Thus, a majority of sample respondents are found to be aware about organic farming

Out of 166 farmers, 65 farmers are found to be using chemical or nonorganic fertilizers whereas 101 farmers are

From the above table, it can be observed that the significance value is less than 5, hence the null hypothesis is rejected. Meaning thereby, there is significant relationship between organic farming and soil fertility. It means the organic farming Creates positive impact on the output of farming by increase in soil fertility. Therefore, it is expected to promote organic farming to improve gross production.

found to be using organic fertilizer. Meaning thereby a majority of the sample farmers are using organic fertilizers.

Out of 166 respondents, 62 respondents are using chemical pesticides, rest are using Biological & organic control methods (non-chemical control methods) and Integrated pest management (IPM) methods. This really shows a positive attitude of the sample farmers towards organic farming, because over and above using organic fertilizers, they used non chemical techniques to control pests and insecticides in their farming practices. Hence, it can be concluded that, the sample farmers are really committed to organic farming.

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