

## Training Needs of Tribal Farmers in Agriculture

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### ABSTRACT

*The present study was conducted in Danta and Amirgadh taluka of Banaskantha district of Gujarat state because these talukas were most backward talukas identified in year 2006 by Gujarat state. Bansakantha district consists 12 talukas. The Danta and Amirgadh taluka was purposively selected because Danta and Amirgadh taluka having highest tribal population. Five villages in each taluka were selected and total 10 Villages were purposively selected for the study, on the basis of more area under major crops (Wheat and Maize) cultivation. From each Village 10 respondents were selected at randomly making a total sample of 100 respondents for the study. This study concludes that Maximum numbers of respondents have medium level level adoption of recommended package of practice of Major crops. Majority of respondents prefer to receive training on oil engine repairing and Micro irrigation systems followed by Seed production and Control measures of pest and disease.*

**Keywords :** Training need, Respondents, Technology

### INTRODUCTION

Knowledge is the cognitive behaviour of an individual. The body of knowledge is the product of learning process. Once the knowledge is acquired, it produces changes in the thinking process of an individual, which lead to further changes in the mental attitude and thereby in his adoption behaviour. Adoption refers to mental acceptance and use of new agricultural technology. Cognitive adoption involves complex decision and changes including knowledge and critically evaluating practices in terms of the individual situation. Behavioural adoption consists of actual use of practice. In the present study, behavioural adoption is defined as use of recommended Agricultural technology on a continuing basis. So as to be able to predict the behaviour of the farmers and control the known factors in a desired manner and channelized the course of farmer's action in a desirable direction.

Training is a central component of human resource development which can generate desirable changes in the behavioral component such as knowledge, skill and attitude. In the farming sector, training forms an important tool to sharpen and hone the skills of farmers to aid them in the effective adoption of improved technologies. Among 30 talukas Danta and Amirgadh talukas of B.K district is most backward talukas identified in year 2006 by Gujarat

state. Many recommendations with latest high yielding varieties had been given to get maximum output/return. But, it was observed that farmers were not following all the recommended technology of major crops of the area. Hence, the study was undertaken in tribal area of Banaskantha District with following objectives.

### OBJECTIVES

- (i) To know the socio-economic and personal characteristics of tribal farmers.
- (ii) To study the adoption of recommended practices of major crops of the area by the tribal farmers.
- (iii) To assess the training need of tribal farmers about major crops of the area

### METHODOLOGY

The present study was conducted in Danta and Amirgadh taluka of Banakantha district because these talukas were most backward talukas identified in year 2006 by Gujarat state. Bansakantha district consists 12 talukas. The Danta and Amirgadh taluka was purposively selected because Danta and Amirgadh taluka having highest tribal population and researcher is himself working in this area. Five villages in each taluka were selected and total 10 Villages were purposively selected for the study, on the basis of more area under major crops (Wheat and Maize) cultivation. From each

Village 10 respondents were selected at randomly making a total sample of 100 respondents for the study.

The data were collected by personal interview. The interview schedule was developed through discussion with experts, scientist and extension officers working in the district. The data were analyzed with appropriate scale and statistical procedures.

## RESULTS AND DISCUSSION

### Personal, Social and Economic characteristics of the respondents

#### (a) Age

**Table 1 : Distribution of the respondents according to their age** n=100

Sr. No.	Categories	Frequency	Per cent
1	Young (Up to 35 years )	21	21.00
2	Middle (36 to 50 years)	42	42.00
3	Old (above 50 years)	37	37.00

The data presented in Table 1 show that majority (42.00 per cent) of the respondents belong to middle age group(36 to 50 years), followed by old and young age group 37.00 and 21.00 per cent respectively. It can be concluded that majority of the respondents were having age between 36 to 50 Years.

#### (b) Education

**Table 2 : Distribution of the respondents according to their level of education** n=100

Sr. No.	Level of education	Frequency	Per cent
1	Illiterate	56	56.00
2	Primary education (Up to VII <sup>th</sup> Standard)	31	31.00
3	Secondary education (VIII <sup>th</sup> to XII <sup>th</sup> standard)	10	10.00
4	College education	03	03.00

The data presented in Table 2 reveal that majority (56.00 per cent) of the respondents belong to Illiterate group followed by Primary education (Up to VII<sup>th</sup> Standard) and Secondary education (VIII<sup>th</sup> to XII<sup>th</sup> standard) group 31.00 and 10.00 per cent respectively. It can be concluded that majority of the respondents were having Illiterate group

#### (c) Land holding

**Table : 3 Distribution of the respondents according to their Land holding** n=100

Sr. No.	Categories	Frequency	Per cent
1	Up to 1.0 ha	54	54.00
2	1.1 to 2.0 ha	29	29.00
3	2.1 to 3.0 ha	12	12.00
4	above 3.0 ha	05	05.00

The data presented in Table 3 show that majority (54.00 per cent) of the respondents have Up to 1.0 ha. land followed by 1.1 to 2.0 ha ( 29.00) and 2.1 to 3.0 ha. land (12.00 ) per cent respectively. It can be concluded that majority of the respondents were having Up to 1.0 ha. land.

#### (d) Source of irrigation

**Table : 4 Distribution of the respondents according to their source of irrigation** n=100

Sr. No.	Source of irrigation	Frequency	Per cent
1	Tube well	28	28.00
2	Open well	44	44.00
3	Tube well + Open well	14	14.00
4	Check dam	12	12.00
5	Other	02	02.00

The data presented in Table 8 show that majority (44.00 per cent) of the respondents source of irrigation have Open well followed by Tube well . It can be concluded that majority of the respondents were having Open well as source of irrigation.

#### (e) Major crops grown

**Table 5 : Distribution of the respondents according to their maize crop** n=100

Sr. No.	Maize crop	Frequency	Per cent
1	Up to 1.0 ha.	64	64.00
2	1.1 to 2.0 ha	26	26.00
3	2.1 to 3.0 ha	09	09.00
4	above 3.0 ha	01	01.00

The data presented in Table 5 reveal that majority (64.00 per cent) of the respondents major crop in kharif season was Maize crop and grown Up to 1.0 ha. followed by

1.1 to 2.0 ha.(26.00 per cent It can be concluded that majority of the respondents were having Up to 1.0 ha Maize crop.

**(f) Wheat**

**Table 6 : Distribution of the respondents according to their wheat crop** n=100

Sr. No.	Wheat crop	Frequency	Per cent
1	Up to 1.0 ha.	74	74.00
2	1.1 to 2.0 ha	22	22.00
3	2.1 to 3.0 ha	04	04.00
4	above 3.0 ha	00	00.00

The data presented in Table 6 show that majority (74.00 per cent) of the respondents major crop in winter season was Wheat crop and grown Up to 1.0 ha followed by 1.1 to 2.0 ha It can be concluded that majority of the respondents were having Up to 1.0 ha Wheat crop.

**(6) Annual Income**

**Table 7 : Distribution of the respondents according to their annual income** n=100

Sr. No.	Annual Income	Frequency	Per cent
1	Upto ₹ 25000	31	31.00
2	₹ 25001 to ₹ 50000	44	44.00
3	₹ 50001 ₹ 100000	13	13.00
4	₹ 100001 ₹ 150000	08	08.00
5	Above ₹ 150001	04	04.00

The data presented in Table 7 reveal that majority (44.00 per cent) of the respondents having Annual Income ₹ 25001 to Rs. 50000 followed by Up to ₹ 25000 (31.00 per cent).

**(10) Yield**

**Table 8 : Distribution of the respondents according to the maize yield** n=100

Sr. No.	Yield (Kg /per ha)	Frequency	Per cent
1	Below 2000	49	49.00
2	2001 to 2500	41	41.00
3	2501 to 3000	08	08.00
4	Above 3001	02	02.00
Total		100	100.00

The data presented in Table 9 indicate that majority

(49.00 per cent) of the respondents have Yield Up to2000(Kg per ha) followed by 2001 to 2500(Kg per ha). It can be concluded that majority of the respondents were having Below 2000 Yield (Kg per ha) in Maize crop.

**(ii) Wheat**

**Table 9 : Distribution of the respondents according to the Wheat yield Kg /ha.** n=100

Sr. No.	Yield (Kg per ha)	Frequency	Per cent
1	Below 2000	38	38.00
2	2001 to 2500	46	46.00
3	2501 to 3000	11	11.00
4	Above 3001	05	05.00

The data presented in Table 9 show that majority (46.00 per cent) of the respondents have Yield 2001 to 2500 (Kg per ha) followed by Below 2000 (Kg per ha) . It can be concluded that majority of the respondents were yield up to 2500 Kg per ha in wheat crop.

**Adoption of recommended package of practices of major crops production technology by tribal farmers**

**Table :10 Distribution of the respondents according to the adoption of package of practices of Major crops production technology** n=100

Sr. No.	Categories	Score range	Number	Per cent
1	Low level	Up to 12	28	28.00
2	Medium level	13 to 15	68	68.00
3	High level	16 and above	04	04.00

Mean=13.45

S.D.= 1.22

Data presented in Table 10 show that majority of the respondents (68.00 per cent) had medium level adoption while 28.00 per cent of the respondents had low level adoption and only 4.00 per cent had high level adoption.

The respondents were asked to opine about training need of various aspects related to major crops cultivation at three points quantum i.e. mostly needed, some what needed and not needed with a score of 3, 2 and 1 respectively. Based on the total training need score of all the respondents mean score for each practice was worked out.

**Training areas of tribal farmers about recommended package of practices of major crops**

**Table 11 : Distribution of the respondents according to their Training needs**

Sr. No.	Training Areas	Mean Score	Rank
1	Selection of variety	2.523	IX
2	Sowing period and method	1.150	XVII
3	Seed treatment	2.650	VIII
4	Seed rate	1.523	XVI
5	Sowing distance	1.115	XV
6	Fertilizer dose	2.125	X
7	Method of application	2.750	XI
8	Weed control	1.150	XIV
9	Irrigation	1.750	XIII
10	Diagnosis of pest and diseases	2.823	VII
11	Control measures of pest and diseases	2.850	IV
12	Post harvest technology / storage	2.050	XII
13	Marketing	1.850	VI
14	Oil engine repairing	2.895	I
15	Micro irrigation systems	2.950	II
16	Value edition	2.150	V
17	Seed production	2.850	III

The data presented in Table 11 reveal that majority of growers prefer to receive training on Oil engine repairing and Micro irrigation systems (Rank I & II) followed by Seed production and Control measures of pest and disease. It can be concluded that Major crops growers of selected villages don't have the knowledge and skill about the Micro irrigation systems and Oil engine repairing.

**CONCLUSION**

Maximum numbers of respondents were belonged to middle age group, illiterate, having land holding Up to 1.0 ha., no membership in social organization, possessed Goat as live stock, where as source of irrigation was Open well, main crop was Maize in kharif and Wheat crop in Rabi season with income Up to ₹ 50000/-. The average yield of maize and wheat crop was found below 2500 Kg./ha. Majority of respondents have medium level adoption of recommended package of practice of Major crops. Majority of respondents prefer to receive training on Oil engine repairing and Micro irrigation systems followed by Seed production and Control measures of pest and disease.

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