

ASSESSMENT OF KNOWLEDGE LEVEL OF FARMERS ABOUT ORGANIC FARMING IN AMRELI DISTRICT OF GUJARAT

P. J. Prajapati¹, M. L. Patel² and H C. Chhodavadia³

1,2 & 3 Subject Matter Specialist, KVK, JAU, Amreli - 365601

Email : kvkamreli@gmail.com

ABSTRACT

The present study was conducted purposively in two talukas of Amreli district in Gujarat as the sample was comprised of 10 villages and 100 respondents (n=100). The data shows that majority of the respondents were in middle age group 59%, education up to primary level 57%, medium size of land holding 45%, 71% of farmers were in medium income group, milch animal possession 126 buffaloes, in organic management practices they adopted crop rotation 66%, highly used FYM 84%, applied seed treatments 69%, majority of respondent only clean their products 63%, sold their products local market 99% and only 23% respondents aware about organic farming certification.

Keywords: socio-economic; organic cultivation; knowledge level

INTRODUCTION

Organic Agriculture is not a new concept to India and traditionally Indian farmers are organic. But, gradually changed to chemical based cultivation since 1950's and chemicals were increasingly applied during the Green Revolution period. Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activities. Organic cultivation protects the long term fertility of soils by maintaining organic matter levels and careful mechanical intervention; thus, a natural balance needs to be maintained at all cost for existence of life and property. Hence assessment of farmer's knowledge level on organic cultivation in Amreli district of Gujarat has become an important issue which needs to be explored. Therefore this study was conducted to assessment of knowledge level of farmers about organic farming.

OBJECTIVE

To know the knowledge level of farmers about organic farming in amreli district of Gujarat

METHODOLOGY

The study was conducted in Amreli district of Gujarat during the year 2017-18. Total 100 farmers were selected from 10 villages by random Sampling method, suitable questionnaire was developed and the data were collected by personally interviewing of their personal and socio-economic characteristics and awareness regarding organic farming of the selected respondents. Thus, total number of 100 farmers constituted the sample for the purpose of the study. To measure the knowledge level of farmers they were asked to reply different questions about the concept of organic farming, crop management, nutrient management, pest and diseases management, post harvest, marketing and certification. The respondents were grouped under the percentage and rank.

RESULTS AND DISCUSSION

Data related to the socio-economic characteristics of the respondent farmers is depicted in Table 1. It can be observed from the table that majority of respondents were from middle age group (59.00 per cent) followed by old age group (39.00 per cent) and (2.00 per cent) of the respondents were from young age group. Regarding education majority (57.00 per cent) of the respondents were hailing in the primary

Extension Strategies for Doubling the Farmers' Income for Livelyhood Security

education category, followed by 27.00 per cent who were educated up to secondary school and 8.00 per cent who had sought more than secondary as well as 04.00 per cent who had sought more than higher secondary education whereas 04.00 per cent of the respondents were illiterate Organic farming requires over 15% more labor than traditional farming and therefore provides rural job opportunities (Pimental et al., 2005).

Table 1: Distribution of the respondents according to their personal and socio-economic characteristics

n=100

Sr. No.	Socio-economic characteristics	Frequency	Per cent
1	Age		
	Young age (up to 35 year)	02	2.00
	Middle age (36 to 50 year)	59	59.00
	Old age (above 50 year)	39	39.00
2	Education		
	Illiterate	04	4.00
	Primary	57	57.00
	Secondary	27	27.00
	Higher Secondary	08	8.00
	Graduation	04	4.00
	Post graduation	00	0.00
3	Size of land holding		
	Small holding (up to 2 ha score)	38	38.00
	Medium holding (>2 to 4 ha score)	45	45.00
	Large holding (above 4 ha score)	17	17.00
4	Annual income		
	Up to 100000	26	26.00
	100000 to 500000	71	71.00
	Above 500000	03	03.00
5	Milch animals possession		
	Cows	64	64.00
	Buffaloes	126	126.00
	Others	14	14.00

In case of land holding majority of respondents were from medium size of land holder (45.00 per cent) followed by 38.00 per cent who were from small land holder and 17.00 per cent respondent have large land holding. It was revealed from the table that Majority (71.00 per cent) of farmers were in medium income group and 26.00 per cent of the respondents

who were in low income group. Only 3.0 percent who were in high income group. In respect of milch animal possession respondents have more no. of buffaloes (126) followed by cows (64) and others (14) milch animals.

Data regarding Extension participation were depicted in table 2.

Table 2: Awareness of farmers regarding organic farming

n=100

Sr. No.	Practices	Yes	No	Percentage	Rank
I	Crop management				
1	Mixed cropping	02	98	02	V
2	Inter cropping	63	37	63	II
3	Crop rotations	66	34	66	I
4	Water management	13	87	13	IV
5	Weed management	21	79	21	III
6	Mulching	00	100	00	VI
II	Nutrient management				
1	Use of Bio-fertilizers	06	94	06	IV
2	Use of oil cakes	66	34	66	II
3	Use of Vermi compost	00	100	00	V
4	Use of Compost	17	83	17	III
5	Green manuring	00	100	00	VI
6	Use of FYM	84	16	84	I
7	Use of Natural minerals	00	100	00	VII
8	Use of Poultry manure	00	100	00	VIII
III	Pest/ disease management				
1	Use of herbal insecticide	19	81	19	V
2	Use of Pheromone trap	33	67	33	II
3	Use of Cow dung/ urine	26	74	26	III
4	Seed treatment	69	31	69	I
5	Use of Bio-pesticide	24	76	24	IV
6	Use of Bird purcher	00	100	00	VIII
7	Hand picking of insects	01	99	01	VI
8	Use of Fruit fly trap	00	100	00	VII

Sr. No.	Practices	Yes	No	Percentage	Rank
9	Preparing Live hedge	00	100	00	IX
10	Sowing Trap crop	00	100	00	X
IV. Post Harvest					
1	Labeling	02	98	02	V
2	Grading	03	97	03	II
3	Cleaning	63	37	63	I
4	Packing	03	97	03	IV
5	Processing	01	99	01	VI
V. Marketing					
1	NGO	00	100	00	-
2	Local Market	99	1	99	I
3	Private Dealers	01	99	01	II
4	Factory owners (processor)	00	100	00	-
VI. Certification					
1	Do you know about certification?	23	77		

It is clear from the table that majority of the respondents in crop management practices 66% of respondents adopted crop rotation and it's ranked first followed by intercropping 63%.

In nutrient management respondents highly used FYM 84% and its ranked first followed by oil cakes 66% and its ranked second. Used of compost and bio-fertilizers ranked third and forth respectively.

Majority of respondents 69% in Pest/disease management applied seed treatments to control pest and its ranked first followed by Use of Pheromone trap 33% and its ranked second. Use of Cow dung/urine, Use of Bio-pesticide, Use of herbal insecticide, Hand picking of insects ranked third, fourth, fifth and sixth respectively., The findings are in agreement with the findings by Kantharaj (1980) and Dube and Sawarkar (1992), who reported that majority of farmers had medium level to high level of knowledge.

In post harvest management (94 percent) majority of respondent only clean their products and its ranked first. In marketing majority of respondent sold their products local market and its ranked first.

About certification only 23 percent respondents aware about organic farming certification.

These results are in consonance with the observations of Pandey and Vekaria (1994) and Ekka (1999).

CONCLUSION

Organic farming practices are new to the farmers and hence, the knowledge levels are low in most of the practices and about organic farming certification. The farmers need to be made well aware about the use of such practices so that the basic concept of organic farming and its application part could be made well known to the farmers.

REFERENCES

- Ananthnag, K, Mahatab Ali K. M. and Vinaya Kumar, H. M. (2014) A study on socio - economic status of farmers practicing organic farming in eastern dry zone of Karnataka. Online Journal of BioSciences and Informatics. 1(2): 75-84.
- Biradar, G.S., Vinaya Kumar, H. M., Nagaraj, and Goudappa, S. B. (2013). Knowledge level of farmers about chilli cultivation practices in North-Eastern Districts of Karnataka. Environment and Ecology. 31 (2B): 828-831.
- Chandawat, M.S., Bochalya, B.C. and Bhoraniya, M.F. (2017) Adoption of organic farming practices by the farmers of Surendranagar district of Saurashtra region of Gujarat. Guj. J. Ext. Edu. 28(2):382-388
- Dube, S.K. and Sawarkar, V.K., (1992). Knowledge and adoption of rice production technology among small and marginal farmers. *Maharashtra J. Extn. Educ.* 11: 60-72.
- Ekka, V.S. (1999). Training needs of paddy growers in South Bihar, M.Sc. Thesis (unpublished), CCS HAU, Hisar
- Kantharaj, J. (1980). A study of knowledge, extent of adoption and appropriateness of sunflower technology among growers. M.Sc. Thesis in Agric. Extn. (Unpub.), Univ. Agric. Sci., Bangalore.
- Pandey, R.D. and Vekeria, R.S. (1994). Knowledge and adoption behaviour of banana growers. *Maharashtra J. Extn. Edu.* 13: 131- 134.
- Patel, V.B., Prajapati, M.R. and Joshi, S.G. (2017) Adoption of organic farming practices by organic farmers in North Gujarat. Guj. J. Ext. Edu. 28(1):182-184
- Pimentel, D., Hepperly, P., Hanson, J., Douds, D., Seidel, R. (2005): Environmental, Energetic, and Economic Comparisons of Organic and Conventional Farming Systems. *Bio-Science*, 55, pp. 573-582.