

PRACTICE-WISE ADOPTION OF ORGANIC FARMING BY THE ORGANIC FARMERS OF NORTH GUJARAT

V.B.Patel¹, M.R.Prajapati² and S.G.Joshi³

1 Dept. of Extension Education . C.P.College of Agriculture , SDAU, S.K.Nagar - 385506

2 Principal, C.P.College of Agriculture , SDAU, S.K.Nagar -385506

3 Krushi Vigyan Kendra , SDAU, S.K.Nagar -385506

Email : sunil.agri1988@gmail.com

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 in-roads 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: practice-wise adoption, organic farming

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.

OBJECTIVE

To know the practice-wise adoption of organic farming by the organic farmers of north Gujarat

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.

Extension Strategies for Doubling the Farmers' Income for Livelyhood Security

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 For the purpose of measurement of extent of adoption of various recommended practices of organic farming by the organic growers, a simple teacher made adoption scale was developed and according to Sengupta (1967).

RESULTS AND DISCUSSION

Practice-wise adoption of organic farming practices

The information regarding practices-wise adoption of organic farming is furnished in Table 1.

Table 1: Practice-wise adoption of organic farming by the organic farmers n=100

Sr. No.	Practices	Number	Percent	Rank
I Crop Management				
1	Inter cropping	90	90.00	I
2	Mixed cropping	25	25.00	V
3	Crop rotations	72	72.00	II
4	Weed management without chemicals	65	65.00	III
5	Water management	58	58.00	IV
6	Mulching	21	21.00	VI
II Nutrient management				
1	Use of FYM	90	90.00	I
2	Use of Compost	36	36.00	V
3	Use of Vermicompost	76	76.00	III
4	Green manuring	16	16.00	IX
5	Use of oil cakes	58	58.00	IV
6	Use of Natural minerals	18	18.00	VIII
7	Use of Concentrated manures	31	31.00	VI
8	Use of Poultry manure	26	26.00	VII
9	Use of Biofertilizers	78	78.00	II
III Pest/ disease management				
1	Seed treatment	36	36.00	VI
2	Use of herbal insecticide	46	46.00	IV
3	Use of Cow dung/urine	55	55.00	II
4	Use of Pheromone trap	56	56.00	I
5	Use of Fruit fly trap	22	22.00	VII
6	Use of Bird purcher	17	17.00	VIII
7	Preparing Live hedge	09	09.00	X
8	Sowing Trap crop	54	54.00	III
9	Hand picking of insects	13	13.00	IX
10	Use of Biopesticide	37	37.00	V

The data in Table 1 indicate that among crop management practices, inter cropping was adopted by maximum number of farmers with the highest (90.00 percent) and was ranked first, followed by crop rotation (72.00 percent), weed management without chemical (65.00 percent) and water management practices (58.00 percent) and were ranked second, third and fourth respectively.

The poor adoption was found in the practices of mixed cropping and mulching. In mixed cropping, it is difficult to perform farming operations like weeding, inter culturing and harvesting. Moreover it involves more labour. Further mulching requires more straw to cover the soil, which is inaccessible hence, might not have seen popular among farmers.

Data with regards to nutrient management practices revealed that application of FYM (90.00 percent) got first rank and was adopted by all the organic farmers, followed by use of bio-fertilizers (78.00 percent), use of vermicompost (76.00 percent), and use of oil cakes (58.00 percent) with the ranks second, third and fourth respectively.

Use of FYM is quite natural as it is age-old traditional practices. While use of vermicompost, bio-fertilizers and oilcakes might have become popular among farmers, as they are rich organic sources of nutrient and comparatively cheap for nutrient management in organic farming. The probable reason could be that the farmers might not aware about the use of above sources of organic nutrient and they are not easily accessible to the farmers.

The data in Table 1 further reveal that among pest/disease managements practices, use of pheromone trap got first rank (56.00 percent) followed by use of cow dung/urine (55.00 percent), growing trap crop (54.00 percent) and use of herbal insecticides (46.00 percent) to control pests/diseases with rank second, third and fourth respectively.

The practices *viz.*, seed treatment and application of bio pesticide were adopted by considerable number of farmers while use fruit fly trap, use of bird purcher, hand picking of insects and preparing live hedge around the farm had poor adoption among the organic farmers. The practices *viz.*, fruit fly trap and hand picking of insects might have not adopted by the farmers because they are crop specific and insect specific while the practices *viz.*, live hedge and bird purcher had not direct bearing with insect control. They serve as supportive medium for insect control hence might have not been popular among farmers.

From the above discussion it can be concluded that the practices *viz.*, intercropping, crop rotation, weed management, water management, use of FYM, vermicompost,

biofertilizer & oil cake and use of pheromone trap & cow dung/urine were found popular among farmers, while rest of the practices were not found popular among the farmers. It is quite clear that the efforts of popularizing such practices are less because there is no trained extension functionaries hence, it is highly required that government should organize training for extension functionaries on organic farming so that they can train the farmers accordingly in these aspects.

CONCLUSION

There is a lack of information on organic farming practices of certain crops as mentioned by majority of the farmers. Therefore, scientists should identify such practices having scientific base and provide guidelines organic farmers. Government should establish model organic farms and orchards in each agro climatic zone of the state where farmers can see all the aspects of organic farming. & 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 in desirable direction by providing training as per their felt

needs.

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