Reactions and Problems of the Farmers Regarding Organic Farming in Punjab

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ABSTRACT

The study was undertaken to know the reactions, reasons for opting organic farming and problems faced in organic farming of the selected four districts of Punjab (Ludhiana, Patiala, Bathinda and Muktsar). The data were collected from 60 farmers who were engaged in organic farming under Punjab Agro Foodgrain Cooperation (Punjab Agri. Export Corporation) and Sutlej Power Pvt. Ltd. The findings of the study showed that majority of the respondents were of middle age group followed by the young age group; matriculate; had 8-46 acres of operational landholding, had 1-6 acres of area under organic farming, had per acre gross income of Rs. 18959-23462 per annum from organic farming, majority had two years experience in organic farming, had medium mass media exposure, very low social participation, majority had medium level economic motivation, risk bearing capacity and innovativeness. Majority of the respondents were satisfied with contract organic farming firms. Firms were emphasizing the varietal diversification by growing Basmati and Durum wheat in kharif and rabi season. Technical guidance was provided by both the firms.

The total area under organic farming in selected four districts was 14.98 per cent of the total operational landholding of the selected respondents and was likely to be increased marginally to 15.14 per cent in next year by them. The major reasons for opting organic farming reported by the respondents were easy marketing (65%), additional benefits (certification of farm and premium) (43.33%), availability of inputs and technical guidance from firms (48.33%). The major problems such as lack of vermicompost, lack of training, low yield and lack of open market for organic farming were pointed out by all the respondents.

More than 80 per cent of the respondents reported the problems as the lack of specific biofertilizers for specific crop, attack of insect-pest and diseases and high cost of cultivation in organic farming. Lack of awareness regarding organic farming and breakdown of agreements were the major problems faced by both the firms. It is suggested that these problems need to be solved by the concerned agencies and the government research institutes should also take up research in this area.

Keywords: Organic farming, reactions, reasons, problems.

1. INTRODUCTION

Introduction of high yielding varieties and widespread use of chemical fertilizers and pesticides helped in increasing the yield of major crops in India, which resulted in the increase of farmer's income. As the availability of land is decreasing day by day, application of fertilizers and pesticides has become essential to sustain the productivity of major crops to meet the food grain demand. The indiscriminate use of pesticides in intensively cropped areas has led to the destruction of beneficial organisms, outbreak of secondary pests, pesticide resistance, and problem of residues and toxic hazards which in turn has disturbed the ecological balance. Toxic residue of the agricultural chemicals are entering in the human diet, which is of major concern. In India, the average dietary intake of pesticide residue is 362.5 mg per day per person for vegetarians and 356.5 mg per day per person for non-vegetarians as compared to the USA where average dietary intake of pesticide residue is 7.6 mg per day per person (Ghosh 2000)

There is a high demand for organic food grains in Europe and other countries. There is a $ 25 billion market for organic food grains in the world at the moment. And it is growing; people in a few countries even want to wear clothes made from organic cotton (Dhaliwal 2003). About 10 per cent of the farmers in European countries like England, Denmark, Germany opted for organic farming. In India (states like U.P., Uttaranchal, Haryana and Punjab) a very small percentage of the farmers have started organic farming.

There is a need to know that what prompted these farmers to go in for organic farming? Further, there is a need to know as to what type of farmers is practicing organic farming and also for which crops. What is the actual situation? What farmers felt, did and thought about organic farming? What are the reasons for going in for organic farming and also what different practices they are following to cultivate the crops successfully.

2. MATERIALS AND METHODS

1. Locale of the study

The study was undertaken in four selected districts of Punjab viz. Ludhiana, Patiala, Bathinda and Muktsar as maximum number of the organic farmers were identified in these districts.

2. Selection of respondents

A list of 115 organic farmers who were engaged in organic farming in selected districts of Punjab was prepared with the help of Punjab Agro Foodgrain Corporation (Punjab Agri Export Corporation Ltd.) and Sutlej Power Pvt. Ltd. Out of these 115 organic farmers, a sample of 60 farmers was selected from these four districts, by random sampling technique using proportional allocation.

3. Construction of research instrument

An interview schedule was prepared and used for gathering information from the respondents.

4. Pre-testing of the research instrument

Interview schedule so prepared was pre-tested on a sample of 20 respondents from the non-sampled units. On the basis of information obtained through pre-testing, necessary modifications were made in the schedule.

5. Collection of data

After finalizing the research instrument, the data were collected through personal interview method.

6. Analysis of data

The tabulated data was analysed with the help of frequencies (f), percentage (%) and cumulative cube root method (Singh 1975).

3. RESULTS AND DISCUSSIONS

1. Reactions of the farmers regarding various aspects of organic farming and facilities given by firms

It is apparent from the data given in Table 1 that most of the respondents (68.33%) realized that organic farming is laborious and time consuming. Around half of the respondents (53.33%) reported that problems were identified and solved by the firms regarding organic farming. 38.33 per cent of respondents stated that recognition was given in the form of certificates and their trustworthiness was increased by the firms. Use of appropriate technical methods by the firms was reported by 31.66 per cent. Organic farm literature was received at appropriate time in the form of pamphlets, folders, diaries and booklets as pointed out by 35 per cent of the respondents, whereas 30 per cent of the respondents found the firm consultants to be professional and technically sound.

Table 1 : Distribution of the respondents according to the reactions regarding various aspects of organic farming and facilities given by firms n=60

S. No.	Reactions	Frequency* (f)	%age
1.	Professional and technically sound consultants	18	30.00
2.	Received organic farm literature at appropriate time through firm	21	35.00
3.	Technical methods used are appropriate	19	31.66
4.	Problems identified and solved by firms	32	53.33
5.	Organic farming laborious and time consuming	41	68.33
6.	Recognition given and trustworthiness increased	23	38.33

*Multiple response

2. Reasons for practicing organic farming

The reasons for opting organic farming have been presented in Table 2. Majority of the respondents (65%) opted the organic farming for easy marketing of produce. This was followed by 61.67 per cent of farmers who opted for organic farming only due to contract made by the firm. 56.67 per cent of the respondents had adopted the organic farming due to demand of organic produce at state, national and international level while 55 per cent of respondents opted the organic farming to increase their status in society. Nearly half of the respondents (53.33%) cultivated the organic produce due to the income security. They thought that income is secure under the contract farming. A little more than half of the respondents (51.67%) were conscious about the soil health improvement that is why they opted for organic farming. An equal percentage of the respondents (48.33%) opted organic farming because of timely availability of inputs and technical advice from the contracting firm. This was followed by equal percentage of respondents (43.33%) who made the organic farming contract because they wanted to increase their income by additional benefits may be in the form of premium or certification of the farm so that they can sell their produce easily after certification. This was followed by 36.67 and 23.33 per cent of respondents who cited environmental consciousness and human health consciousness as the reasons for opting for organic farming. They want to improve the human health by producing quality food. Nearly one third of the respondents (21.67%) opted organic farming because they thought that they can save the ground water by adopting organic farming.

Table 2 : Distribution of the respondents according to the reasons for practicing organic farming n=60

S. No.	Reasons	Frequency* (f)	%age
1.	Want more income	26	43.33
2.	Increased status	33	55.00
3.	Certification of farm	26	43.33
4.	Human health consciousness	14	23.33
5.	Soil health improvement	31	51.67
6.	Environmental consciousness	22	36.67
7.	Additional benefit (premium or certification)	26	43.33
8.	Ground water saving	13	21.67
9.	Easy marketing	39	65.00
10.	Only because of contract	37	61.67
11.	Availability of technical advice timely	29	48.33
12.	Income security	32	53.33
13.	Timely availability of inputs	29	48.33
14.	Demand of organic produce	34	56.67

**Multiple respons*

3. Problems faced by the farmers in practicing organic farming

Response of the respondents regarding problems in organic farming was taken by open ended statements. The problems were classified into four categories viz. input problems, information seeking and sharing problems, socio-cultural problems and miscellaneous problems. Under input problem category lack of vermicompost emerged as the main problem as indicated by all the respondents. A large majority of the respondents (95%) reported that specific biofertilizers for specific crops were not available. As many as 71.67 per cent of the farmers reported the non-availability of resistant varieties for organic cultivation. An equal percentage of respondents (55%) reported the non-availability of biofertilizers and biopesticides for organic farming and these problems were in line with the problems reported by Gill *et al* (2000) who stated non-availability of biofertilizers for different crops in local market Regarding the problems related to information seeking and sharing problems, all the respondents reported that there was lack of training facility in organic farming for farmers by the firms as well by the government. Most of the respondents (65%) stated lack of relevant literature regarding organic farming while 71.67 per cent of respondents reported that frequency of contact by organic consultants with farmers was low.

Table 3 ; Distribution of the respondents according to the problems faced in organic farming n=60

S. No.	Problems	Respondents	
		Frequency* (f)	%age
1.	Input problems		
	(a) Lack of vermicompost	**60**	**100.00**
	(b) Lack of specific biofertilizers for specific crop	**57**	**95.00**
	(c) Lack of resistant varieties	**43**	**71.67**
	(d) Non-availability of biofertilizers	**33**	**55.00**
	(e) Non-availability of biopesticides	**33**	**55.00**
	(f) Non-availability of seeds in time	**11**	**18.33**
2.	Information seeking and sharing problems		
	(a) Lack of training in organic farming	**60**	**100.00**
	(b) Lack of relevant literature	**39**	**65.00**
	(c) Frequency of contact by firm consultants with farmers is less	**43**	**71.67**
3.	Socio-cultural problems		
	(a) High cost of cultivation	**48**	**80.00**
	(b) Low yield	**60**	**100.00**

	(c) Small size of land holdings	**37**	**61.67**
	(d) Attack of insect-pest and diseases more	**54**	**90.00**
	(e) Lack of open local markets	**60**	**100.00**
4.	Miscellaneous problems		
	(a) Non-remunerative prices	**32**	**53.33**
	(b) Late payment by firms	**28**	**46.67**
	(c) Unfavourable weather	**9**	**15.00**
	(d) Risky venture	**6**	**10.00**

**Multiple response*

In case of socio-cultural problems category, all the respondents reported lack of open local market for sale of organic produce. Major problem was low yield in organic produce which was reported by all the respondents. This problem was in line with the problems found by Nirmala *et al* (2003) who reported that higher degree of crop loss occurred when no chemical pesticides were used.A large number of respondents (90%) stated that attack of insect-pest and diseases was high in organic farming. This may be due to lack of specific biopesticides and bioherbicides for specific crops and 80 per cent of respondents informed about high cost of cultivation in organic farming. This may be due to increase in labour for cultural, mechanical and biocontrol practices for organic cultivation. As many as 61.67 per cent of respondents revealed that the small size of land holdings was also a problem which was affecting the yield of conventional as well as yield of organic farming.

The problems related to miscellaneous category, nearly half of the respondents (53.33%) reported lack of remunerative prices for organic produce by firms as well as by government whereas 46.67 per cent of respondents reported the late payment of organic produce by firms as a problem and 15 per cent of respondents reported the unfavorable weather conditions for organic farming. This problem was in line with Pal *et al* (2003) who stated the biophysical and technological constraints in organic farming, 10 per cent of respondents stated organic farming as a risky venture.

Thus it can be concluded that organic farming is a holistic production management system. It was found that majority of the respondents fell under medium category of economic motivation, risk bearing capacity and innovativeness. Majority of the respondents were satisfied with contract organic farming. Technical guidance and inputs were provided by firms. Manual labour is costly and most of the farm operations were done by respondents manually. Hence the machines should be made available by the firms. The total area under organic farming in selected districts was 14.98 per cent of the total operational land holding of the selected respondents and was likely to be increased marginally to 15.14 per cent in next year by them. The major reasons for opting organic

farming reported by the respondents were: easy marketing, additional benefits (certification of farm and premium), availability of inputs and technical guidance from firms. As many as 11.67 per cent of the respondents wanted to discontinue organic farming in the next year. The reasons for their discontinuance were: lack of financial help, low yield and weeding problem. Lack of vermicompost, low yield, lack of training, lack of specific biofertilizers for specific crops were the major problems faced by respondents. Lack of awareness regarding organic farming and breakdown of agreements by the farmrs were the problems faced by both the firms.

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