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## Knowledge of farmers regarding organic farming certification

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**Abstract**

In the last few years, the trend of organic food is increasing. By food appearing, it cannot be detected that it is organic. So, here organic food is required to be certified. Organic certificate is a proof document that shows the quality of organically grown food. This is the assurance of pure organically grown food. In India, there are 29 agencies under National Programme for Organic Production (NPOP) that provides the organic certification. So keeping the importance of organic certification in mind, this present study was conducted in four villages of two districts of Haryana state viz. Sirsa and Hisar. Total 240 farmer respondents (30 males and 30 females from each village) were selected randomly for the study. Results about knowledge on organic certification showed that on average 31.5 percent of the respondents had knowledge on organic certification agency and standards. On average 23.8 percent respondents had knowledge about certified organic products followed by transition period (23.28%) and certifying process (15.8%).

**Keywords:** Organic food, organic certification, organic certification agencies

**Introduction**

People think that organic food is healthy, safe and tasty than conventional food. So, it is very important to identify the organic food in which certification helps the people. Organic certificate is a surety that product is organically grown and there is no use of any chemical. Organic certification agencies have defined standards for products which is must to follow for getting certification. The Ministry of Commerce, Government of India approved six accreditation agencies and which are 1. APEDA (Agricultural & Processed Food Product Export Development Authority), 2. Coffee Board, 3. Spices Board, 4. Tea Board 5. Coconut Development Board, and 6. Cocoa & Cashew nut Board for certification of organic products. The National Programme for Organic Production (NPOP) implemented by the Government of India involves the accreditation programme for certification bodies, standards for organic production and promotion of organic farming etc. In India, there are 29 accredited certification agencies under National Programme for Organic Production (NPOP) for organic products like Bureau Veritas (India) Pvt. Limited, Ecocert India Pvt. Ltd., IMO Control Pvt. Ltd. and Indian Organic Certification Agency (INDOCERT) etc.

**Objective**

To assess the knowledge level of conventional farmers about organic farming certification process

**Review of literature**

Sidram *et al.* (2009) <sup>[10]</sup> reported that 63.33 per cent of the respondents had medium knowledge on organic farming practices of pigeon pea. The reason might be that the practices which were simple were generally known and regularly being practiced in the area known to most of the farmers.

Panneerselvam *et al.* (2012) conducted the study in Tamil Nadu, Madhya Pradesh and Uttarakhand states and 40 farmers from both organic and conventional systems were interviewed from each state. The findings indicated that production and marketing, lack of knowledge and lack of institutional support were the barriers to conversion in organic farming. Deshmukh and Babar (2014) <sup>[3]</sup> found that land area under organic agriculture had increased

from 37.5 million hectares in 2012 to 43.1 million hectares in 2013. More over the states like Madhya Pradesh (37.25%) is contributing highest area under organic agriculture in India followed by Himachal Pradesh (35.34%), Rajasthan (12.69%), Utter Pradesh (2.38%) and Maharashtra (1.86%) in 2013-14.

Xie *et al.* (2015) [11] found that 95.3 percent consumes preferred organic food for better health followed by 93.8 percent for no chemical residues, 74.9 percent for good environment, 65.4 percent for better taste, 58.3 percent for traditional farming, 53.1 percent for freshness, 50.7 percent for healthy lifestyle, 46.4 percent for non-GMO and 46.0 percent caring for animal welfare.

Hossain (2016) [4] revealed that most of the respondents brought and consumed organic foods based on the support and policy by the government.

Khanna and Tripathee (2018) [5] found that 81.61% people were aware of organic farming while 68.96% were not aware of the organic certification.

Anonymous (2017) [1] reported that organic production under National Programme for Organic Production in 2014-15 was 1095754.1 MT and in 2015-16 it was 1335952.29 MT and in 2016-17 it was 1180105.812 MT.

APEDA (2017) reported that in India, certified organic production was around 1.35 million million tonnes (MT) in 2015-16. Madhya Pradesh has covered largest area under organic certification followed by Himachal Pradesh and Rajasthan. The total 263687 MT (2015-16) was exported to European Union, US, Switzerland, New Zealand, Canada, Australia, Korea, South East Asian countries, South Africa, Middle East etc. The total value of exported organic food was around 298 million United State Dollar

Kondepati (2019) [6] concluded that the product was organically certified then the product had the more value.

## Methodology

The research was conducted in two districts of Haryana state viz. Sirsa and Hisar districts. Four villages from two blocks Rupana Khurd, Nathusari Kalan from Nathusari Chopta block and Chuli Khurd and Chuli Kalan from Adampur were selected randomly. From each village sixty farmer respondents (30 males and 30 females) who were actively engaged in farming were randomly selected for the study. Thus, total 240 respondents were taken for the study. The data were collected through pretested questionnaire and analyzed by applying frequency and percentage tools.

## Results

### Profile of respondents

#### Age

The data reported in Table-1 indicated that half of the respondents (51.7%) belonged to middle age group followed by young age (27.1%) and old age group (21.2%) respectively.

## Education

The data indicated that 35.9 percent respondents were educated up to matric and secondary followed by primary (34.2%), illiterate (18.9%), graduate (8.1%) and post-graduate (2.9%) respectively.

## Land Holding (own)

In table 1 data regarding own land holding revealed that 32.5 percent respondents had 5.1 to 10 acres land holding followed by 30.8 percent had 2.6 to 5 acres, 24.6 percent had up to 2.5 acres and 12.1 percent respondents had more than 10 acres land holding respectively.

## Land on lease

Data regarding land taken on lease by the respondents for farming presented in table-1 clearly depicted that 25.3 percent respondents had taken 2.6 to 5 acres, 13.7 percent had 5.1 to 10 acres, 13.0 percent had up to 2.5 acres and 8.0 percent had more than 10 acres land on lease. Rest of the respondents i.e. 40.0 percent had not taken any land on lease.

**Table 1:** Profile of respondents

Sr. No.	Variables	F(%) (n = 240)
<b>1</b>	<b>Age</b>	
	Young (21-30 years)	65 (27.1)
	Middle (31-50 years)	124 (51.7)
	Old (51 years and above)	51 (21.2)
<b>2</b>	<b>Education</b>	
	Illiterate	45 (18.9)
	Primary	82 (34.2)
	Matric and Senior Secondary	86 (35.9)
	Graduate	20 (8.1)
	Post Graduate	7 (2.9)
<b>3</b>	<b>Land holding (acres)</b>	
	Up to 2.5	59 (24.6)
	2.6 to 5	74 (30.8)
	5.1 to 10	78 (32.5)
	More than 10	29 (12.1)
<b>4</b>	<b>Land on lease (acres)</b>	
	No land	96 (40.0)
	Up to 2.5	32 (13.0)
	2.6 to 5	59 (25.3)
	5.1 to 10	33 (13.7)
	More than 10	20 (8.0)

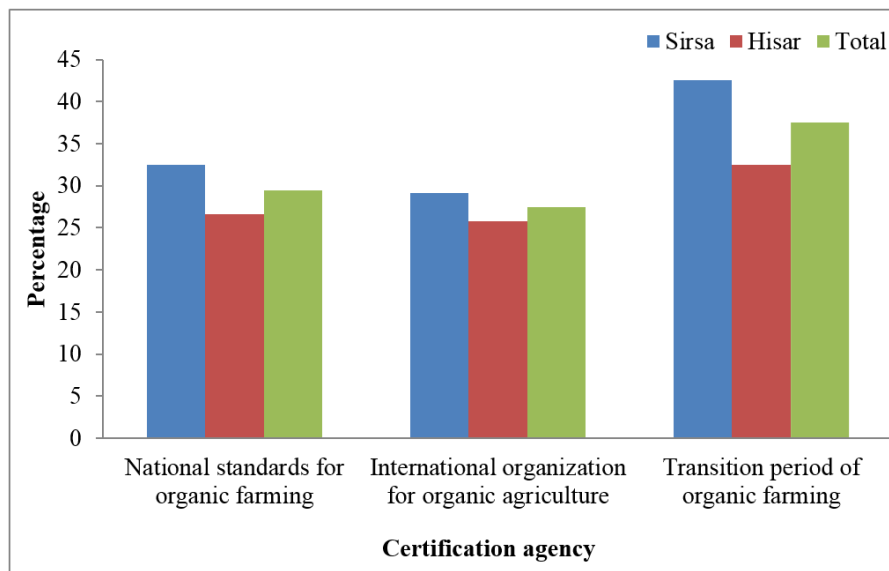
## Organic certification agency and standards

Data presented in Table 2 and fig. 1.1 revealed that 37.5 percent respondents had knowledge about transition/ conversion period followed by national standards for organic farming (29.5%) and international organization for organic agriculture (27.5%) respondents respectively.

**Table 2:** Knowledge of respondents on organic certification agency and standards

Sr. No.	Certification agency and standards	Sirsa F (%) (n = 120)	Hisar F (%) (n = 120)	Total F (%) (N = 240)
1	National standards for organic farming	39 (32.5)	32 (26.6)	71 (29.5)
2	International organization for organic agriculture	35 (29.1)	31 (25.8)	66 (27.5)
3	Transition period of organic farming	51 (42.5)	39 (32.5)	90 (37.5)

Multiple response table



Knowledge of respondents about certification of organic products

Certification is a surety that product is organic. As compared to knowledge about other aspects of organic farming, no knowledge about certification process was more reported by 53.7 to 63.7 percent respondents.

#### Certified organic products

Data regarding certified organic products presented in Table 3 revealed that 28.3 percent respondents had knowledge that products inspected by independent state or private organization followed by food grown and handled to National Organic Programme standards (24.2%), and periodic testing of soil, water and produces (19.1%) respectively. More than half of the respondents (53.7%) had no knowledge about certified organic products.

#### Certifying process of organic products

Table 3 indicated that 20.4 percent respondents had knowledge that farm must enter a transition period followed by show a farm map (20.4%), knowledge of inputs from

previous seasons (18.3%), knowledge of cropping history (15.4%), a third party independent inspector will inspect the farm on an annual basis (14.1%) and free from use of synthetic fertilizers and pesticides (13.7%) respectively. Few of respondents (8.75%) had knowledge that farm practices should be in compliance with the standards of certifying body. Majority of the respondents (59.58%) had no knowledge about certifying process of organic products.

#### Transition period

Majority of the respondents (45.4%) had knowledge regarding alter conventional farm system management practices followed by did not receive premium (28.3%), its period is generally 3 years (17.0%) and difficult in terms of weeds, insects and potential yield (16.2%) respectively. Only 9.5 percent of respondents had knowledge that producers are ineligible to market their products as "organic" in this period. Majority of the respondents (63.7%) had no knowledge about transition period.

Table 3: Knowledge of respondents about certification of organic products

Sr. No.	Certification statements	Sirsa F (%) (n = 120)	Hisar F (%) (n = 120)	Total F (%) (N = 240)
<b>1</b>	<b>Certified organic products</b>			
I	Food grown and handled to National Organic Programme standards	23 (19.1)	28 (23.3)	51 (24.2)
Ii	Inspected by independent state or private organization	41 (34.1)	27 (22.5)	68 (28.3)
Iii	Periodic testing of soil, water and produces	21 (17.5)	25 (20.8)	46 (19.1)
Iv	No knowledge	71 (59.1)	58 (48.3)	129 (53.7)
<b>2</b>	<b>Certifying process of organic products</b>			
I	Farm must enter a transition period	21 (17.5)	28 (23.3)	49 (20.4)
Ii	Free from use of synthetic fertilizers and pesticides	16 (13.3)	17 (14.1)	33 (13.7)
Iii	Farm practices should be in compliance with the standards of certifying body	12 (10.0)	9 (7.5)	21 (8.7)
Iv	A third party independent inspector will inspect the farm annually	16 (13.3)	18 (15.0)	34 (14.1)
V	Show a farm map	26 (21.6)	22 (18.3)	48 (20.0)
Vi	Knowledge of cropping history	18 (15.0)	19 (15.8)	37 (15.4)
Vii	Knowledge of inputs from previous seasons	21 (17.5)	23 (19.1)	44 (18.3)
Viii	No knowledge	78 (65.0)	65 (54.1)	143 (59.5)
<b>3</b>	<b>Transition period</b>			
I	Alter conventional farm system management practices	16 (13.3)	21 (17.5)	37 (15.4)
Ii	Transition period is 3 years	23 (19.1)	18 (15.0)	41 (17.0)
Iii	Producers ineligible to sale their products as "organic"	10 (8.3)	13 (10.8)	23 (9.5)
Iv	Did not receive premium	35 (29.1)	33 (27.5)	68 (28.3)
V	Difficult in terms of weeds, insects and potential yield	22 (18.3)	17 (14.1)	39 (16.2)
Vi	No knowledge	75 (62.5)	78 (65.0)	153 (63.7)

Multiple response table

## Discussion

Organic food needs to be certified for distinguish from conventional food. In India, there are 29 agencies for organic certification under National Programme for organic certification. By knowing the importance of certification the study was conducted in four villages from two districts of Haryana state with 240 respondents (120 males and 120 female). Results shows that most of the respondents belonged to middle age group and educated up to matric and senior secondary. Majority of the respondents had farming as their main occupation. Deepti (2008) [2] and Renu (2009) [9] also supported the findings that farming was the main occupation of respondents. Majority of the respondents had 5.1 to 10 acres land holding (own) and not taken any land on lease. More than half of the respondents had overall low knowledge. Marsh *et al.* (2017) also reported that 60 percent respondents had low knowledge about farming practices, production and quality of organic crops.

## Conclusion

Organic food is free from chemicals. For surety the foods need certification. So the study was conducted to assess the knowledge level of respondents about certification process. For this total 240 respondents (120 males and 120 female) were selected randomly from four villages of Haryana state. It was concluded that knowledge level of respondents about different aspects of certification process was very low.

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