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Knowledge of Respondents Regarding Different Aspects of Organic Farming

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Abstract: ***Organic farming is a closed system, and depends upon local resources, maintain the long-term fertility of soils and to avoid all forms of pollution that may result from agricultural techniques. Organic food contains a very less amount of chemical pesticides which shows the goodness of food. All-natural inputs like vermin-compost, bio-fertilizers, bio-pesticides, and FYM, etc. are used in organic farming. After considering these facts, the present study was conducted in two districts viz. Sirsa and Hisar of Haryana state with 240 respondents (120 male and 120 female). Results shows that average 40.6 percent respondents had knowledge about input used in organic farming, harvesting (33.6%). Opinion of respondents about organic food was 39.9 percent in average.***

Keywords: organic farming, organic food, chemical inputs and natural inputs

1. Introduction

Organic farming is a chemical free Farming which depends on all the natural inputs like vermicompost, bio-fertilizers, FYM and compost etc. There is no use of chemically based inputs with adverse effects. Organic farming is eco-friendly. All management practices like soil management, insect-pest management and weed management are done without using any chemical. So in this way organic farming is cost effective and people get awareness about this. Surveys shows that now a days, consumers prefer the organic food because they are healthy and chemical free. When organic food samples were tested for pesticide residues, 94 to 100% samples tested as pesticides free and the residue was below the regulated maximum residue level (Lairon, 2010).

2. Review of Literature

Ellis *et al.* (2006) reported that since the 1990s, the global market for organic products has continuously and rapidly grown at around 20 – 25% per year.

Jaganathan *et al*. (2012) reported that majority of organic (67.50%) and inorganic farmers (74.16%) had medium level of knowledge followed by high (11.67%) organic and 10.83% inorganic) and low (18.33% organic and 9.17% inorganic) levels of knowledge. Few farmers both organic and inorganic group had very low and high levels of knowledge, respectively.

Suchitra and Manivannan (2012) reported that the regular use of vermicompost in okra resulted in longest fruit length (17.85 cm), maximum fruit girth, maximum fruit yield per plant and maximum fruit yield per plot.

Kumar and Satyanarayana (2014) stated that organic food had the capability of longer time storage than the other crops grown by using synthetic chemicals.

Basha *et al*. (2015) explained that awareness on organic food products was increased which resulted in positive attitude of public toward organic farming. The reasons behind purchasing the organic food products were care for environment, health, lifestyle, quality and subjective norms. Consumers' purchasing behaviour was changed towards eco-friendly and organic products due to awareness about environmental degradation and the related issues.

Sharma and Chetani (2017) pointed that fertilizers were added into soil and change physical, biological and chemical property of soil and easily available to plants. Organic fertilizers are eco-friendly and derived from living material which promotes soil health, water retention, resistance to erosion, prevent diseases and fulfill nutritional need of plants.

3. Methodology

The study was conducted in two districts of Haryana state viz. Sirsa and Hisar districts. Two blocks, Nathusari Chopta from Sirsa and Adampur from Hisar were selected randomly. From each block, two villages were selected randomly. Thus, the study was conducted in four villages i.e. Rupana Khurd, Nathusari Kalan, Chuli Khurd and Chuli Kalan by selecting sixty respondents (30 males and 30 females) from each village through random selection. Total 240 respondents were taken for the study. The data were collected through pretested questionnaire and analyzed by applying frequency and percentage tools.

4. Results

4.1 Knowledge of respondents about inputs used/processing in organic farming

Table 1 revealed that majority of the respondents (62.0%) had knowledge about use of vermicompost produced by earthworms and application of green manure (61.6%). More than half of the respondents (51.2%) had knowledge about

sprinkler irrigation method and 42.5 percent had knowledge about drip irrigation method. Knowledge about properly composted manure (48.7%) followed by bio-pesticides derived from natural materials like animals, plants, bacteria and minerals (44.1%) and 43.2 percent respondents had knowledge about organically produced and handled seeds used in organic farming. Insect-pest management techniques on organic farms (47.0%) and uncontaminated manure, water and soil should be used reported by 34.5 percent respondents respectively. Written assurance by an independent body (25.8%) followed by National Organic Programme regularly establish and protect the standards for agriculture products labeled as organic (22.9%) and farm or processing facility assessed and adhered to the standards of the certifying body by 17.0 percent respondent respectively.

Table 1: Knowledge of respondents about inputs used/processing in organic farming

Sr. No.	Inputs used/ processes	Sirsa F (%) (n = 120)	Hisar F (%) (n = 120)	Total F (%) (N = 240)
1	Organically produced and handled seeds	61 (50.8)	50 (41.6)	111 (43.2)
2	Manure, water and soil should not be contaminated	42 (35.0)	41 (34.1)	83 (34.5)
3	Properly composted manure	59 (49.1)	58 (48.3)	117(48.7)
4	Insect-pest management	47 (39.1)	66 (55.0)	113 (47.0)
5	Bio-pesticides derived from natural materials like animals, plants, bacteria and minerals	57 (47.5)	49 (40.8)	106 (44.1)
6	Sprinkler irrigation method	71 (59.1)	52 (43.3)	123 (51.2)
7	Drip irrigation method	54 (45.0)	48 (40.0)	102 (42.5)
8	Use of Mulching is a process	32 (26.6)	34 (28.3)	66 (27.5)
9	Application of Green manure	69 (57.5)	79 (65.8)	148 (61.6)
10	Use of vermicompost produced by earthworms	84 (70.0)	65 (54.1)	149 (62.0)
11	National Organic Programme establish and protect the standards for organic agriculture	24 (20.0)	31 (25.8)	55 (22.9)
12	Certification of organic products means			
i)	Written assurance by an independent body	33 (27.5)	29 (24.1)	62 (25.8)
ii)	Farm or processing facility assessed and adhered to the standards of the certifying body	26 (21.6)	15 (12.5)	41 (17.0)

4.2 Harvesting of organic crops

Perusal of data in table 2 indicated that 46.25 percent respondents had knowledge that if possible move the harvested products into a cold store followed by use clean and sanitized packing or transport containers (45.4%), harvest during coolest time of the day (38.7%) and avoid unnecessary wounding, bruising, crushing or damage (24.1%) respectively. Approximately 13.0 percent respondents had knowledge of avoiding mingling high quality products with damaged, decayed or decay-prone products.

Table 2: Knowledge of respondents about harvesting of organic crops

Sr. No.	Harvesting statements	Sirsa F (%) (n = 120)	Hisar F (%) (n = 120)	Total F (%) (N = 240)
1	Harvest during coolest time of the day	44 (36.6)	49 (40.8)	93 (38.7)
2	Avoid unnecessary wounding, bruising, crushing or damage	26 (21.6)	32 (26.6)	58 (24.1)
3	If possible move the harvested products into a cold store	56 (46.6)	55 (45.8)	111 (46.5)
4	Do not mingling high quality products with damaged, decayed or decay-prone products	14 (11.6)	18 (15.0)	32 (13.3)
5	Use clean and sanitized packing or transport containers	49 (40.8)	50 (41.6)	109 (45.4)

Multiple response table

4.3 Opinion of respondents about organic food

Majority of the respondents had opinion that washing of organic vegetables and fruits (62.9%)is must followed by organic foods are safe (40.0%), like to consume organic food (38.7%),taste of organic products is different from non-organic products (37.08%), organic food pesticides free (35.4%), and organic food healthier than conventional food (35.0%) respectively. Approximately thirty percent respondents had opinion that organic food free from genetic modification (GM or GMO) and irradiation.

Table 3: Opinion of respondents about use of organic food

Sr. No	Variables	Sirsa F (%) (n = 120)	Hisar F (%) (n = 120)	Total F (%) (n = 240)
1	Likes to consume organic food	45 (37.5)	48 (40.0)	93 (38.7)
2	organic food are safe	49 (40.8)	47 (39.1)	96 (40.0)
3	organic food healthier than conventional food	36 (30.0)	48 (40.0)	84 (35.0)
4	Organic food free from pesticide	37 (30.8)	48 (40.0)	85 (35.4)
5	free from genetic engineering (GM or GMO) and irradiation	39 (32.5)	34 (28.3)	73 (30.4)
6	Organically grown vegetables and fruits must be washed	75 (62.5)	76 (63.3)	151 (62.9)
7	Difference in taste of organic products	41 (34.1)	48 (40.0)	89 (37.0)

Multiple response table

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