

Research Article

Information seeking and information sharing behaviour of the vegetable growers of Ludhiana district

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SUMMARY : The study was conducted in Ludhiana district to know the information seeking and information sharing behaviour of vegetable growers and to determine the relationship of socio-personal characteristics of vegetable growers with their information seeking and information sharing behaviour. The data were collected by selecting 80 vegetable growers randomly. Findings of the study revealed that about one third of the respondents (33.75%) and nearly one fourth of the respondents (23.75%) had medium and high overall information seeking behaviour, respectively. Private dealers, friends, *Kisan Mela* and PAU scientists were emerged as the main sources of seeking information. The weed control, plant protection, recommended varieties and fertilizer applications were the major areas for seeking information regarding vegetable cultivation. Most of the respondents shared information with neighbours, friends, relatives and mode of sharing was verbal as stated by 100 per cent of the respondents. Nearly one third of the respondents possessed medium and high overall information sharing behaviour. The plant protection, weed control, marketing, seed treatment and recommended varieties were the main aspects to share the information. Education, operational land holding, land under vegetable cultivation, income, social participation, scientific orientation and mass media exposure were positively and significantly correlated with information seeking behaviour. Age, social participation and cosmopolitanness were positively and significantly correlated with information sharing behaviour. Thus it is suggested that farmers should seek information from reliable sources. They should be motivated to share the information among the other farmers who are engaged in vegetable cultivation.

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BACKGROUND AND OBJECTIVES

Through a vast network of research and development a lot of technologies have been developed, but hardly 30-35 per cent of the technologies has been disseminated to its ultimate users and 65-70 per cent is still confined to the universities and research institutes *i.e.* just one third of this is transferred to farmers and the gap between available technology and its adoption is increasing (Brar and Kalra, 2008). Hence, it is important to know the process whereby farmers seek and share information to other farmers. In

order to raise the production of agricultural produce, seeking of information regarding the particular crop and sharing that information among the farmers play a vital role. Seeking information from various types of sources including the latest method which incorporate the latest technology and sharing the same among themselves helps in updating the knowledge and skills of the farmers by which they can boost their production (Pinjar *et al.*, 2012). A few research studies have been conducted on the communication behaviour of the extension personnel and farmers relating to the general farming practices. It is assumed that

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the communication behaviour of the farmers will be different regarding vegetable cultivation because small number of the farmers raise the vegetable crops as compared to other commercial crops like wheat, rice etc. Vegetable production is one of the important aspects of agriculture where the farmers' behaviour needs to be analyzed (Halakatti *et al.* (2010). The importance of the vegetable cultivation in the state seems to be increasing. Therefore, an effort has been made to study the information seeking and information sharing behaviour of vegetable growers and to study the relationship of socio-personal characteristics of vegetable growers with their information seeking and information sharing behaviour.

RESOURCES AND METHODS

The study was conducted in Ludhiana district. Two blocks namely Machhiwara and Samrala were selected purposively from Ludhiana district having maximum area under vegetable cultivation. Clusters of vegetable growing villages were identified with the help of staff of State Department of Horticulture Punjab. One cluster from Machhiwara block and another from Samrala block were selected. Forty farmers from each cluster were randomly selected. Thus, the total sample constituted 80 farmers engaged in cultivation of vegetables. An interview schedule was prepared for the collection of information from the vegetable growers. The interview schedule was pretested on ten non-sampled vegetable growers taken from Dhaipai village. The data were collected from the 80 vegetable growers through personal interview method. Appropriate statistical tools such as frequencies, percentages, range, cumulative cube root method, coefficient of correlation and chi-square test were used to analyze the data.

OBSERVATIONS AND ANALYSIS

The experimental findings obtained from the present

study have been discussed in following heads:

Information seeking behaviour of the respondents regarding personal sources of information:

The results of the study reveals that the most important personal sources of seeking information regarding vegetable cultivation were found to be private dealers, friends and *Kisan Mela* as these were placed on rank 1, 2 and 3, respectively (Table 1). It may be due to the reason that private dealers are most convenient sources of information and farmers are use to purchase inputs from them. Farmers need to be cautious and careful while getting information from private dealers and they should be advised to cross check the information. Similar results were obtained by Kaur and Kalra (2007) and Sidhu *et al.* (2010) who stated that commonly used source of information was private dealers. Bhagat and Mathur (1985) and Popat and Savaliya (1992) supported the findings that friends and fellow farmers were the important sources of information. These were followed by PAU scientists, key communicators, demonstration and training camps (Fig. 1). Bhagat *et al.* (2004) and Singh (2005) also found that PAU

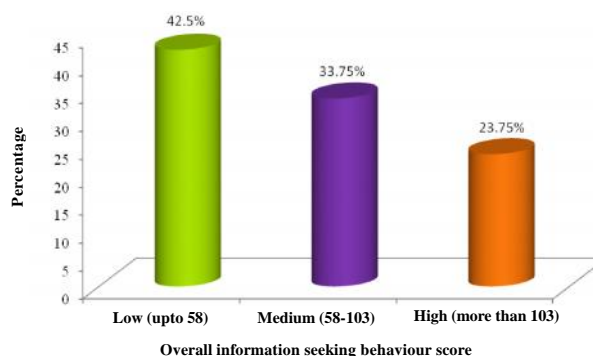


Fig 1: Overall information seeking behaviour of the farmers regarding vegetable cultivation

Table 1 : Information seeking behaviour of the respondents with respect to personal sources of information (n = 80)

Sources of information	Information seeking behaviour								Mean scores	Rank
	Low (0-8)		Medium (8-16)		High (16-24)					
	f	%age	f	%age	f	%age				
Personal sources	1.	Private dealers	6	7.50	26	32.50	48	60.00	16.2	1
	2.	Friends	6	7.50	62	77.50	12	15.00	9.6	2
	3.	<i>Kisan Mela</i>	58	72.50	8	10.00	14	17.50	7.6	3
	4.	PAU/KVK Scientists	56	70.00	18	22.50	6	7.50	7	4
	5.	Key communicators	68	85.00	12	15.00	0	0	5.2	5
	6.	Demonstration	76	95.00	2	2.50	2	2.50	4.6	6.5
	7.	Training camps	76	95.00	4	5.00	0	0	4.6	6.5
	8.	Group meeting	76	95.00	4	5.00	0	0	4.4	8
	9.	HDO	78	97.50	2	2.50	0	0	4.2	9
	10.	Leasers of land	80	100	0	0	0	0	4	11
	11.	Field days	80	100	0	0	0	0	4	11
	12.	Exhibition	80	100	0	0	0	0	4	11

scientists were consulted for gaining information regarding agricultural technology.

Among the impersonal sources of information such as TV, *Changi Kheti*, news paper and vegetable package of practices received the highest ranks 1, 2, 3 and 4, respectively (Fig. 2). It indicates that these are the most credible sources of information as perceived by the respondents. Similar findings were observed in the study of Kaur (1994) who reported that listening behaviour of the TV owning farmers were found to be high (Table 2).

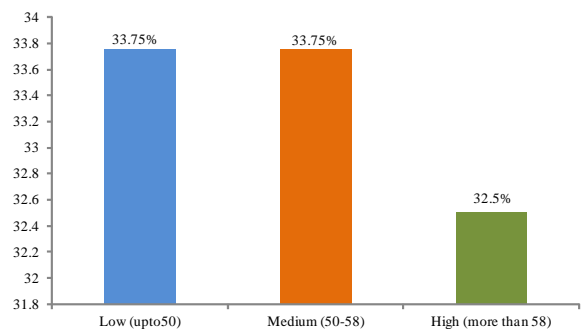


Fig 2: Overall information sharing behaviour of the farmers regarding vegetable cultivation

Information seeking behaviour of the respondents regarding various practices of the vegetable growers:

The data given in Table 3 showed that most of the respondents were having low information seeking behaviour in case of land preparation (72.50%), recommended varieties (47.50%), seed rate (67.50%), seed treatment (55%), sowing transplanting and spacing (60%) and fertilizer applications (52.50%). The perusal of the data showed that majority of the respondents fall under medium category of information seeking behaviour regarding seed rate, plant protection measures (50%), weed control (45%). The information seeking behaviour regarding weed control and seed rate was high as perceived by 12.5 per cent of the respondents. It was preceded by recommended varieties, seed treatment, sowing transplanting and spacing and fertilizers application (10% each). The information seeking behaviour of the farmers regarding vegetable cultivation practices such as ‘weed control’ received the highest rank. It was followed by plant protection practices, recommended varieties, fertilizer application and seed treatment. It inferred that in vegetable cultivation weed control, plant protection measures need greater attention thus, enable the farmers to seek information about these practices. Recommended varieties of vegetable seed is also

Table 2: Information seeking behaviour of the respondents regarding impersonal sources of information

Impersonal sources	Rank	Source	f	%	f	%	f	%	f	%
1.	1.	Television	24	30.00	56	70.00	0	0	9.6	1
2.	2.	<i>Changi Kheti</i>	58	72.50	10	12.50	12	15.00	7.4	2.5
3.	3.	Newspaper	48	60.00	30	37.50	2	2.50	7.4	2.5
4.	4.	Vegetable package of practices	66	82.50	8	10.00	6	7.50	6	4
5.	5.	Progressive farming	68	85.00	6	7.50	6	7.50	5.8	5
6.	6.	Other <i>Kheti</i> magazines	76	95.00	2	2.50	2	2.50	4.6	6
7.	7.	Radio	80	100	0	0	0	0	4	7

Table 3 : Distribution of the respondents based on their information seeking behaviour regarding various practices of vegetable cultivation (n=80)

Sr. No.	Practices	Information seeking behavior						Mean score	Rank
		Low (0-6)		Medium (6-12)		High (12-18)			
		f	%age	f	%age	f	%age		
1.	Recommended varieties	38	47.50	34	42.50	8	10.00	6.75	3
2.	Land preparation	58	72.50	18	22.50	4	5.00	4.95	11
3.	Seed rate	54	67.50	16	20.00	10	12.50	5.7	8
4.	Seed treatment	44	55.00	28	35.00	8	10.00	6.3	5
5.	Sowing/transplanting and spacing	48	60.00	24	30.00	8	10.00	6	6
6.	Plant protection	34	42.50	40	50.00	6	7.50	6.9	2
7.	Weed control	34	42.50	36	45.00	10	12.50	7.2	1
8.	Fertilizer application	42	52.50	30	37.50	8	10.00	6.45	4
9.	Irrigation and drainage	52	65.00	26	32.50	2	2.50	5.25	9
10.	Harvesting	56	70.00	20	25.00	4	5.00	5.1	10
11.	Storage	58	72.50	22	27.50	0	0	4.65	12
12.	Marketing	48	60.00	26	32.50	6	7.50	5.85	7

important to get information for greater productivity.

Overall information seeking behaviour of the respondents regarding vegetable cultivation:

The data presented in Fig. 1 showed that majority of the respondents (42.5%) had low overall information seeking behavior. It may be due to the reason that farmers have been engaged in vegetable cultivation since ages and they usually cultivate same crop every season. One more reason for this may be because majority of the respondents belonged to joint family and seeks information from members particularly elder members of the family. About 1/3rd of the respondents (33.75%) had medium and about 1/4th of the respondents (23.75%) had high overall information seeking behaviour regarding vegetable cultivation (Fig. 2). The present finding are supported by Girish (2004) who stated that majority of the respondents (66%) fall under low category and 1/3rd of the respondents had medium overall information seeking behaviour. Another study conducted by Brar and Kalra (2008) who reported that majority of the respondents had high and medium overall information seeking behaviour regarding cultivation of cotton crops.

Information sharing behaviour of the vegetable growers regarding vegetable cultivation practices:

The data given in Table 4 reported that most of the

respondents possessed low information seeking behaviour regarding land preparation (55%), seed rate (60%), irrigation and drainage (45%) and harvesting (60%). A perusal of the data further revealed that majority of the respondents had medium information sharing behaviour towards sowing transplanting and spacing (52.50%), fertilizers application (62.50%), irrigation and drainage (45%) and storage (62.50%). The data further showed that the majority of the respondents were having high information sharing behaviour regarding plant protection measure (57.50%), weed control (45%) and marketing (45%). It indicates that these are the important practices where vegetable growers are curious to seek information as it is evident in case of information seeking behaviour of the respondents regarding weed control and plant protection measures (Table 1).

Type of the farmers with whom the respondents shared the information:

Majority of the vegetable growers (62.50%) shared the information with neighbours followed by friends, relatives and farmers out of villages (Table 5). These results are supported by Singh *et al.* (2006) who inferred that neighbour found their place of pride by attracting large number of famers for information sharing. Another study conducted by Brar and Kalra (2008) found that friends were most important type of

Table 4: Distribution of the respondents based on their information sharing behaviour regarding various practices of vegetable cultivation (n=80)

Sr. No.	Practices	Information sharing behaviour						Mean score	Rank
		Low (0-3)		Medium (3-6)		High (6-9)			
		f	%age	f	%age	f	%age		
1.	Recommended varieties	16	20.00	40	50.00	24	30.00	4.8	5
2.	Land preparation	44	55.00	32	40.00	4	5.00	3	10
3.	Seed rate	48	60.00	30	37.50	2	2.50	2.77	11
4.	Seed treatment	16	20.00	30	37.50	34	42.50	5.17	4
5.	Sowing/transplanting and spacing	30	37.50	42	52.50	8	10.00	3.67	7
6.	Plant protection	10	12.50	24	30.00	46	57.50	5.85	1
7.	Weed control	10	12.50	34	42.50	36	45.00	5.47	2.5
8.	Fertilizers application	16	20.00	50	62.50	14	17.50	4.42	6
9.	Irrigation and drainage	36	45.00	36	45.00	8	10.00	3.45	8
10.	Harvesting	48	60.00	32	40.00	0	0	2.7	12
11.	Storage	30	37.50	50	62.50	0	0	3.37	9
12.	Marketing	10	12.50	34	42.50	36	45.00	5.47	2.5

Table 5 : Information sharing behaviour of the respondents with respect to type of farmers (n=80)

Sr. No.	Type of farmers	Information sharing behaviour scores						Mean score	Rank
		Low (0-8)		Medium (8-16)		High (16-24)			
		f	%age	F	%age	f	%age		
1.	Neighbour	4	5.00	50	62.50	26	32.50	14.2	1
2.	Friends	6	7.50	50	62.50	24	30.00	13.8	2
3.	Relatives	8	10.00	66	82.50	6	7.50	10.45	3
4.	Out of village	38	47.50	42	52.50	0	0	8.2	4
5.	Leasers of land	74	92.50	6	7.50	0	0	4.6	5

farmers for sharing the information. Gogoi (1984) and Brar *et al.* (2005) shared information to the outside villages also.

The data given in Table 6 showed that most of the respondents (65%) shared information with 6-12 numbers of farmers. Majority of the respondents (60%) shared complete information about fertilizer applications and storage followed by weed control, harvesting and seed treatment. The information sharing was always initiated by receiver and mode of information sharing was verbal (100%).

Overall information sharing behaviour of the respondents regarding vegetable cultivation:

Data presented in Fig. 2 showed the overall information sharing behaviour of the respondents, about 1/3rd of the respondents had medium (33.75%) and high (32.5%) information sharing behaviour while 33.75 per cent had low information sharing behaviour regarding vegetable cultivation. It indicates that good number of respondents shared information with other farmers. Brar *et al.* (2005) supported the findings who reported that the majority of the respondents had medium and high information sharing behaviour.

Relationship of socio-personal characteristics and information seeking and information sharing behaviour of vegetable growers:

The socio-personal characteristics such as education, occupation, operational land holding, land under vegetable cultivation, income, social participation and scientific orientation were found to be positively and significantly related with information seeking behaviour of the respondents (Table 7). It indicates that these characteristics contributed significantly in seeking information from various sources by the respondents. Hence, the Null hypothesis that these variables have no relationship with the information seeking behaviour of the farmers, were rejected. The studies conducted by Lal (1972), Singh (1999) and Patel *et al.* (1995) supported the findings by indicating the operational land holding and land under vegetable cultivation were correlated positively and significantly with information seeking behaviour of the vegetable growers. The relationship of the variables such as family size, operational land holding and land under vegetable cultivation with information seeking behaviour was supported by Singh (1999) and Patel *et al.* (1995) and the similar results in case of income, social participation, scientific orientation,

Table 6: Distribution of the respondents according to the number of persons information shared, initiative taken, mode and methods of information

	Range	F	%age
No. of persons with whom the information shared	upto 6	4	5.00
	6 – 12	52	65.00
	12 – 18	24	30.00
Initiative taken	Source	0	0
	Receiver	80	100
Mode	Verbal	80	100.0
	Written	0	0
Methods	Personal visit	80	100
	Informal contact	72	90.00
	Telephone call	25	31.25

Table 7 : Relationship of socio-personal characteristics and information seeking and information sharing behaviour of vegetable growers

Sr. No.	Socio-personal characteristics	Information seeking (r)	Information sharing (r)
1.	Age	0.1572 NS	0.9446**
2.	Education	0.4074 **	0.1033 NS
3.	Family size	0.1773 NS	0.1733NS
4.	Operational land holding	0.4579**	0.1905 NS
5.	Land under vegetable cultivation	0.5130**	0.0659 NS
6.	Income	0.3362**	
7.	Extension contacts	0.0615 NS	0.0659 NS
8.	Social participation	0.2265*	0.2172*
9.	Scientific orientation	0.2469*	0.0302 NS
10.	Economic motivation	0.1796 NS	0.0925 NS
11.	Cosmopoliteness	0.1448 NS	0.3365**
12.	Mass media exposure	0.3531*	0.0893NS
13.	Experience in vegetable cultivation	0.0147 NS	0.1258 NS

NS= Non-significant

*and ** indicate significance of values at P=0.05 and 0.01, respectively

cosmopolitanism and mass media exposure were reported by Singh (1999).

Age, social participation and cosmopolitanism of the respondents were positively and significantly correlated with their information sharing behaviour. The present finding in case of social participation are inline with the finding of Singh (1999) and Patel *et al.* (1995). It indicates that higher the social participation more the tendency of the vegetable growers to share the information with other farmers.

Conclusion:

The following conclusions were drawn from the study:

It was observed that the farmers seek information mainly from the private dealers where there was risk to get inaccurate information. Thus, the farmers should be encouraged to seek information from the reliable sources.

Personal sources of information (friends, *Kisan Mela* and PAU Scientists) were more used by the farmers for seeking information regarding vegetable cultivation so these should be emphasized by extension personnel for motivating farmers.

Impersonal sources such as TV, *Changi Kheti* and newspaper were more preferred by the farmers for seeking information, hence the use of these sources need to be encouraged by the extension personnel.

Vegetable growers mostly sought information on weed control, plant protection and recommended varieties. Efforts should be made to focus these areas to increase productivity.

Mostly vegetable growers shared information on plant protection, weed control, marketing, seed treatment and recommended varieties. So, these areas need to be emphasized.

Mostly the vegetable growers shared information with 6-12 persons. There is need to encourage farmers to share the information on all aspects of vegetable cultivation practices with large number of persons.

The variables such as education, operational land holding, land under vegetable, income, social participation, scientific orientation and mass media exposure influenced information seeking behaviour.

The younger the farmers, more social participation and cosmopolitanism characteristics of vegetable growers led to more information sharing with other farmers.

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