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Credibility of different sources and channels of agriculture information as perceived by the ber growers

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SUMMARY: Credibility of information sources and channels affect the adoption of improved agricultural practices by farmers. Credibility refers to perceived trustworthiness and expertise accorded to a source or channel by its audience at any given time. Therefore, sources and channels of agriculture information play major role in diffusion of agriculture innovations. This study was conducted in Chomu tehsil of Jaipur district of Rajasthan, from Chomu tehsil ten villages were selected on the basis of highest area and production of ber. A sample of 100 ber growers was selected by simple random sampling technique for the study purpose in such a manner that the number of ber growers selected was proportional to the size of the selected village. It was found that majority of the ber growers (76.00 %) belonged to medium credibility level followed by 13.00 per cent having low credibility and only 11.00 per cent were having high credibility to different sources and channels of agriculture information. About 85.11 per cent peripheral ber growers had high credibility to different sources and channels, whereas 67.93 per cent distant ber growers had high credibility to different sources and channels of information. It was further found that the 'progressive farmers' (MPS 79.33) was identified as the most credible personal localite source by the ber growers. The peripheral ber growers accorded their highest credibility to 'friends' (MPS 77.30), whereas 'progressive farmers' (MPS 84.90) was perceived as the most credible personal localite source of agriculture information by the distant ber growers. The 'agriculture supervisor' (MPS 84.33) was the most credible personal cosmopolite sources by the ber growers. The peripheral ber growers also accorded their highest credibility to 'agriculture supervisor' (MPS 95.03), whereas the 'KVK officials' (MPS 76.73) were perceived as the most credible personal cosmopolite source of agriculture information by the distant ber growers. The 'group meeting' was the most credible personal cosmopolite channel among the peripheral ber growers (MPS 81.56) and distant ber growers (MPS 86.79) in the study area. The 'radio' (MPS 85.33) was perceived as the most credible impersonal cosmopolite channels by the ber growers. The peripheral ber growers accorded their highest credibility to 'newspaper' (MPS 85.11), whereas 'radio' (MPS 87.42) was perceived as the most credible impersonal cosmopolite channel of agriculture information by the distant ber growers. The 'impersonal cosmopolite channels' (MPS 71.70) and 'personal localite sources' (MPS 67.72) were the most credible sources and channels. The 'impersonal cosmopolite channels' were the most credible channels-9 among the peripheral ber growers (MPS 71.13) and distant ber growers (MPS 72.20) in the study area.

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BACKGROUND AND OBJECTIVES

Communication sources or channels are one of the most important elements of communication process and its effectiveness largely depends upon

its credibility as perceived by the clientele. It is necessary to know the credibility of different sources or channels for transfer of any new technology or improved practice. Credibility of a particular agricultural information source or channel can be defined as the degree to which a source or channel is perceived as trustworthy and competent by the receiver. Credibility of information sources and channels affect the adoption of improved agricultural practices by farmers. Credibility refers to perceived trustworthiness and expertise accorded to a source or channel by its audience at any given time. Therefore, sources and channels of agriculture information play major role in diffusion of agriculture innovations. Farmers respond differently to the different information sources and channels. The action of farmer mainly depends on his exposure to the sources and channels of agriculture information. Previous researches revealed that variability of knowledge acquired through different sources and channels by the farmer's accounts for the personnel characteristics like age, education, family background and farming experience.

It is hoped that the findings of the present investigation will provide guidelines to the administrators, policy makers, planners, researchers, executors of agricultural plans and extension workers as it will arable to use the right methods at right time and in proper way which will lead to disseminate the agriculture messages to reach a large number of farmers specially ber growers efficiently and effectively. Under the backdrop of above importance of various sources and channels of agricultural information and varying preferences attached to those by ber growers, the present investigation "credibility of different sources and channels of agriculture information as perceived by the ber growers in Rajasthan" has been under taken.

RESOURCES AND METHODS

The present study was under taken in Jaipur district of Rajasthan. Jaipur district is having 13 tehsils, out of which Chomu tehsil was selected purposely due to having highest area and production of ber as compared to other tehsils. A list of all ber growing villages in the tehsil was prepared, out of which, 10 villages having highest area under ber cultivation were selected randomly for the study purpose. From the selected villages, a sample of 100 ber growers was selected by random sampling technique for the study purpose in such a manner that the number of ber growers selected was proportional to the total number of ber growers of the respective village.

An interview schedule consisting of measuring devices along with the face data of ber growers was used for collecting responses of the ber growers. The data were collected by personal interview method, the data colleted were classified, tabulated and inferences were drawn after subjecting the data to appropriate statistical analysis which led to the following major findings.

OBSERVATIONS AND ANALYSIS

The findings related to the credibility to different sources and channels of agriculture information have been presented under following heads:

- Distribution of the ber growers according to their extent of credibility to different sources and channels of agriculture information.
- Extent of credibility of different sources and channels of agricultural information as perceived by the ber growers.

Distribution of the ber growers according to their extent of credibility to different sources and channels of agriculture information:

The extent of credibility of different sources and channels of agriculture information was measured by getting responses on a three point continuum namely 'highly credible', 'moderately credible', and 'least credible' with weightage of 3, 2 and 1, respectively. The scores of each item were added to obtain the overall credibility score. The lowest credibility score obtained by the respondents was 72 and the highest was 109 out of the total maximum possible score of 129. The respondents were categorized into three groups 'low credibility', 'medium credibility' and 'high credibility' by using mean (84.14) and standard deviation (7.14). The extent of credibility of different sources and channels of agriculture information by the peripheral and distant ber growers has been presented in Table 1.

The data in Table 1 indicates that majority of the total ber growers (76.00 %) were having medium credibility followed by 13.00 per cent having low credibility and 11.00 per cent were having high credibility of different sources and channels of agriculture information.

The data in Table 1 further show that the majority of the peripheral ber growers (85.11 %) were having medium

Table 1: Distribution of ber growers according to their extent of credibility of different source and channels of agriculture information

Degree of credibility	Peripheral ber growers $(n = 47)$		Distant ber growers $(n = 53)$		Total ber growers (n=100)		'Z' value
Degree of credibility	F	%	F	%	F	%	Z value
Low credibility (below 76.73)	1	2.13	12	22.64	13	13	
Medium credibility (from 76.73 to 91.55)	40	85.11	36	67.93	76	76	0.963 NS
High credibility (above 91.55)	6	12.76	5	9.43	11	11	
Total	47	100.00	53	100.0	100	100.0	

X = 84.74; = 7.41; NS = Non-significant

credibility to the different sources and channels of information followed by 12.76 per cent having high credibility and 2.13 per cent low credibility. In case of the distant ber growers 67.73 per cent were having medium credibility followed by 22.64 per cent having low credibility and only 9.43 per cent were having high credibility to different sources and channels of agriculture information.

The analysis of the data further indicated that the 'Z' values (0.96) between the scores of the degree of credibility of different information sources and channels by the peripheral and distant ber growers were non-significant. Hence, the Null hypothesis (H_0) was accepted. This shows that there is a no significant difference between the peripheral and distant ber growers in their extent of credibility to different sources and channels of agriculture information.

Extent of credibility of different sources and channels of agricultural information as perceived by the ber growers: Credibility of personal localite sources:

As depicted in Table 2 the 'progressive farmers' (MPS

79.33) was identified as the most credible personal localite sources of agriculture information. This was followed by 'neighbours' (MPS 76.33) and 'friends' (MPS 73.00). The other sources of information, which were perceived trustworthy and competent by the ber growers, were 'relatives' (MPS 69.67) and 'Panchayat member' (MPS 63.33).

The peripheral ber growers perceived 'friends' (MPS 77.30) as the most credible source of information, followed by 'neighbours' (MPS 75.18) and 'progressive farmers' (MPS 73.04), whereas the distant ber growers accorded their highest credibility to 'progressive farmers' (MPS 84.90) followed by 'neighbours' (MPS 77.36) and 'relatives' (MPS 72.95). It is interesting to note that 'agriculture graduates' (MPS 44.67) were perceived as the least credible personal localite sources of agriculture information by both peripheral and distant ber growers.

Conclusion on the basis of these data could be drawn that 'progressive farmers', 'neighbours' and 'friends' were the most credible personal localite sources of information to the ber growers in the study area.

Table 2: Degree of credibility of different personal localite sources as perceived by the ber growers

Sr. No.	Personal localite sources -	Peripheral ber	Peripheral ber growers (n=47)		Distant ber growers (n=53)		Total ber growers (n=100)	
		MPS	Rank	MPS	Rank	MPS	Rank	'Z' value
1.	Progressive farmers	73.04	III	84.90	I	79.33	I	13.24**
2.	Friends	77.30	I	69.18	IV	73.00	III	6.96**
3.	Neighbours	75.18	II	77.36	II	76.33	II	2.27*
4.	Relatives	65.96	IV	72.95	III	69.67	IV	35.86**
5.	Agriculture graduates	43.97	VI	45.28	VI	44.67	VI	4.07**
6.	Panchayat members	57.45	V	68.55	V	63.33	V	39.20**
	Overall MPS	65.48		69.70		67.72		

^{*} and ** indicates of significance of values at P=0.05 and P=0.01, respectively

Table 3 : Degree of credibility of different personal cosmopolite sources

Cr No	Personal cosmopolite sources	Peripheral ber growers (n=47)		Distant ber growers (n=53)		Total ber growers (n=100)		- 'Z' value
Sr. No.		MPS	Rank	MPS	Rank	MPS	Rank	Z value
1.	Agriculture supervisor	95.03	I	74.84	II	84.33	I	37.49**
2.	A.R.S./master trainers of agriculture	53.90	X	47.17	XII	50.33	XI	8.85**
3.	Salesmen and dealers	79.43	III	72.95	III	76.00	III	6.25**
4.	NGO personal	71.43	VII	65.41	VII	68.33	VI	32.68**
5.	Agriculture officers	68.08	VIII	64.15	IX	66.00	VIII	7.11**
6.	Assistant Agriculture Officers	72.34	VI	64.15	IX	68.00	VII	13.92**
7.	Private agencies	56.03	IX	50.94	XI	53.33	X	9.03**
8.	Research station	53.90	X	47.17	XII	50.33	XI	9.71**
9.	Plant clinic/poly clinic centre	43.26	XIII	52.20	X	48.00	XII	18.31**
10.	ATIC	72.34	VI	70.44	IV	71.33	IV	1.68 NS
11	Co-operation officers	73.04	V	67.92	VI	70.33	V	12.03**
12.	Panchayat officials	74.47	IV	68.55	V	71.33	IV	17.64**
13.	Deputy director of agriculture	47.52	XII	38.99	XIII	43.00	XIII	24.63**
14.	Assistant director of agriculture	51.06	XI	64.78	VIII	58.33	IX	31.26**
15.	KVK officials	80.85	II	76.73	I	78.67	II	4.35**
	Overall MPS	66.18		61.76		63.84		

NS = Non - significant; * and ** indicates of significance of values at P = 0.05 and P = 0.01, respectively

The Table 2 also indicated that the 'Z' values of all the personal localite sources (except neighbours) were significant at 1 per cent level of significance. The 'Z, value of 'neighbours' was significant at 5 per cent level of significance. Hence, the Null hypothesis H_0 was rejected and alternate hypothesis was accepted. It can be concluded that there is a significant difference between the peripheral and distant ber growers in the degree of credibility of different selected personal localite sources of information.

Credibility of personal cosmopolite sources of agriculture information:

Table 3 makes it clear that 'agriculture supervisor' (MPS 84.33) was perceived as the top ranked credible and competent source of agriculture information by majority of the ber growers. The 'KVK officials' (MPS 78.67) and 'salesmen and dealers' (MPS 76.00) were also proved somewhat effective among the ber growers. The peripheral ber growers accorded

their highest credibility to 'agriculture supervisor' (MPS 95.03) followed by 'KVK officials' (MPS 80.85) and 'salesmen and dealers' (MPS 79.43), whereas in opinion of distant ber growers the most credible personal cosmopolite source was 'KVK officials' (MPS 76.73) followed by 'agriculture supervisor' (MPS 74.84) and 'salesmen and dealers' (MPS 72.95). Surprisingly, 'deputy director of agriculture' (MPS 43.00) have totally lost their credibility among the distant ber growers (MPS 38.99), whereas the 'plant clinic/poly clinic centre' (MPS 43.26) were least credible in peripheral ber growers.

In other words, it is concluded that 'village extension workers', 'KVK officials' and 'salesmen and dealers' were the most credible personal cosmopolite source of agriculture information as perceived by the ber growers.

The Table 3 also revealed that the 'Z' values of all the personal cosmopolite sources of information (except ATIC) were found significant at 1 per cent level of significance.

Table 4: Degree of credibility of different personal cosmopolite channels

Sr. No.	Personal cosmopolite channels	Peripheral ber growers (n=47)		Distant ber growers (n=53)		Total ber growers (n=100)		- 'Z' value
		MPS	Rank	MPS	Rank	MPS	Rank	Z value
1.	Training	71.63	II	69.18	V	70.33	IV	2.42*
2.	Method demonstration	66.67	IV	69.81	IV	68.33	VII	3.13**
3.	Result demonstration	67.37	III	69.81	IV	68.67	VI	4.63**
4.	Farmer's fair	81.56	I	72.33	III	76.67	II	21.05**
5.	Kisan seva kendra	81.56	I	69.18	V	75.00	III	50.95**
6.	Literature	51.78	VI	65.41	VI	59.00	VIII	28.76**
7.	Group meeting	81.56	I	86.79	I	84.33	I	7.13**
8.	Group discussion	62.41	V	74.84	II	69.00	V	32.64**
9.	Field day	51.06	VII	47.17	VII	49.00	IX	7.56**
10.	Field visit	48.94	VIII	38.36	IX	43.33	XI	12.59**
11	Educational tour	35.46	X	37.73	X	36.67	XII	19.87**
12.	Workshop/seminar	44.68	IX	46.54	VIII	45.67	X	3.51**
	Overall MPS	62.06		62.26		62.16		

^{*} and ** indicates of significance of values at P = 0.05 and P = 0.01, respectively

Table 5: Degree of credibility of impersonal cosmopolite channels

C. No	Impersonal cosmopolite channels	Peripheral ber growers (n=47)		Distant ber growers (n=53)		Total ber growers (n=100)		- 'Z' value
Sr. No.		MPS	Rank	MPS	Rank	MPS	Rank	Z value
1.	Radio	82.98	III	87.42	I	85.33	I	7.91**
2.	Television/film shows	68.79	VII	76.10	V	72.67	VI	6.49**
3.	News paper	85.11	I	84.90	II	85.00	II	0.33 NS
4.	Farm journals/ magazines	65.25	IX	63.52	IX	64.33	IX	4.23**
5.	Traditional media (puppets, songs etc)	83.69	II	83.02	III	83.33	III	0.85 NS
6.	Exhibitions	71.63	VI	65.41	VIII	68.33	VII	13.53**
7.	E-mail/internet	41.13	X	39.62	X	40.33	X	5.96**
8.	Poster/charts/ circulars	65.96	VIII	67.92	VII	83.67	VIII	12.42**
9.	Telephone/mobile phone	73.76	IV	74.84	VI	74.33	V	3.33**
10.	Youth club/mahila mandal	73.04	V	79.24	IV	76.33	IV	6.54**
	Overall MPS	71.13		72.20		71.70		

NS = Non significant; ** indicates of significant of values at P = 0.01, respectively

Hence, the Null hypothesis (H₀) was rejected and alternate hypothesis was accepted. It can be concluded that there was a significant difference between the peripheral and distant ber growers in the degree of credibility of these selected personal cosmopolite sources of information except ATIC.

Based on results, it is suggested that extension organizations should make their efforts to train 'agricultural supervisors', 'KVK officials' and 'salesmen and dealers' on improved ber cultivation practices because they had high credibility and may play a significant role in disseminating the agricultural information specially on ber growing in the study area

Credibility of personal cosmopolite channels:

It is obvious from Table 4 that 'group meeting' (MPS 84.33) was the most credible personal cosmopolite channel of agricultural information as perceived by the ber growers in the study area. This was followed by 'farmer's fair' (MPS 76.67), 'kisan seve kendra' (MPS 75.00), 'training' (MPS 70.33) and 'group discussion' (MPS 69.00). The 'group meeting' was the most credible personal cosmopolite channel of information in both peripheral (MPS 81.56) and distant (MPS 86.79) ber growers.

On the basis of data, it is concluded that 'group meeting', 'farmer's fair' and 'kisan seva kendra' were the most credible personal cosmopolite channels of agriculture information as perceived by the ber growers.

The data in Table 4 also show that the 'Z' values of all the personal cosmopolite channels (except training) were significant at 1 per cent level of significance. The 'Z' value of 'training' was significant at 5 per cent level of significance. Hence, the Null hypothesis H_0 was rejected and alternate hypothesis was accepted. It can be concluded that there was a significant difference between the peripheral and distant ber growers in the degree of credibility of different selected personal cosmopolite channels of information.

Credibility of impersonal cosmopolite channels:

It is clear from the data in Table 5 that 'radio' (MPS 85.33) was perceived as the top ranked most credible impersonal cosmopolite channel of information by the ber growers in the study area. Likewise 'newspaper' (MPS 85.00), 'traditional media (puppet, local songs, drama)' (MPS 83.33) and 'youth club/mahila mandal' (MPS 76.33) were also reported as credible impersonal cosmopolite channels.

The peripheral ber growers accorded their highest credibility to 'newspaper' (MPS 85.11) followed by 'traditional media (puppet, local songs, drama)' (MPS 83.69) and 'radio' (82.98) whereas the distant ber growers accorded their highest credibility to 'radio' (MPS 87.42) followed by 'newspaper' (MPS 84.90) and 'traditional media (puppet, local songs, drama)' (MPS 83.02). Surprisingly, 'e-mail/

Internet' have lost their trust among both peripheral and distant ber growers in the study area.

It is inferred, therefore, that 'radio', 'newspaper' and 'traditional media (puppet, local songs, drama)' were the most credible impersonal cosmopolite channels of agriculture information as perceived by the ber growers in the study area.

The Table 5 also indicated that the 'Z' values of all the impersonal cosmopolite channels (except traditional media and newspaper) were significant at 1 per cent level of significance. Hence, the Null hypothesis (H₀) was rejected and the -alternate hypothesis was accepted. It can be concluded that there was a significant difference between the peripheral and distant ber growers in the degree of credibility of these impersonal cosmopolites channels of information. The 'Z' values of 'traditional media (puppet, local songs, drama)' and 'newspaper' were non-significant, which shows that there was no significant difference between the peripheral and distant ber growers in the degree of credibility of 'traditional media' and 'newspaper'.

Conclusion:

- Majority of the peripheral and distant ber growers had medium level of credibility to different sources and channels of agriculture information.
- The ber growers considered the 'progressive farmers', 'neighbours' and 'friends' as the most credible personal localite sources of agricultural information.
- Majority of the ber growers in the area perceived 'agriculture supervisor' and 'KVK officials' as the most credible agriculture information sources.
- The ber growers perceived 'group meeting' and 'farmers fair' as the most credible personal cosmopolite channels of agricultural information.

The ber growers perceived 'impersonal cosmopolite channels' and 'personal localite sources' were the most credible sources in information seeking by the ber growers.

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