Credibility of Farm Information Disseminated Through Newspapers and Radio Programme: A Case Study

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ABSTRACT

The potentiality of mass media in farm information communication is needed to be exploited to its fullest extent, to transfer the agricultural technology to the end users in order to overcome the menace of food insecurity. Among the different mass media, newspapers and radio have some relative advantages in terms of cost effectiveness and wide coverage. But the credibility of the farm information communicated through these two media has always been under scanner. The present study was conducted on farm information communicated in four widely circulated Bengali newspapers of West Bengal, and three daily farm broadcast of All India Radio, Kolkata, *to study the credibility aspects of farm information communicated through selected newspapers and radio programme from technical and farmers' point of view. A sample of 200 farm information each, from four selected Bengali newspapers published during the study period and three Bengali farm radio programmes were selected randomly from the total farm information communicated during the study period. A total of 200 farmer respondents were selected through proportionate random sampling in order to study the credibility of farm information communicated through selected newspapers and farm radio programmes. The study revealed that in terms of credibility issues radio was found more credible medium than that of newspapers from both technical and farmers' point of view.*

Key words : *Farmers' preferences; Credibility study; Farm information; Newspapers; Radio; Factor analysis;*

Driven by the facts of poor extension services and apathy of media for agriculture, the Ministry of Agriculture, Government of India took a bold initiative to sponsor schemes on Mass Media Support to Agriculture Extension that are being implemented since 2003-2004. That means that the importance of mass media in dissemination of agricultural technology has been felt and potentiality of mass media in agricultural extension has started getting acknowledgement in India. *Ansaloni (1986)* showed in a survey in Emilia-Romagna on livestock production, that out of the total sample livestock farmers, 59.1 per cent gained information through reading a specialized publication and 41.8 percent listened to the radio daily. *Ani and Kwaghe (1997)* also suggested that the use of radio as a medium of reaching farmers should be intensified by the extension agencies.

But, the credibility of farm information communicated through newspapers and radio has always been questioned over the time. *Fox (1963)* emphasized contents pre-requisites in the style of writing of agricultural and technical articles and its comprehensibility. He suggested that clarity and brevity in writing are important for better comprehension and called for simple and short sentences with crisp and concrete words. *Kamath (1969)* prescribed that the message in an agricultural article should be related to some problem or ambition of the reader and it should be properly timed. The message should be related to immediate future readers, so as to attract readers' attention. *Patel et al (1995)* also found that source credibility of radio and newspapers in progressive villages in India are 1.085 and 0.192 respectively, whereas in less progressive villages these were 0.399 and 0.160.

Schweiger (1998) found that newspapers in Germany were rated ahead of the web and television on nine of eleven credibility item.

Keeping in mind the importance of mass media in communicating farm information and their credibility among the farmers and experts the present study was conducted. Four widely circulated Bengali newspapers of West Bengal, India and three farm programme of All India Radio, Kolkata were considered under research. Farmers' perception about the media, the content communicated and their credibility were studied among the farmers of Birbhum district of West Bengal. The objectives of the study were;

i. To study the farm information seeking behaviour of the sample farmers.
ii. To study the credibility of farm information communicated through Bengali newspapers and radio from technical point of view.
iii. To study the credibility of farm information communicated through Bengali newspapers and radio as perceived by the farmers.
iv. To study the differential perception of credibility of farm information communicated through selected Bengali newspapers and radio programme from technical and farmers' point of view

METHODOLOGY

This study was formulated in two broad segments to collect the information from 'technical point' of view and 'farmers' point' of view regarding credibility study of farm information communicated through selected newspapers and radio programme. Segment-wise methodology is presented below.

credibility of farm information communicated through Newspapers and Radio from technical point of view: In order to analyze farm information communicated through newspapers and radio covering all three major cropping seasons, the actual study period was from April'2010 to March'2011. The four most widely circulated Bengali newspapers, namely, *Aajkal, Ananda Bazar Patrika, Bartaman* and *Sambad Pratidin* have been selected. For radio programme, three Farm Programme of All India Radio, Kolkata at 456.6 m. Band and 657 KHz were studied and recorded for the entire study period i.e. April 2010 – March 2011. These are as follows;

- *Chasi Bhaider Bolchhi* (Addressing the Farmers) – being broadcasted every morning at 6.30 to 6.40 am for ten minutes.
- *Uno Jamir Duno Phasal* (Double Crop in Fertile Land) – being broadcasted every day at 12.40 P.M to 01.00 P.M for twenty minutes.
- *Krishi Kathar Aasar* (Programme on Agriculture) – being broadcasted every day in the evening hours from 06.40 P.M to 07.30 P.M. for 50 minutes.

Selection of sample : Total 200 sample farm information was selected from four above stated newspapers through random sampling (without replacement) in the proportion of farm information published in those newspapers during the study period for credibility study. Total 200 sample farm information was also selected from the total farm information broadcast through Radio during the study period by following random sampling method (without replacement) for credibility study.

Credibility parameters: For the present study, fifteen credibility parameters were selected after exhaustive study of existing literature for the credibility study of farm information. These were; Presentation, Brevity, Detailed, Understandability, Clarity, Necessity, Feasibility, Universality, Timeliness, Current, Repetition, Biased, Accuracy, Factual and Believability. Credibility was measured with the help of a modified 5-point semantic scale (From 'Strongly Agree' to 'Strongly Disagree') of *Gaziano and McGrath (1986)* as it is given below;

Strongly Agree	Agree	Undecided
5 (-) 1	4 (-) 2	3 (-) 3
Disagree	Strongly Disagree	
2 (-) 4	1 (-) 5	

Reliability test : Reliability test of this modified scale was done on randomly selected 200-sample farm information, of which, 100 sample farm information were selected from four newspapers (taking 25 farm information from each newspapers) and 100 sample farm information from radio. Reliability of the scale is measured by *Internal Consistency Method* by measuring *Cronbach's Alpha* (*Cronbach, 1951*). Inter-correlation matrix of the fifteen credibility variables was prepared. It was measured 0.746 and decision rule is that when Alpha value is 0.7 and above, subject under study is considered reliable. Hence, the scale used for the present study was found reliable.

credibility of farm information communicated through newspapers and radio as perceived by the farmers :

Selection of the respondents : To study the farmers' perception about the credibility of farm information

communicated through newspapers and radio, 200-sample farmers from all nineteen blocks of Birbhum district of the state of West Bengal were interviewed with the structured schedule. A multistage sampling procedure was followed to find the target respondent, who read at least one of those selected four newspapers and follow at least one of those selected three radio programmes on regular basis. At the first stage of sampling, 1,750 literate cultivators (1 per cent of total literate cultivators in the district) from all three sub-divisions were selected through simple random sampling (without replacement). From the pilot survey, it was found that only 937 farmers fulfilled the basic criteria to be selected as responded which constituted the size of the population to be studied. The names of 200 respondents (21.34 per cent of the total population of 937) spread over all the blocks were selected by random sampling (probability proportion) method in proportion to the numbers of eligible cultivators (937 farmers as mentioned above) for the final study.

Preference orders : Preference orders of the farmers regarding farm information communicated through newspapers and radio were ascertained to understand the need and interest of the farmers. Different preference orders were studied and the farmers' responses were measured through frequency distributions. These were;

- Preference orders for different Bengali newspapers for getting farm information
- Preference orders for different farm information published in newspapers
- Preference orders for different radio programmes broadcast farm information by AIR, Kolkata
- Preference orders for different Farm Information broadcasted by AIR, Kolkata.

Credibility of farm information as perceived by farmers : The same credibility scale mentioned earlier was applied for the purpose separately for the farm information communicated through newspapers and radio. Reliability score was measured on 50 farmers applying *Internal Consistency Method* and it was measured 0.782, which is permissible.

Different statistical techniques were applied which like, Internal Consistency Method (Cronbach Alpha) for reliability of credibility scales, mean and frequency distribution, standard deviation, paired *t*-Test and factor analysis. The different steps of factor analysis employed in the study were as follows:-

i. Correlation matrix was used as the primary data for factor extraction.
ii. Principal component analysis was done as a method of extraction of components.
iii. Variables which have *Eigen Value* more than 1 were selected as components.
iv. Varimax type of rotation of *Orthogonal Rotation* with *Kaiser Normalization* was applied as a method of rotation.

RESULTS AND DISCUSSION

The results of the present research work are presented below under different segments.

Farmers' perception and preferences for different newspapers and different radio programmes for receiving farm information : Table 1 represented the preference for newspapers for obtaining farm information as responded by the sample farmers and it was found that, *Bartaman* (48.22%) preferred by majority of the farmers, followed by *Sambad Pratidin (24.39 %), Ananda Bazar Patrika (*20.51 %) and *Aajkal* (6.88%) in descending order of preferences for getting farm information.

Table 1. Preference offarmers for newspapers for obtaining farminformation

Newspapers	Preference (%)
Aajkal	6.88
Ananda Bazar Patrika	20.51
Bartaman	48.22
Sambad Pratidin	24.39

In case of preferences for getting farm information from radio programme, *Krishi Kathar Asar* was ranked one (42.63%), followed by, *Chasi Bhaider Bolchhi* (38.92 %) and *Uno Jamir Duno Phasal* (18.45%) in descending order of preference (Table 2).

Table 2. Farmers' preference for radio programme for obtaining farm information

Radio Programme	Preference (%)
Chasi Bhaider Bolchhi	38.92
Uno Jamir Duno Phasal	18.45
Krishi Kathar Aasar	42.63

Farmers' perception and preferences for different types of farm information communicated through newspapers and radio : The Table 3 suggested that 32.68 per cent farmers preferred to have farm information regarding 'Technology Transfer' from

selected newspapers followed by 'Agricultural Marketing' (21.79 %), 'Rural Development' (18.56%) and 'Success Story' (15.46%) related farm information in descending order of preference.

Table 3. Preference for types of farm information communicated through newspapers by farmers

Farm Information	Preference (%)
Agricultural Marketing	21.79
Agricultural Policy	8.98
Rural Development	18.56
Success Story	15.46
Technology Transfer	32.68
Weather Forecast	2.53
Total	100

In case of radio, Table 4 indicated that 26.48 per cent and 22.73 per cent farmers preferred to have 'Technology Transfer' and 'Rural Development' related farm information respectively from radio programme followed by 'Weather' (18.16 %) and 'Success stories' (15.63 %).

Table 4. Preference of kind of farm information in radio by farmers

Farm Information	Preference (%)
Agricultural Marketing	7.42
Agricultural Policy	5.27
Rural Development	22.73
Rural Youth	4.31
Success Story	15.63
Technology Transfer	26.48
Weather Forecast	18.16
Total	100

Study of credibility of farm information communicated through newspapers and radio : The mean values of credibility scores of farm information for all four selected newspapers and radio were calculated and presented in the following table;

Table 5. Descriptive statistics of credibility score of farm information communicated through newspapers and radio

Mass Media	Credibility Score	
	Mean	SD
Aajkal	54.82	5.87
Ananda Bazar Patrika	54.24	6.94
Bartaman	55.52	6.58
Sambad Pratidin	54.23	6.66
Radio	58.67	6.17

It is evident from Table 5 that among the selected newspapers, *Bartaman* had the highest mean credibility score (55.52) followed by *Aajkal* (54.82), *Anandabazar Patrika* (54.24) and *Sambad Pratidin* (54.23). But between the two media it is evident that radio had much higher mean credibility score (58.67) than that of any newspapers under study.

Comparative study of credibility of farm information communicated through newspapers from both technical and farmers' point of view : In this sub-section comparative study of credibility of farm information communicated through newspapers from technical and farmers' point of view was done by the mean values of fifteen numbers identified 'credibility variables' and Factor Analysis. Results of these analyses have been presented in the following tables;

Table 6. Descriptive statistics of credibility variables of farm information in newspapers from technical point of view

Credibility Variables	Mean	SD	No. of Farm Information
Presentation	4.01	0.92	200
Brevity	3.70	0.95	200
Detailed	3.69	1.01	200
Understandability	3.52	1.10	200
Clarity	3.51	1.26	200
Necessity	3.98	0.92	200
Feasibility	4.29	0.82	200
Universality	3.58	1.23	200
Timeliness	3.70	1.03	200
Current	3.73	0.93	200
Repetition	2.81	1.16	200
Unbiased	3.87	1.07	200
Accuracy	3.77	0.70	200
Factual	3.63	0.92	200
Believability	3.83	0.83	200
Total Score	55.58	6.35	200

Table 6 showed the mean values of different credibility variables of farm information communicated through newspapers from technical point of view. It was found that 'Feasibility' (4.29%), 'Presentation' (4.01%), 'Necessity' (3.98) had the higher mean credibility scores. Next in order the other major credibility variables were, 'Unbiased' (3.87), 'Believability' (3.83), 'Accuracy' (3.77), 'Current' (3.73), 'Brevity' and 'Timeliness' (each 3.70), 'Detailed' (3.69), 'Understandability' (3.52) and 'Clarity'. (3.51). There were few other variables with lesser credibility mean score.

To further explore the different underlining dimensions responsible for credibility of farm information

communicated through newspapers from technical point of view, factor analysis was carried out.

Table 7. Total variance explained (Newspapers from technical point of view)

Component	Percentage of Variance	Cumulative Percentage
Component 1	17.73	17.73
Component 2	15.12	32.85
Component 3	12.93	45.78
Component 4	10.81	56.60
Component 5	7.84	64.44

Table 8 displayed the rotated factor matrix of the factor analysis of credibility of farm information published in newspapers from technical point of view. Five-factor solution revealed distinct dimensions. Each factor was composed of some variables, which had high factor loadings and high communalities. The first factor was anchored by 'Believability' (0.878) and 'Factual' (0.804). 'Accuracy' (0.791) also had loads on the factor. Second factor was made up of 'Timeliness' (0.739) and 'Feasibility' (0.661). The third factor was again built up of two variables, 'Presentation' (0.874) and 'Detailed' (0.855) whereas fourth factor was anchored by 'Understandability' (0.878) and 'Clarity' (0.876). Only one variable, 'Current' (0.900) composed the fifth factor.

Table 8. Rotated factor matrix (Newspapers from technical point of view)

Factor	Variable	Factor I	Factor II	Factor III	Factor IV	Factor V	Commonality
Factor-I	Believability	0.878	0.152	0.013	0.083	0.007	0.800
	Factual	0.804	0.054	0.057	-0.114	0.037	0.666
	Accuracy	0.791	0.134	0.038	0.062	-0.214	0.696
Factor II	Timeliness	0.259	0.739	-0.002	0.018	0.008	0.613
	Feasibility	0.173	0.661	0.152	0.063	0.278	0.571
Factor III	Presentation	0.082	0.140	0.874	-0.045	0.47	0.794
	Detailed	0.109	0.073	0.855	-0.082	-0.024	0.756
Factor IV	Understandability	0.100	0.007	0.126	0.878	0.003	0.796
	Clarity	-0.047	-0.015	-0.181	0.876	-0.028	0.803
Factor V	Current	-0.067	0.031	0.008	-0.054	0.900	0.819

Table 9. Descriptive statistics of credibility variables of farm information in newspapers from farmers' point of view

Credibility Variables	Mean	SD	No. of Farm Information
Presentation	3.24	0.99	200
Brevity	2.25	1.15	200
Detailed	3.27	0.79	200
Understandability	3.88	0.63	200
Clarity	2.69	1.04	200
Necessity	3.71	0.57	200
Feasibility	2.68	1.05	200
Universality	3.50	1.00	200
Timeliness	2.83	0.94	200
Current	4.05	0.55	200
Repetition	2.76	0.95	200
Biased	3.17	0.91	200
Accuracy	3.66	0.61	200
Factual	3.99	0.48	200
Believability	4.10	0.60	200
Credibility Score	49.72	4.23	200

The Table 9 showed the mean values of different credibility variables of farm information published in newspapers from farmer's point of view. According to this table 'Believability' (4.10), 'Current' (4.05) and 'Factual' (3.99) had the higher mean credibility values followed by "Undrstandability" (3.88), 'Necessity' (3.71), 'Accuracy' (3.66), 'Universality' (3.50), 'Detailed' (3.27), 'Presentation' (3.24) and 'Biased' (3.17) in descending order of credibility. Whereas, 'Brevity' (2.25), 'Clarity' (2.69) and 'Feasibility' (2.68) had the lower mean credibility values in case of newspapers.

Table 10. Total variance explained (Newspapers from farmers' point of view)

Component	Percentage of Variance	Cumulative Percentage
Component 1	17.65	17.65
Component 2	13.14	30.79
Component 3	12.74	43.53
Component 4	11.67	55.20
Component 5	11.18	66.38
Component 6	8.91	75.29

Table 11 showed the rotated factor matrix of the factor analysis of credibility of the farm information in newspapers from farmers' point of view. Six factors were found having distinct dimensions. First factor was made up of 'Repetition' (0.774), 'Necessity' (0.774) and 'Detailed' (0.665). Second factor was anchored by 'Universality' (0.898), 'Brevity' (0.746) and

'Believability' (0.645). Third and sixth factors were built up with only one variable each. They were made up of 'Feasibility' (0.823) and 'Factual' (0.928) respectively. Fourth factor centered around 'Clarity' (0.849) and 'Presentation' (0.592) whereas, fifth factor centered around 'Accuracy' (0.825) and 'Biased' (0.726).

Table 11. Rotated factor matrix for newspapers from farmers' point of view

Factor	Variable	Factor I	Factor II	Factor III	Factor IV	Factor V	Commonality	
Factor-I	Repetition	0.774	0.061	-0.194	0.169	0.347	-0.030	0.791
	Necessity	0.774	0.007	0.072	0.022	-0.131	0.039	0.624
	Detailed	0.665	0.182	0.418	0.118	-0.182	-0.087	0.705
Factor II	Universality	-0.113	0.898	0.036	-0.194	-0.019	-0.183	0.892
	Brevity	0.129	0.746	-0.188	0.406	0.002	0.153	0.797
	Believability	0.280	0.645	0.045	0.014	0.398	0.155	0.680
Factor III	Feasibility	-0.168	-0.076	0.823	-0.122	0.040	0.143	0.748
Factor IV	Clarity	-0.037	-0.080	-0.007	0.849	-0.068	0.177	0.764
	Presentation	0.520	0.244	-0.167	0.592	0.284	-0.208	0.832
Factor V	Accuracy	-0.024	-0.013	0.226	-0.247	0.825	-0.098	0.802
	Biased	-0.195	0.221	-0.275	0.338	0.726	0.060	0.808
Factor VI	Factual	-0.031	-0.023	-.009	0.103	-0.003	0.928	0.873

Comparative study of credibility of farm information broadcasted through radio from both technical and farmers' point of view: Like newspapers, comparative study of credibility of farm information was done from both Technical (Scientist/Extension specialists point of view) and Farmers' point of view for radio programme.

Table 12. Descriptive statistics of credibility variables of farm information broadcasted through radio from technical point of view

Credibility Variables	Mean	SD	No. of Farm Information
Presentation	4.27	0.73	200
Brevity	3.84	0.90	200
Detailed	3.96	0.83	200
Understandability	4.22	0.90	200
Clarity	3.76	0.94	200
Necessity	3.28	1.42	200
Feasibility	4.20	0.82	200
Universality	3.65	1.41	200
Timeliness	3.57	1.18	200
Current	3.25	0.92	200
Repetition	3.87	1.15	200
Biased	4.09	1.10	200
Accuracy	4.04	0.80	200
Factual	4.23	0.62	200
Believability	4.25	0.67	200
Credibility Score	58.44	6.45	200

The Table 12 displayed the mean credibility values of fifteen credibility variables from technical point of view. It was found that 'Presentation' (4.27), 'Believability' (4.25), 'Factual' (4.23) had the higher mean credibility scores, followed by 'Understandability' (4.22), 'Feasibility' (4.20), 'Biased' (4.09) and 'Accuracy' (4.04). Whereas, 'Current' (3.25), 'Necessity' (3.28) and 'Universality' (3.65) had the lower mean credibility values.

Like newspapers, factor analysis of credibility of farm information in radio from technical point of view was done to explore the underlining dimensions. Scree plot suggested that five components were identified having Eigen value more than 1. Table 13 ascertained that these five factors were accounted for 68.72 per cent variance.

Table 13. Total variance explained (Radio from technical point of view)

Component	Percentage of Variance	Cumulative Percentage
Component 1	20.81	20.81
Component 2	17.78	38.59
Component 3	11.30	49.89
Component 4	10.59	60.48
Component 5	8.23	68.72

Table 14 displayed the rotated factor matrix of the factor analysis of the credibility of farm information in radio from technical point of view. It ascertains that five factors had distinct dimensions. First factor was anchored by 'Believability' (0.815), 'Accuracy' (0.815) and 'Biased' (0.759). Second factor was composed of 'Timeliness' (0.882), 'Necessity' (0.803) and 'Feasibility' (0.769). Third factor was composed by, 'Detailed' (0.908) and 'Presentation' (0.854); and fourth factor by 'Understandability' (0.857) and 'Clarity'

Table 14. Rotated factor matrix (Radio from technical point of view)

Factor	Variable	Factor I	Factor II	Factor III	Factor IV	Factor V	Commonality
Factor I	Believability	0.815	0.054	0.031	0.113	-0.188	0.716
	Accuracy	0.815	-0.086	-0.035	-0.348	0.001	0.794
	Biased	0.759	0.003	0.064	0.052	-0.191	0.620
Factor II	Timeliness	0.169	0.882	-0.036	-0.001	0.111	0.820
	Necessity	0.261	0.803	-0.142	-0.081	0.249	0.802
	Feasibility	-0.056	0.769	0.196	0.136	-0.213	0.697
Factor III	Detailed	-0.002	-0.091	0.908	0.032	0.078	0.840
	Presentation	0.072	0.144	0.854	-0.082	-0.082	0.769
Factor IV	Understandability	0.188	0.268	-0.020	0.857	0.137	0.861
	Clarity	-0.049	-0.214	-0.040	0.813	-0.279	0.789
Factor V	Current	-0.106	0.079	0.032	-0.080	0.764	0.609

Table 15. Descriptive statistics of credibility variables of farm information in radio from farmers' point of view

Credibility Variables	Mean	SD	No. of Farm Informations
Presentation	3.94	0.77	200
Brevity	3.40	1.02	200
Detailed	3.76	0.77	200
Understandability	4.43	0.60	200
Clarity	3.78	0.90	200
Necessity	4.00	0.65	200
Feasibility	3.20	0.98	200
Universality	4.50	0.50	200
Timeliness	3.20	1.05	200
Current	3.84	0.43	200
Repetition	4.20	0.59	200
Biased	4.16	0.76	200
Accuracy	4.03	0.71	200
Factual	4.18	0.62	200
Believability	4.19	0.43	200
Credibility Score	58.77	4.69	200

(0.813). The fifth factor was composed of only one variable, 'Current' (0.764).

The Table 15 ascertained the mean values of different credibility variables of farm information communicated through radio as perceived by farmers. It is found that 'Universality' (4.50), 'Understandability' (4.43), 'Repetition' (4.20), 'Believability' (4.19). 'Factual' (4.18) had the higher mean values, followed by 'Biased' (4.16), 'Accuracy' (4.03), 'Necessity' (4.0) in descending order of credibility. Whereas, 'Feasibility' (3.20), 'Timeliness' (3.20), 'Detailed' (3.78) etc. had the lower mean values.

Through principal component analysis it was found that these five factors were accounted for 76.13 per cent of variance as it can be seen in Table 16.

Table 16. Total variance explained by radio from farmers' point of view

Component	Percentage of Variance	Cumulative Percentage
Component 1	21.36	21.36
Component 2	16.73	38.10
Component 3	15.84	53.94
Component 4	12.92	66.85
Component 5	9.28	76.13

The Table 17 showed the rotated factor matrix of the credibility of farm information in radio as perceived by the farmers. Here the first factor was anchored by 'Timeliness' (0.811) and 'Biased' (0.802), 'Universality' (0.729) and 'Factual' (0.663). Second factor was composed of 'Repetition' (0.714), 'Presentation' (0.686) and 'Detailed' (0.651) and third factor was made up of 'Brevity' (0.897), 'Clarity' (0.750), and 'Believability' (0.647). Fourth and fifth factors were made up of only one variable each, 'Necessity' (0.833) and 'Accuracy' (0.913) respectively.

Difference between cumulative credibility score of farm information communicated through newspaper and radio : In a 2 tailed test it was found that mean credibility value were not equal at 5 per cent and 1 per cent level of significance. Estimated mean difference was 2.860 and mean value was higher in case of radio from technical point of view. Same results were found when paired *t*- test was carried out between cumulative credibility scores of farm information communicated through newspapers and radio from framers' point of view. Here also mean values were significantly (both at 5 per cent and 1 per cent level of significance) not equal as the table-18 suggested. The estimated mean difference here was 9.050 and mean credibility value was higher in case of radio, rather than newspapers.

Table 17. Rotated factor matrix for radio from farmers' point of view

Factor	Variable	Factor I	Factor II	Factor III	Factor IV	Factor V	Commonality
Factor I	Timeliness	0.811	0.239	-0.039	0.042	0.202	0.758
	Biased	0.802	-0.208	-0.070	0.169	-0.158	0.745
	Universality	0.729	0.108	0.152	-0.124	0.282	0.661
	Factual	0.663	0.081	-0.665	-0.013	-0.019	0.890
Factor II	Repetition	-0.157	0.714	0.087	0.558	-0.112	0.867
	Presentation	0.303	0.686	0.192	0.135	-0.239	0.674
	Detailed	0.477	0.651	-0.132	-0.246	-0.188	0.764
Factor III	Brevity	0.041	-.0.004	0.897	0.039	-0.201	0.848
	Clarity	-0.134	0.278	0.750	0.273	0.052	0.734
	Believability	0.526	0.087	0.647	-0.048	0.287	0.787
Factor IV	Necessity	0.150	0.016	0.059	0.833	0.121	0.734
Factor V	Accuracy	0.173	-0.100	-0.047	-0.073	0.913	0.882

Table 18. Paired *t*- test between cumulative credibility score of farm information communicated through newspapers and radio (2 Tail Test)

Point of Views	Mean Value of Farm Information (Radio)	Mean Value of Farm Information (Newspapers)	Estimated Mean Difference	No. of Observation	*t*- Test Value	Table Value (1% level,199 d.f)
Technical	58.435	55.575	2.860	200	4.41	2.576
Farmers	58.770	49.720	9.050	200	19.87	2.576

CONCLUSION

It was observed from the study that framers had the differential preferences and credibility of newspapers with regard to farm information communication. *Bartaman was* preferred by majority of the farmers (48.22%), followed by *Sambad Pratidin (24.39 %), Ananda Bazar Patrika (*20.51 %) and *Aajkal* (6.88%) in descending order of preferences. It was also observed that farmers mostly preferred to get 'Technology Transfer', 'Agricultural Marketing', 'Rural Development' and 'Success Story' related farm information from newspapers. The areas of preference, in case of radio, were same except 'Agricultural Marketing'. It was also found that farm information published in *Bartaman* had the highest mean credibility score. Between the two media, farm information communicated through radio had much higher mean credibility than that of newspapers. The differences in perception from two different viewpoints was found with regard to credibility of farm information broadcasted through radio and published in newspapers from technical and farmers' point of view. From the results of Paired *t*-tests, it can be generalized that farm information communicated through radio was appeared to be more credible than that of newspapers, from both technical and farmers' point of view.

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