

ROLE OF EXTENSION TEACHING METHODS AND AIDS IN SUSTAINABILITY OF EXTENSION ORGANIZATION AND MANAGEMENT

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ABSTRACT

The study was conducted in 3 agro-climatic zones (Zone-IA, Zone I C and Zone IIIA) of Rajasthan state, from which, 6 tehsils 20 villages and a sample of 55 extension personnel working in study area was selected randomly from the State Department of Agriculture. The opinion of extension personnel about infrastructure facilities in extension organization, from extension management point of view were analysed separately. After that analyzing the data with statistical tests used. It was found that the extension teaching methods the "Organisation of Kisan Mandals" and "Organisation of Mahila Mandals" were the most essential extension methods followed by "Introduction and use of computers in all government offices" while, the "Personnel letter" was perceived as least essential extension method by the extension personnel for sustainability of extension organisation and extension management.

INTRODUCTION

The extension teaching methods are the ways to create the situations in which the things to be taught are brought to the attention of the learner, in such a way that learning can take place. The sustainability of agriculture has become increasingly important to policy makers, agricultural scientists, farmers and the public. Proper use of teaching methods play effective role in sustainability of extension organization and management. Extension management refers to the whole process by which the farmer is able to enhance returns from the farm on sustained basis for the attainment of family goals is considered as extension management. There is an urgent need to reorient and manage the agricultural extension systems to meet these new challenges. Keeping all these views in mind the present investigation entitled "Role of extension teaching methods and aids in sustainability of extension organization and management" was undertaken.

RESEARCH METHODOLOGY

The study was conducted in Rajasthan state. Rajasthan state has been divided into 10 agro-climatic zones in which, 3 agro-climatic zones, namely zone- IA, zone IC and zone IIIA were selected by

simple random sampling technique. From these three zones, 6 tehsils namely Phalodi, Lunkaransar, Lalsot, Sambharlake, Chomu and Sarwar were selected with the help of probability proportional to size technique. Similarly a total of 20 villages were selected from these selected 6 tehsils with the help of probability proportional to size technique. From these selected tehsils a sample of 55 extension personnel working in study area was selected randomly from the State Department of Agriculture.

An interview schedule for extension personnel was prepared for measuring the essentiality of the teaching methods and aids as perceived by the extension personnel was specially constructed by the investigator in light of suggestions of the experts and the responses were recorded accordingly. The validity and reliability of the schedule was also ensured. The mailed questionnaires were used for collecting the data from extension personnel included in the study. The data so collected were classified, tabulated and analysed. Inferences were drawn after subjecting the data to statistical analysis, which led to following findings:

RESULTS AND DISCUSSION

The data presented in Table 1 reveal that in case of individual methods, the 'Farm clinic' (2.55

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M.S.) was considered as the most essential teaching method by the extension personnel, as it was perceived 'Most essential' by 63.63 per cent, 'Essential' by 27.27 per cent and 'Some what essential' by 9.09 per cent of extension personnel and was ranked first. Similarly the 'Result demonstration' (2.38 M.S.) was considered as essential method by the extension personnel was ranked second followed by the 'Adaptive/mini kit trial' (2.36 M.S.), 'Farm and home visit' (1.98 M.S.) and 'Farmers call' (1.96 M.S.), which were also considered essential methods by the extension personnel and were ranked third, fourth and fifth, respectively. Among individual methods the 'Personal letter' (0.91 M.S.) was considered as the least essential method by the extension personnel as it was perceived 'Most essential' by none of the extension personnel, 'Essential' by 18.18 per cent, 'Some what essential' by 54.54 per cent, and 'Not essential' by 27.27 per cent of extension personnel and was ranked last among individual methods of teaching.

The data regarding group methods shows that the 'Method demonstration' (2.45 M.S.) was considered as the most essential method as it was perceived 'Most essential' by 54.54 per cent, 'Essential' by 36.36 per cent and 'Some what essential' by 9.09 per cent of extension personnel and was ranked first. Similarly the 'Field day' (1.93 M.S.) was considered as second most essential method by extension personnel and was ranked second, followed by 'Study tour' (1.76 M.S.) and 'Small group training' (1.52 M.S.) were considered as essential method by extension personnel and were ranked third and fourth, respectively. Among the group methods the 'Group meeting' (1.24 M.S.) was considered as least essential method by extension personnel, as it was perceived 'Most essential' by 18.16 per cent, 'Essential' by 32.72 per cent, 'Some what essential' by 21.18 per cent and 'Not essential' by 27.27 per cent extension personnel and was ranked last.

Among the mass methods the 'Exhibition' (1.89 M.S.) was considered as most essential methods by the extension personnel as it was perceived 'Most essential' by 32.72 per cent, 'Essential' by 36.36 per cent, 'Some what essential' by 18.18 per cent and 'Not essential' by 12.72 per cent extension personnel and was ranked first. Similarly the 'Farm publica-

tion' (1.84 M.S.) was considered as second most essential methods by extension personnel and was ranked second, followed by 'Campaign' (1.65 M.S.) and 'Newspaper' (1.62 M.S.) were considered as essential methods by the extension personnel and were ranked third and fourth, respectively. The 'Mass meetings' (1.38 M.S.) was considered as least essential method by extension personnel as it was perceived 'Most essential' by 18.18 per cent 'Essential' by 25.45 per cent 'Some what essential' by 32.72 per cent and 'Not essential' by 20.00 per cent extension personnel and was ranked last.

Among audio aids the 'Radio' (2.40 M.S.) was considered as the most essential audio aid by extension personnel as it was perceived 'Most essential' by 56.36 per cent, 'Essential' by 27.27 per cent and 'Somewhat essential' by 16.36 per cent and was ranked first followed by the 'Tape recorder' (1.65 M.S.) and the 'Public address system' (1.60 M.S.) were also considered essential audio aid by extension personnel and were ranked second and third, respectively. The 'Telephones' (1.24 M.S.) was considered as least essential audio aid by extension personnel as it was perceived 'Most essential' by 16.36 per cent 'Essential' by 21.82 per cent 'Some what essential' by 30.91 per cent and 'Not essential' by 30.91 per cent extension personnel and was ranked last.

Among the visual aids the 'Over head projection' (2.05 M.S.) was considered as most essential visual aid by the extension personnel as it was perceived 'Most essential' by 34.54 per cent, 'Essential' by 41.81 per cent, 'Some what essential' by 18.18 per cent and 'Not essential' by 5.45 and was ranked first followed by the 'Slide projection' (2.00 M.S.) and 'Opaque projection' (1.69 M.S.) were considered also essential visual aid by the extension personnel and were ranked second and third, respectively. The 'Film strips' (1.59 M.S.) was considered as least essential visual aid by extension personnel as it was perceived 'Most essential' by 32.72 per cent 'Essential' by 18.18 per cent 'Some what essential' by 23.63 per cent and 'Not essential' by 25.45 per cent extension personnel and was ranked last.

Among the audio-visual aids the 'Motion pictures' (2.58 M.S.) was considered as most essential audio-visual aid by the extension personnel as it was

perceived 'Most essential' by 65.45 per cent, 'Essential' by 27.27 per cent and 'Some what essential' by 7.27 per cent and was ranked first followed by the 'Television' (2.35 M.S.) was considered also essential audio-visual aid by extension personnel and were ranked second. The 'Video' (2.29 M.S.) was considered as least essential audio-visual aid by the extension personnel as it was perceived 'Most essential' by 49.09 per cent 'Essential' by 30.90 per cent, and 'Some what essential' by 20.00 per cent and was ranked last.

Regarding the non-projected aids the 'Chalk board' (2.35 M.S.) was considered as most essential non-projected aid by extension personnel as it was perceived 'Most essential' by 54.54 per cent, 'Essential' by 30.90 per cent, 'Some what essential' by 9.09 and 'Not essential' by 5.45 per cent and was ranked first. Similarly, the 'Posters' (2.27 M.S.) was perceived as second most essential non-projected aid by extension personnel and was ranked second followed by 'Flannel graph' (2.24 M.S.), 'Models' (2.02 M.S.) and 'Charts' (1.93) were perceived as essential non-projected aids by the extension personnel and were ranked third, fourth and fifth, respectively.

The data in Table 1 regarding other methods also indicate that the 'Organisation of Kisan mandals' (2.76 M.S.) was considered as essential method by extension personnel, as it was perceived 'Most essential' by 76.36 per cent and 'Essential' by 23.63 per cent, none of the extension personnel were perceived it 'Some what essential' and 'Not essential' and it was ranked first. Similarly, the 'Organisation of mahila mandals' (2.76 M.S.) was also considered essential method by extension personnel and was ranked first followed by 'Participative approach' (2.73 M.S.) was also considered essential method by extension personnel and was ranked second. Whereas, 'Introduction and use of computers in all government offices' (2.67 M.S.) and 'Demonstration on slow moving technologies' (2.67 M.S.) were considered as essential method by extension personnel and were ranked third and fourth, respectively. The 'Linking users with data bank and expert personnel' (2.31 M.S.) was considered as the least essential method by extension personnel, as it was perceived 'Most essential' by 54.54 per cent, 'Essential' by 27.27 per cent, 'Some what

essential' by 12.72 per cent and 'Not essential' by 5.45 per cent and was ranked last.

Regarding overall essentiality of extension methods the table indicate that the 'Organisation of kisan mandals' (2.76 M.S.), 'Organisation of mahila mandals' (2.76 M.S.) were perceived as most essential extension methods and were jointly ranked first, followed by 'Participative approach' which was also perceived as most essential extension method by the extension personnel and was ranked second. whereas, the 'Personnel letter' was considered as least essential extension method by the extension personnel and was ranked last.

CONCLUSION

It was found that among individual methods the "Farm clinic" and "Result demonstration were perceived as the most essential teaching method. Whereas the "Personal letter" was perceived as least essential teaching method. Among the group methods the "Method demonstration" was perceived as the most essential method, whereas, the "Group meeting" was perceived as the least essential method by the extension personnel for sustainability of extension organisation and extension management. Among mass method the "Exhibition" as most essential method, while, the "Mass meeting" was perceived as least essential method by the extension personnel for sustainability of extension organisation and extension management.

Regarding audio it was found that the "Radio" was perceived as most essential audio aids while, among visual aids the "Over head projection" was perceived as most essential audio aids and the "Film strips" was perceived as least essential audio aids by the extension personnel. Among audio-visual aids the "Motion pictures" was perceived as most essential audio-visual aids, whereas, the "Video" was perceived as least essential AV aid by the extension personnel.

Among non-projected aids, the "Chalk board" was perceived as the most essential aid, whereas, "Charts" was perceived as the least essential non-projected aids by extension personnel for sustainability of extension organisation and for extension management, whereas among other teaching methods, the extension personnel perceived the

Table 1: Essentiality of extension teaching methods and aids for sustainability of extension organization and extension management as perceived by the extension personnel n = 55 (Multiple response)

S.No.	Methods	Most essential	Essential	Some what essential	Not essential	Mean score	Class wise Rank	Overall Rank
A. Individual methods								
1.	Farm and home visit	20 (36.36)	18 (32.72)	13 (23.63)	4 (7.27)	1.98	IV	XIX
2.	Farmer's call	18 (32.72)	20 (36.36)	14 (25.45)	3 (5.45)	1.96	V	XX
3.	Personal letter	-	10 (18.18)	30 (54.54)	15 (27.27)	0.91	VI	XXXIII
4.	Adaptive/mini kit trial	30 (54.54)	15 (27.27)	10 (18.18)	-	2.36	III	X
5.	Result demonstration	30 (54.54)	16 (29.09)	9 (16.36)	-	2.38	II	IX
6.	Farm clinic	35 (63.63)	15 (27.27)	5 (9.09)	-	2.55	I	V
B. Group methods								
1.	Method demonstration	30 (54.54)	20 (36.36)	5 (9.09)	-	2.45	I VII	
2.	Group meeting	10 (18.18)	18 (32.72)	12 (21.18)	15 (27.27)	1.24	V	XXXII
3.	Small group training	15 (27.27)	14 (25.45)	10 (18.18)	16 (29.09)	1.51	IV	XXX
4.	Field day	22 (40.00)	15 (27.27)	10 (18.18)	8 (14.54)	1.93	II	XXI
5.	Study tour	20 (36.36)	15 (27.27)	7 (12.72)	13 (23.63)	1.76	III	XXIV
C. Mass methods								
1.	Farm publications	15 (27.27)	18 (32.72)	20 (36.36)	2 (3.63)	1.84	II	XXIII
2.	Mass meetings	10 (18.18)	14 (25.45)	18 (32.72)	11 (20.00)	1.35	V	XXXI
3.	Exhibition	18 (32.72)	20 (36.36)	10 (18.18)	7 (12.72)	1.89	I	XXII
4.	News papers	13 (23.63)	15 (27.27)	20 (36.36)	7 (12.72)	1.62	IV	XXVII
5.	Campaign	13 (23.63)	20 (36.36)	12 (21.82)	10 (18.18)	1.65	V	XXVI
D. Audio-visual aids								
1. Audio aids								
(i)	Public address system	11 (20.00)	20 (36.36)	15 (27.27)	9 (16.36)	1.6	III	XXVIII
(ii)	Radio	31 (56.36)	15 (27.27)	9 (16.36)	-	2.4	I	VIII
(iii)	Tape recorder	13 (32.72)	21 (38.18)	10 (18.18)	11 (20.00)	1.65	II	XXVI
(iv)	Telephones	9 (16.36)	12 (21.82)	17 (30.91)	17 (30.91)	1.24	IV	XXXII
2. Visual aids								
(i)	Slide projection	18 (32.72)	22 (40.00)	12 (21.81)	3 (5.45)	2.00	II	XVIII
(ii)	Over head projection	19 (34.54)	23 (41.81)	10 (18.18)	3 (5.45)	2.05	I	XVI
(iii)	Film strips	18 (32.72)	10 (18.18)	13 (23.63)	14 (25.45)	1.59	IV	XXIX
(iv)	Opaque projection	17 (30.90)	15 (27.27)	12 (21.81)	11 (20.00)	1.69	III	XXV
3. A.V. aids								
(i)	Motion pictures	36 (65.45)	15 (27.27)	4 (7.27)	-	2.58	I	IV
(ii)	Video	27 (49.09)	17 (30.90)	11 (20.00)	-	2.29	III	XIII
(iii)	T.V.	27 (49.09)	20 (36.36)	8 (14.54)	-	2.35	II	XI

S.No.	Methods	Most essential	Essential	Some what essential	Not essential	Mean score	Class wise Rank	Overall Rank
E. Non projected aids								
1.	Charts	12 (21.81)	22 (40.00)	21 (38.18)	-	1.84	VI	XXIII
2.	Posters	20 (36.36)	18 (32.72)	10 (18.18)	7 (12.72)	1.93	V	XXI
3.	Specimens	30 (54.54)	12 (21.81)	11 (20.00)	2 (3.63)	2.27	II	XIV
4.	Models	25 (45.45)	12 (21.81)	12 (21.81)	6 (10.90)	2.02	IV	XVII
5.	Flannel graph	26 (47.27)	18 (32.72)	9 (16.36)	2 (3.63)	2.24	III	XV
6.	Chalk board	30 (54.54)	17 (30.90)	5 (9.09)	3 (5.45)	2.35	I	XI
F. Other Methods								
1.	Organization of rural youth club	20 (36.36)	18 (32.72)	10 (18.18)	7 (12.72)	1.93	VIII	XXI
2.	Organization of kisan mandals	42 (76.36)	13 (23.63)	-	-	2.76	I	I
3.	Organization of mahila mandals	42 (76.36)	13 (23.63)	-	-	2.76	I	I
4.	Non formal education of rural youth	35 (63.63)	12 (21.81)	8 (14.54)	-	2.35	VI	XI
5.	Introduction and use of computers in all Govt. offices	40 (72.72)	12 (21.81)	3 (5.45)	-	2.67	III	III
6.	Linking users with data banks and expert personnel	30 (54.54)	15 (27.27)	7 (12.72)	3 (5.45)	2.31	VII	XII
7.	Demonstration on slow moving technologies	40 (72.72)	12 (21.81)	3 (5.45)	-	2.67	III	III
8.	Social engineering	35 (63.63)	10 (18.18)	7 (12.72)	3 (5.45)	2.4	V	VIII
9.	Integrated service approach	37 (67.27)	10 (18.18)	8 (14.54)	-	2.53	IV	VI
10.	Participative approach	40 (72.72)	15 (27.27)	-	-	2.73	II	II

Figures in parentheses indicate percentage

“Organisation of Kisan mandals” and “Organisation of Mahila mandals” as the most essential methods while as “Linking users with data banks and expert personnel” (2.31 M.S.) was perceived as the least essential method by the extension personnel.

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