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# A study on effective utilization of communication methods by farm women in Odisha

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#### Abstract

The first and foremost challenge for the nation builders is the development of rural areas. Changing the behavior of rural community in terms of knowledge, skills and attitudes is the major thrust towards rural development. In this major source of livelihood, contribution of women in modern times in unlimited both at home and farm. Despite their significant role in agriculture, farm women still have to carry out their agricultural activities without much support from the agricultural support services such as extension (training), input supply, marketing and credit. This research study was conducted in Odisha among the active farm women to check the effective utilization of different communication methods. For our study we have used three major communication methods viz. Individual, Group and Mass Method. The respondents were interviewed about their usage of different sources of communication and its frequency of utilization. It was observed that most of the farm women contact VLEW once in a month and mostly prefer to take suggestions from progressive farmers, friends and relatives. Further, according to the findings it was noted that 85.00 per cent of farm women never attended any training programmes, which was due to poor government initiatives to empower the women. Though, mass media is undoubtedly an important tool in bringing about social change and modernization in developing nations. But in our study, it was seen that farm women rarely used mass media sources for obtaining agricultural information due to lack of spare time. Among all the mass media sources, radio was one of the most widely used sources for obtaining agricultural information other than farm literatures. Further, it was observed that socio-personal characteristics influenced (29.00%) utilization of mass communication methods.

Keywords: Communication methods, Utilization, Modernization, Farm women, Mass media and farm women.

#### Introduction

Agriculture being a major source of livelihood in rural areas, which includes majority of rural farm women in minutest field works. They share abundant responsibilities by performing wide spectrum of duties both in home and outside but their participation is considered normal by the society. Though these women have immense contribution in all spheres of agriculture, they lag behind in technical competency and advanced information on farm technologies. In a study conducted on the knowledge level of farm women on farm technologies (Sankaran and Perumal, 1993), it was reported that 50 per cent of farm women belonging to small farm category and possessed a low level of knowledge on farm technologies, Henceforth it is the necessity of the hour that, farm women should be fully aware of the latest agricultural technologies so as to achieve faster development in agriculture.

Information is important for farmers to maintain livelihoods and to gain a competitive edge in a rapidly changing economic and production environment where traditional farming methods might be ineffective to meet new demands. They have been a definite strength in the nation's building process. Agricultural extension represents a mechanism by which information about new technologies, better farming practices and better management can be transmitted to farmer. These activities are carried forward by the extension agents, who are few in number as compared to the proportion of the farmers. However, agricultural extension services had always focused on male farmers, keeping up with the perception that "women do not farm", a perception that ignores the wide range of farming activities performed by them behind the scene. A widespread "perception bias" regarding the actual role of women in agriculture can contribute to a low priority of providing better services to women (Temesgen, 2015).

As a result, different communication methods had been recognized as highly cost-effective technologies to convey information, training, and technology in rural areas. In our country we have a wide range of communication technologies ranging from satellite broad casting to the print media to make the information accessible to all the people. These media include newspaper, magazines, farm literatures, books, radio, television, contact with development agents, progressive farmers etc. Women possess scanty knowledge of the latest technologies

which could be made possible with use of various communication channels. The transfer of technology approach which mainly includes mass media is not paying much attention towards dissemination of adequate and timely agricultural information to the farm women. (Santra and Kundu, 2001).

Therefore, timely access to communication media prepares women for improving their communication and mediation skills to strengthen their capacity to contact with the external world. Their access to training and education is essential to develop livelihood strategies that build on the opportunities created. Keeping in view, the accessibility to different communication methods this study had been conducted to measure the rate of utilization of different modes of communication and its relationship with the socio-personal characteristics of the farm women.

## Methodology

For our study, we had selected six villages under Brahmapur subdivision of Ganjam district in Odisha, where 57.80 per cent women were actively involved in all the agricultural field operations. Moreover, it was the most productive district in Odisha contributing 1279 kg/ha of food grains. A sample size of 120 farm women above 18 years of age and with at least 3 years of farming experience in paddy cultivation were selected from these villages as respondents, using a multistage sampling design. The primary data was collected using a wellstructured and pretested schedule from 20 respondents of each village to measure the utilization of various communication methods viz. Training Programmes, Mass Media Usage and Extension Contacts. Tabular analyses were carried out to examine the status of women and also to measure the frequency and percentage of accessibility to the different communication sources. Further, to examine the influence of socio-personal status of the farm women on the utilization of communication methods, multiple regression analysis had been done.

## **Results and Discussion**

## Socio-personal characteristics of farm women

The socio-personal characteristics are defined on the basis of personal, social, economic characters. Respondents were categorized and their frequency and percentage was calculated for further analysis. The results from Table. 1 reveal that majority of the farm women (53.33%) were of age group 18 to 35 years followed by (42.51%) in the age group of 36 to 60 years and (4.16%) in the age group of 61 and above, as majority of the farm women belonged to the age group of 18 to 35 years it signifies that young women of the sampled area are generally active.

The findings reveal that majority of the respondents attended up to primary school (41.66%) followed by literate respondents who were only able to read and write basics (25.83%), 16.66 per cent attended up to middle school, and rest 9.16 per cent and 6.66 per cent were illiterate and attended high school respectively. It was observed that none of the respondents had attended more than high school which is evidently clear from the table that educational levels of the respondents are very low as (35.02%) have never attended formal schooling.

As regards the family type, it has been observed that most of the respondents reside as joint family (72.50%) and also were inclined towards extended family type with 16.67 per cent. The nuclear family constituted only 10.83 per cent in the surveyed villages which shows that in the study area, people still values "joint family" over "nuclear family".

Further, the farming experience of the farm women revealed that that majority (82.50%) of the farm women were engaged for more than 5 years, and rest (9.16%) and (8.34%) had 4-5 years and 3 years of experience respectively. This evinces that most of the farm women actively participated in all the agricultural operations related with paddy cultivation for many years.

For accounting the annual income, we had categorized the respondents on two dimensions. We compared the data with national monthly per capita household income. The annual income was converted to monthly household income (M. H. I). The respondents' actual monthly income was calculated by multiplying the national per capita income with average family size of the sample. From the above findings, it is understood that (17.50%) respondents are below monthly household income level (B. M. H. I) and rest (82.50%) lies above monthly household income (A. M. H. I).

Further, the knowledge level revealed that most of the respondents possess medium level (78.33%) knowledge in package and practice of rice cultivation followed by rest 10.83 per cent both high and low level knowledge.

 
 Table 1: Distribution of the respondents according to their sociopersonal characteristics (n=120)

Characteristics	Categories	Frequency	Percentage
	18-35	64	53.33
Age	36-60	51	42.51
	61 and above	5	4.16
	Illiterate	11	9.19
	Literate	31	25.83
Education	Primary School	50	41.66
	Middle School	20	16.66
	High School	8	6.66
	Nuclear	13	10.83
Family Type	Joint	87	72.50
	Extended	20	16.67
	3 years	10	8.34
Farming Experience	4-5 years	11	9.16
	Above 5 years	99	82.50
Annual Income	B.M.H.I	21	17.50
Allitual Income	A.M.H.I	99	82.50
	Low	13	10.83
Knowledge Level	Medium	94	78.34
	High	13	10.83

# Utilization of various communication methods by the farm women

In this era of fast pace technology, the access to different communication methods is quite effective but the rate of utilization is poor in rural areas of our country. Mostly it has been observed that farm women lack knowledge on agricultural information, due to improper access and utilization of various communication methods *viz*. Individual, Group and Mass methods.

According to Van and Fortier (2000), it was stated that there have been short-comings of traditional print and library based methods of providing such agricultural information to rural farmers who are generally illiterate and relatively remote from formal sources of information (e. g. extension stations, libraries). Therefore to analyze the utilization frequency of individual, group and mass communication methods the respondents were interviewed regarding their familiarity with extension agents, attending training programmes and exposure to mass media tools respectively. Further, multiple regression was done to measure the influence of sociopersonal characteristics on the utilization of these communication methods.

#### **Contact with Extension Agents**

Traditionally, agricultural extension strategies have focused on increasing production by providing trainings, information and access to inputs and services specifically to male farmers by contacting them. Therefore, it has been observed that the contact of farm women is poor with extension agents. Women are constraint in terms of group management by being less mobile than men and have less time to interact with the extension workers because of household activities (Subedi, 2008).

The data of Table. 2 evince that 21.66 per cent of the farm women had contact with "progressive farmers" every "15 days" but with rest of the extension agents like VLEW (VAW) and village panchayat, about 33.33 per cent and 83.33 per cent respondents contacted "every month". Subedi (2008) reported that, in many societies contact between men and women is restricted and, since the great majority of extension workers are male, women farmers may not have access to them. Only 66.66 per cent and 16.66 per cent of the respondents had contact with the "private extension agents" and "input dealers" once in a year. But, it was shocking to observe that none of the respondents had any contact with ADO, KVK scientists, NGO members and, ATMA and University officials. As per the findings it was observed that most of the respondents had contacts with only progressive farmers, VAW, village panchayat because it was easy to contact them as they were within the village social system. A study conducted by Ansari and Sunetha (2014) concluded that (83.33%) firstly sought information from friends and relatives, then secondly prefer to contact progressive farmers, local leaders and extension functionaries. According to Premavati and Seetharaman (2002) contact with extension agents helps in improving the lifestyle of the women.

**Table 2:** Distribution of contact with different extension agents (n=120)

S. NO	Contact with Extension Agents	1-15 Days	1 month	More than 2 months	Once in a year	Never
1	Progressive farmers/Farmer's Friend	26 (21.66)	63 (52.50)	14 (11.66)	14 (11.66)	3(2.50)
2	VLEW	0	40 (33.33)	15 (12.50)	65 (54.16)	0
3	Village Panchayat members/officials	0	100 (83.33)	7 (5.83)	13 (10.83)	0
4	ADO	0	0	0	0	120 (100.00)
5	KVK Officials	0	0	0	0	120 (100.00)
6	ATMA officials	0	0	0	0	120 (100.00)
7	University Officials	0	0	0	0	120 (100.00)
8	NGO members	0	0	0	0	120 (100.00)
9	Private Ext. agents	0	0	0	80 (66.66)	40 (33.33)
10	Input Dealers	0	0	4 (3.33)	20 (16.66)	96 (80.00)

## **Participation in Training Programmes**

The Table. 3 reveals that 85.00 per cent of the respondents had never attended any training programmes so far and only 15.00 per cent had attended training programmes. According to Subedi (2008) extension training courses and curricula seldom deal with the role of women in agriculture or approaches for working with women farmers. A large part of the rural population women face special obstacles like heavy labour inputs prevent them for taking parts in group meeting/ training.

According to Temesgen *et al.* (2015), evidence suggests that women farmers' productivity is constrained by a lack of appropriate skills training. As per the data of Table. 3, only 15.00 per cent of the respondents attended training programmes in the last 5 yrs. It seems the government agencies are not taking sufficient steps in organizing training programmes in related fields for farm women in the study area. Verma and Verma (1985) stated that training programme should be given as per the preferences of the respondents.

 
 Table 3: Distribution of respondents based on Participation in Training Programmes (n=120)

S. No	Category	Frequency	Percentage
1	No training attended	102	85.00
2	Trainings attended	18	15.00
	Total	120	100.00

## **Mass Media Exposure**

Mass media have been termed as hidden sway which reflects the social reality and thereby promoting an attitude of mind conducive to economic growth, which involves the orientation of future prosperity create a reality in the minds of audience of literacy and distance. It brings the voice of the nation to the village, creating a sense of working towards common economic and national goals. This Table. 3 gives us a detailed understanding of the mass media utilization by the respondents.

Regarding mass media exposure, the data are discussed category wise. The above Table. 4 evinces the frequency of respondents' exposure to each mass media. So far the "regularity" of the mass media exposure have been maintained in case of "viewing T.V programme (25.83%)", "listening of radio programme" (16.66%) and 11.66 per cent in "reading and hearing of newspaper". As reported by Sharma (2012) among the mass media, radio is the cheapest, fastest and farthest reaching mass medium, successfully cutting the barriers of literacy and distance. It was observed that "none" of the respondents had visited "farmers' fair" or even viewed a "documentary film". Similarly about 96.66 per cent had "never" read "farm literatures", 96.60 per cent and 93.33 per cent had never attended any demonstrations on practices and read agricultural bulletin respectively. Sharma (2012) further reported that the major constraints in using mass media were non-availability of free time, followed by use of technical word and language. But 83.33 per cent of the respondents had "seldom" exposure to "awareness programmes" followed by 51.66 per cent in "reading and hearing of newspaper" in the same category. About 40.83 per cent of the respondents were "often" exposed to "listening radio" and "viewing of T. V programmes" followed by 29.16 percent in hearing and reading of newspaper. Overall it has been found radio, T. V and newspaper were the important mass media to which most of the respondents were exposed, as they are preferably more attractive than the other sources. The overall mass media exposure situation is not encouraging. According to the findings of Swathi-lekshmi et al. (2015) it was observed that majority of the respondents used the radio and television for knowing about farm technologies, newspaper was used by majority for information on weather forecast followed by information on market news by the rest of farm women. Meenambigai and Ravichandran (2000) reported that frequency of utilization of the mass media sources was very poor, though it is an effective source of

information. A similar finding was reported by Bhagat and Mathur (1985) that mass media is an effective source of information.

Further, this data of different methods of communication has been analyzed using multiple regression to see the influence of socio-personal characteristics on the utilization of various communication methods.

S. No	Mass media	Frequency and Percentage			
	Iviass media	Regularly	Often	Seldom	Never
1	Reading or hearing Newspaper	14 (11.66)	35 (29.16)	62 (51.66)	9 (7.50)
2	Reading farm literature such as Chasira Sansar, Chasira Sathi	0	0	4 (3.33)	116 (96.66)
3	Radio programme	20 (16.66)	49 (40.83)	35 (29.16)	16 (13.33)
4	Viewing T. V. programme	31 (25.83)	49 (40.83)	34 (28.33)	6 (5.00)
5	Agricultural Bulletin	0	0	8 (6.66)	112 (93.33)
6	Internet Access	0	0	3 (2.50)	117 (97.50)
7	Documentary Films	0	0	0	120 (100.00)
8	8 Demonstrations on practices/machineries		0	4 (3.33)	116 (96.60)
9	Farmers Fair		0	0	120 (100.00)
10	Awareness programme/campaigns	0	0	100 (83.33)	20 (16.66)

# Effect of socio-personal characteristics on utilization of different communication methods

This initiative had been intended to understand the effect of socio-personal characteristics on utilization of different communication methods. In the present study to measure the utilization, the researcher has used the different socio-personal factors (Age, Education, Family type, Farming experience, Annual income and Knowledge level) on the three different methods of communication (Individual, Group and Mass method). Before analyzing the data, indices have been formed ranging between 0-1. Socio-personal characteristics of the farm women were taken as the intercept, to measure the influence in the three aspects as shown in Table. 5.

From the Table. 5 above, it is evident that all the three undertaken factors individual (4.65), group (29.03) and mass (3.88) methods had non-significant 'b values'. This shows that socio-personal characteristics have no significant effect on the rate of utilization of communication methods. For the present study, it is understood that socio-personal characteristics of the farm women influences 26.00 per cent, 29.00 per cent and (20.00%) respectively on utilization of Individual, Group and Mass communication methods. According to the findings of Sharma (2012), it has been stated that education and social participation had significant relationship with utilization pattern of newspaper whereas, age, land holding and family type has no significant correlation with the utilization pattern of newspaper. Further, age, education, land holding, family type and social participation had non-significant correlation with the utilization pattern of both radio and television

 
 Table 5: Multiple Regression values showing the effect on utilization of different communication methods

Categories	'b' value	't' value	R <sup>2</sup> value
Individual Method	4.65	6.47	0.26
Group Method	29.03	7.05	0.29
Mass Method	3.88	5.51	0.20

# Summary and Conclusion

The future development of agriculture would essentially depend on the skills and abilities of the farm women in agricultural activities who constituted about half of the total workforce in rural area. With rapid build out of the agricultural technologies, it is felt that if suitable technologies were introduced among the farm women this would improve their efficiency up to a certain extent. The findings from the study concludes that the income status of about 17.50 per cent were below monthly household income level (B. M. H. I) with poor economic condition reflecting poor attendance (85.00%) in training programmes. They had regular access to Newspaper, Radio and T.V Programmes as compared to other mass media sources; similarly in case of extension contact they had only contact with Progressive farmers, Panchayat and VAW frequently. Farm women have been long accorded as invisible workers in Agriculture, and their contribution for agricultural development is tremendous. Hence, organizing promoting effective utilization of different and communication modes would play a vital role in enlightening farm women for agricultural development.

## Reference

- 1. Ansari MA, Sunetha S. Agriculture information needs of farm women: A study in State of North India, African Journal of Agricultural Research. 2014; 9(19):1454-1460.
- 2. Bhagat R, Mathur PN. Mass Media and changing Lifestyle of Farm Women in Delhi Territory, Indian Journal of Extension Education. 1985; 21(3-4): 37-41.
- 3. Meenambigai J, Ravichandran V. Utilisation Frequency of Media Programmes by Farm Women, Journal of Extension Education, 2000; 11(2):2776-2782.
- 4. Premavati R, Seetharaman NR. Decision-Making Pattern of Rural Women in Farm related activities, Journal of Extension Education. 2002; 13(3):3382-3386.
- Sankaran S, Rai P. Tamil Nadu Agriculture and farm women in agriculture developmental issues. *Proceedings* of the National Seminar, National Academy of Agricultural Research Management, Hyderabad, 1993, 28-30.
- Santra SK, Kundu. Women's empowerment for Sustainable agriculture development. Manage Extension Research Review. 2001; 2:131-135.
- 7. Sharma D. Mass Media utilization pattern of farm Women, International Journal of Scientific and Research Publications, 2012, 2(5).
- 8. Subedi R. Women Farmers' Participation in Agriculture Training: in Kavre District of Nepal: A *Research Project Submitted to Larenstein University of Applied Sciences*,

2008, 11-14.

- 9. Swathi-lekshmi PS, Chandrakandan K, Balasubramani N. Mass media utilization behaviour of farm women, *Agricultural Science Digest*. 2015; 35(1):51-55.
- Temesgen D, Hinde U, Yusuf J. Determinants of farm women participation in agricultural extension training programs: A case from selected district of Oromia Region of Ethiopia, International Journal of Agricultural Science Research. 2015; 4(4):67-77.
- 11. Van-Crowder L, Fortier F. National Agricultural and Rural Knowledge and Information System (NARKIS): a proposed component of the Uganda National Advisory Service (NAADS) FAO, 2002, 22.
- Verma T, Verma S. Training needs of Rural Women: An Action Research, Indian Journal of Extension Education. 1985; 21(3-4):104-107.