

A study on information gap among the farm women about rice cultivation*

SUJIT K. NATH AND SARTHAK CHOWDHURY

Visva-Bharati University, Sriniketan-731236, West Bengal, India

E-mail: sujithnath75@gmail.com

(Received: January, 2013 ; Accepted: June, 2014)

Abstract: This empirical study was conducted in purposively selected Balasore district of Odisha state where 91.1% of total *kharif* cultivated area was under rice cultivation. Farm women perform the major portion of farm work except ploughing and insecticide application. It was found that the linkage of farm women, leaving the personal localite sources for availing agricultural knowledge was very poor. The information supply in many vital operations of rice farming was not up to the mark. The information supply was lowest in seed treatment of rice farming (0.08), whereas the highest was in winnowing (1.58). The highest information demand was for selection of variety (2.10). Weed control had the maximum information gap of 1.77 followed by seed variety (1.41) and seed treatment (1.21). The extension agencies should try to bridge the gap for enhancing the knowledge level of the farm women.

Key words: Farm women, Information, Information gap, Rice cultivation

Introduction

Access of information leads to empowerment and development. Good and timely information on new technology are essential for taking decisions on adoption of an innovation. Information gap is the disparity between what is known and what needs to be known in order to make a responsible plan or decision. Mishra and Tripathy (1991) in their study found that knowledge level of farm women was low as only 3 to 4 per cent of farm women were exposed to various sources of information like extension personnels. Moreover, their participation in most of the agricultural activities was within the range of 60 to 100 percent (Das, 1996; Singh and Verma, 1997). Rice is the major food crop of the nation and the involvement of women in all activities except ploughing and using chemicals is note worthy (Nath and Chowdhury, 2010). Keeping in view of the extent of participation of farm women in rice farming, it is imperative to study the information gap and make empirical inferences to bridge it for increasing their knowledge level.

Material and methods

This investigation was carried out in purposively selected Balasore district, once called the granary of Odisha state. All the twelve community development blocks of the district were taken for the study. One village from each of the blocks was randomly selected. Twenty farm women representing the small

and marginal categories were selected purposively as 90 percent of total farm households represent both these categories. The information supply and demand pattern on various technologies in rice farming were studied in a 4-point continuum comprising of mostly, moderately, some extent and never allotted to 3, 2, 1 and 0 score respectively. The mean score of all the individual technologies were ranked according to their score. Information gap was calculated as the difference of the demand and supply and ranking was done accordingly.

Results and discussion

Farm women avail information from sources which are grouped under personal localite (PL) sources *viz.* friends, neighbours, family members and relatives, personal cosmopolite (PC) sources *viz.* extension agencies, scientists, farming consultants, traders etc. and impersonal cosmopolite (IC) sources, *viz.* print and electronic media, farm bulletins, journals *etc.* The per cent of farm women receive information from various sources are depicted below in Table 1.

From the Table 1 it could be observed that personal locality sources like friends, family members, relatives, neighbors, village leaders were still the major sources of information of the respondents. In time of starting of cultivation and preservation, all the respondents availed information from these sources only.

Table 1. Sources of information utilized by the respondents with respect to rice cultivation

(n=240).

Information	Sources of information		
	Personal localite	Personal cosmopolite	Impersonal cosmopolite
Time of starting of cultivation	240 (100.0)	0 (0.0)	0 (0.0)
Variety	196 (81.67)	44 (18.33)	0 (0.0)
Seed treatment	14 (5.83)	3 (1.25)	0 (0.0)
Fertilizer application	233 (97.08)	7 (2.92)	0 (0.0)
Water management	226 (94.17)	12 (5.0)	2 (0.8)
Disease and pest management	205 (85.42)	31 (12.92)	4 (1.6)
Safe storage	228 (95.0)	12 (5.0)	0 (0.0)
Preservation	240 (100.0)	0 (0.0)	0 (0.0)
Value addition	228 (95.0)	12 (5.0)	0 (0.0)
Marketing of the surplus	234 (97.5)	6 (2.5)	0 (0.0)

Figures in parentheses represent the percentage

*Part of Ph.D. thesis submitted by the first author to the Visva-Bharati University, Shriniketan-731 236, West Bengal, India

Table 2. Information supply pattern status of the respondents in rice cultivation

(n=240).

Information	Extent of information supplied				Total score	Mean score	Rank
	Mostly	Moderately	Some extent	Never			
Seed variety	19	35	38	148	165	0.69	VI
Land preparation	11	15	22	192	85	0.35	X
Seed treatment	0	3	14	223	20	0.08	XVII
Nursery raising	5	16	29	190	76	0.32	XI
Transplanting	66	49	20	105	316	1.32	II
Puddling	3	8	12	217	37	0.15	XV
Water management	10	17	24	189	88	0.37	IX
Fertilizer	2	6	17	215	35	0.16	XIII
Weed control	0	2	25	213	29	0.12	XVI
Pest control	0	4	30	206	38	0.16	XIV
Disease management	0	4	32	204	40	0.17	XII
Harvesting	14	38	41	147	159	0.66	VII
Threshing	26	45	58	111	226	0.94	III
Winnowing	61	67	63	49	380	1.58	I
Transportation	15	25	47	153	142	0.59	VIII
Selling	11	42	55	132	172	0.72	V
Storage	24	49	37	130	207	0.86	IV

In marketing of surplus and fertilizer application more than 97 per cent were dependent upon PL sources. In seed treatment only 5.83 per cent got the information from these sources. It was due to non-popularization of seed treatment among farming households of Odisha state. The maximum outside sources farm women got information were in variety selection. 18.33 per cent of respondents got the information in variety selection in rice farming from government or non-government extension functionaries. Besides for disease and pest management farm women got the first information from these personal cosmopolite sources. For disease and pest management 1.6 per cent of respondents got their knowledge from impersonal cosmopolite sources like print and electronic media. But 85 per cent of the total studied sample still was getting the information from personal localite sources. This result confirms the earlier studies of Tucker and Napier (2002),

Waris (2004) and Mishra *et al.* (2009) which reported that friends, neighbor and local leaders were the major sources of information of farm women.

From the Table 2 it could be observed that farm women availed the maximum information on post harvest management practices and transplanting like operations in rice farming where their involvement was found more. Winnowing, transplanting and threshing were the operations secured the top three ranks respectively in information supply to farm women. In transplanting, farm women availed the maximum information. In seed treatment of rice cultivation, the lowest supply was observed which obtained a mean score of 0.08 only. Weed control secured the penultimate rank among all the activities. In fertilizer application and pest control the information supply was also found very poor which ranked 13th and 14th rank among the 17 selected major required information in rice farming.

Table 3. Information demand status of the respondents in rice cultivation

(n=240).

Information	Extent of information demand				Total score	Mean score	Rank
	Mostly	Moderately	Some extent	Never			
Seed variety	112	65	40	23	506	2.10	I
Land preparation	10	22	34	174	108	0.45	XI
Seed treatment	41	40	68	91	311	1.29	VII
Nursery raising	60	32	85	63	329	1.37	V
Transplanting	81	37	36	86	353	1.47	IV
Puddling	4	11	15	210	49	0.20	XV
Water management	8	12	26	194	74	0.31	XIV
Fertiliser	59	85	37	59	384	1.6	III
Weed control	92	64	51	33	455	1.89	II
Pest control	30	67	89	54	313	1.30	VI
Disease management	21	76	83	60	298	1.24	IX
Harvesting	10	14	25	191	83	0.34	XII
Threshing	6	13	38	183	82	0.34	XIII
Winnowing	20	38	49	133	185	0.77	X
Transportation	0	0	24	216	24	0.10	XVII
Selling	0	6	21	223	33	0.14	XVI
Storage	42	48	81	69	303	1.26	VIII

Table 4. Information gap among the respondents with respect to rice cultivation

(n=240)

Information	Information supply Mean score	Information demand Mean score	Gap in mean score	Rank
Seed variety	0.69	2.10	+1.41	II
Land preparation	0.35	0.45	+0.10	X
Seed treatment	0.08	1.29	+1.21	III
Nursery raising	0.32	1.37	+1.05	VI
Transplanting	1.32	1.47	+0.15	IX
Puddling	0.15	0.20	+0.05	XI
Water management	0.37	0.31	-0.06	XII
Fertilizer	0.16	1.60	+0.44	VII
Weed control	0.12	1.89	+1.77	I
Pest control	0.16	1.30	+1.14	IV
Disease management	0.17	1.24	+1.07	V
Harvesting	0.66	0.34	-0.32	XIII
Threshing	0.94	0.34	-0.60	XVI
Winnowing	1.58	0.77	-0.81	XVII
Transportation	0.59	0.10	-0.49	XIV
Selling 0.72	0.14	-0.58	XV	
Storage	0.86	1.26	+0.40	VIII

In rice cultivation, the highest information demand was in variety of rice. During discussion it was found that farm women perceived the variety has the determining role in most of the factors that increases yield and maximizes profit in rice cultivation. It obtained the mean score of 2.10. Weed control, fertilizer application and transplanting secured the next three ranks respectively. Selling and transportation were found at the lowest position in rank analysis. It was surprising to find though farm women's participation in the drudgery prone post-harvest management practices was more, the demand of technologies in these operations were less than the pest and disease management (Table 3).

From the Table 4 it was found that in weed control there was lying the maximum gap between information demand and supply. The information supply value was 0.12 whereas the demand was 1.89. The second ranked gap was in the case of seed variety

where the demand was found highest. Seed treatment, insect, pest and disease management were in the third, fourth and fifth ranks while analyzing the information gap. In post-harvest management of rice the gap was found negative in all the components. Threshing and winnowing remained in the lowest ranks obtaining mean scores of -0.60 and -0.8, respectively. In their view they were aware of the post-harvest management practices of rice.

From the above discussion, it is amply evident that there exists a significant information gap with respect to weed control, seed variety, seed treatment, pest control and disease management in case of rice cultivation among the respondents. As farm women plays the most vital role in rice farming, information gap in these important activities certainly affect the productivity in rice farming. Extension agencies must take effective steps to bridge the gap in this respect.

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