

Technological training need and interest of the farm women for different crop cultivation operations of Haryana State

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ABSTRACT

Women play an important role in agriculture. Majority of farm women are associated directly/indirectly with the agricultural operations. Since women are little bit exposed to formal education, imparting training to them on the agricultural work being performed by them would help in improving quality of their work. For this, a critical analysis of their training need was felt necessary with the specific objectives viz. to make a profile of farm women and to assess the technological training need and interest of the farm women. The above study was conducted in six villages, two from ladwa block (Kurukshetra) two from Indri block (Karnal) and two from Bilaspur block (Yamunanagar) of Haryana during 2004-05 and 2005-06. A purposive proportionate sample of 250 farm women, who were actively involved in farming, was selected for the present study. The data were collected with the help of structured interview schedule. Most of the farm women were in young age group belonging to backward caste, illiterate, having low family education status, negligible social participation belonging to nuclear family with agriculture as their main occupation low innovative proneness. Regarding information input sources, use of localite source were of high extent, while low cosmopolite and mass media exposure. It is concluded that the storage and harvesting were found the most needed and interested training area by farm women with the highest rank of 2.58 and 2.34 mean square, respectively while the medium rank was found for weeding, transplanting, nursery raising, insect-pest management and manure and fertilizer application. The lowest rank of 1.50 average square was found for land preparation and irrigation. Farm women reported their need and interest for farming in rice cultivation. In case of sugarcane growing area most needed interesting training area was harvesting with mean square 2.29 followed by weeding (M.S. 2.29) and storage (M. S. 2.23). Therefore, need-based trainings for farm women should be organized in order to update their knowledge and skills and thereby change in their attitude for cultivation of rice and sugarcane crop more effectively. These experiences can also be utilized for other similar area at global level for farm women.

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Women constitute half the world's population, accomplish about two third of its working hours, receive one tenth of the world's income and own less than one-hundredth of the world's property (Gupta, 1987).

Agriculture is the mainstay of nation's economy especially rural community of the Haryana state. In rural areas, women are equally the bread earners of the family and work as much as men in various agricultural operations. A large number of farm women are engaged in farming operations either as cultivators or helpers to cultivators or agricultural labourers.

Women participate in most of the agricultural operations like manuring, land preparation, sowing of seeds, transplanting, weeding, applying fertilizers, taking care of standing crops, harvesting, threshing, carrying the produce from farm to home, storage of food grains, cattle care and preparation of manure pit. The success or failure of a farm depends mainly on the contribution made by farm women (Rani *et al.*, 2001).

The media is playing an important role in passing on meaningful information at faster rate to the large number

of farm women in our country. It has emerged as one of the powerful sources of seeking relevant scientific information by our farm women, therefore, tapping and utilizing media for transferring the newly generated technologies in agriculture among the Indian farm women is crucial and of significant importance. This is mainly due to the fact that the vast majority of our farm women inhabiting in remote rural areas where facilities could not be arranged for sustainable individual or group approaches of technology transfer as it could be highly expensive and difficult in managing information infrastructure.

In view of importance women farmers direct access to technological information sources. Thus, the present study was undertaken with objectives to make the profile of the farm women and to assess the training need of the farm women.

METHODOLOGY

The study was conducted in Yamuna Nagar, Karnal and Kurukshetra districts. The study was undertaken in Ghespur and Dhalera villages of Bilaspur block of Yamuna

Nagar district of Haryana state for sugarcane crop. Majra Rodan and Koyar villages were selected from Indri Block where as Ban and Sonti villages were selected from Ladwa block which are situated in Karnal and Kurukshetra districts, respectively. From 6 selected villages, a proportionate sample of 250 farm women who were actively involved in farming were selected randomly.

Selected respondents, were interviewed personally with the help of specially structured interview schedule. Personal, social, economic, communication and psychological variables were taken as independent variables. The different areas in which women needed training were identified and categorized as land preparation, sowing, nursery raising, trans-planting, irrigation, manure and fertilizer application, weeding, insect pest control, harvesting, threshing and storage etc. Responses of women regarding their training need and interest were collected on a three point continuum namely, most needed and interested, some what needed and interested and least needed and interested with score 3, 2 and 1, respectively. The aggregate score for each item and most preferred field of training was identified. The scores were tabulated and frequency were, calculated to know the percentage of respondent's requirement for training. The data were collected through a structured pretested interview schedule.

RESULTS AND DISCUSSION

Profile of the farm women:

Table 1 incorporates background profile of the respondents. In term of age, caste, education of the respondents, family education, social participation, family type, main occupation, localite source, cosmopolite, mass media and innovative proneness.

Age :

The data presented in Table 1 indicated that 55.00 per cent of the Yamunanagar district respondents were in young age group, whereas 31.25 per cent belonged to middle age group and rest of them (13.75 per cent) were found to be old age group (above 41 years). But in case of rice growing area 44.70 per cent respondents were in young age group followed by middle and old age group (38.24% and 17.06%), respectively.

Caste:

Caste-wise distribution of the respondents according to Yamunagar district in Table 1 reported that the 56.25 per cent of the respondents were belonged to general caste followed by backward and schedule caste (27.50 and 16.25%), respectively. Whereas in case of Karnal

and Kurukshetra districts less than half of them (41.47%) were belonged to backward caste followed by general and schedule caste (30.29% and 28.24%) categories, respectively.

Education of the respondents:

It is clear from the Table that 38.75 per cent and 31.25 per cent of Yamunanagar district respondents were found can read only and illiterate. However about one 8th of the respondents (12.50%) can read and write. But less than ten per cent of the respondents (7.50%) and five per cent were educated up to primary and high school level. A very few of the respondents possessed senior school education (2.50%) and an equal percentage of the respondents (1.25% each) were found educated up to middle school and graduate level.

On contrary to this less than fifty per cent (41.10%) of the Karnal and Kurukshetra districts respondents were found illiterate and about one tenth of the respondents (12.94, 11.77 and 10.59%) were found to be educated up to middle level, can read only and can read and write, respectively. However less than one tenth of the farm women *i.e.* 7.05, 6.47, 5.29 and 4.20 per cent respondents were found to be educated up to primary, high school 10+2 level graduate level, respectively. A very meager percentage of (0.59%) of the respondents were found postgraduate level.

Education of the family :

Data regarding sugarcane growing area in Table 1 indicated that majority of the respondent's family (60.00%) were possessing low education level followed by medium education level (25.00%) and only 15.00 per cent were possessed education up to high education level. Results regarding rice growing area also presented in Table 1 that there were same trends of the respondent's family education were found in Karnal and Kurukshetra districts *i.e.* low (60.59 %), medium (30.59%) and high (8.82%), respectively.

Social participation :

Table 1 clearly indicates that an overwhelming majority of the respondents (80.25%) from Yamunanagar district were not member of any social organization and only 14.75 per cent were found member of only one social organization. On the other hand results regarding rice growing area 84.70 per cent of farm women were not member of any social organization. On contrary to this 15.30 per cent of them were member of only one social organization. The surprising results were found in all the districts that none of the respondent were not the member

Table 1 : Background profile of the farm women					
Sr. No.	Variables	Yamuna Nagar (N=80)		Karnal and Kurukshetra (N=170)	
		Sugarcane		Rice	
		Freq.	%age	Freq.	%age
1.	Age				
	Young (Below 28 yrs)	44	55.00	76	44.70
	Middle (28-41 yrs)	25	31.25	65	38.24
	Old (Above 41 yrs)	11	13.75	29	17.06
2.	Caste				
	General	45	56.25	52	30.29
	Backward	22	27.50	70	41.47
	Schedule	13	16.25	48	28.24
3.	Education of respondent				
	Illiterate	25	31.25	70	41.10
	Can read only	31	38.75	20	11.77
	Can read and write	10	12.50	18	10.59
	Primary	6	7.50	12	7.05
	Middle	1	1.25	21	12.94
	High school	4	5.00	11	6.47
	10+2	2	2.50	9	5.29
	Graduate	1	1.25	8	4.20
	Post graduation	---	---	1	0.59
4.	Education of the family				
	Low	48	60.00	103	60.59
	Medium	20	25.00	52	30.59
	High	12	15.00	15	8.82
5.	Social participation				
	Member of no organization	61	80.25	144	84.70
	Member of one organization	15	14.75	26	15.30
	Member of <1 organization	---	---	---	---
	Officer bearer/holder	4	5.00	---	---
	Public leader	---	---	---	---
6.	Family type				
	Nuclear	44	55.00	152	89.41
	Joint	22	27.50	10	5.88
	Extended	14	17.50	8	4.781
7.	Main occupation				
	Farming	75	93.75	157	92.35
	Service	5	6.25	10	5.89
	Business	---	---	3	1.76
	Agril. labour	---	---	---	---
8.	Localite source of information				
	Low	7	8.75	7	4.13
	Medium	16	20.00	40	23.52
	High	57	71.25	123	72.35
9.	Cosmopolite source of information				
	Low	45	56.25	107	62.95
	Medium	30	37.50	51	30.00
	High	5	6.25	12	7.05
10.	Mass media				
	Low	50	62.50	93	54.70
	Medium	17	21.25	65	38.24
	High	13	16.25	12	7.06
11.	Innovative proneness				
	Low	42	52.50	94	55.29
	Medium	29	36.25	50	29.42
	High	9	11.25	26	15.29

of more than one social organization, office bearer and public leader except five per cent of them were found office bearer Yamunanagar district.

Family type :

Results regarding family type have been furnished in Table 1 which revealed that more than half of the respondents (55.00%) belonged to nuclear families and 27.50,17.50 per cent of the farm women of Yamunanagar district were from joint and extended families. But results of rice growing area revealed that an overwhelming majority (89.41%) were belonging to nuclear families where as about an equal percentage of the respondents *i.e.*5.88 and 4.78 per cent were having joint and extended families, respectively.

Main occupation :

Table 1 further showed that an overwhelming majority of the sugarcane growing area’s respondents (93.75%) had farming as their main occupation, where as only 6.25 per cent were found to be in service and no one respondents were not belonging to business and as agricultural labourer as their main occupation. Same trends were also found in Karnal and Kurukshetra districts except 1.76 per cent of the respondents were having business as their main occupation.

Localite source :

When localite source was taken in to consideration, the data in this respect (Yamunanagar district)revealed that more than seventy per cent of the respondents (71.25%)had high localite source of information followed by medium (37.50%) and low (8.75%), respectively.

Similar trends were also in rice growing districts *i.e.* high (72.35%), medium (23.52%) and low (4.13) were found as localite source of information.

Cosmopolite source :

It is evident from the data of sugarcane growing area that 56.25 per cent respondents had low cosmopolite source. One third of the respondents (37.50%)had medium cosmopolite source and less than ten per cent (6.25%)had high cosmopolite source of information, respectively. The data presented in rice growing area revealed that 62.95 per cent of the respondents were having low cosmopolite source of information. Where as thirty per cent of the farm women were having medium and high (7.05%) cosmopolite source of information.

Mass media :

The results of mass media exposure have been presented in Table 1. It unfolds the fact that more than sixty per cent of the Yamunanagar district respondents (62.50%) had low mass media exposure. Where as one fifth of the respondents (21.25%) had medium level mass media exposure which was followed by 16.25 per cent as a high mass media exposure.

On the other hand about half of the respondents (54.70%) of rice growing area had low mass media exposure. Less than forty per cent (38.24%) of the respondents were having medium followed by high (7.06%) mass media exposure.

Innovative proneness :

The data regarding innovative proneness are presented in Table 1. It further points to the fact that

Table 2 : Technological training need and interest of the respondents for sugarcane cultivation N=80

Sr. No.	Practices	Extent of need and interest			Score	Mean score	Rank
		Most needed and interested	Somewhat needed and interested	Least needed and interested			
		F (%)	F (%)	F (%)			
1.	Land preparation	4 (5.00)	20 (25.00)	56 (70.00)	108	1.35	VIII
2.	Sowing	30 (37.50)	24 (30.00)	26 (32.50)	164	2.05	V
3.	Irrigation	12 (15.00)	28 (35.00)	40 (50.00)	132	1.65	VII
4.	Manure and fertilizer application	29 (36.25)	25 (31.25)	26 (32.50)	163	2.04	VI
5.	Weeding	39 (48.75)	25 (31.25)	16 (20.00)	183	2.29	II
6.	Insect pest control	32 (40.00)	22 (27.50)	26 (32.50)	166	2.08	IV
7.	Harvesting	42 (52.50)	24 (30.00)	14 (17.50)	188	2.35	I
8.	Threshing	26 (32.50)	34 (42.50)	20 (25.00)	166	2.08	IV
9.	Storage	37 (46.25)	24 (30.00)	19 (23.75)	178	2.23	III

* Maximum score is 3
 Least needed/interested (low) 1 – 1.66
 Somewhat needed/interested (medium) 1.67 – 2.32
 Most needed and interested (high) 2.33 – 3.00

more than fifty per cent of the respondents (52.50%) were having low innovative proneness followed by medium (36.25%) and high (11.25%) innovative proneness in the Yamunanagar district. In case of rice growing area, the results of the innovative proneness revealed that 55.29 per cent farm women were found to have low innovative proneness where as 29.42 per cent of the respondents had medium and 15.29 per cent farming women were having high innovative proneness.

Technological training need and interest of the respondents for sugarcane cultivation:

The data regarding technological training need and

trainings were land preparation and irrigation.

Technological training need and interest of respondents for rice cultivation:

The data regarding training need and interest of farm women for rice cultivation practices are presented in Table 3.

Results in Table 3 highlighted that the highest rank was obtained by storage (Rank I, MS 2.58), harvesting (Rank II, MS 2.34) which was also adjudged most needed and interested training area by farm women. Medium rank was assigned to weeding and sowing (Rank III MS 2.21), threshing (Rank IV, MS 2.19), transplanting (Rank V, MS

Table 3 : Technological training need and interest of the respondents for rice cultivation N=170

Sr. No.	Practices	Extent of need and interest			Score	Mean score	Rank
		Most needed and interested	Somewhat needed and interested	Least needed and interested			
		F (%)	F (%)	F (%)			
1.	Land preparation	26 (15.29)	34 (20.00)	110 (64.71)	256	1.51	IX
2.	Sowing	78 (45.88)	49 (28.82)	43 (25.30)	375	2.21	III
3.	Nursery raising	66 (38.83)	54 (31.76)	50 (29.41)	356	2.09	VI
4.	Transplanting	69 (40.59)	50 (29.41)	51 (30.00)	358	2.10	V
5.	Irrigation	23 (13.53)	38 (22.35)	109 (64.12)	254	1.49	X
6.	Manure and fertilizer application	63 (37.06)	51 (30.00)	56 (32.94)	347	2.04	VIII
7.	Weeding	75 (44.12)	56 (32.94)	39 (22.94)	376	2.21	III
8.	Insect pest control	60 (35.29)	60 (35.29)	50 (29.42)	350	2.05	VII
9.	Harvesting	91 (53.53)	46 (27.06)	33 (19.41)	398	2.34	II
10.	Threshing	78 (45.88)	46 (27.06)	46 (27.06)	372	2.19	IV
11.	Storage	117 (68.82)	34 (20.00)	19 (11.18)	438	2.58	I

* Maximum score is 3

Least needed/interested (low)	1 – 1.66
Somewhat needed/interested (medium)	1.67 – 2.32
Most needed and interested (high)	2.33 – 3.00

interest of the respondents for sugarcane cultivation of Yamuna Nagar district are presented in Table 2. It is evident from the Table 2 that highest rank was obtained by harvesting (Rank I, MS 2.35) and medium rank was assigned to weeding (Rank II, MS 2.29), storage (Rank III, MS 2.23), insect pest control (Rank IV, MS 2.08), sowing (Rank V, MS 2.05), manure and fertilizer application (Rank VI, MS 2.04). The lowest rank was assigned to irrigation (Rank VII MS 1.65) and land preparation (Rank VIII MS 1.35).

Therefore, it can be inferred that most needed and interested areas of trainings was harvesting, somewhat needed and interested areas were weeding, storage, insect pest control, sowing, manure and fertilizer application whereas least needed and interest areas of

2.10), nursery raising (Rank VI, MS 2.09), insect pest control (Rank VII, MS 2.05), manure and fertilizer application (Rank VIII, MS 2.04). The lowest ranks were assigned to only two practices namely land preparation (Rank IX, MS 1.51) and irrigation (Rank X, MS 1.49).

Therefore, it can be concluded that the most needed and interested areas of training were storage and harvesting, somewhat needed and interested areas were weeding, threshing, transplanting, nursery raising, insect pest control, manure and fertilizer application. Whereas least needed and interested areas of trainings were land preparation and irrigation.

Same conclusions were arrived at by Ghuman and Randhawa (2000), Ravichandran *et al.* (2000) in these respects.

Conclusion:

It can be concluded that most needed and interested areas of training was harvesting, somewhat needed and interested areas were weeding, storage, insect pest control, sowing, manure and fertilizer application whereas least needed and interested areas of trainings were land preparation and irrigation for sugarcane cultivation. On the other hand regarding rice cultivation operations most needed and interested areas of training were storage and harvesting, somewhat needed and interested area were weeding, threshing, transplanting, nursery raising, insect pest control, manure and fertilizer application, whereas least needed and interested areas of training were land preparation and irrigation.

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