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Women in agriculture : a profile

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ABSTRACT

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. Majority of the farmwomen are associated directly\indirectly with the agricultural operations. For study, twenty villages from ten districts were selected purposively on the basis of crops grown in area. A proportionate purposive sample were drawn for each villages comprising of 800 rural women. Personal, social, economic, communication, and psychological variables of the farm women were assessed for each of the selected crop. The pretested structured interview schedule was used to collect data personally. The data collected were processed, tabulated and analyzed by using frequency, percentage etc. Results revealed that most of the respondents were in age group between (below 28 years), belonged to general category caste, illiterate had low family education status, belonged to nuclear family, having landholding between 2.51 to 5.0 acre. Most of the respondents had tube-well and canal as source of irrigation, gross monthly income between Rs. 1500 to 5500, and possessed milch animals up to two. Regarding information input sources, use of localite sources was of high extent while cosmopolite and mass media were used to a low extent. Regarding psychological variables, most of the respondents were having low economic motivation and low risk orientation.

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Women play an important role in agricultural. Majority of the farm women are associated directly\indirectly with the agricultural operations. Agricultural productivity mainly depends on the extent to which the farmers become aware and adopt newly developed technology. In rural areas, women are equally the bread earners of the family and work as much as men in various agricultural operation. Women participate in most of the agricultural operations like maturing, 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 foodgrains, 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*., 2002).Communication media are the major means used by the farm women to achieve their goals. All agricultural work are done by the men\women and the achievements in agricultural operations depends upon their work performance. It is not only the physical aspects of the farm women that determine their effectiveness but an interplay of farm women characterstics that determine the overall effectiveness (Gupta, 1987). The two aspects communication media and technology, physical tasks are inseparable so far as agricultural work performance is concerned, It is thus imperative to study the profile of the farm women. A number of studies have highlighted special recruitment for those who work for development of agriculture (Jhamthani *et al.*, 2001). Keeping in view the importance of farm women in the success of agriculture was felt necessary with the following specific objective *viz*. the background profile of farm women was studied.

METHODOLOGY

The present study was conducted in Haryana State. The Haryana state was divided into eight agro ecological zones – at least one district from each zone and one block from each district and two villages from each block were selected purposively for the present study. Thus, twenty villages from ten districts were selected purposively on the basis of crops grown in area. A proportionate purposive sample were drawn for each villages which is comprising of 800 rural women. Only those women were selected for the study who were actively involved in farming. Major crops grown in Haryana state were wheat, rice, *bajra*, gram, cotton, sugarcane as cash crop, sorghum and *Berseem* as fodder crop were included in the study.

Personal, social, economic, psychological variables and Information input sources of the farm women were assessed for each of the selected crop.. The structured interview schedule was developed and pretested on non sampled respondents. The interview was conducted personally by the investigator with the women farmers individually. The data thus collected were processed,

tabulated and analyzed by using frequency, percentage etc.

RESULTS AND DISCUSSION

Profile of the farm women:

Social background is an important contributor in shaping an individual's personality and plays a role in work situations. The institutions like family schools etc. have a significant bearing on the individual's attitudes and perceptions of work conditions. who are the women, manning the agricultural development, where do they confirm, what is their social background etc?, are few of the questions that are attempted in the following table and their descriptions.

Table 1 incorporates background profile of rural women in terms of age, caste, education of the respondents, family education, family type, land holding, source of irrigation, gross income, milch animals, sources of information, innovative proneness, economic-motivation and risk orientation.

Socio- personal variables:

The data presented in Table 1 indicate that 46.25 per cent of the total respondents were in young age group, where as 41.12 per cent belonged to middle age group and rest of them (12.63 per cent) were found to be in old age group.In case of Yamunanagar, 55.00 per cent respondents were in young age group followed by middle and old age group (31.25% and 13.75%), respectively.

A similar trend was followed in Karnal and Kurukshetra, Bhiwani and Mahendergarh districts whereas in Jind and Kaithal, Rewari 51 and 54 per cent respondents were in middle age group followed by young age group (39% and 37%) and old age group 10 and 9 per cent, respectively.In case of Sirsa and Fatehabad districts an equal number of respondents 46 per cent were in young and middle age group followed by old age group *i.e.* 8 per cent.

Caste- wise distribution of the respondents in total sample revealed that 39.27 per cent belonged to general category, 33.25 per cent were from backward category followed by 27.38 per cent in scheduled caste category. The results according to different districts revealed that approximately same per cent of respondents were found in Yamunanagar, Bhiwani and Mahendergarh districts in which 56.25 and 38.24 per cent were hailing from general caste category, 27.50 and 35.88 per cent belonged to backward caste followed by 16.25 and 25.88 per cent. A similar trend was followed in Jind, Kaithal and Rewari districts. In case of Karnal and Kurukshetra, Sirsa and Fatehabad districts less than half *i.e.* backward caste followed by general (30.29 and 37.34%) and scheduled caste categories (28.23 and 23.30%), respectively.It is clear from the Table 1 that 47.88 per cent in total sample were found illiterate. A similar trend was followed in all the districts except Yamunanagar where 38.75 per cent respondents can read only. However, about one-seventh of the respondents (15.37%) can read only in pooled as well as district wise data except Yamunanagar district. A very few respondents (0.12%) possessed post graduation in pooled sample. About one tenth of the total respondents as well as district wise 11.50 per cent who can read and write except Reward which is 4.62 per cent only.On contrary to this 11.50 and 10.76 and 8.50 per cent respondents in Jind, Kaithal and Rewari districts and total sample found to be educated up to primary level. A very meagre percentage (2.00%) of respondents in total sample found to be educated up to graduate level.Almost equal percentage of the respondents, 5.75 and 5.50 per cent in pooled sample found to be educated upto middle and high school. Almost similar trends were found in all the districts.Only 3.38 per cent respondents of pooled sample were having education up to 10+2 level which is in coordination with other districts. Same results were also found by Jhamthani *et al*. (2001)

On the basis of whole sample, the data regarding family education are presented in Table 1, which point to the fact that majority of the respondents families (61.63%) were possessing low education level followed by medium education level (30.50%) and only 7.87 per cent possessed education up to high level. Same trend was found in all the districts except Jind and Kaithal districts in which majority of the respondent's family (95.75%) were having medium education level followed by low 62.42 per cent and high 7.28 per cent.

Results regarding family type have been furnished in Table 1 which reveals that majority of the farm women (64.25 per cent) belonged to nuclear families and 28.62, 7.13 per cent of the respondents were having the form of joint and extended families, respectively. The same results were found district wise also.

Economic variables:

Table 1 further shows that an overwhelming majority of the total respondents (84.25%) had farming as their main occupation, whereas 11.87 per cent were found to be in service followed by in business (3.25%) and as agricultural labours (0.63%) as their main occupation. According to districtwise, majority of the farm women had farming as their main occupation in all the regions *i.e.* Yamunanagar (93.75%), Karnal and Kurukshetra (92.35%), Jind and Kaithal (95.75%), Rewari (86.16%),

Sirsa and Fatehabad (58.00%), Bhiwani and Mahendergarh districts (82.94%) where as less than one tenth of the respondents (6.25%) in Yamunanagar, 5.89 per cent in Karnal and Kurukshetra, 3.04 per cent in Jind and Kaithal and more than ten per cent (12.30%)) in Rewari and 33.33 per cent in Sirsa and Fatehabad districts were found to be in service followed by business as their main occupation. Only very few number of respondents (2.94%) in Bhiwani and Mahendergarh districts were found to be agricultural labour as their main occupation.

A perusal of Table 1 reveals that more than one third of the total respondents (33.63% and 32.50%) had land less than 2.5 acres and between 2.51 to 5 acres. It is further pointed out that one fifth of the total respondents (20.25%) had land between 5.1 to 7.5 acres. Only few respondents *i.e.* 13.62 per cent were having land more than 7.5 acres in pooled sample.Same trend was followed by the respondents of Yamunangar, Karnal and Kurukshetra, Jind and Kaithal and Rewari districts. But in Sirsa and Fatehabad, Bhiwani and Mahendergarh districts more than 30 per cent of the respondents i.e 38.00 per cent and 33.53 per cent had land between 2.51 to 5 acres followed by one fifth (22.67%) and one third (30.00%) of the respondents, respectively who had land less than 2.5 acres. An equal number of respondents were having land between 5.1 to 7.5 acres and above 7.5 acres *i.e.* 24.00 and 15.33 per cent in Sirsa and Fatehabad districts, 21.17 and 15.30 per cent in Bhiwani and Mahendergarh districts, respectively.

The data regarding source of irrigation from all the districts have been reported in Table 1 which clearly depict that more than 50 per cent of the respondents (51.37%) had tube-well and canal were the major source of irrigation, 22.88 per cent were having tube-well as source of irrigation, 15.63 per cent farm women had canal as source of irrigation. Only 7.87 per cent of them were dependent only on rains and less than five per cent of the respondents (2.25%) used sprinkler as a source of irrigation.The results regarding district-wise reveals that majority of the respondents had tubewell and canal as main source of irrigation in Yamunanagar (63.75%), Karnal and Kurukshetra (54.12%), Jind and Kaithal (52.12%), Rewari (30.77%), Sirsa and Fatehabad (74.66%), Bhiwani and Mahendergarh districts (35.29%). It was also found that more than 20 per cent of the respondents in chikpea growing area (Rewari) *i.e.* 26.16 per cent and bajra growing area (Bhiwani and Mahendergarh districts) *i.e.* 21.18 per cent were dependent only on rains as a source of irrigation followed by respondents who had sprinkler as their source of irrigation *i.e.* 6.15 and 8.24 per cent, respectively in these districts.

The results pertaining to gross-income from all the sources have been reported in Table 1, which clearly reveal that about 60 per cent of the total respondents (59.62%) had monthly income Rs. 1500/- to Rs. 5500/- per month followed by 28.75 per cent who had monthly income between Rs. 5600/- to 9600/- whereas one tenth of the respondents (11.63%) had family income above Rs. 9600/- per month. A similar trend was seen in all the districts.

The data pertaining to material possession have been reported in Table 1 bring to light that an overwhelming majority of the total respondents (71.37%) had low material possession followed by the respondents who had medium and high material possession *i.e.* 20.50 and 8.13 per cent, respectively. The same trends of results were found district-wise also.

It is clear from Table 1 that majority of the total respondents (69.50%) had milch animals up to two. More than one fifth of the total respondents (23.12%) possessed 3-4 milch animals and rest of the respondents (7.38%) had above more than 4 milch animals. But the results presented in Table 1 according to district-wise reveal that majority of the respondents in each region, 73.75 per cent in Yamunanagar, 48.83 per cent in Karnal and Kurukshetra, 79.39 per cent from Jind and Kaithal, 81.53 per cent from Rewari, 80.66 per cent in Sirsa and Fatehabad and 64.11 per cent in Bhiwani and Mahendergarh districts had up to two milch animals.

Psychological variables:

A perusal of Table 1 indicates that about 60 per cent of the total respondents (59.50%) had low economic motivation and less than 30 per cent of total respondents (29.87%) were having medium economic motivation, whereas one tenth of the total farming women (10.63%) had low economic motivation. Similar results were also found in all the districts separately. All the findings of all regions match with the findings of the total sample.

Majority of the total respondents (63.25%) were found to have low risk orientation followed by medium (27.25%) and high risk orientation by 9.50 per cent of the total respondents.It further reveals that all the respondents had similar pattern of results regarding risk orientation in all the districts.

Information input sources:

When localite source was taken into consideration, the data in this respect (Table 1) reveal that more than seventy per cent of the total respondents (73.50%) had high localite sources followed by medium (20.37%) and low (6.13%), respectively.The similar trend was observed

Table 1 : Background profile of the farm women

Sr. No.	Zone variables	I & II Yamuna Nagar (N=80)		III & IV Karnal and Kurukshetra (N=170)		V Jind and Kaithal (N=165)		VI Rewari (N=65)		VII Sirsa and Fatehabad (N=150)		VI & VIII Bhiwani and Mahendergarh (N=170)		Total (N=800)	
		Sugarcane		Rice		Wheat		Chickpea		Cotton		Bajra			
		Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age	Freq.	%age
1.	**Age**														
	Young (below 28 yrs)	44	55.00	76	44.70	64	39.00	24	37.00	69	46.00	93	54.70	370	46.25
	Middle (28-41 yrs)	25	31.25	65	38.24	84	51.00	35	54.00	69	46.00	51	30.00	329	41.12
	Old (above 41 yrs)	11	13.75	29	17.06	17	10.00	6	9.00	12	8.00	26	15.30	101	12.63
2.	**Caste**														
	General	45	56.25	52	30.29	73	45.00	24	37.00	56	37.34	65	38.24	315	39.37
	Backward	22	27.50	70	41.47	38	24.00	16	24.63	59	39.33	61	35.88	266	33.25
	Scheduled	13	16.25	48	28.24	54	31.00	25	38.37	35	23.33	44	25.88	219	27.38
3.	**Education of respondent**														
	Illiterate	25	31.25	70	41.10	78	47.50	35	53.84	97	64.67	78	45.88	383	47.88
	Can read only	31	38.75	20	11.77	25	15.00	10	15.38	11	7.33	26	15.30	123	15.37
	Can read and write	10	12.50	18	10.59	18	11.00	3	4.62	19	12.67	24	14.12	92	11.50
	Primary	6	7.50	12	7.05	19	11.50	7	10.76	8	5.34	16	9.41	68	8.60
	Middle	1	1.25	21	12.94	6	3.50	5	7.70	2	1.33	11	6.48	46	5.75
	High School	4	5.00	11	6.47	13	8.00	3	4.62	3	2.00	10	5.88	44	5.50
	10+2	2	2.50	9	5.29	5	3.00	1	1.54	6	4.00	4	2.35	27	3.38
	Graduate	1	1.25	8	4.20	1	0.50	1	1.54	4	2.66	1	0.58	16	2.00
	Post Graduation	---	---	1	0.59	---	---	---	---	---	---	---	---	1	0.12
4.	**Education of the family**														
	Low	48	60.00	103	60.59	103	62.42	41	63.07	88	58.67	110	64.70	493	61.63
	Medium	20	25.00	52	30.59	50	30.30	16	24.62	50	33.33	56	32.95	244	30.50
	High	12	15.00	15	8.82	12	7.28	8	12.31	12	8.00	4	2.35	63	7.87
5.	**Family type**														
	Nuclear	44	55.00	152	89.41	97	58.79	41	63.08	80	53.34	100	58.83	514	64.25
	Joint	22	27.50	10	5.88	59	35.76	18	27.69	57	38.00	63	37.05	229	28.62
	Extended	14	17.50	8	4.781	9	5.45	06	9.23	13	8.66	7	4.12	57	7.13
6.	**Main occupation**														
	Farming	75	93.75	157	92.35	158	95.75	56	86.16	87	58.00	141	82.94	674	84.25
	Service	5	6.25	10	5.89	5	3.04	8	12.30	50	33.33	17	10.00	95	11.87
	Business	---	---	3	1.76	2	1.21	1	1.54	13	8.67	7	4.12	26	3.25
	Agricultural labour	---	---	---	---	---	---	---	---	---	---	5	2.94	5	0.63

Table 2 Contd……

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7.	**Land holding**													
	> 2.5 acre	34	42.50	69	40.59	56	34.00	25	38.50	34	22.67	51	30.00	269	33.63
	2.5 to 5 acre	24	30.00	50	29.41	49	29.50	23	35.00	57	38.00	57	33.53	260	32.50
	5.1 to 7.5 acre	12	15.00	33	19.41	33	20.00	12	18.50	36	24.00	36	21.17	162	20.25
	Above 7.5 acre	10	12.50	18	10.59	27	16.50	5	8.00	23	15.33	26	15.30	109	13.62
8.	**Source of irrigation**														
	Tubewell	10	12.50	52	30.58	43	26.06	14	21.54	30	20.00	34	20.00	183	22.88
	Canal	19	23.75	26	15.30	36	21.82	10	15.38	8	5.34	26	15.29	125	15.63
	Both	51	63.75	92	54.12	86	52.12	20	30.77	112	74.66	60	35.29	411	51.37
	Depend only rain	---	---	---	---	---	---	17	26.16	---	---	36	21.18	63	7.87
	Any other (sprinkler)	---	---	---	---	---	---	4	6.15	---	---	14	8.24	18	2.25
9.	**Monthly gross income (Rs.)**														
	Low (1500-5500)	35	43.75	105	61.77	113	68.50	36	55.38	82	54.66	106	62.35	477	59.62
	Medium (5600-9600)	35	43.75	32	18.82	45	27.25	19	29.24	56	37.34	43	25.30	230	28.75
	High (Above Rs. 9600)	10	12.50	33	19.41	7	4.25	10	15.38	12	8.00	21	12.35	93	11.63
10.	**Milch animal**														
	Upto 2 animals	59	73.75	83	48.83	131	79.39	53	81.53	121	80.66	109	64.11	556	69.50
	3-4 animals	16	20.00	63	37.05	23	13.94	9	13.84	24	16.00	50	29.41	185	23.12
	Above 4 animals	5	6.255	24	14.12	11	6.67	3	4.63	5	3.34	11		59	7.38
11.	**Localite source**														
	Low	7	8.75	7	4.13	8	4.85	9	13.84	10	6.66	8	4.10	40	6.13
	Medium	16	20.00	40	23.52	28	16.97	15	23.08	49	32.67	15	8.90	163	20.37
	High	57	71.25	123	72.35	129	78.18	41	63.08	91	60.67	147	87.00	588	73.50
12	**Cosmopolite sources**														
	Low	45	56.25	107	62.95	142	86.06	41	63.08	109	72.67	126	74.12	590	73.75
	Medium	30	37.50	51	30.00	19	11.52	14	21.53	31	20.67	15	20.589	160	20.00
	High	5	6.25	12	7.05	4	2.42	10	15.39	10	6.66	9	5.30	50	6.25
13.	**Mass media**														
	Low	50	62.50	93	54.70	91	55.15	41	63.08	124	82.67	143	84.11	542	67.75
	Medium	17	21.25	65	38.24	67	40.60	17	26.16	21	14.00	18	10.59	205	25.62
	High	13	16.25	12	7.06	7	4.25	7	10.76	5	3.33	9	5.30	53	6.63
17.	**Economic motivation**														
	Low	45	56.25	81	47.64	120	72.73	28	43.08	81	54.00	121	71.18	476	59.50
	Medium	27	33.75	68	40.00	29	17.58	22	33.84	53	35.33	40	23.52	239	29.87
	High	8	10.00	21	12.36	16	9.69	15	23.08	16	10.68	9	5.30	85	10.63
18	**Risk orientation**														
	Low	43	53.75	82	48.23	15	69.70	35	53.84	99	66.00	132	77.75	506	63.25
	Medium	22	27.50	71	41.77	44	26.67	20	30.77	31	20.67	30	17.55	218	27.25
	High	15	18.75	17	10.00	6	3.63	10	15.39	20	13.33	8	4.70	76	9.50

in all the districts individually.

It is evident from the data in Table 1 that three fourth of the total respondents (73.75%) had low exposure to cosmopolite source. One fifth of the total respondents (20.00%) had medium exposure to cosmopolite source and less than ten per cent (6.25%) had high exposure to cosmopolite source of information, respectively.The data presented according to district-wise, there were approximately same percentage pattern of respondents having in all the regions.

The results of mass media exposure have been presented in Table 1. It unfolds the fact that more than 60 per cent of the total respondents (67.75%) had low mass media exposure. Whereas, one fourth of the respondents (25.62%) had medium level mass media exposure which was followed by 6.63 per-cent as a high mass media exposure. When districts wise results was taken into consideration, same pattern were found in all the districts.

Conclusion:

Most of the respondents were in age group between (below 28 years), belonging to general category caste, illiterate had low family education status, belonged to nuclear family, having landholding between 2.51 to 5.0 acre which was irrigated land. Most of the respondents had tube -well and canal as source of irrigation, gross monthly income between Rs. 1500 to 5500, and possessed milch animals upto two. Regarding psychological variables, most of the farmwomen were having low economic motivation and low risk orientation. Regarding information input sources, use of localite sources was of high extent while cosmopolite and mass media were used to a low extent.

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