

WOMEN IN AGRICULTURE: Impact of their participation on the home environment

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Abstract

Agriculture is the backbone of the Indian economy. The contribution of women is considerable. Statistical data are available regarding their participation in the agricultural sector and allied activities but their impact on the home environment has been completely ignored. The present study was undertaken to discover what this impact was and to determine the factors associated with the involvement of women in agricultural activities. A multistage, stratified, random sampling technique was used to select a sample of 240 respondents from the Punjab. Mean scores were calculated to see the extent of the impact and factors associated with the participation of women. The F-ratio was worked out to see the significance of the differences in impact and various factors.

The results revealed that the majority of respondents from both farm and non-farm categories belonged to the age group 35–45 years. Most of these women were illiterate. The majority of farm women belonged to joint family systems while non-farm women belonged to the nuclear family system. Most respondents from both categories belonged to families with 0–6 members. In terms of family life, the positive impact of women's participation in agriculture and allied activities was low while in the education of children, household standards and economic and social status it was medium. The prime factor was a feeling of responsibility with farm women but with non-farm women, economic factors were of top importance.

In today's society, the role of women extends way beyond the home and the bringing-up of children. Women have to perform the dual role of housewife and wage earner. Both roles made heavy demands on a woman's time and energy.

Women from rural areas are engaged in farm operations as cultivators, assistants to male cultivators and agricultural labourers. Women are

actively involved in pre-sowing, post-sowing, harvesting and post-harvesting operations as well as allied activities. Women belonging to low socio-economic strata are actively engaged in agricultural labour. They also show their involvement in planning, decision-making and supervisory activities. According to the latest data on the Punjab (Census 2001), female work participation is recorded as 8.7%, compared to 4.4% a decade ago.

Women's participation in home and farm activities is dependent upon social, cultural and economic conditions in the area. It also varies from region to region and even within a region, their involvement varies widely among different farming systems, castes, classes and socio-economic status (Swaminathan 1985).

The participation of women greatly helps to supplement the family income but the dual role they play as income generator as well as homemaker does have some negative impact on the family too.

Thus the present study was undertaken to determine the impact on the home environment of women's participation in agriculture and allied activities and the factors associated with their involvement.

Methodology

The study was conducted in three agro-climatic regions in the Punjab. Under the multistage stratified random sampling technique that was used, a selection of districts was made at the first stage, then a selection of blocks at the second stage, a selection of villages at the third stage and a selection of respondents at the final stage. 240 respondents belonging to 120 farm families (the wife of the farmer or other female family member who was involved in performing different agricultural and allied activities) and 120 non-farm families (landless labourers working in agriculture and allied activities on a wage basis) were selected randomly.

The impact on the home environment was studied on a three-point continuum scale and the responses awarded arbitrary weights such as 2,1, 0 to responses of always, sometimes and never. The impact was categorized as low (1-67 scores), medium (68-132 scores) and high on the basis of the scores obtained by respondents.

Results and Discussion

Social Background of Respondents

It is evident from Table 1 that the age of respondents ranged between 24 and 56 years. Most from the farm and non-farm categories belonged to

the age group 35-45 years (57.5% and 54.17% respectively).

Most respondents in both categories were illiterate although the percentage was much higher in the case of non-farm women (85.83% compared to farm women 44.17%). Table 1 further reveals that the majority of respondents (42.5% and 45.83%) belonged to families with 0-6 members. A comparatively lower number in both categories belonged to large families of 8 members or more. Most farm women belonged to the joint family system (55.83%) while most non-farm women belonged to the nuclear family system (80.83%).

Table 1: Distribution of respondents according to social background

Particulars	Farm Women (n=120)	Non-farm women (n=120)	Total (240)
Age in years			
24-34	17 (14.17)	49 (40.83)	66 (27.5)
35-45	69 (57.5)	65 (54.17)	134 (55.83)
46-56	34 (28.33)	6 (5.00)	40 (16.67)
Education			
i) Illiterate	53 (44.17)	103 (85.83)	156 (65.00)
ii) Primary	20 (16.67)	17 (14.17)	37 (15.41)
iii) Middle	9 (7.5)	0	9 (3.75)
iv) Matric	33 (27.5)	0	33 (13.75)
v) Graduate	5 (4.17)	0	5 (2.09)
Family size			
i) 0-6 members	51 (42.5)	55 (45.83)	106 (44.16)
ii) 6-8 members	48 (40.00)	49 (40.83)	97 (40.42)
iii) 8 and above	21 (17.5)	16 (13.34)	37 (15.42)
Family type			
i) Nuclear	53 (44.17)	97 (80.83)	150 (62.5)
ii) Joint	67 (55.83)	23 (19.17)	90 (37.5)

Figures in parentheses indicate percentages.

Positive Impact on Family Environment

Data in Table 2 illustrates the impact of women's participation in agricultural and allied activities. Farm women felt that their participation enabled them to play an important part in decision-making, have a better standard of living and be recognized as an individual within the family. With non-farm women, such an impact was seen as very low. The F-ratio showed that there were significant differences (F-8.81, CD 0.43 and F-9.17, CD 0.19) in terms of impact on family life. The overall mean scores revealed a medium level of impact on family life.

Farm women felt the impact on their children's education to a large extent, as they were able to

provide them with better educational facilities as well as chances to get an education outside the village. Non-farm women only felt this impact to a medium extent; they were able to provide better educational facilities by buying books and stationery but there were far fewer chances to get their children educated outside the village.

Statistical analysis revealed that there were significant differences (F-15.11, CD-0j.39) in terms of impact of farm women's participation on children's education. With non-farm women, the differences were not significant. The overall mean scores revealed that the impact on children's education was medium level.

Farm women were of the opinion that their participation in agricultural activities meant their families were able to afford better transport, better clothing, better utensils, a greater number of appliances and better household furniture. These findings are supported by Kaur (1996) who reported that the major impact of women's employment was an improvement in the overall standard of living although with non-farm women, the impact was only low. The calculated F-ratio showed that there were non-significant differences in terms of impact on household standard with farm women but significant differences (F=11.61, CD=0.25) occurred with non-farm women. The overall mean scores (0.70)

indicated that there was medium to low level of impact on household standard.

Table 2 shows that the income farm women received from agriculture and allied activities was spent on the upliftment of their economic status. With non-farm women, data revealed that they were able to supplement the family income to a large extent. Statistical analysis indicated that there were non-significant differences on farm women's participation on economic status but significant differences (F014.17, CD=0.59) for non-farm women. The overall mean scores (0.85) showed a medium level of impact on economic status.

Table2: Positive impact of participation of women in agricultural and allied activities on the home environment

Impact	Farm women (n=120) MS**	F	Non-farm women (n=120) MS**	F	Total (n=240) MS**
I. Impact on Family Life					
1) Recognized as individual in family	1.02	8.81 (0.435)	0.26	9.17 (0.190)	0.64
2) Play important role in decision-making	1.30		0.41		0.85
3) Better standard of living	1.21		0.18		0.69
4) Assured more participation of family in social, cultural & political activities	0.47		0.01		0.24
Mean Scores	1.00		0.22		0.61
II. Impact on Education of Children					
1) Better facilities	1.55	15.11* (0.390)	0.88	1.67ns	1.21
2) Chance to get education outside village	1.50		0.18		0.84
3) Raised educational standard of family	1.13		0.03		0.84
4) Able to provide newspapers & magazines to children	0.60		0.00		0.30
Mean Scores	1.19		0.27		0.73
III. Impact on Household Standard					
1) Acquired more appliances	0.01	1.45ns	0.60	11.61* (0.250)	0.30
2) Better, adequate furniture	0.96		0.65		0.80
3) Better, adequate utensils	1.13		0.19		0.66

4) Better, adequate clothing	1.21		0.15		0.68
5) Better transport	1.25		0.11		0.68
Mean Scores	1.11		0.34		0.70
IV. Impact on Economic Status					
1) Independent income	0.88	0.88ns	0.93	14.47*	0.90
2) Supplementation of income	1.43		1.51		1.47
3) Acquired personal/household assets as per choice	1.07		0.86		0.96
4) Financial security for future	1.25		0.04		0.64
5) Help in clearance of family debt	0.70		0.00		0.35
Mean Scores	1.04		0.66		0.85
V. Impact on social status					
1) Better social interaction	0.85	4.65ns	1.49	8.03* (0.953)	1.17
2) Achieved a position/status in society	0.33		0.16		0.24
3) Able to spend money on social rituals	0.99		0.50		0.74
Mean Scores	0.72		0.72		0.72

F = The calculated F-statistic value for various factors

* = Significant at 5% level of significance. The figures in parenthesis indicate the critical difference at 5% level.

**MS = Mean Scores

As regards the impact of farm women's participation on the social status of the family, farm women felt that they were able to spend more money on social rituals and had better interaction with people in the village. Statistically, non-significant differences were found in terms of social status. For non-farm women, the impact of spending money on social rituals was low. The F-ratio revealed significant differences in impact on social status for non-farm women. The overall mean scores (0.72) showed a medium level impact.

Thus positive impact of women's participation in agriculture and allied activities was low in terms of family life and medium for the education of children, household standard, economic status and social status.

Negative Impact on Family Environment

Table 3 indicates a negative impact of women's participation. Farm women noticed a negative impact on their personal health since they had less leisure time to relax, fatigue due to a double

workload, uncomfortable working positions and frustration when their work was not recognized. Non-farm women experiences this kind of impact on their health to an even greater extent. Statistical analysis showed significant differences (F-6.93, CD-0.36 and F-7.63, CD-0.20) for farm and non-farm women. The overall mean scores (1.45) revealed a high-level negative impact of women's participation on their personal health.

Table 3 also shows the negative impact on children. Farm women felt that they were unable to help their children with their studies and that consequently, their children lacked interest in their studies because the women were busy performing agricultural and allied activities in addition to their household responsibilities. Non-farm women felt their participation meant that they could not devote time to their children and so they became delinquent in their behaviour, lost interest in their studies and indulged in bad habits such as calling names and running away from school. The F-ratio showed significant differences (F-20.43, CD-0.19

and F-6.15, CD-0.35) for farm and non-farm women respectively. The overall mean scores (0.71)

indicated a medium level of negative impact on children.

Table 3: Negative impact of women's participation in agricultural and allied activities on home environment

Impact	Farm women (n=120) MS**	F	Non-farm women (n=120) MS**	F	Total (n=240) MS**
I. Impact on personal health					
1. Less leisure time	1.50	6.93* (0.363)	1.95	7.63 (0.204)	1.72
2. Fatigue due to double workload	1.46		1.96		1.71
3. Uncomfortable working position	1.34		1.94		1.64
4. Frustration from lack of recognition of work	1.20		1.54		1.37
5. Effect on physical health	1.10		1.91		1.50
6. Lack of time for medical check-up	0.77		1.60		1.18
7. No time for personal care	0.89		1.65		1.27
8. Insufficiency in performing work	0.88		1.60		1.24
Mean Scores	1.14		1.76		1.45
II. Impact on Children					
1. Unable to help their studies	0.70	20.43* (0.196)	0.90	6.15* (0.359)	0.8
2. Lack of interest in studies	0.58		1.28		0.93
3. Children delinquent in behaviour	0.25		1.42		0.96
4. Lack of interest in household activities	0.23		0.79		0.51
5. Indulgence in bad habits	0.05		0.91		0.48
Mean Scores	0.36		1.06		0.71
III. Impact on Family Life					
1. Less interaction with family members	0.63	1.87ns	1.50	8.79* (0.417)	1.06
2. Unable to attend to needs of husband	0.60		1.45		1.02
children	0.70		1.45		1.07
in-laws	0.72		0.72		0.72
guests	0.37		0.70		0.53
3. Non-recognition of work	1.06		1.49		1.27
4. No credit to wives' financial contribution	1.09		1.66		1.37

5. Less leisure time for entertainment of family	1.81		1.79		1.80
Mean Scores	0.75		1.34		1.04
IV. Impact on Social Life					
1. Participation in social functions	0.73	10.68ns	1.42	42.19* (0.921)	1.07
2. Negative social attitude towards women's participation	0.28		0.03		0.15
Mean Scores	0.50		0.72		0.61

With regard to the negative impact of women's participation in agricultural and allied activities on family life, farm women felt that their work was not recognized, no credit was given to the wives' financial contribution and there was less leisure time to spend with family members in entertainment. Non-farm women felt the negative impact to a great extent as they had less leisure time for entertainment, were not given credit for their financial contribution, had less interaction with family members because of their dual work outside the home as well as household responsibilities and they were unable to attend to the needs of the family. Statistical analysis revealed non-significant differences in impact on family life for farm women but significant ones (F-8.79, CD-0.417) for non-farm women. The overall mean scores (1.04) showed a medium level of impact on family life.

Data in Table 3 also showed the negative impact on the women's social life. Farm women felt a low level of impact as they were unable to participate in social functions while non-farm women experiences a high level. Statistical analysis indicated non-significant differences in impact on social life for farm women but significant differences (F-42.19, CD-0.92) for non-farm women were observed. The overall mean scores showed a low level of negative impact of women's participation in agricultural work and allied activities on their social life.

Thus, a negative impact on women was found to be high on personal health, medium on children and family life and low on social life.

Factors associated with participation of women in agricultural and allied activities

Table 4 shows that the first and foremost factor for participation of farm women was a feeling of responsibility. Economic necessity and income supplementation were associated to a high extent while economic dependence was associated to a medium extent. Other factors were associated to a low extent. With non-farm women, economic necessity, income supplementation and a feeling of responsibility towards the family were associated to a high extent, while economic independence was medium and the remaining factors were low.

The F-ratio was worked out to see the differences in factors and revealed significant differences (F-4.09, CD-0.82) and (F-19.94, CD-0.52) between the association of factors for farm and non-farm women. The overall mean scores showed medium level association of factors with women's participation in agricultural and allied activities.

Conclusion

Women's participation in agricultural and allied activities had positive as well as negative impact on their home environment. A feeling of responsibility was the prime factor for farm women but for non-farm women, economic factors were of topmost importance.

References:

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- Swaminathan M S (1985) *Imparting rural women perspective to agricultural research and development*. Report of the Project Design Workshop on Women in Rice Farming Systems, held at the International Rice Research Institute, Los Banos, Philippines, April 10.

Table 4: Factors associated with the participation of women in agricultural and allied activities

Factors	Farm women (n=120) Mean Scores	F	Non-farm women (n=120) Mean Scores	F	Total (n=240) Mean Scores
1. A feeling of responsibility	2.00	4.09* (0.826)	2.00	19.94* (0.525)	2.00
2. Economic necessity	1.37		2.00		1.68
3. Income supplementation	1.40		2.00		1.70
4. Economic independence	1.12		1.34		1.23
5. Large family to support	0.54		0.77		0.65
6. To avoid unpleasant environment at home	0.45		0.46		0.45
7. No one else to share such activities with husband	0.56		1.15		0.85
8. No male earning member in family	0		0.02		0.01
9. Bad habits of male members	0.12		0.24		0.18
Mean Scores	0.84		1.11		0.97

F = The calculated F-statistic value for various factors

* = Significant at 5% level of significance