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PARTICIPATION LEVEL OF RURAL WOMEN IN AGRICULTURAL ACTIVITIES

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In Pakistan about fifty percent labour force is provided by the rural women. Contribution of rural women in the agriculture is underestimated. This study was planed with the objective to determine the involvement of the rural women in the agricultural activities. Tehsil Faisalabad was selected for this study. Eight villages were selected at random. From each selected village 48 farm families were randomly selected. Thus making a sample of 384 farm families comprising husband and wife leading to a total 768 of respondents. The data thus collected were analyzed and interpreted by using appropriate statistical package to draw the conclusions. Most of the activities were dominated by the husbands with the remarkable contribution of wives, such as wheat harvesting, wheat binding, wheat threshing, prepare land for sugarcane, sugarcane sowing, sugarcane peeling and binding, gur making, rice sowing, weeding of rice, harvesting of rice. Whereas wives' contribution was higher in seed cleaning and picking of vegetables. Clear policies and strategies should be formulated on the promotion of women's advancement in agriculture

Keywords: Rural women, agriculture activity, vegetable production, participation level

INTRODUCTION

In Pakistan, as a developing nation, the situation is more or less similar to the different developing countries. Inequality between women and men can take many different forms. Definitely, gender inequality is not a homogeneous phenomenon, but it is a collection of unrelated and interlinked problems (UNDP, 1999). Strong gender disparities exist in educational attainment between rural and urban areas and among the provinces. In 1996–1997 the literacy rate in urban areas was 58.3 percent while in rural areas it was 28.3 percent, and only 12 percent among rural women (ADB, 2000). According to UNDP (2003) gender disparity can be seen and analyzed through the lens of the gender-related development index (GDI) and the gender empowerment measurement (GEM). Pakistan's GDI ranking is 120th out of 146 countries while its GEM ranking is 92 out of 94 countries. Women faced preferential treatment in every aspect of life in side and out side the boundary wall (Jamali, 2009).

Women, as paid and unpaid labour, represent an important source of total agricultural labour in the region. In Turkey, Morocco, Egypt, Lebanon, Sudan, Iraq and Mauritania, women were estimated to constitute 55.3%, 53.2%, 50.7%, 40.7%, 34.7%, 30.7% and 28% of total paid and unpaid agricultural work, respectively. In Syria, women constituted 44.4% of wage labourers and 60% of unpaid farm labour, and in Tunisia, 34.7% of the total temporary paid labour were women. In Somalia, women provided 66% of the labour in subsistence farming. In Cyprus, women constituted 44% of the total paid labour, while in Pakistan; women comprised 42% of the total family labour (FAO, 1995). Female labour participation rate is 18.93% compared to 71.97% for men in Pakistan (GOP, 2007).

Women's substantial contribution continues to be undervalued in conventional agricultural and economic analysis and policies, while men's contribution remains the central, often sole focus of attention (Jiggins *et al.*, 1998; Fabiyi *et al.*, 2007). The women participate in almost all agricultural activities except cutting of trees and spraying of chemicals. It has been reported that statistics collected in South Asia on female activity rates do not reflect the actual contribution made by women. In Pakistan, for instance, the Labour Force Survey (LFSP, 1999-2000) initially excluded women who reported housekeeping and other related activities. In recent years, the LFS sought to include women who worked on one of fourteen specified agricultural and non-agricultural activities under the classification of improved female participation rates. This resulted in a huge discrepancy between female crude activity rates.

Rural women are the main producers of staple crops more to the production of secondary crops, such as legumes and vegetables. These vegetables, which are often grown in home gardens, provide essential nutrients and can often be the only source of food during times of food shortage. Rural women are

assuming greater roles in agricultural production, yet their contributions remain largely overlooked in development plans. Women remain largely unpaid for their domestic services; their household labor remains invisible in national economies (WOW, 2007). Women bear the burden of farming duties, household task, off-farm income generating activities while also maintaining responsibility over family nutrition, food security and child care (Abbasi, 2005).

In our society males get preference over the females in every aspect of the life. They get better opportunities for food, education, ownership. Whereas, the females are dedicate to the male along with the allocation of the household resources. The sons are educated properly with the better skills. However, scarcity of the skills has limited the opportunity to the female in our society. Therefore the females are allocated to the household chores and labour in the fields depending upon the male community **(**Pudup, 1990)**.**

In developing nations, two-thirds of the female labor force is engaged in agricultural work (Garcia, 2004). In terms of their proportion in the agricultural labor force, women account for 40-80% in different developing countries like Zimbabwe, Afghanistan, Congo and Kenya, respectively (ILO, 2000; NSO, 2002; Kavoreria 2003; PPI, 2004). Women are an equally important part of our society as male (Younis, 2000). As a part of the society women have an important role to play in the productive, reproductive and community management activities. In our country, especially in rural society, all women educated and uneducated alike generally remain involved in their domestic duties; women are the part and parcel of family life. They are involved in every corner of household work. The role of women in homestead and family life needs to be assessed for future research oriented development activities of the nation (Paul and Saadullah, 1991). From the different studies it has been identified that women are the most important factor in the rural area which provide most of the labour force in the field. This study was planed to investigate to thrash out the level of participation of rural women in agricultural activities.

MATERIALS AND METHODS

Faisalabad District has a total area of 5,856 square kilometres (2256 square miles). Of this, about 5,150 square kilometres is devoted to agriculture, of which no less than 96% is irrigated. The District comprises 5 Tehsils. Irrigation of the District dates from the excavation of the Lower Chenab Canal in 1892. The main agricultural crops are wheat (50% of total) and sugar cane (23% of total) and there are also significant numbers of livestock. (CDGF, 2006).

The population of this study consisted of all married couples (husband and wife) belonging to farm families (families engaged in agriculture) in Tehsil Faisalabad.

From Faisalabad Tehsil eight villages were selected at random. From each selected village 48 farm families were randomly selected, thus making a sample of 384 farm families comprising husband (384) and wife (384) leading to a total of 768 respondents. All villages selected were canal irrigated. The data from 768 respondents of 384 farm families were collected. The data collected were entered on Microsoft Excl® Spread Sheet. All the data were tested for the normality. The data were subjected to the analysis using the Statistical Package for Social Sciences (SPSS®) version 10. The frequency tables and descriptive statistics (Means, standard deviations) were obtained. Further the frequencies were subjected to the analysis of variance using the SAS®, 1990.

RESULTS AND DISCUSSION

Social status

Social status can be defined as the degree of honour or prestige attached to one's position in society. Social distribution is linked with the capability of individuals to live up to some set of principles considered as important by the society or some social group within it. Although there are some societies in the world that attribute everyone (at least adults) equal status, most societies do have some form of social ladder with some people in stronger, more dominant positions, and other people in weaker, lower positions. Often this inequity is built into the social system itself through various forms of structural components and institutions. Social and economic roles are distinguished and accorded differential status according to what a particular society or culture deems valuable. Status can be determined by type of the people and their occupation or profession. (Fershtman, *et al.*, 1996).

Social status of the respondent was estimated by different indicators, tasks categories. Such indicators were included in the interview; Nazim, Naib Nazim, Councilor and school teacher. The status of the family can give the idea about the involvement of the rural women in the household chores and agricultural activities.

Data indicated that most of the families belonged to the members of ordinary farm families and had no political background. However, some of the respondents were school teachers (Table 1). They work for their survival in their fields. None of their wives were Nazim or Naib Nazim. This status of the wives may be attributed due to their education level, social, cultural customs. Government should take measures to improve their education and awareness to participate in community matters.

Table 1. Social status of the respondents

Statement	Response of husband		Response of wife	
	n	%	n	%
Naib nazim	1	0.3		
Councilor	5	1.3	3	0.8
School teacher	13	3.4	10	2.6
Ordinary number of society	365	95	371	96.6
Total	384	100	384	100

Age

The average life of the population in Pakistan was 64.13 years. However, the life expectancy of female (65.25 year) is higher than male i.e. 63.07 years (CIA, 2008).

Therefore, respondents were divided into five different age groups with the interval of ten years. With a view to estimate the early marriages which might be the antagonistic factor for education and early responsibilities regarding the household chores and agricultural activities. The data regarding the age of the respondents are presented in Table 2.

Table 2. Distribution of respondents according to their age group

Age	Husband		Wife	
	n	%	n	%
20-30	28	7.29	66	17.19
31-40	128	33.33	140	36.46
41-50	117	30.47	110	28.65
51-60	68	17.71	58	15.10
61- above	43	11.20	10	2.60

The data in Table 2 revealed that most of the respondents were belonging to the 31-40 year of age among both husband (33.33%) and wife (36.46%), followed by the 41-50 years husband (30.47%) and wives (28.65%). The table further shows that most of the respondents were in the range of 41-50 years of age. This age group is generally considered for the active participation in the activities related to household and agriculture. Directional participation of the younger age (20-40) may be enhanced to take the responsibilities of household chores and agricultural activities by introducing the awareness and new technologies of their work requirement and interest. In the respondents main contributors were husband and wives of 31 to 40 years of age groups.

The above demographic information helps us about the respondents to predict their involvement in the household chores and other allied responsibilities.

Crop production and protection

Crop production is complex process demanding different skills and encompasses lot of activities around the year. The involvement of both male and female in food crop production activities is well documented. In this study their involvement was included along with the household activities. To estimate the involvement of gender in crop production different activities relate to the sowing, pealing, harvesting, etc. were included in the interview. The respondents were asked about the involvement in these activities. A number of activities were selected given in the Table 3 to measure the additional work in the fields along with the household activities.

Average frequencies of the respondents were subjected to the Analysis of variance. The data revealed that involvement of husband was significantly different from the wives. The results indicate that the role of rural women regarding the crop production is significantly lower than their husbands. However, the contribution of the rural women is appreciable alongwith the other domestic work (Table 3.2).

Table 3. Mean, Standard Deviation (SD) and ranked order of the respondents regarding the role in crop production

Role in crop production	Husband	Wife	Both	None of them
Total	559.50	161.00	191.50	1008.00
Mean	111.90	32.20	38.30	201.60
SD	83.61	13.10	16.77	92.29

Table 3.2. Analysis of variance regarding the crop production

SOV	Df	Mean Square	F Value	Prob.
Who	3	81602.94	15.18	0.0001
Error	48	5374.25		
Total	51			

The data revealed that role of rural women in crop production was mainly contributed by the husbands whereas, wives were only involved in seed cleaning (54.95%). The role of wives was limited in agriculture, but considerably engaged in most of the activities. The respondents did not show higher involvement in the paddy growing activities.

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Table 3. Frequency distribution of husband and wife according to their involvement in the crop production

Roles	Husband								Wife							
	Husband		Wife		Both		None of them		Husband		Wife		Both		None of them	
	n	%	n	%	n	%	n	%	N	%	n	%	n	%	n	%
Seed cleaning	47	12.24	211	54.95	94	24.48	32	8.33	41	10.68	225	58.59	75	19.53	43	11.20
Sowing	234	60.94	35	9.11	75	19.53	40	10.42	230	59.90	45	11.72	71	18.49	38	9.90
Manure application	250	65.10	15	3.91	75	19.53	44	11.46	241	62.76	25	6.51	72	18.75	46	11.98
Wheat harvesting	150	39.06	135	35.16	45	11.72	54	14.06	159	41.41	143	37.24	41	10.68	41	10.68
Wheat binding	157	40.89	139	36.20	47	12.24	41	10.68	154	40.10	141	36.72	50	13.02	39	10.16
Wheat threshing	285	74.22	10	2.60	25	6.51	64	16.67	270	70.31	15	3.91	35	9.11	64	16.67
Prepare land for sugarcane	291	75.78	8	2.08	21	5.47	64	16.67	285	74.22	15	3.91	33	8.59	51	13.28
Sugarcane Sowing	268	69.79	35	9.11	40	10.42	41	10.68	261	67.97	41	10.68	37	9.64	45	11.72
Sugarcane peeling and binding	243	63.28	39	10.16	65	16.93	37	9.64	238	61.98	45	11.72	57	14.84	44	11.46
Gur making	150	39.06	8	2.08	15	3.91	211	54.95	157	40.89	11	2.86	13	3.39	203	52.86
Rice sowing	51	13.28	38	9.90	45	11.72	250	65.10	49	12.76	40	10.42	39	10.16	256	66.67
Weeding of rice	59	15.36	34	8.85	37	9.64	254	66.15	57	14.84	41	10.68	35	9.11	251	65.36
Harvesting of rice	56	14.58	29	7.55	46	11.98	253	65.89	59	15.36	37	9.64	31	8.07	257	66.93

Table 4. Frequency distribution of husband and wife according to their involvement in the vegetable production

Roles	Husband								Wife							
	Husband		Wife		Both		None of them		Husband		Wife		Both		None of them	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Vegetable for home consumption	46	11.98	41	10.68	91	23.70	206	53.65	43	11.20	23	5.99	51	13.28	267	69.53
Irrigation to the vegetables	49	12.76	29	7.55	36	9.38	270	70.31	83	21.61	19	4.95	13	3.39	269	70.05
Hoeing	75	19.53	23	5.99	15	3.91	271	70.57	65	16.93	30	7.81	11	2.86	278	72.40
Manure application for vegetables	85	22.14	8	2.08	9	2.34	282	73.44	81	21.09	12	3.13	10	2.60	281	73.18
Picking of vegetables	13	3.39	69	17.97	18	4.69	284	73.96	11	2.86	72	18.75	15	3.91	286	74.48
Pest management of vegetables	87	22.66	10	2.60	6	1.56	281	73.18	75	19.53	17	4.43	9	2.34	283	73.70

Average frequencies of the respondents were subjected to the Analysis of variance. The data revealed that involvement of husband was significantly different from the wives, both and none of them. The results indicate that the role of rural women regarding the crop production is significantly lower than their husbands. However, the contribution of the rural women is appreciable alongwith the other domestic work.

It shows that masculinity and femininity theories prevail. All the agricultural activities require the physical strength and compact body structures. However, the rural women involvement along with the household activities is appreciable. Further their involvement also attributed to the social and cultural set up. Moreover, the labour contributed by the rural women is unpaid and dominated by the male. The rural women from the families having the small holdings are mainly involved.

Similar findings that rural women are involved in different activities related to the agricultural production have been reported (Nazli and Hamid; 2007; Sarwar and Saleem 1993). Rural women allocate their time to the agriculture production process (Gurung, 1999; Reddi, 2003; Paul and Saadullah, 1991). Further, Riaz (1994) concluded that women play a vital role in making a household food secure and involve in various stages of production and storage of agriculture produce. The productive work done within the agriculture fields by women has been ignored and not much attempt has been made to incorporate the value of such activities within the national accounts. This is the main reason behind the exceptionally low female labour participation rate of 18.93% compared to 71.97% for men in Pakistan (GOP, 2007). Similarly, Harshipender and Gupta (2006) reported that women form 50% of population and constitute 60 % of work force but earn only 10% of income. In Nigeria, Fabiyi et al (2007) women are more involved in farm activities apart from their legitimate roles as wives and mothers. Men alone cannot achieve success in farming without women. They were involved in land clearing, planting, weeding, transporting of products and harvesting. The contribution of women to agricultural development should be maximized by implementing solutions to the specific problems they encounter as economic and social stakeholders.

The uncounted and unpaid labour can be enhanced by providing the incentive of income and utilization of the income. There should be the implements and equipments which should be suitable to the feminine structure. By providing the extension services to the rural wives which help to make the profitable farming. Women are considered responsible for the availability of food to the family members and they can play a significant role in the vegetable production and harvesting.

Vegetable production and harvesting

This may be refer to the growing the vegetable for the domestic purpose or commercial purposes. Vegetable production for domestic use is mainly considered as home seated activity; therefore rural women can participate in all activities related to the vegetable production for home use. It does not need heavy work as in crop production. Therefore, activities related to vegetable production were asked for their involvement. Most of the activities related to the vegetable production were selected are presented in the Table 4. These activities can give an idea related to the involvement of rural women in the vegetable production.

Regarding the vegetable production and harvesting data showed that maximum number of the husband respondents were involved in the manure application for vegetable (22.14%) and pest management of vegetable (22.66%). Whereas, the involvement of rural wives was minimum regarding the vegetable production. It has been revealed that most of the farmers did not grow the vegetable.

The average role of husband was much higher (62.40±29.07) than wives (28.90±24.26) regarding the vegetable production (Table 4.1). Further the frequencies were subjected to the analysis of variance (Table 4.2). The data show that most of the respondents were not involved in vegetable production and husband (15%) involvement was higher in the production as in agricultural production than wives (8%)–Figure 2.

Table 4.1. Mean, Standard Deviation (SD) and ranked order of the respondents regarding the role in vegetable production

Role in vegetable production	Husband	Wife	Both	None of them
Total	312.00	144.50	71.00	1392.50
Mean	62.40	28.90	14.20	278.50
SD	29.07	24.26	6.70	6.33

Table 4.2. Analysis of variance for vegetable production

SOV	df	Mean Square	F Value	Prob.
Who	3	167216.166	294.54	0.0001
Error	20	567.71		
Total	23			

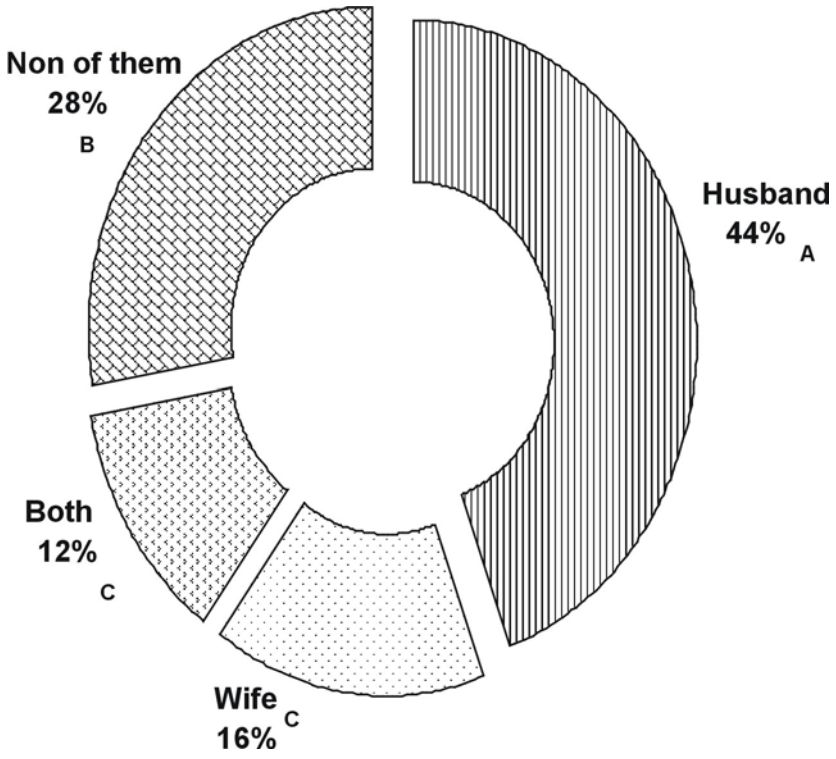

Figure 1. Participation of rural women in crop production

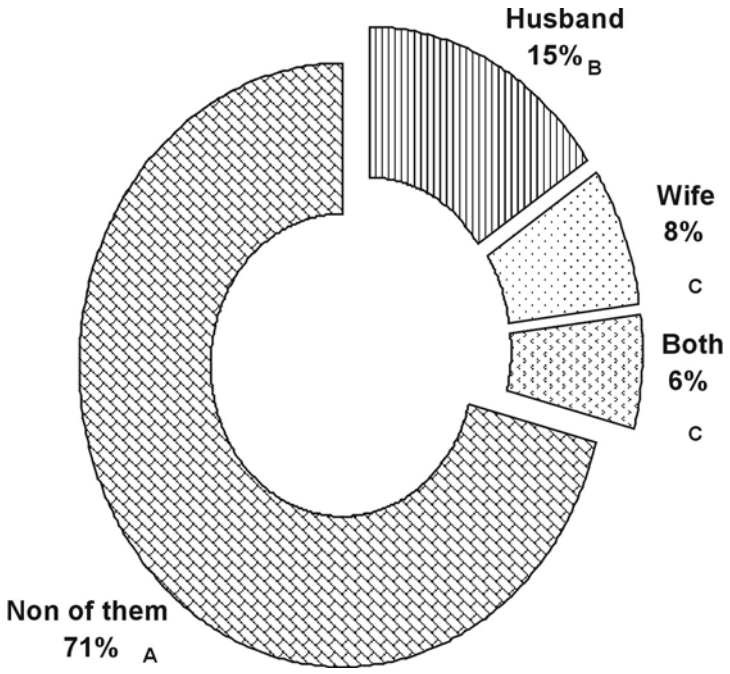

Figure 2. Participation of rural women in vegetable production

For the growing of the vegetable number of inputs are required in return due to which farmers grow the vegetable on the border of the field. They did not give specific plot of field for vegetable production. The secondary importance is given to vegetable production. Most of the farmers grow the vegetable for the domestic use. Due to the soil structure and shortage of water vegetable crops do not yield properly.

In Pakistan, women are key players in agriculture sector, which employs almost 12 million women in the production of crops, vegetables and livestock (Qadri and Jahan, 1982; Jamali, 2009) in Malaysia (Masud and Palm, 2004; Fafchams and Quiumbing, 1999). Availability of improved nutrition to the rural women can ensure by vegetable production which are rich in vitamin and mineral.

Improved vegetable seeds should be provided to the farmers which require less labour and yield high. New and easiest techniques for vegetable production should be introduced. Extension services should be extended to the farmers for growing season of different vegetable crop and their seed ratio.

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