EXPLORING THE GENDER INVOLVEMENT IN AGRICULTURAL DECISION MAKING: A CASE STUDY OF DISTRICT CHAKWAL

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The main objective of the study was to explore the Gender involvement in agriculture decision making like crop production, selection of variety, sowing, irrigation pattern, weeding, use of pesticides, harvesting, storage and marketing. Punjab province is the populous one among other provinces and its land is very fertile. Moreover, the biggest canal irrigation system is supplying irrigation water in this province. Agriculture is the main source of earning and employment sector in Pakistan. In rural areas of Pakistan, women make feed, collect fodder, clean animals and their sheds, make dung cakes, collect manure for organic fertilizers, pump milk, process animals' products and market them. They also play a crucial role in rural poultry farming where they apply their own methods of rearing and breeding. But overall the agricultural activity rates may vary from one region to another as in the North West Frontier Province (NWFP) and Balochistan, the socio-cultural norms are more binding and less female participation is observed. Women also play an important role in dairy production. They remain 'invisible' partners in development. Farmers are still generally perceived as 'male' by policy-makers, development planners and agricultural experts and service deliverers. Therefore study in hand was designed to explore the involvement of both genders in agriculture sector. District Chakwal was selected as the universe of the research study. A cross sectional survey research design (snap short technique) was used to collect the data. The results of the study reveal that women are actively involved in agricultural practices but the degree of involvement of men and women vary according to different activities like crop production, crop protection, marketing, poultry production and livestock management. There are also many cultural, social and physical obstacles for low participation of female folk in agriculture extension services. Moreover, the male dominating society in Pakistan is also the hindrance to female participation in such activities.

Keywords: Productive agriculture, tributaries, natural resources, harvesting, weeding, dung cake, pump milk

INTRODUCTION

The Punjab is the country's most populous province as compared to other provinces and Azad Jammu Kashmir. The population of this province was estimated about 86,084,000 persons in 2005. Nearly 60% of Pakistan's population lives in the Punjab. The province is mainly a fertile region along the river valleys. The Indus River and its many tributaries traverse the Punjab from north to south. Despite its dry climate, extensive irrigation makes it a rich agricultural region. Its canal-irrigation system is the largest man made irrigation system in the world. Wheat cotton, sugar can and rice are the major crops besides millet, corn, oilseeds, pulses, fruits, and vegetables. Livestock and poultry production are also important sectors.

It is generally accepted that full participation of men and women is the best key to build and sustain society that will resolve conflict and achieve the goal of human development. Comprising over 50 percent of the world's population, women are essential to address the pressing challenges of new era. The working women in the rural areas of Pakistan are facing a number of challenges ranging from lack of access to education, resources, property rights and skill development to gender discrimination in the labor markets.

Pakistan is a land with all natural resources like land, water and climate for productive agriculture. The two genders have to equally contribute in country's economy. Agriculture is the backbone of Pakistan's economy that contributes about 23 percent to the Gross Domestic Product (GDP). The total cultivated area of Pakistan is 22.2 million hectares, out of which 2.7 million hectares is under horticultural crops. Agriculture is also the main sector of employment where total employed labor force is 44.8 %. Men labor force in this sector is 38.4% and women labor force is 69.9% which is highest than all in other sectors and industries in Pakistan. Nearly 65.9 % % of Pakistan's population is living in rural areas that are directly and indirectly linked with agriculture related sectors for its livelihood. Livestock is the single largest sector which is adding half of agriculture value and profitable commodity for rural community of Pakistan, where most of the rural women engage with all responsibilities from cattle rearing to milking (Govt. of Pakistan, 2007).

In rural areas of Pakistan, women make feed, collect fodder, clean animals and their sheds, make dung cakes, collect manure for organic fertilizers, pump milk, process animals' products and market them. They also play a crucial role in rural poultry farming where they apply their own methods of rearing and breeding. But overall the agricultural activity rates may vary from one region to another as in the North West Frontier Province (NWFP) and Baluchistan, the socio-cultural norms are more binding and less female participation is observed. Women also play an important role in dairy production. All fresh milk consumed in the country with the exception of a few large cities, is based on small domestic productions, run and managed by women. Poultry, sheep and goats are sole income sources that are fully controlled by women. Contribution of women in agriculture is poorly understood and their specific needs are ignored in development planning. In spite of that, women are the world's principal food producers and providers. They remain 'invisible' partners in development. Farmers are still generally perceived as 'male' by policy-makers, development planners and agricultural experts and service deliverers. For this reason, women find it more difficult than men to gain access to valuable resources such as land, credit and agricultural inputs, technology, extension, training and services that would enhance their production capacity, activities, taking responsibility for storage, handling, stocking, processing and marketing (FAO 2005). Hassan (2008) has concluded in his study that women were deprived in overall socio-economic situations in our country. They have lesser access to education and training, extension services and technology as compared to their male counterpart.

A number of factors contribute to this disadvantaged position of women in developing world. They have low levels of skill and literacy and lack of organizational structures, through which resources could be mobilized for their own benefit. A gender segregated school system limits their access to formal education, as boys' schools are accorded priority. While poor health conditions and high fertility rate constraint their development, lack of mobility further aggravates the situation.

According to United Nations Development Programme (UNDP), 2003 gender disparity can be seen, 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.

In Asia and particularly in South Asia, house care and management is considered as the prime responsibility of women in addition to their fundamental role of childbearing and child rearing. Traditional gender roles in Pakistan define the woman's place as in the home and not in the workplace. But, women roles are now changing with the change in time. Rural women are the workers seen as invisible farmers working in many fields. In recent years women are rapidly exercising their abilities in almost all fields of life like administration, economy offices, and especially in agriculture (UNIFEM, 2000)

Women were the important pillar of household and considered superior in the skills of household chores as argued by Becker (1991) who stated that in the past, marriage was a product of spousal specialization whereby each partner adopted the roles for which he or she had superior skills. As a result men specialized in market work and women in domestic work. But due to economic revolution this institution was under stress as women become financially independent.

Anonymous (2001) has also proposed five key points to resolve the gender issues in agriculture and rural development for common wealth countries. The first issue is equal access to land and water resources. The second point described stresses on equal access to credit and other supportive services. When women do not have their own or have less access to land, automatically they have limited access to agriculture support services such as credit, agricultural advice and training in agricultural technology. The third key point is to analyze the gender differences in roles and responsibilities in routine tasks. A woman has typically three roles in term of paid and unpaid labor. The first role is productive which generate an income in financial or in kind form; the other role is reproductive that refers to child bearing and child rearing that is the responsibility born by women and last role of women is community management which refers to the activities undertaken by women to ensure the provision of resources at the community level.

Agricultural tasks are also regarded as male and female oriented. For example women typically collect and gathered forest wood for fuel and food for the family and fodder for livestock even in the ancient society. Men often cut wood to sell or use wood as building material and purchase or sale the cattle in to markets. The 4th key point is gender and agricultural extension and research. All group trainings, extension meetings and research activities are mostly done with male farmers. These services are also staffed by men. A few number of extension workers are women in developed countries and they are extending their services to male farmers and male- headed households. Extension and research activities were sole responsibility of governments in the past. That is now shifted to the farmer's organization, NGOs and CBOs through privatization and commercialization

through funding of national and international agencies. The last and 5th key point is women empowerment and equal access to decision making. Women empowerment is important where decision making issues are affecting their lives.

According to Hanan (2004) Gender analysis is best key to understand women situations as well as men in all developmental processes before any planning to be planned by policy makers and state representatives.

Gender issues in agriculture and rural development policy in Asia and the Pacific FAO (2000) has recommended that it is essential to collect rural women statistics for formulation of policy regarding to rural development in Pakistan. Further, it is recommended that all data collected should be gender disaggregated. It is also recommended in the same document that in-depth qualitative studies of women's role in the agriculture sector must be undertaken to comprehend the women's constraints and their share and participation by crops and seasons.

In Pakistan, women are working in the crop and livestock production, cottage industry and household maintenance. Their work is not recognized due to lack of adequate statistics. Desegregated data on women and their activities, particularly in non-farm households, is not available to planners for policy making and decision making level. (FAO, 1993) Therefore it is necessary to analyze the gender involvement in agriculture decision making and rural development.

In Rural communities of Pakistan, 90% of the households are headed by men. The female –headed households are belonging to the poor strata of the society. 79.4 % of rural women are engaged in agriculture where they work from 12-15 hours a day for various economic activities and household chores (ESCAP1997).

The role of women in agriculture development is largely overlooked. Women are only passive beneficiaries, and only are recognized by their inferior status in society. Women are not considered strong enough to handle large agricultural tasks. Training and extension activities generally excluded women participation. The same idea was portray by FAO (2006) document that Gender relations are unbalanced in most of the societies and women often make their contribution more in daily tasks as compared to men.

Foster (2001) pointed out that the barriers to women's advancement as seen by successful women included: male stereotyping and preconceptions about women; exclusion from informal networks of communications; and lack of significant experience.

This paper is about analyzing and exploring the role of women in Agriculture practices, decision making and involvement like selection of crop, selection of variety, purchasing of seeds, irrigation, sowing, harvesting, storage, and marketing etc. along with livestock management in the province of Punjab. However, only one district of Arid Agriculture Region was the universe of this research study. The overall objective of the study was to analyze the gender involvement in agricultural decision making and to explore the gender roles in Agricultural development and decision making related to agricultural practices.

The obstacles related to gender issues for agriculture and extension can only be removed through gender equality in all policies, programs, management and administrative activities of organizations and government institutions through which gender biases can be managed and protected. Mainstreaming in agriculture and extension is a key strategy for sustainable economic and social wellbeing of developing nations.

MATERIALS AND METHODS

A cross sectional survey research design (snap short technique) was used. In this design the data was obtained at one point in time, but from groups of different ages or at different stages of development.

District Chakwal has four tehsils namely Chakwal, Talagang, Choa Sadan Shah, and Kallar Kahar. It had total population of 1059,491 persons as district census report of 1998. Its present estimated population is 1.31 millions. Total literacy rate of the district was 69.02%. There are 58 rural and 10 urban Union Councils in the district. The total number of villages is 461 (Govt. of Pakistan, 2007).

A multistage random sampling process was used for this research study. Rural areas of District Chakwal were selected as the universe of this research study. Two tehsils out of four were selected by simple random sampling technique. From the selected tehsils, five villages were again selected randomly and twenty households (farming and non-farming families) of each village were further selected by using systematic random sampling technique. One married couple from the selected households was further selected as respondent of this study and total 400 respondents (200 female and 200 males) were interviewed. The data was collected through pre-tested interview schedule survey. The collected data was analyzed by using Statistical Package for Social Sciences (SPSS). Moreover, the data were analyzed by calculating simple frequencies and percentages. It is mandatory to point out that the present study is the part of a study entitled as ''Analysis of the Obstacles to Gender Mainstreaming in Agricultural Decision Making and Extension Work in the Punjab, Pakistan" , carried out in the Department of Agri. Extension, University of Agriculture, Faisalabad and funded by Higher Education Commission, Islamabad in 2008.

RESULTS AND DISCUSSION

Socio-Economic Profile of the Respondents

The socio-economic characteristics are very important to give first hand information about the social set up, social transformation, social interaction, education level of the community and general trend of the community working and traditional set up. The following tables (Table No. 1 to Table No. 5).

Table 1. Age Composition of the Respondents

Age (in years)	Wife		Husband	
	No.	% age	No.	% age
Up to 30	61	30.5	31	15.5
31-40	58	29.0	65	32.5
41-50	41	20.5	35	17.5
51 & above	40	20.0	69	34.5
Total	**200**	**100**	**200**	**100**
Mean age	**41.00**		**46.77**	
Std. Dev.	**13.75**		**14.74**	

Table 2. Educational Level of the Respondents

Educational level	Wife		Husband	
	No.	% age	No.	% age
Illiterate	144	72.0	44	22.0
Primary-Middle	32	16.0	80	40.0
Metric	21	10.5	59	29.5
Above metric	3	1.5	17	8.5
Total	**200**	**100**	**200**	**100**
Mean education	**2.19**		**6.66**	
Std. Dev.	**3.78**		**4.20**	

Table 3. Share of Husband and Wife in Household Monthly Income

Contribution	Husband		Wife	
	No.	%age	No.	%age
Less than 25%	3	1.5	110	55.0
25-50%	28	14.0	55	27.5
50-75%	71	35.5	20	10.0
75-100%	98	49.0	15	7.5
Total	200	100.0	200	100.0

Table 4. Share of Husband and Wife in Household Monthly Expenditure

Contribution	Wife		Husband	
	No.	%age	No.	%age
Less than 25%	10	5.0	93	46.5
25-50%	25	15.5	67	33.5
50-75%	60	30.0	30	15.0
75-100%	105	52.5	10	5.0
Total	200	100.0	200	100.0

Table 5. Major Crops Pattern

Major corps	No.	%age
Wheat	188	94.0
Ground nut	200	100.0
Pulses	200	100.0

The results pertaining to number and percentage for respondents according to their age showed that average mean age of 41 years for wives and 46 years for husbands with 13.75 Standard Deviation for wives and 14.74 standard deviation, respectively in the present study. The results showed that females are younger as compared to their husbands.

It is depicted from Table No. 2 that females are more illiterate as compared to males. Male respondents were getting higher levels of education as compared with female respondents. Although the total literacy rate of the district Chakwal was 69.02 percent (Govt. of Pakistan, 2007).

It is visible gender discrimination regarding to education. Still male gender is getting more educational opportunities as compare to female gender.

It is revealed from Table No. 3 that male members were contributing more into their household income. As about 49.0 % male were contributing from 75-100% share of into household monthly income. It is also evident from the same table that the females were contributing less share as compared to males. About 55 % females were contributing less than 25 % share of the monthly household income. Although they are equally putting their efforts and consuming energies to agriculture farming activities but their efforts are not considered as paid one.

The results revealed (Table No. 4) that male members of the family were contributing less in household's expenditure as compared to females as. The same table showed that 46.5 percent male were contributing less than 25 % in the household's expenditure. On the other side 52.5 % females were contributing about 75-100% in the household's expenditure.

The table No. 5 shows that major crops of District Chakwal were ground nut, pulses and wheat.

Decision Making Dynamics Regarding Agriculture

The analysis of data (Table No. 3 to 4 and 5) reflected that husbands were giving more share to the family income but wives were sharing more in family expenditure. The major profession is agriculture and main crops are wheat, groundnut and pulses. The involvement of both genders and the extent of decision making in agriculture practices is described in the proceeding sections.

Male and female respondents were asked to identify their roles and participation level on the described scales as indicated beneath Table No. 6. The results showed that the tasks related to crop production, and protection, livestock management and poultry husbandry were carried out by males and females both in District Chakwal. However, the roles of female were less prominent in different aspects of agriculture inputs like crop protection due to less access to agriculture extension education. But they were actively taking part in performing all other agricultural operations on the forms.

detailed summary of the prevailing situation is shown in above table.

RECOMMENDATIONS

Based on the results as described above following recommendations are made for the agencies concerned.

- Rural home economics extension service in the district for the education and uplift of rural women should be established.

Table 6. Participation Level of Females and Males in Agriculture Practices

Participation in main activities	Wife						Husband					
	Scale						Scale					
	1		2		3		1		2		3	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Crop production	49	24.5	34	17.0	117	58.5	39	19.5	59	29.5	102	51.0
Corp protection	152	76.0	21	10.5	27	13.5	75	37.5	81	40.5	44	22.0
Marketing of crop produce	151	75.5	16	8.0	33	16.5	103	51.5	70	35.0	27	13.5
Animal production	103	51.5	20	10.0	77	38.5	78	39.0	57	28.5	65	32.5
Animal protection	117	58.5	27	13.5	56	28.0	75	37.5	55	27.5	70	35.0
Marketing of animals	135	67.5	23	11.5	42	21.0	116	58.0	63	31.5	21	10.5
Livestock management	54	27.0	14	7.0	132	66.0	144	72.0	39	19.5	17	8.5
Poultry husbandry	117	58.5	30	15.0	53	26.5	179	89.5	14	7.0	7	3.5
Water management	139	69.5	28	14.0	33	16.5	171	85.5	22	11.0	7	3.5

Scale: Never = 1 Sometimes = 2 Often = 3

Table 7. Causes of Low Involvement of Women in Agriculture Extension

Causes	Wife				Husband			
	Yes		No		Yes		No	
	No.	%age	No.	%age	No.	%age	Freq.	%age
Social	148	74.0	52	26.0	182	91.0	18	9.0
Cultural	129	64.5	71	35.5	172	86.0	28	14.0
Male dominance	171	85.5	29	14.5	174	87.0	26	13.0
Custom/ traditions	132	66.0	68	34.0	161	80.5	39	19.5
Social security	115	57.5	85	42.5	128	64.0	72	36.0
Physical security	117	58.5	83	41.5	128	64.0	72	36.0
Mobility hindrance	118	59.0	82	41.0	143	71.5	57	28.5

There are many cultural, social and physical obstacles for low participation of female folk in agriculture extension services. Moreover, the male dominating society in Pakistan is also the hindrance to female participation in such activities. Higher Education Commission (HEC 2008) also concluded that male dominancy, cultural values and ego are main reasons for not involving the females into extension work. The

- Female graduates in agriculture should be encouraged to work as extension workers (Agriculture Officers) Agriculture Department (Extension & Adaptive Research) by providing additional pay benefits.
- The trained women professionals to serve as trainers, and managers in agricultural development should be encouraged.

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