

An Empirical Analysis of Women Participation in Farm Activities in Rural Kashmir

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Abstract

The present paper analyses the participation of women in farm activities in Kashmir valley. Information has been collected from 200 households with the help of multi- stage sampling. Our analysis reveals that in Rice cultivation all the activities except weeding and ploughing is dominated by women in the sample area, likewise in maize all the activities are dominated by women. Only one activity in the sample area which is a joint venture is horticulture. It has been found that over load of work and extreme weather conditions affect the health of women workers as majority of them reported different types of ailments related to their work.

Keywords: Women, Rice, Maize, Apple, Health, Farm activities.

1. Introduction

Women are a vital part of any society. Over the years, there is a gradual realization of the key role of women in agricultural development and their contribution in the field of agriculture, food security horticulture, processing nutrition, sericulture, fisheries and other ailed sectors. Comprising the majority of agricultural laborers, women have been putting in labour not only in terms of physical output but also in terms of quality and efficiency. Despite, all these strenuous efforts made by women, they are still not given their share and position in the society. There are various issues relating to women inferiority and complexes in the society, which need to be addressed in a proper way. This paper is devoted to highlight the participation of women in farm activities in rural areas.

The female participation rate in the agricultural labour force is highest in sub-Saharan Africa, Asia and the Caribbean and lowest in Latin America. Some 70 percent of women living in rural areas of the third world countries work on the land. Brazil shows that between 1970 and 1980 that total number of men economically active in agriculture fell, but the number of women increased and the female proportion of farm labour force rose from 9.6 percent to 12.7 percent. Similarly in Peru, the proportion of female population which was economically active in rural areas grew from 14 percent to 21 percent between 1971 to 1981. (Maithili 1994)

In Kenya, as much of Africa, women are the primary cultivators; managers are co-managers of farm operations. Women are responsible to later stages of land preparation; they also plant, weed and harvest crops. Men, on the other hand, are responsible for early stages of land preparation such as clearing or burning bush, for plowing, and for cattle care. Yet despite women's extensive involvement in agriculture,

Kenya shows the same tendency evident elsewhere in Africa. (Maithili 1994)

The women are the backbone of agriculture work force, but worldwide her hard work has mostly been un-paid. In India around 70 percent of population earns their livelihood from agriculture (EIU, 1997). Rural population accounted for 71 percent (1991 census). In 1992 – 93 only 9.2 percent of the households were female – headed (ESCAP, 1997).

In the rural scenario, there is hardly any agricultural activity where women are not found contributing except probably plowing field. They have to do varied field operations like tilling, manuring, weeding, transplanting, harvesting, threshing, and storing. They also have to look after dairy animals, poultry, fuel needs, food processing, drawing and storing water activities within house are classified as housework and not considered as contribution to the economy and most of their work is invisible. The statistical data shows that poor the family, the more it depends on economic productivity of its women, which is true as per the present study as well.

Women have key role to play in farming system throughout the world. In majority of the developing countries, women play too major roles in rural areas-household responsibilities for child rearing, food preparation and other chores; and other role they are paid or unpaid workers in agriculture of off the farm. Most of the areas in the world women are important to agriculture. Households headed by women make up 20-25 percent of rural households in developing countries, excluding china and Islamic countries. Women are active at every point in the food chain and are often responsible for protecting the integrity of food and ensuring its wholesomeness and safety. Women work remains invisible in family enterprises at present in rural India about 33 percent of cultivators and about 47 percent of agricultural labourers are women. Female agricultural labourers are high in some states compared to other. Agriculture in most backward districts attracts larger percentage of women than men at the same time; more prospective districts have less number of women than men. (Babita Agarwal 2008)

It has been found that women from weaker sections of the society and possessing small or no land holding participate in large proportion in agricultural operations than women from middle class socio-economic status. They are actively involved in agricultural development and ailed fields including crops production (FAO, 1999).

The distribution of rural women by employment status (1992-93) indicates that 31.2 percent women works for someone else, 31.6 percent women work in their own family farm business units and 2.0 percent women are self-employed (national family health survey 1992-93). This could well, be read as almost 63 percent rural women are employed in agriculture and ailed sections. Thus this vast majority cannot be neglected at any cost. Over the years, percentage of women in agricultural labour has increased; in 1991 census women constituted 38 percent of agricultural labour and this figure jumped to 46 percent in 2001. Similarly women cultivators increased from 20 percent to 32 percent in the same period (M.S. Swaminathan Research Foundation)

Another dimension of women's wellbeing is related to the unequal distribution of work and leisure according to gender. Women work longer hours than men and often carry a disproportionate share of the burden of coping with poverty. Usually women spent on an average 20 percent more than men in rural area and 6 percent in urban areas, because, of their reproductive roles, their responsibilities relating to rearing of children and serving the aged persons in the family, their greater responsibility for agricultural work in family owned farms and barriers to their entry in urban area markets (UNDP, 1995)

Surviving through a normal life cycle is a resource – poor women's greatest challenge the practice of breast feeding female children for shorter periods of time reflects the strong desire for sons. If women are particularly anxious to have a male child, they may deliberately try to become pregnant again as soon as possible after a female is born. Conversely, again women may consciously seek to avoid another pregnancy after the birth of male child in order to give maximum attention to the new born son. A primary way that parents discriminate the girl children is through neglect during illness. When sick, little girls are not taken to doctors as frequently as their brothers.

2. Farm women in third world – India

Women are vital and productive workers in India's economy. They make up 1/3 of the labour force. The five years plans have consistently placed special emphasis on providing minimum health facilities, integrated with family welfare nutrition and education for women and children. Various measures have been introduced to improve living conditions of women and to increase their excess to and control over material and social resources.

An overwhelming presence of women is manifested in the unorganized sector, both in rural and urban areas. The national commission on self-employed women estimates that 94 percent of the total female work force is to be found in this sector (G.D.I. 1988). They participate extensively in agriculture, animal husbandry, dairying, social and agro-forestry fisheries, handicrafts, Khadi and village industries, handloom weaving and sericulture. In agriculture their activities range from sowing to weeding, transplanting and harvesting. In agro forestry, they are engaged in the collection of minor forest produce and medicinal herbs as well as in afforestation programmes. Apart from this women have a great deal of involvement in handloom weaving and handicrafts and in a variety of Khadi & Village Industries. Rural area accommodates the majority of women work force and they work in large number in home based production and also under self-employment basis. Typically, they do work in small trades, making garments rolling bidis and in a plethora of other activities. Women also do work in innumerable number if hawkers, vendors and domestic servants in both rural and urban segments of India.

Available statistics also gives us the information that the percentage share of women in total labour force is 29 percent. Their share in agriculture 62 percent, in industry 11 percent and in semi-skilled sector it is 27 percent. (Tripathy 1996)

The Indian work force participation rate is 37.7 percent. The rate for women is 22.7 percent, which is less than half the rate of 51.6 percent. The pattern of women's participation in the labour force varies across the country depends upon geographic region, cast, socio- economic lass and formal and informal sectors. The rural participation rate is 27.2 percent, nearly thrice as much as urban female participation rate of 9.7 percent. The percentage of labourers employed as main workers is higher among men than among women. In the case of marginal workers, this proportion is larger among women the majority of main workers (66.8 percent) are employed in agricultural and ailed industrial sectors. The proportion of women employed in this sector is 80.7 percent, compared to 62.7 percent for men. In rural areas 89.5 percent of the total females employed are engaged in agriculture and ailed sectors. (Census 2001)

In a poor and developing country like India, the participation of women in the labour force is not only desirable, but also essential because it increases the level of food availability, nutrition, productivity and creates essential demands. Women's participation in the labour market also determines the structure of the household and the relationship within the family which are prime movers of the small family norms. It also results in the reduction in female fertility and improvement in the quality of lives. Thus, we can undoubtedly say that women's participation in labour force seems to lead to multidimensional utilities relating to personal, economic social health and welfare sectors.

3. Participation of Women in Agriculture sector of Jammu and Kashmir.

Agriculture is the dominant and major sector in the state as well as in Kashmir and is considered the backbone of the state economy, in reality; however, it has been treated as a backbone without a spinal cord, because its position has been deplorable. From time immemorial rice has been the stable crop in Kashmir, grown throughout the valley of Kashmir and the staple food of indigenous population. Agriculture is the major contributor to the state domestic product; however, analysis of data reveals that the dependence on agriculture as a paramount occupation is continuously declining.

Jammu and Kashmir State is predominantly an agrarian state; bulk of population is engaged in farming activities. Though the majority of population is engaged is farming but the production is still low due to low nutrient status of soil, poor and unassured irrigation facilities, imbalance in use of major synthetic fertilizers, lack of timely availability of major agricultural inputs, lack of timely and easily credit crop loan facilities and inadequate and unscientific storage facilities.

Farming is an occupation of family as a whole and it is high time that we start realizing the importance of

participation of women in this venture. If we take the example of a rural Kashmiri women engaged in farming and list out her contribution operation wise particularly for paddy crop it has been found that about 80-85 percent of the operations are conducted by women, either alone or along with men folk. The operations which merit a mention are seed-bed preparations, transplantation, weeding, harvesting, and to some extent application of fertilizers and insecticides, weedicides and fungicides along with men-folk and threshing of grains. All does not end here and she continues to put in her bit in winnowing and bagging of threshed crop and its storage and after care in the home.

Agriculture is the dominant occupation in the entire district of Pulwama and adjoining areas of Shopian, Budgam and Anantnag. District Pulwama is called “The Rice Bowl” of Kashmir followed by district Kulgam. In the district various crops are being cultivated but apple, maize and rice are the main and dominant ones. Apple and maize are cultivated mainly in the upper belts of the tehsil Pulwama and rice is cultivated in lower and plain belts of the tehsil. Therefore the present study has been conducted in two community development (C.D) blocks of the tehsil viz. Keller and Pulwama. Block Keller is famous for its apple and maize cultivation as the block is hilly in nature and the whole area is under the cultivation of fruits especially apple. Among cereals maize is produced at a large scale. The two villages- Qasbha Yaar and Kalampora which have been randomly selected for two crops are rich in quality as well as in productivity. The village, Tengtuna which has been selected for rice in block Pulwama has almost the whole agricultural land under the cultivation of rice and the people are mainly dependent on the agriculture. The soil in the village is somewhat marshy and is suitable for rice cultivation. The village is highly productive in terms of quantity and quality, as the villagers supply rice and fodder to the upper belts of the tehsil for their requirements.

4. Objectives

The specific objectives of the study are as under:

- To enquire into the participation of women in various farm activities in the sample area.
- To analyze the contribution of women labour in three major crops- rice, apple and maize.
- To study the ill-effects of work load on the health status of women as they are considered as weaker sex.

5. Methodology

In the present study multi-stage sampling technique has been used. At the first instance two blocks Keller and Pulwama of tehsil Pulwama were selected because of agrarian nature of the people of the tehsil and concentration of women workers in farm related activities. In the second stage 200 households from three villages which have higher concentration of women workers working in the fields have been selected randomly. Thus a sample of 100 respondents (50 male and 50 female) has been taken from the village Tengtuna of block Pulwama and 50 respondents (25 male and 25 female) from village Qasbha Yaar and 50 respondents (25 male and 25 female) from village Kalampora both from block Keller has been selected. The respondents were interviewed as per the objectives of the study.

6. Discussion and Analysis

6.1 Activities performed in rice (paddy) cultivation

Generally in rural areas the majority of women are illiterate and women workforce is involved in agriculture and men are working outside home, same is the case with Pulwama district which is the base of the present study. The present paper analyses the women participation in three crops in tehsil Pulwama viz rice, maize and apple. The activities performed by respondents in rice cultivation are presented in table 1.

Table 1: Activities performed in rice (paddy) cultivation

S. No	Activity	Number of responses						
		Male	(%)	Female	(%)	Jointly	(%)	Total (%)

01	Ploughing	0	0	0	0	0	0	0
02	Watering	24	24	21	21	55	55	100
03	Field preparing	18	18	18	18	64	64	100
04	Transplanting	17	17	83	83	0	0	100
05	Weeding	57	57	6	6	27	27	100
06	Harvesting	15	15	22	22	63	63	100
07	Bounding of rice	23	23	10	10	67	67	100
08	Threshing	6	6	15	15	79	79	100
09	Transporting	19	19	81	81	0	0	100
10	Storing of grains	51	51	59	59	0	0	100

Source: Filed survey

From the above it is clear that, ploughing an arduous task for men is done by tractors, meaning thereby that no responses in favour of any respondent. Watering of fields is other activity in rice cultivation and 24 percent respondents (men) say that they do lonely and 21 percent women respondents said that they do lonely and majority that is 55 percent respondents said that watering of fields is done jointly by men and women folk. Preparing of fields for planting seedlings is one more task and 64 percent respondents said that they do jointly this, while 18 percent men and 18 percent women respondents gave credit to themselves for preparing fields separately. Transplanting of seedling is done mainly by women as 83 percent responses comes in their favour, only 17 percent responses goes in favour of men (respondents). Weeding one of the difficult tasks in rice cultivation goes only in favour of male respondents as 57 percent respondents agree that weeding is done by men, 6 percent female respondents said that they do weeding themselves and 27 percent respondents gave joint responses, meaning thereby, women are not exempted even from weeding, a shabby and arduous task for women. After weeding comes harvesting of crop and women as 22 percent respondents do such an activity as well and only 15 percent male (men) respondents perform harvesting and 63 percent respondents, both men and women said that they harvest rice (Paddy) jointly. One more task in paddy cultivation is bounding of rice into sheaves and it is considered as male's task, but in sampled area, 10 percent women respondents perform this activity as well and only 23 percent men respondents do this by their own and 67 percent that is majority of respondents accept that they perform this jointly, as they explained that, small stone can't stand alone as well as big stone can't also remain alone in the construction, both act as support to each other. After this comes threshing of grains and 15 percent women respondents do this activity separately and 6 percent men respondents do threshing separately and 79 percent respondents perform threshing of rice jointly. After threshing, grains are transported to their suitable places (home) for storing. Women are considered as transporting agents as 81 percent women respondents, transport grains in bags on their heads and only 19 percent men respondents do help women respondents in transporting of grains. Lastly, grains are stored in grainry and this is also dominated by women respondents as 59 percent women respondents store grains as compared to men only 51 percent respondents do store grains.

From, the above analysis it is clear that all the activities i.e. from watering to storing of grains in rice cultivation, except weeding are dominated by women respondents either, separately or working shoulder to shoulder with men respondents.

6.2 Activities performed in maize production.

Maize is cultivated in hilly regions and is mostly rain fed. To know about women participation in maize cultivation, we take block Keller in consideration as this block is hilly and maize is cultivated in this block. Table 2 shows the participation rate of women in maize cultivation.

Table 2: Activities performed in maize production.

S. No	Activity	Number of responses						
		Male	(%)	Female	(%)	Jointly	(%)	Total (%)
01	Sowing of seeds	12	24	16	32	22	44	0
02	Digging under plants	9	18	40	80	1	2	100
03	Harvesting	5	10	45	90	0	0	100
04	Threshing	2	4	41	82	7	14	100
05	Storing	7	14	43	86	0	0	100

Source: Field survey

It is clear from table 2 there are numerous activities in maize cultivation as well and all these activities are dominated by women respondents. The table shows that 24 percent of male respondents sow alone seeds of maize as compared to this 32 percent women respondents do sow seeds of maize alone and 44 percent respondents sow jointly. Sowing of seeds is followed by digging under maize plant and 80 percent respondent's (women) perform this activity alone, 18 percent men do this themselves alone and a mere 2 percent respondents do this activity jointly. After digging under plants, maize is harvested and 90 percent women respondents perform harvesting alone and 10 percent men respondents favour themselves. Threshing, one more activity in maize cultivation is performed by women folk as 82 percent respondents favour this and 4 percent men respondents favour themselves and 14 percent respondents perform threshing jointly. Lastly, storing of grains take place and 86 percent storing is done by women respondents as compared to 14 percent by men respondents.

6.3 Activities performed in apple cultivation

Tehsil Pulwama is rich in apple varieties and many other fruits as well. Block Keller is having apple cultivation at its peak and this industry is the main source of livelihood in this region. Both men, women old or young and even children are associated with this industry.

The historical tracing of women's status has revealed that women had higher status in horticultural societies than in agricultural and industrial societies and in the present study we came to the conclusion that the above fact seems to hold true as is clear from the table 3

Table 3 Activities performed in apple cultivation

S. No	Activity	Number of responses						
		Male	(%)	Female	(%)	Jointly	(%)	Total (%)
01	Application of fertilizers and insecticides	11	22	3	6	36	72	100
02	Plucking of apples	0	0	0	0	50	100	100
03	Packaging of apples	8	16	6	12	36	72	100

Source: Field survey

Table 3 makes it clear that, in apple cultivation, both male and female respondents work jointly as this sector requires much time and more labour force. As is clear from the above table, 72 percent respondents apply fertilizers and insecticides to apple orchards jointly, 6 percent women respondents apply fertilizers and

insecticides by them because of one reason or the other, despite women are aware of the danger to their unborn children of exposure to chemicals and only 22 percent men respondents do these activities by their own alone. Similarly, plucking of apples is one of the hectic tasks in apple cultivation and 100 percent respondents agree that they do perform such an activity jointly. In this task women pluck the apples from lower sides and also transport them to a safe place for further processing and packaging. Before packaging apples are kept either in boxes in big stalls or a heap is made and then grading takes place. After grading of apples in separate lots, packaging is done and from the above table we came to know about 72 percent work is done jointly and only 16 percent men respondents said that they do packaging alone and in the same way 12 percent women respondents gave credit to them alone. In packaging women respondents had two tasks to perform, one is to bring food for packagers at the work place that is orchids and second they act as helpers meaning that (women) they carry packed apples cases (boxes) to safer places and make stalls.

6.4 Effect of work on health of respondents

After becoming aware about how much work load is on the women respondents in the sampled area, it becomes mandatory for us to know about the health standard and ill effects of work on both the respondents. There are many ailments associated with work, particularly women have been seen complaining that work load has deteriorated their health standards as they are being considered weak sex and they do not get time for maintaining their health. Table 4 highlights the ill effects of work on health standards of respondents.

Table 4: Effect of work on health of respondents

S. No	Health problem	Number of responses						
		Male	Percentage	Female	Percentage	Jointly/ Both	Percentage	Total (%)
01	Backache	31	31	60	60	9	9	100
02	Vision problem	6	6	3	3	91	91	100
03	Neck problem	4	4	19	19	77	77	100

Source: Field survey

From the analysis of the table 4 it is clear that 60 percent of women respondents complaint of backache, as the majority of work they perform is done as bowing/bending on their back, which is a very serious matter of concern, compared to this only 31 percent male respondents have backache related to their work and 9 percent respondents (both) do not have backache like problem related to their work. Similarly, 6 percent male respondents have vision problem because of continuously looking/focusing towards their work and only 3 percent women respondents complaint of visionary defects because of work and 91 percent respondents (both) do not have vision problem related to their work. In the same way 19 percent women respondents do agree that they got neck problem due to carrying load on their head and only 4 percent men respondents have neck problem related to their work and 77 percent respondents (both) do agree that they do not have neck problem at all.

From the above analysis it is quite evident, that agricultural work needs sufficient time and both men and women in particular work for whole day long and their health gets affected due to over load of work and extreme weather conditions do add to the miseries of workers.

6.5 Usage of spare time on women respondents

The dedication and hard work of women folk does not end here, they devote their spare time in contributing the economic wellbeing of the household. The respondents were asked how they spend their spare time, they gave their responses which are depicted in the table 5

Table 5: Usage of spare time on women respondents

S. No	Activity	Number of Responses	Total percentage
01	Handicraft	22	22
02	Knitting	43	43
03	Watching TV	32	32
04	Any other	3	3
	Total	100	100

Source: Field survey

The above table reveals that 43 percent women respondents spend their leisure time in knitting sweaters, gloves, mufflers etc. for their husbands, in-laws and children, 32 percent respondents spend their leisure time in watching TV and other recreational activities similarly, 22 percent women respondents spend this time in handicraft activities in order to support their family financially and only 3 percent respondents do any other activity during leisure time such as reading books, stories etc. In addition to all these activities women respondents have one more task to perform at household during leisure time is taking care of cattle and poultry, which takes on an average 1 – 2 hours to each respondent (women).

7. Conclusion

In our society the women are considered as the caretaker of all domestic affairs and she is overburdened with the work at farm land. Women are having a busy schedule of work from morning till late in the night. It has become evident from the earlier analysis that the women in rural areas suffer from the problems of various kinds arising out of her familial and rural situation. We found that Women do much of the work either alone or with their family members in all the three activities. Our analysis shows that in rice cultivation all the activities i.e. from watering to storing of grains except weeding are dominated by women respondents either, separately or working shoulder to shoulder with men respondents. Similarly in maize cultivation all the activities except sowing of seeds are done by women folk. The historical tracing of women's status has revealed that women had higher status in horticultural societies than in agricultural and industrial societies and same is the case in our study.

Bibliography

- Babita Agarwal (2008) *Indian Women a Giant Power*, Jaipur, ADB Publications, PP 66.
 E.S.C.A.P (1997) *Women in India; A Country Profile*, United Nations, New York.
 E.I.U (1997) India and Nepal: Country profile, *The economist Intelligence Unit* London.
 F.A.O. (1991) *Women's Role in Dynamic Forest – Based Small Scale Enterprises, case Studies on Uppage and Lacauerwar From India*, Food & Agricultural Organization of the United Nations, Bangkok.
 Maithili Vishwanathan (1994) *Women in Agriculture and Rural Development*, Jaipur, Rapa offset press.
 Walter Lawrence (1988) *the Valley of Kashmir*, Chinara Publishing House, New Delhi.
 S.N. Tripathy (1996) *Unorganized Women Labour In India*, Discovery Publishing House, New Delhi, PP 44

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