

# Women Participation in Agriculture: -A case study of Kathua district

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***Abstract:** Women play significant and crucial role in agricultural and allied fields. Both economic and non economic factors are responsible for women participation in agriculture. However it is most unfortunate that role of women in agriculture has not recognized. In order to probe into the matter that to what extent women participate in agriculture and allied activities therefore an attempt were made to analyze the work performed by women and the factors associated with their involvement in agriculture. A study was undertaken in Kathua district of J& K state. A total of 160 respondents were selected using purposive random sampling technique. The selected respondents were interview personally using pre tested well structured questionnaire. Thus, it can be concluded that in the study area, most of the women are found to be in the overall medium extent of participation. It has been observed that the relationship between the age and extent of participation is positive and statistically significant. As per the education level, higher the education level lowers the women participation in agriculture. The education level of women has not positively correlated with the extent of participation of women.*

**Keywords:** Participation, Agriculture, Essential inputs, Development organizations.

## INTRODUCTION

As committed by Women's Environment and Development Organizations (WEDO; 2001) women equality is not only a goal in its own right, but a requisite element for achieving all the Millennium Development Goals(MDG), be it poverty eradication protecting the environment or access health care. The United Nation women support the leadership and participation of rural women in shaping laws, policies and programmers on all issues that affect their lives, including improved food and nutrition security and better rural livelihoods. Women play a key role in food production and form a large proportion of the agricultural workforce globally. In developing economies, the majorities of the women are engaged in agriculture and allied activities. Nearly 80 per cent of the economically active women in sub-Saharan Africa and at least half in Asia except west Asia are in agriculture (ILO, 1995). Women farmers constitute more than a half of the world population. Women comprise 43 per cent of the agriculture workforce in developing countries ranging from 20 per cent in Latin America to 50 per cent in sub-Saharan Africa and eastern Asia. Women could boost yield by 20-30 per cent if they enjoyed the same access to productive resources. The gain in production could lessen the number of hungry people in the world by 12-17 per cent.

**Coordinated UN action:** Many of the world's most poor are women. Poverty elimination is a pivotal challenge for rural women. To help rural women, in 2012 UN women joined with the World Food Programme, Food and Agriculture Organization, the International Fund for Agriculture and Development to launch a joint programme to empower rural women through economic integration and food security initiatives. The initiative aims to empower rural women to claim their right to land, leadership, opportunities and choices and to participate in shaping laws, policies and programmes.

It is impossible to understand women's work in India or indeed anywhere across the world. As agriculture is a multidimensional venture and comprises of large number of activities each one of which is equally important and has a direct contribution to the productivity of the agriculture produce. Women are an integral part of every agricultural operation and many of the activities are exclusively undertaken by women. All the activities performed by women is essential for well being of the households, still, they are not defined as economically active employment in national accounts.

### **Role of agriculture in the context of Indian economy**

The Indian economy continues to be predominantly an agricultural economy in terms of employment of labour force and as a source of subsistence for the millions in the countryside. It is a disputed fact that the dream of 'inclusive growth' will remain a far cry if the growth plan fails to account for the significance of agriculture.

To quote Professor Gunnar Myrdal, "it is in the agriculture sector that the battle for long-term economic development of India will be won or lost".

Agriculture is the basic industry in India. The agriculture sector of India has occupied almost 4 per cent of India's geographical area and over 58 per cent of the rural households depend on agriculture as their principal means of livelihood. As per the NSSO, in 2011-2012, the share of agriculture in employment was 48.9 per cent. In 2015-2016, the agriculture contributed 17.4 per cent to India's GDP, as compared to 18.3 per cent in 2013-2014.. Women composed 38 per cent of the agricultural labour force in under developed countries. It is also estimated that 45.3 per cent of the agricultural labour force consists of women. But a large number of women have persisted as "invisible workers" (Ghosh & Ghosh, 2014).

### **Women participation in agriculture**

Women Population Engaged in Agriculture. In order to awaken the people, it is the women who have to be awakened. Once she is on move, the family moves, the village moves, the nation moves (Pandit Jawaharlal Nehru). Female in the agriculture sector represents whether through traditional means or industrial, for subsistence or as an agriculture labourers represent a momentous demographic group. Work is an economic activity that brings remuneration, income, payment, salary, wages and honorarium. In developing countries like India agricultural sector continue to absorb the female workforce but fail to give them recognition as employed labour. The women's work in agriculture is just considered as the responsibility of women and not any economic contribution to agriculture production but the role of women's work in agriculture is the result of the definition of work in economics. The studies on women in agriculture conducted in India and other developing and under-developed countries all point to the fact that women contribute far more to agricultural production than has generally been acknowledged.

**Table 1.1 Share of Women in Agricultural activities**

Women's Involvement	%age
Land preparation	32
Seed cleaning and sowing	80
Inter cultivation activities	86
Harvesting, winnowing, drying, cleaning and storage	84

Source: National Commission for Women (NCW), New Delhi Report (2005)

## Review of Literature

Reddy and Rani (1982) observed that rural women are important as productive workers. Women have played a fundamental role in the protection of basic life support systems. Therefore, despite the participation of women, it is not possible to popularize the alternative sources of land management to shifting cultivation and increase the care of the soil and the health of economic plants and farm animals. Ray and Phokan (1999) women played a significant role in the daily household and agriculture activities without demanding any credit and only 31 per cent are found to be engaged in market activities. Prasad and Singh (1992) the women play a significant role in agriculture and allied activities, it is in fact long taken for granted but ignored. The nature and extent of women involved in agriculture vary greatly from region to region. In some of the farm activities like processing and storage, women predominate so strongly than men workers are numerically significant. Waris (2009) highlighted that the proportion of women as agricultural labour was more than the male labour. With the advancement of technology in agriculture, capacity building of women workforce is important for achieving sustainable agricultural growth and improving livelihood security of the people. Oladejo and Olawuyi (2011) found that the central factor which determine the participation level or perceptions on agriculture production are socioeconomic characteristics like capital, cash, saving as well as assets, therefore the study concludes that there is a high level of involvement of women in agriculture production and other variables such as household size, taboo, marital status were shown to have a significant effect on women participation perception. Chowdhury and Rashid, Sultana (2009) observed that there is a greater extent of women participation in farm and non-farm activities as well as in various household decision-making events. Economic pressure was forcing them to break away their traditional roles of housewives into the farm and non-farm labourers and contribution of female labour in different activities were substantial. Hameed (2012) observed that a woman of the study area shows active participation in agricultural activities and they spent more time on post-harvest activities than those pre-harvest activities.

## Objectives of the Study

1. To study the socio-economic profile of rural women's in the study area
2. To determine and describe the nature and extent of women's participation in agriculture in the study area.

## Hypotheses

- 1) There is no association between the age and extent of women's participation in agricultural activities.
- 2) There is no association between the education and extent of women's participation in agricultural activities.
- 3) There is no association between the main income source of household and extent of women's participation in agricultural activities.

## Collection of data

The data for the study has been collected from both primary and secondary sources. The data from the primary sources was collected directly through field survey with the help of the pre-tested questionnaire in the eight villages from the four blocks of Kathua district. Questionnaires were prepared for collecting data from different sources. For the secondary data articles, census, reports, journals and internet on the subject being consulted.

## Sample size

The study has been conducted in Kathua district. From Kathua district, four blocks are selected i.e. Hiranagar, Marheen, Barnoti, and Billawar because it had greater involvement of women in agriculture at present. From the four blocks, two villages from each block were selected purposively. In the next stage from each village i.e., eight villages- Kilyal, Siyalna, Forlain, Jakhole, Dinga Amb, Satoora, Pansar, and Khanwal twenty respondents were selected using purposive and random sampling. So the total number of respondents covered under the study will be 160.

## Socio-economic profile of the respondent in the study area:

Human being possesses various interrelated and constituent characteristics which determine her unique adjustment to her environment. It is therefore supposed that their socio-economic characteristics would influence the participation of women in various agriculture activities. Out of the 160 households in the study area, the majority of 83.12 per cent of the families are belonging to a nuclear family and rest 16.87 per cent are Joint family. As far as religion is concerned, most of the households in the study area have belonging to Hindu religion where most of them i.e. 68.1 per cent belong to SC category followed by General (19.4 per cent) and OBC (12.5 per cent). As far as the ration card is concerned, the majority of the households have above poverty line i.e. 61.2 per cent of the households have APL ration cards and 38.8 per cent of the households have below poverty line as depicts by their ration cards.



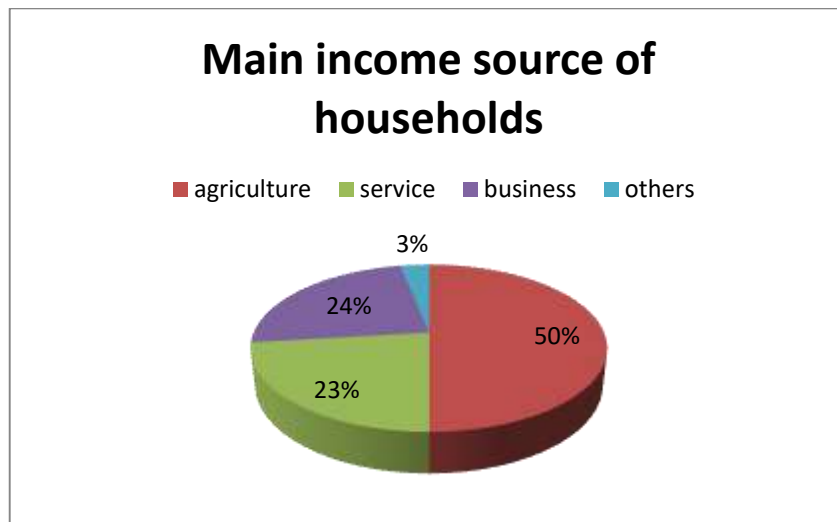
**Fig: 1.1 Main income source of household**

Figure 1.1 depicts the respondent main income source of the household. The 50 per cent respondent have main income source of household is agriculture followed by 24 per cent business, 23 per cent service and rest 3 per cent have another income source of the household.

**Table 1.2 Distribution of Sample Respondent in Different Agricultural activities**

Activities	Frequency	%age	Mean	Rank
Traditional care of the field	150	93.75	0.937	III
Irrigation	29	18.12	0.1812	IX
Ploughing	3	1.87	0.08	XI
Manuring of field	34	21.25	0.6125	VII
Sowing of seeds	75	46.87	0.60625	VIII
Weeding	138	86.25	0.8625	V
Harvesting	137	85.62	0.90625	IV
Threshing	104	65	0.65625	VI
Winnowing	160	100	1	I
Storage of green fodder	156	97.5	0.975	II
Marketing	5	3.12	0.1	X

Source: field survey

The above table depicts that the majority of the women participate in all the agricultural activities but their extent of participation varies among all the agricultural activities performed at the farm level. As the table reveals the farm activities in which women's participation is at a high level includes winnowing (mean score 1) followed by Storage of green fodder (mean score 0.975), traditional care of field and crop (mean score 0.93), harvesting (mean score 0.90 each), weeding (mean score 0.86), respectively. The activities in which the women's participation is at a low level are ploughing (mean score of 0.08), and marketing (mean score of 0.1). Thus, it may be concluded that the highest participation has been recorded in winnowing. The minimum participation of women has been recorded in ploughing.

### Overall participation of women in agricultural activities:

Women participation in agricultural operations is as old as farming itself. In rural areas, women's participation rate in few agricultural activities is found to be very high. Women mostly engaged themselves in all agriculture activities and easy working for them like weeding, harvesting, winnowing, storage etc. But they are performing all activities to some extent. The scale consists of 11 agriculture activities. The responses of respondents were obtained in 3 points continuum namely low, medium and high. The scoring was assigned in the order of 1, 2, and 3. The study of Bilkisu Aboda Musa (2005) also found that medium and higher participation of farm women in agricultural activities. In detail, the overall extent of participation of women in different agriculture activities is presented in the table.

**Table 1.3 shows the overall participation of sample respondent**

		No.	%age
<b>Extent of participation</b>	<b>Medium</b>	94	58.8
	<b>High</b>	66	41.2
	<b>Total</b>	160	100.0

Source: field survey

The women extent of participation in the agriculture sector can be analyzed with the help of the data presented in table 1.3 The data presented in the table shows that a higher percentage of women mainly 58.8 per cent found in overall medium participation group followed by high participation 41.2 per cent respectively. Thus, it can be concluded that in the study area, most of the women have found to overall medium extent of participation.

### Association between the profiles of farm women's with the extent of participation:

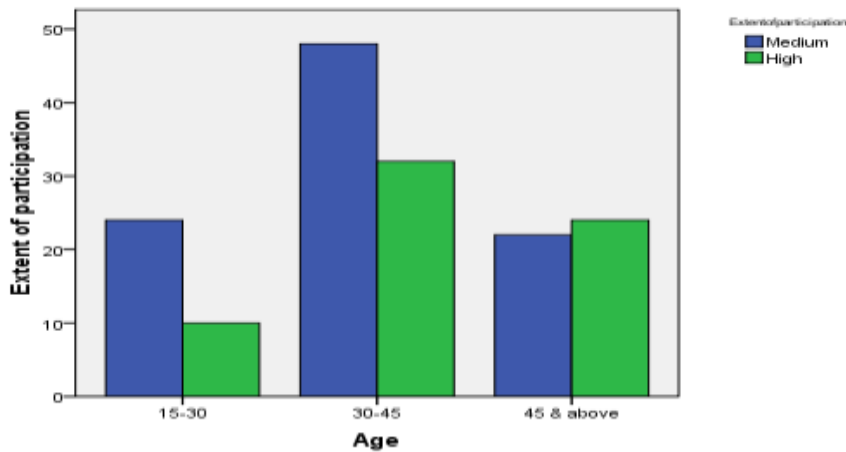
Women's multiple roles being undertaken in the process of empowering, it is felt the need to study women's participation in various agriculture activities. The findings of the investigation will provide an overall picture of the participation of farm women in agricultural activities. To see the association between the variables i.e. socio-economic profile and extent of participation crosstabs is used.

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.783 <sup>a</sup>	2	.034

Source: field survey

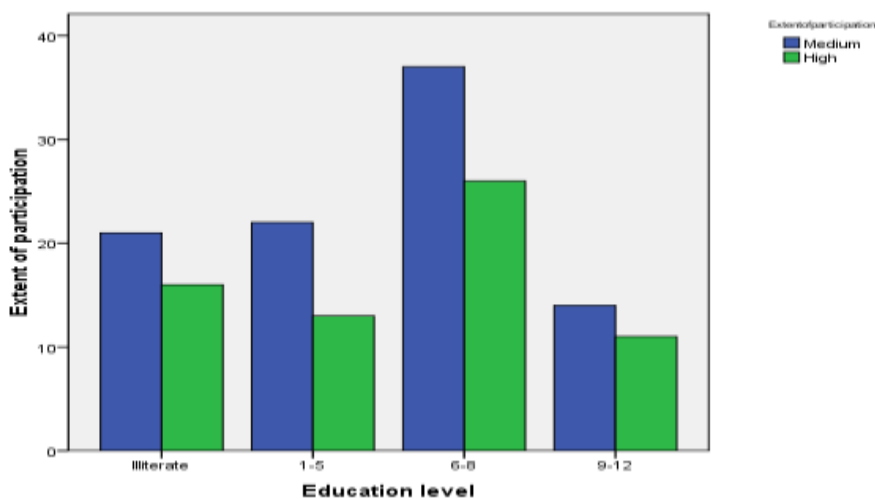
The corresponding p-value of the test statistic is 0.034; and concludes that there is a statistically significant association between the variables i.e. the age and the extent of women participation in agriculture activities. It has been concluded that the participation of women is positively correlated with the age of women. It seems that young women are less likely to participate in agriculture as well as they want to employ in other sectors. Same results were found in the study of Damisa (2007)

**Fig 1.2: Association between Age and Extent of Participation****Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.382 <sup>a</sup>	3	.944

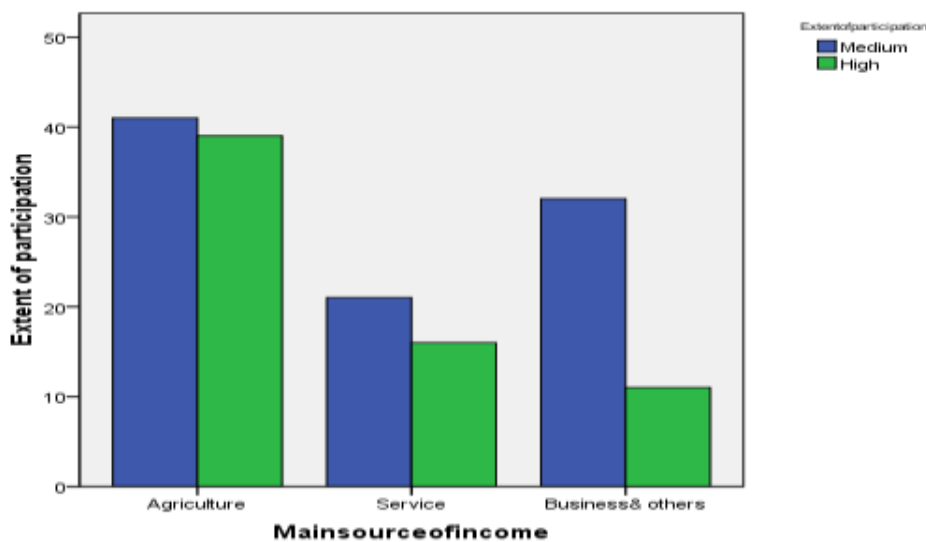
Source: field survey

The corresponding p-value of the test statistic is 0.94 and concludes that there is no statistically significant association between the variables i.e. the education level and the extent of women participation in agricultural activities.

**Fig 1.3: Association between Educational level and extent of Participation****Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.274 <sup>a</sup>	2	.043

Source: field survey

**Fig 1.4: Association between the Main source of Income and Extent of Participation**

The corresponding p-value of the test statistic is 0.043; and concludes that there is a statistically significant association between the variables i.e. the main income source of household and the extent of women participation in agriculture activities.

### Conclusion

The researcher drew the following conclusions from the finding of the study. All the respondents own agriculture land but main income source of household is not agriculture. There are some other sources of income such as service, business, etc. women participated in all the agricultural activities but their extent of participation found to vary among all the agricultural activities performed at the farm level. Thus, it can be concluded that in the study area, most of the women are found to be in the overall medium extent of participation. It has been observed that the relationship between the age and extent of participation is positive and statistically significant. As per the education level, higher the education level lowers the women participation in agriculture. The education level of women has not positively correlated with the extent of participation of women. Only 50 per cent respondent whose main income source of household has agriculture shows more participation in agriculture activities and the respondents whose main income source of household has service or business shows less participation in agricultural activities and therefore concludes that there is no statistically significant association between the variables i.e. the main income source of household and the extent of women participation in agriculture activities. It can be concluded that women play a significant role in agriculture activities.

### Suggestions

The involvement of women should be increased at every level of planning and decision making to exploit the potential of the whole population. More awareness programme should be conducted on a large scale.

- All the operations performed by rural women is essential for the well being of the households so the contribution of women should also be recognized
- If easy access to input, extension services, farming technology are put in place, it will thus a long way in improving upon the women participation in agriculture.



- As study has shown women's status is low in all economic and political indicators. This will require a change in their patriarchal values and concerted efforts by the civil society and the government for empowerment of women.

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