Exploring Gender Involvement in Agriculture Decision-making: A Case Study of Meerut District in Uttar Pradesh

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ABSTRACT Women play a significant and crucial role in agriculture but it is unfortunate that they continue being invisible workers. Women work in agriculture and allied activities but cannot exercise any control over the activities as well as the utilization of resources. Their involvement as decision-makers regarding these activities is questionable. The decision-making ability is a true indicator of empowerment. The present descriptive study was conducted to determine the contribution of farm women in decision-making in agriculture in selected villages of Meerut district. A total of 60 farm women were selected as respondents through multistage random sampling technique. Relevant data were collected with the help of personal interview technique and analysed. Involvement of farm women in decision-making process in agriculture was found very low. Low educational status less confidence, socio-cultural issues and less opportunities and dominance of men were some of the constraints these women face.

INTRODUCTION

In India, about 833 million people constituting 68.84 per cent of the population live in rural areas, of which 405.17 million, that is, 48.6 per cent are women (Dash and Srinath 2013). Aggregate data shows that women comprise about forty three per cent of the agricultural labour force globally and in developing countries (FAO 2011). Moreover, according to the data of World Bank (2013), global female labour force participation is around fifty per cent. Women are key players in the agricultural sector of most developing countries of the world and India is no exception. They play key role by working with full passion in production of crops right from the soil preparation till post-harvest activities (Ahmed and Hussain 2004). Their activities typically include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, caring for family members and maintaining their homes (SOFA Team and Cheryl Doss 2011; Pal 2013). Women's participation in the decision-making

Address for correspondence: Dr. Kushagra Joshi Scientist ICAR-Central Institute for Women in Agriculture Plot No. 50-51, Opposite Kalinga Studio P.O. Baramunda, Mauja Zokalandi Bhubaneswar 751 003 Odisha, India Mobile: +91-8763424424 E-mail: kushagra.me@gmail.com process has a significant impact on their improved status and greater role in society. Their participation is potentially important to bring equality between women and men in order to achieve sustainable development. However, despite this major role, men have reportedly continued to dominate farm decision-making, even in areas where women are the largest providers of farm labour. This is as a result of traditional gender-based subordination and disparity between men and women in the size of landholding and other agricultural resources in farm production. However, the productivity of women depends on the rate of their involvement in farm decision-making (Rahman et al. 2005). This could be counter-productive, because there is bound to be conflict when women, as key players, carry out farm tasks without being part of the decision process, especially when the decisions fail to recognize their other peculiar household responsibilities. Decisions have to be made when persons having limited resources have alternative courses of action and therefore must make some choices (Oji 2002). Farmers make decisions on a number of pre-harvest and postharvest activities such as what to produce, input use, harvest and post-harvest issues, which according to William (2003) affect production, processing, distribution, prices and costs. In view of the pitfalls of the past, gender issues are becoming increasingly indispensable in Indian agriculture owing to overwhelming evidence of significant contribution of women to agriculture,

household maintenance, stability and food security amidst formidable economic adversity.

However, the foremost concern is that many of these activities are not effectively recognized and acknowledged appropriately in spite of the fact that they are most important and essential to the household food security and welfare (Lal and Khurana 2011). Since women's contribution to economic development is vital, there is a need of proportionate increase in her involvement in decision-making process, because the success and progress of any production depends upon the plans made and decisions taken. Without active participation of women and incorporation of women perspectives at all levels of decisionmaking, the goals of equality development and peace cannot be achieved (Karl 1995). From this point of view it may be suggested that women should be encouraged to take decisions and make plans jointly with the man members not only to achieve the peace of the family but also to improve to the socio-economic status of the family (Pandey 2011). Against this backdrop, this study is aimed at identifying a wide range of factors hindering women involvement in household farming decisions. Specifically, the objectives of the study were to examine gender-based rate of involvement in the household farming decisions, and to identify constraints to women's contribution to household farming decisions.

METHODOLOGY

Sample Selection

Meerut district was selected purposively for the study. Three villages of Meerut district namely, Andawali, Kishoripur and Alipur were randomly selected and from each village, twenty farm women were further selected randomly. Hence, a total of 60 farmwomen were selected and interviewed (Fig. 1).

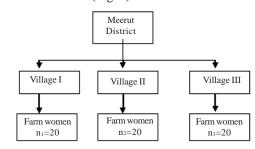


Fig. 1. Sampling design

Area of the Study

Meerut district lies between 28°57' to 29°02' North latitude and 77°40' to 77°45' East longitude in the Upper Gangetic Plain Region. The Uttar Pradesh state has highest cropping intensity and most of the agricultural land is irrigated. It is a larger Gangetic plain area of Indus and Ganga river. The soils in the region are alluviumderived soils and high in organic matter content. According to agro climatic zone, Meerut district is part of north-western plains, about seventy per cent land is under agriculture and another five per cent land is under forest cover. Tube wells are the predominant source of irrigation. It is one of the most populous and economically advanced and agriculturally very prosperous districts. Wheat is the most important crop followed by sugarcane and fodder. The cropping pattern in the district is highly dynamic and market-oriented. Mixed farming has been encouraged due to widespread irrigation facilities and a strong demand for fodder. In addition to this, the district has become one of the important milk producing areas and is at present meeting a substantial part of Delhi's demand for milk. Cattle, buffaloes, sheep and goats are the main livestock of the district in addition to poultry. Economic significance of these animals is of paramount importance as they are main source of milk production and dairy industry. Rearing of these animals is found everywhere in the district as it is an important source of livelihood and income supplement to many households in villages. Crop production, Animal Husbandry and Horticulture are among the major enterprises of the farming system prevailing in the district.

Data Collection and Analysis

Focused group discussions and personal interviews were conducted to illicit information regarding the participation of women in household and farm related decisions. Data pertaining to constraints faced by women in taking art in decision-making were also collected. Frequencies and percentages were calculated for role in decision-making. A list of constraints was presented to the women and the responses were collected using three point continuum likert scale such as "to a greater extent, to a lesser extent and not at all" by assigning scores 3, 2 and 1, respectively. On the basis of weighted scores, ranks were assigned to the constraints.

RESULTS AND DISCUSSION

Socio-personal Profile of Respondents

Majority of the respondents (46%) fell in 35-40 years age group followed by respondents (17%) above 50 years. A few respondents (25%) were less than 35 years. Most of the respondents (40%) were illiterate followed by twenty per cent educated up to elementary and twenty per cent respondents educated up to primary level. A few were qualified up to high school (10%), intermediate (7%) and graduation (2%) level.

Majority of respondents (33%) were having experience of up to ten year, followed by women having experience of thirty to forty year (27%). Some (22%) had experience of ten to twenty years and a few (7%) were having an experience of above forty years. Majority of the respondents (57%) were from nuclear families while the rest (43%) were from joint families. Among the total respondents, majority (97%) belonged to maleheaded households while only three per cent households were female-headed. These households were female headed because of the absence of any male figure in the family. According to landholding size, sixty four per cent were small farmers followed by marginal (26%) and large farmers (10%).

Decision-making Pattern in Reproductive and Productive Activities

Table 1 depicts the percentage involvement of gender in decision-making in reproductive roles, that is, household activities. Women were asked "Who takes decision in your families for agriculture and home related activities?" Majority of the decisions (44%) were taken jointly by men and women followed by decisions taken by men (29%). Only twenty seven per cent women reported that they take household decisions by themselves.

Table 1: Overall gendered participation in decision making in household (reproductive) and agricultural (productive) activities

Gender	Reproductive activities (%)	Productive activities (%)
Men	29	68
Women	27	6
Joint	44	23
None	nil	3

When gender participation in decision-making in productive activities was explored, it was observed that majority (68%) of the decisions were taken by men alone followed by joint decision-making by men and women (23%). Only six per cent women took decisions alone.

Gender in Decision-making in Agricultural Activities

Among the agricultural activities, men dominated in taking decisions alone in most of the activities namely land preparation, crop selection, fertilizer choice and application, irrigation schedule, pesticide choice and application, labour size and wage, tube well installation, marketing, and credit (Table 2). In a few activities

 Table 2: Involvement of farm women in decision making in agricultural activities

S. No	p. Activities	Men	Women	Jointly	None
1	Land preparation	44 (73)	1 (2)	15 (25)	-
2	Crop selection	31 (52)	1 (2)	28 (46)	-
3	Fertilizer choice and application	57 (95)	1 (2)	2 (3)	-
4	Irrigation schedule	55 (92)	1 (2)	4 (7)	-
5	Pesticide choice and application	59 (98)	1 (2)	0 (0)	-
6	Labour size and wage	41 (68)	2(3)	17 (28)	-
7	Tube well installation	58 (97)	1 (2)	1 (2)	-
8	Marketing	59 (98)	1 (2)	0 (0)	-
9	Storage	14 (23)	4 (7)	42 (70)	-
10	Cattle buying	22 (37)	9 (15)	29 (43)	-
11	Cattle selling	25 (42)	9 (15)	26 (43)	-
12	Herd size	15 (25)	14 (23)	31 (52)	-
13	Credit	58 (96)	1 (2)	1 (2)	-
14	Land on lease	32 (53)	1 (2)	1 (2)	26 (43)

*Figures in parenthesis indicate percentage

namely, storage, cattle buying, cattle selling and deciding herd size, decisions were taken jointly by men and women. Decision regarding sale of land and credit was being taken by men alone in many cases.

Pattern of Decision-making in Household Activities

The pattern of decision-making in different household activities was examined and results are presented in the Table 3.

Women dominance was observed in only two activities namely selection of food and clothing for family members. Males dominated in taking decisions for financial marketing. In rest of the activities, decision-making was carried out jointly by male and female.

Constraints Faced by Women in Decision-making

In the present study, the factors for this low involvement of women in decision-making were examined further. Women farmers were asked for the possible constraints they experience that hinder their power of taking important decisions at household as well as in farm activities.

A perusal of Table 4 shows women ranked socio-cultural barriers as the main cause for their less involvement in decision-making. Being patriarchal society, gender blindness was found more prevalent in this society which may suppress voice of women. The decisions are generally taken by men, the head of the household, and women generally do not retaliate back to these decisions. Women alone are not going to make decision, as they have no autonomy in economic empowerment and there are many political, cultural, economic and social barriers, which create profound handicaps in decreasing their decision-making power (Pearl 2003), resulting in a supportive or subordinate status instead of decision maker.

Second rank was assigned to the lack of knowledge of improved or scientific practices which lags behind women from their male counterparts in taking important decisions. The women ranked the lack of access to information as third barrier in their active participation in deci-

Table 3: Involvement of farm women in decision making in household activities

S.N	o. Activities	Men	Women	Jointly
1	Food	0 (0)	51 (85)	9 (15)
2	Clothing	2 (3)	30 (50)	28 (47)
3	Children's education	10 (17)	10 (17)	40 (66)
4	Health	23 (38)	9 (15)	28 (47)
5	Children's marriage	13 (22)	3 (5)	44 (73)
6	Financial (saving and investment)	39 (65)	5 (8)	16 (27)
7	Marketing (shopping errands)	50 (84)	2 (3)	8 (13)
8	Familial/ relatives related	4 (7)	18 (30)	38 (63)

*Figures in parenthesis indicate percentage

Table 4: Percentage distribution and rank order of constraints reported by farm women in their involvement in decision making (N=60)

S.No.	Constraints	To a greater extent	To a lesser extent	Not at all	Maximum score	Obtained score	Rank
1	Lower educational status	12 (7)	16 (27)	48 (80)	3	1.27	IX
2	Poor access to information	84 (47)	36 (60)	14 (23)	3	2.23	III
3	Less training opportunities	84 (47)	32 (53)	16 (27)	3	2.20	IV
4	Lack of knowledge about practices	96 (53)	44 (73)	6 (10)	3	2.43	II
5	Socio-cultural barriers	108 (60)	36 (60)	6 (10)	3	2.50	Ι
6	Low self-esteem	24 (13)	44 (73)	30 (50)	3	1.63	VII
7	Less recognition to work	60 (33)	40 (67)	20 (33)	3	2.00	V
8	Less support from family	54 (30)	44 (73)	20 (33)	3	1.97	VI
9	Disinterest and lack of motivation	48 (27)	4 (7)	42 (70)	3	1.57	VIII

*Figures in parenthesis indicate percentage

sion making process. Lack of training opportunities for women was ranked as fifth barrier. It was reported that since last year, no training was organized in the village for women. Women are not treated as farmers and active participants in economic activity. The lack of technical trainings, knowledge, and skills, reported by almost all respondents, which might be related to the literacy situation of households, as most of the respondents were illiterate or less educated. They may often unable to attend or continue formal training courses, social, and economic services provided by supporting organizations as indicated by Aazami et al. (2011). Results showed that the level of rural women's participation in the decision making is limited or under recognized due to the stated socially and culturally formed structures (Lubbock 1998).

Women ranked less recognition to work as sixth barrier. They told that their contribution in home as well as on farm is not recognized and appreciated by their own families. They are just perceived as helpers in the fields. Chayal et al. (2013) in their study in Rajasthan also found that low self-confidence of women in making farm decisions (75.83%), lack of knowledge about farming (58.33%), belief that women are subordinate to male counterparts (57.50%), illiteracy (52.50%), poor access of farm women to farm information (48.33%), as the major constraints which obstructed the women to involve in farm related decision.

Leadership among Farm Women

The respondents were asked for their involvement in women's groups and participation in any training programme in last 5 years. Among the respondents, none of the women reported for attending any training in last five years. None of them were a member of any self-help group (SHG) or farmer group. They reported that only male members in their families attend the training programmes, if any, organized in their village. The women reported of being shy in attending meetings along with men as well as shortage of time for the trainings. They did find the trainings as need based too.

Focused group discussions were held with women and a SWOT analysis was carried out pertaining to decision making and women's value in agriculture and allied activities. It was found that women opined their diligence, willingness to work, willingness to work for income generation as their strength; their low education level, no community participation, less mobility and more household work as weakness. The opportunity for them was the support they could receive from Government and local NGOs and the threat perceived was the cultural restrictions (*parda pratha*) and male dominance in the society.

DISCUSSION

In productive activities, males dominated in decision making in comparison to their female counterparts whereas in reproductive activities, women had a more dominant role in decision making. It is interesting to note that in spite of greater participation of women in the household activities, the decision making is done jointly by male and female jointly in majority of the cases. Households with decision-making by men only closely followed. Wichterich (2000) also reported in his study that in most of the households, still males take most of the decisions either alone or jointly with women. Although women work in the fields, the homes, outside of the farm their male counterparts often dictate decisions over the household and its economy (Anonymous 2004).

Only a few women enjoy their power of taking decisions alone. Similar findings were reported by Shanthy (2010) that women are not considered at forefront when it comes to decision making. Husbands found to be always taking the leading role. This could be a constraint to women farmers, taking into account that women play a big role in food production, but they cannot make decisions on different production activities. The findings of this study are in line with Aarnink and Kingma (1991) that women's range of household decision-making is drastically affected by customs and patriarchal power.

The situation of women in decision-making in agricultural and allied activities was not that favourable when compared with their male counterparts. None of the women farmer were found to be taking decision alone for any of the agricultural activity. These results were in line with Chayal et al. (2013) who also found farm women's involvement in decision making in agriculture field quite minimal. Results indicated that marketing of farm inputs and farm produce, manure and fertilizer application were the activities wherein involvement of farm women was very poor. Similar results were also presented by Sharma et al. (2013).

It can be concluded that the most of the farm decisions were made by husband of farm women followed by few decisions made jointly after discussion with any of their family members. It can be further concluded that farmwomen had a recessive role in decision-making process regarding farm management. The findings are in conformity with the study by Roy (2009) in which male emerged as dominant decision makers in the areas of selection of copping pattern and cultivars followed by capital allocation to different crops.

It was noteworthy here that in matters related to finance, decisions were in the hands of men. In patrilineal societies, where women are accustomed to subordination, they play very little role in decision-making. Many crucial decisions, which affect women, are made by men with little or no input from women. Male farmers or member of the farming household have a bigger say in household as well as farming decision and financial transactions. However, women's relative share in decision making is higher in low value added but arduous activities (Mehar and Prasad 2015).

Moreover women were not involved in any group or SHG also, which depicts that women were lacking voice in their household as well as community. Non membership of farmwomen in SHGs or other bodies could be a hindering factor in their involvement in decision making. As it is evident that women who are actively involved in formal groups and organisations are more empowered than the ones who are not involved in groups or other local bodies. Kondal (2014) reported in his study that fifty two per cent of respondents increased decision making in agriculture sector and fifty seven per cent of respondents increased their decision making in other activities in their family after becoming a part of Self Help Groups.

Thus to enable and empower women to participate in development process, policies and programs, it is necessary to develop an institutional mechanism that could help women to involve in capacity building process to make them in involving all small ruminant production activities.

CONCLUSION

The survival and sustenance of agriculture and rural development in India, as well as in many developing countries, rest squarely on the rural women. They therefore deserve to be given due recognition as far as decision making process in agriculture is concerned. From the present study, it can be concluded that men dominated majority of the farm decisions in rural families in the selected villages of Meerut district. Decisions related to buying and selling of land, machines and other agricultural implements, improvements of harvest and livestock management were mainly taken by head of the family or husbands. Most of the farm decisions were made by husband of farmwomen followed by few decisions made jointly. Women did not have the final say in all the productive decisions. In household decisions, women enjoyed the decision-making in choice of food and clothing, but they reported least involvement in financial decisions. Wherever money was involved, the decisions were taken dominantly by men. None of the women farmer found to be taking decision alone for any of the agricultural activity. Majority of women reported socio-cultural restrictions as the most significant barrier followed by lack of technical skills, less access to information and lack of training opportunities in comparison to their male counterparts. The lack of participation of women in any formal or informal group was missing depicting lack of leadership skills among the farmwomen.

RECOMMENDATIONS

Some of the recommendations that may be given for enhancing women's participation in decision making in productive as well as reproductive activities are as follows.

Bringing Psycho-social Change by Sensitization and Creating Awareness

Men shall be sensitized to accept the change and support women as equals not subordinates. Awareness needs to be created among rural people highlighting positive images of girls and women to change their traditional mindset like son preference and inheritance of property.

Support Systems for Women

Being kin-keepers and caregivers, women often complain of lack of time for their non-participation in productive roles. Measures facilitating household work and care of the children

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should be introduced to increase the chance for women to participate in economic and training activities.

Advocacy to Ensure That Women's Voices Are Heard and Represented

Meaningful representation in groups or local bodies is an important step towards helping women gain access to decision-making. Women's organizations can be effective in promoting local participation, building a consensus and raising consciousness at all levels, especially as women are generally not well represented in decision-making bodies. Women must be an integral part of the implementation of land and agricultural programmes. Training community members as paralegals and conflict mediators can help build community skills and increase the probability that women's concerns will be addressed.

Programs for Capacity Building, Intrapersonal and Interpersonal Skills Development

Programmes shall run for building self-confidence and self-esteem, knowledge and skills (technical, leadership, managerial) of women and girls, through gender-sensitive extension and business advisory services and capacity building initiatives.

Creating Awareness about Women's Rights among Women and Other Community Members

There is a need for effective empowerment of women among the membership and leadership positions in producer organizations, cooperatives and commodity interest groups, to ensure that rural women have a stronger voice and decision-making power.

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