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Participation of Farm Women in Land Use Decision Making Process - A Case Study in Panubali Watershed of Nagpur District, Maharashtra

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ABSTRACT

Women plays a significant and crucial role in land use decision making process for agricultural development. Land use in agriculture and allied fields including crop production, livestock production, horticulture, post harvest operations, agro-social forestry and fisheries requires high managerial skill for rainsing farm income. The fact is that women's managerial contribution in these sectors have either largely ignored or inadequately acknowledged. This posses a handicap in their becoming of equal partners in land management activities. Very few scientific and empirical attempts have been made to examine the actual participation of farm women in land use decision making process.

In Indian society, both husband and wife participate in different household activities. Their role are generally complementary, not only in physical participation in farm, but also in the decision making process concerning major land use activities. In some of these activities, women take sole or joint decisions. Joint decisions were made in purchase and sale of land and management of animals where independent decisions were made in storage and marketing of produce (Seema and Prasad, 1991). Women played a major role in land management decision making process (Lotha and Brindha, 1994). Women were found to take 73 per cent decision concerning household consumption, 55.74 per cent production decision and 38.74 per cent in investment decision making in land management (Alagumani, 1990). Tripathi (1999) also observed that women of the household made 20 per cent land use decisions. In male headed household, 15 to 34 per cent of the females played major roles in land management decision making where their decisions were accepted in regard to farm production activities (Saikia, 1999). Participation of women in land use decision making depends on the nature of agriculture being followed. The scope of decision making in land management is usually more in modern agriculture compared to traditional one. Under these condition of existing farming system, the area of decision making does not confine to activities related to crop cultivation alone. In animal activities, beside other allied homestead activities, also women play important role in decision making. There is no comprehensive study about the role of women in land use decision making process in Maharashtra though participation of women in land use activities is one of the highest in the country. Therefore, an attempt is made in this paper to study the role of women in land use decision making process in the context of farming system perspectives in the Panubali watershed of Nagpur district of Maharashtra where various government agencies have taken up agricultural development programmes.

METHODOLOGY

The study area was taken up in Punabali watershed of Nagpur district as it was considered important to know the role of women in land use decision making process because of continuance of various kind of agricultural development programmes of different rural development agencies. For the purpose of study, multistage random sampling technique was used to select 144 farms belong to 4 distinct size groups viz. marginal (<1 ha) small (1-2 ha), medium (2-4 ha) and large (>4 ha) farms. For collection of data, a specially designed and questionnaires were used and cross section data were collected from the female respondents of the sample households.

The participation of farm women in decision making was worked out based on the member of women who have taken part in particular aspect of decision under the major heads of organizational, production and marketing decisions. Women took some decision in the farm solely

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or independently while some other decisions were taken jointly with their male counterparts. In the case of those respondents who did not take part in decision making, their male counter parts were the major decision makers.

RESULTS AND DISCUSSION

Women carry out most of the operations in agricultural production. Besides contributing physical labour in various land management operations, women also take part in decision making process concerning such activities. Some decisions were taken jointly with their husbands whereas some were taken independently by women. Land use decisions can be categorized under 3 main head, viz. organizational decision, production decision and marketing decision.

In Nagpur district of Maharashtra, by and large, agriculture is manually operated. Cotton and soybean are the main crop. Besides vegetable oranges, oilseeds and pulses etc. are also grown. Farmers also rear livestock and animals besides allied activities. Women partcipate in different activities and operations such as seedling, transplanting, weeding, thinning, harvesting, processing, selling farm products, winnowing, storage etc. Several of these operations are exclusively carried out by women. In the case of decision making also husbands generally consult their wives in deciding different activities. Women also actively involve in decision making on diverse production activities either solely or jointly with their husbands. Participation of women is quite prominent in the primary sector, mainly in crop production and livestock rearing activities.

Organisational Decision in Land Use

Organisation decision include decision like purchasing and sale of land, leasing and leasing out of land, livestock purchase, arrangement and payment of labour, amount to be spent on land use, borrowing of money on farm operations and adoption and procurement of farm implements.

It is seen from the study (Table 1) that livestock purchase and arrangement and payment of labour were the major organizational decision where women participation in independent decision making was recorded to the extent of 29.16 and 24.31 per cent while the participation of women in decision making was the least (9.03 per cent) in leasing and leasing out of land. Women might have less knowledge on the procedures of leasing and leasing out of land, which might have discouraged them in decision making in this regard. In other organizational aspect, viz. purchasing and sale of land, amount to be spent on land use, borrowing money for farm operation and adoption and procurement of improved implements were of the order of 11.81, 11.11, 12.50 and 15.27 per cent respectively. Highest (29.86 per cent) percentage of joint decision was recorded in the case of purchase and sale of land and least (18.75 per cent0 regarding amount to be spect on land use/improvement.

Inter-group analysis of organizational decision revealed that as high as 37.50 and 32 per cent decision on livestock purchase and arrangement and payment of labour were taken by women independently in small and marginal size group of farms. One the other hand, women from all size groups except medium size group of farms took less participation in purchase and sale of land. Only 25 per cent of women had taken decision solely on arrangement and payment of labour in large farms. Joint decision was found to be the highest 50 per cent in decision purchase of livestock in medium size group of farms; whereas only 10 per cent women took part in joint decision making regarding amount to be spent on land use/ improvement in medium farm. Around 25 per cent women participated in joint decision making each on purchase and sale of land, livestock purchase, arrangement and payment of labour, amount to be spent to land use improvement and borrowing of money for farm operations in large farm.

Production decision on land use

Decision making under the head production decision were allocation of area under different use activities, selection of crop activities, selection of crop varieties, use of fertilizer, use of plant protection measures, time of transplanting, time of interculture, time of harvesting, type of animal breed, type of animal feed used and veterinary treatment.

Among the different decisions, decision on veterinary treatment activities was decided only by 5.55 per cent female independently (Table 1). In the case of use of plant protection measures also, only 5.55 per cent females were found to have taken independent decision. Only 27.77, 20.83, 23.61, 19.44, 18.05, 15.97 and 33.33 per cent females were found to have taken independent decision on allocation of area under different land use activities, selection of crop activities, selection of crop varieties, use of fertilizer, time of transplanting, time of interculture, time of harvesting, type of animal breed and type of animal feed, respectively (Table-1). Joint decision of both husband and wife were found to be as high as 45.84 per cent in determining the time of transplanting to as low as 16.67 per cent in the use of plant protection measures (Table 1).

The study on production decision among various groups showed that the highest (50.00 per cent) decision on determining the time of interculture was taken by

women independently in large size group of farms. As high as 42.50 per cent women of small size group of farms took independent decision in determining the type of feed for animal, whereas in all the groups women take independent decision at a very low level on use of fertilizer and use of plant protection measures. Againg as high as 75.00 per cent and 56.67 per cent women took part in joint decision on deciding time of harvesting in large farms and selection of crop activities in medium size group of farms respectively and as low as 5.00 per cent use of plant protection measures in small size group of farms. Similar findings was also reported by Gogoi and Bhowmick (1999).

Marketing decision on land use:

Here is this study, marketing decision included quantity of produce to be marketed, quantity of produce to be used for family consumption, selling of livestock produce and storage of produce.

In the case of marketing decision, highest 55.83 per cent females were found to have been independent decision on quality of produce to be used for family consumption and the least 29.17 per cent on selling of livestock produce (Table-1) which corroborates with the finds of Alagumani (1999). Quantity of produce to be marketed and storage of produce were decided independently by 40.00 and 30.83 per cent females, respectively (Table-1). In the case of join decision as high as 43.33 per cent joint decision was recorded in selling of livestock produce and as low as 19.17 per cent in determining the quality of produce to be used for family consumption (Table-1).

Inter-group analysis of marketing decision revealed that independent decision taken by women was recorded to be the highest 64.00 per cent in deciding the quantity of produce to be used for family consumption in marginal size group of farms and the lowest 20.00 per cent on storage of produce in small farms. Joint decision of both husband and wife was the highest 60.00 per cent in medium size group of farms followed by 50 per cent in large size group of farms on selling of livestock produce and the lowest 10 per cent in small size group of farms in determining the quantity of produce to be marketed.

TABLE-1. LAND USE DECISIONS FOR ALL FARMS

Sr. No.	Types of decision	Sample No.	Female participation in decision making		
			Solely by male	Solely by female	Joint Decision
A.	**Organisation decision**				
1.	Purchase and sale of land	144	84	17	43
		(100.00)	(53.33)	(11.81)	(29.86)
2.	Leasing and leasing out of land	144	100	13	31
		(100.00)	(69.44)	(9.03)	(21.53)
3.	Livestock purchase	144	67	42	35
		(100.00)	(46.53)	(29.16)	(24.31)
4.	Arrangement and payment of labour	144	80	35	29
		(100.00)	(55.55)	(24.31)	(20.14)
5.	Amount to be spent on land use/improvement	144	101	16	27
		(100.00)	(70.14)	(11.11)	(18.75)
6.	Borrowing of money for farm operation	144	97	18	29
		(100.00)	(67.36)	(12.50)	(20.14).
7.	Adoption and procurement of improved implements	144	91	22	31
		(100.00)	(63.19)	(15.27)	(21.52)
B.	**Production decision**				
1.	Allocation of area different land use activities	144	77	40	27
		(100.00)	(53.47)	(27.17)	(18.75)
2.	Selection of crop activities	144	55	30	59
		(100.00)	(38.19)	(20.83)	(40.97)
3.	Use of crop varieties	144	72	34	38
		(100.00)	(50.00)	(23.61)	(26.39)
4.	Use of fertilizer	144	102	10	32
		(100.00)	(70.83)	(6.94)	(22.22)
5.	Use of plant protection measure	144	112	8	24
		(100.00)	(77.77)	(5.55)	(16.67)

Sr. No.	Types of decision	Sample No.	Female participation in decision making		
			Solely by male	Solely by female	Joint Decision
6.	Time of transplanting	144	44	34	66
		(100.00)	(30.55)	(23.61)	(45.84)
7.	Time of inter-culture	144	89	28	27
		(100.00)	(61.81)	(19.44)	(18.75)
8.	Time of harvesting	144	85	26	33
		(100.00)	(59.02)	(18.05)	(22.92)
9.	Type of animal breed	144	92	23	29
		(100.00)	(63.89)	(15.97)	(20.14)
10.	Type of animal feed used	144	70	48	26
		(100.00)	(48.61)	(33.33)	(18.06)
11.	Veterinary treatment	144	108	8	28
		(100.00)	(75.00)	(5.55)	(19.44)
C.	**Marketing decision**				
1.	Quantity of produce to be marketed	144	56	58	30
		(100.00)	(38.89)	(40.28)	(20.83)
2.	Quantity of produce to be used for family	144	36	80	28
		(100.00)	(25.00)	(55.55)	(19.44)
3.	Selling of livestoc produce	144	40	42	62
		(100.00)	(27.78)	(29.17)	(43.05)
4.	Storage of produce	14	48	44	52
		(100.00)	(33.33)	(30.55)	(36.11)

CONCLUSION

The above stdy on land use planning decision revealed that women played on important role in decison making pertaining to quantity of produce to be used for family consumption, quantity of produce to be marketed, type of animal feed to be used, storage of produce, selling of livestock produce, livestock purchase, allocation of area under different land use activities, time of transplanting, selection of crop varieties and selection of crop activities. Women participation was also encouraging in joint decision making. It was observed in the study that women were consulted by the family male members in land use decision making process in deciding time of transplanting, selling of livestock produce, selection of crop activities, storage of produce and purchase and sale of land. However, women participation in independent decision making was not prominent in areas like use of plant protection measures, use of fertilizer, leasing and leasing out of land, determining amount to be spent on land/improvement and purchase and sale of land and veterinary treatment.

Thus the findings of the present study revealed that women played a decisive role in land use decision making process. Though in few areas, male members were found to be the main decision makers, in majority of the areas women folk participated in the independent decision making process in the land use activities.

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