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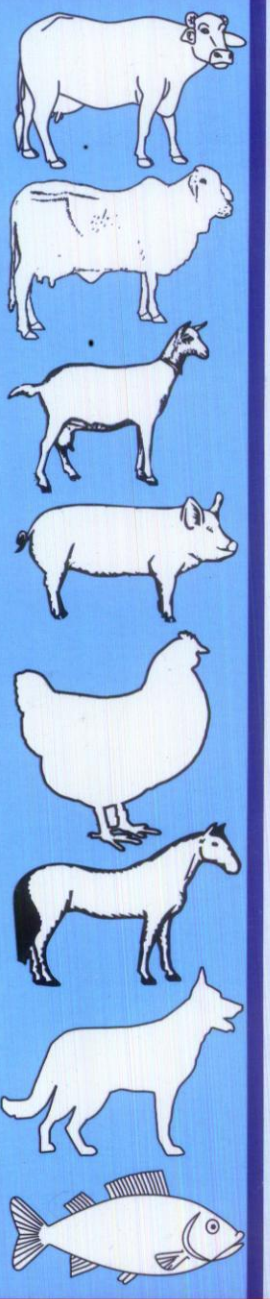

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Decision making pattern of women farmers in dairy production system in mid western plain zone of Uttar Pradesh

Hema Tripathi

Transfer of Technology and entrepreneurship unit

ICAR-Central Institute for Research on Buffaloes, Hisar, Haryana 125001, India

E-mail : hematripathi1@gmail.com

ABSTRACT

Women farmers handle most of the critical jobs and are considered to be the main actors in livestock rearing. Though women play a significant role in dairy production system but their control over decision making is lesser than men. To have an empirical data, the present study was carried out in mid western plain zone of Uttar Pradesh to understand the decision making pattern of women in dairy production system in gender perspective. Data were collected through interview schedule from 720 respondents taken from 360households. From each household, two members comprising the head of household and its spouse were selected as respondents. The study revealed that share of female respondents was very low in breeding related activities. Decision related to keeping of cross breed/ heifer/young stock was done only by 22.22% female respondents in addition to being a major joint decision while the selection of breed was a male dominated decision. Involvement of women in the joint decisions was found more in feeding of colostrum to newly born calf (36.11%), allowing the newly born calf to suckle its mother within an hour after calving (44.44%), keeping a crossbred heifer (23.89%) and feeding concentrates (21.94%). Timely vaccination of animals was a major decision taken by both the female and male respondents. In most of health care activities, the share of males in joint decision with the spouse was more prominent. The marketing of live animals and selling of products etc were the activities where major decisions were taken by males independently.

Key words: Dairy production activities, Decision making pattern, Gender, Women farmers

Livestock is an important asset to rural women that provides the basis for livelihood security. It provides income and increased economic stability, and often the most important "cash crops" in small-scale mixed farming systems. It plays significant social and economic roles also in the subsistence production systems as a store of value, measure of wealth, and source of cash flow, fuel, food, draught power and manure and gain value through reproduction. In most system, women provide labour for various tasks related to livestock production but may or may not control the process of decision making, particularly over the disposal of animal and animal products (Tripathi and Arya, 1994). Despite the considerable involvement and contribution, the rural women's role in livestock production including dairy farming activities in decision making has largely been ignored. Very few scientific and empirical attempts have been made in the state of Uttar Pradesh to examine the actual decision making pattern of women with respect to men in livestock production. This phenomenon is particularly true in the case of study area where women, apart from actual participation in livestock production, also substantially participate in other subsidiary activities and having decision making capabilities regarding

dairy production. It is, therefore, pertinent to examine the decision making pattern in dairy production system.

MATERIAL AND METHODS

Bareilly district from mid western plain zone of Uttar Pradesh was selected purposively as the location for the study. The district comprises 15 Community Development blocks. Out of these, two blocks were selected randomly. A total of six villages, three from each of the two blocks were identified on the basis of livestock density. Families were selected on the basis of landholding, after conducting door to door survey on landholding and herd size. Proportionate random sampling was done for selecting 20 per cent families from each identified landholding category making a total of sixty households from each village. The average landholding size was 14.69 bighas and the herd size was 1-2 cattle or 2-3 buffaloes or 3-4 goats. A detailed interview schedule was developed for collecting the final data about the decision making pattern from 720 respondents (360 households). From each household, two members comprising the head of household and its spouse were selected as respondents. Thus fifty per cent male and fifty per cent female members were interviewed from each village. Data from 720 respondents was collected, tabulated and analyzed through an interview schedule. The involvement of women in decision making was studied under category of breeding, feeding, health care and management related activities. Each respondent was asked to indicate who was taking decision in each activity on a four point continuum viz. Decision taken by her independently (Independent decision), decision taken by her spouse independently (Independent decision), Decision taken by spouse + housewife + other family members (Joint decision) and decision taken by other members of the family without her involvement (Others) with respect to various dairy farming practices.

RESULTS AND DISCUSSION

Gender wise decision making pattern of respondents in dairy production activities

Table 2 shows that most of the male dominated activities were decided by spouse (males) independently and women oriented activities were decided jointly; however the share of women in such activities was more than males. Participation of women in family decision making process was also

Table 1 : Distribution and selection of number of household according to the landholding categories

Land holding Categories	Villages											
	I		II		III		IV		V		VI	
	Households		Households		Households		Households		Households		Households	
	Total	Selected	Total	Selected	Total	Selected	Total	Selected	Total	Selected	Total	Selected
Landless	46	21	21	10	17	13	3	2	14	6	16	6
Marginal	67	30	59	31	34	25	55	33	85	35	101	36
Small	11	5	25	13	13	10	29	18	26	10	35	13
Mediu m	7	3	5	3	3	2	9	5	10	4	3	1
Large	3	1	6	3	14	10	3	2	12	5	11	4
Total	134	60	116	60	81	60	99	60	147	60	166	60

found low in majority of the activities. With few exceptions, majority of the male respondents were taking decisions either independently or with other members of the family without consulting their wives.

Breeding activities: As far as breeding practices were concerned the decision of keeping of cross breed / heifer / young stock was done only by 22.22% female respondents in addition to being a major joint decision while the selection of breed was a male dominated decision in majority (85%) of respondents with decision to have pregnancy diagnosis being done mainly on behest of others (81.67%). In general the share of female respondents was very low in breeding related activities. Tulachan and Karki (1999) reported in the hills of Tanahu district of Nepal, husbands and wives take most of the decisions regarding livestock systems jointly. Nevertheless, except for breed selection, decisions regarding marketing, household management, spending of income and issues related to goat rearing were mostly made by women.

Feeding activities: Involvement of women in the joint decisions was found more in feeding of colostrum to newly born calf (36.11%), allowing the newly born calf to suckle its mother within an hour after calving (44.44%), keeping a crossbred heifer (23.89%), feeding concentrates (21.94%). More than 30 % women were taking independent decisions in the activities related to feeding of colostrum to a newly born calf and its quantity (36.11%), grazing/ stall feeding (36.11%) and providing clean and fresh drinking water for animals (49.44%). The feeding of balanced concentrate mixture on the basis of milk production is done mainly by others. Sah *et al* ., (2006) also found that the decisions on type and amount of concentrate to be given to animals and drying time of pregnant animals were taken exclusively by women. According to Payeng (2012) farm women were involved in the decision making process in most of the feeding activities either independently or jointly with the spouse in Assam.

Health care activities: Less than 37 per cent females were involved in impendent decision in few activities. In most of health care activities, the joint decision with the spouse was more prominent than single/independently. Removing the placenta with in 24 hrs of calving If not shed normally (37.22%), timely and regular vaccination against the common contagious diseases (46.11%), timely treatment of the sick animal by vet staff (31.67%) were the decision taking independently by females. Use of

Table 2 : Decision making pattern of the respondents in major breeding practices of dairy animals (N=760)

Breeding Activities	Independent Decision		Joint Decision	
	Women (%)	Spouse (%)	Women+ Spouse (%)	Spouse + Others (%)
Selection of breed	1.11	85.00	11.11	2.78
Selection of breeding method	1.11	84.17	11.94	2.78
Keeping a CB/heifer / young stock/buffalo	22.22	36.11	23.61	18.06
Insemination of animal between12-18 hrs after the onset of heat	1.94	13.33	6.39	78.33
Serving a cow//buffalo within 60-90 days after calving	1.11	34.72	8.33	55.83
PD between 60-90 days after service	0.00	15.00	3.33	81.67
Treatment of repeat breeding and anestrous cases by a veterinarian	2.22	30.00	6.94	60.83

Table 3: Decision making pattern of the respondents in major feeding practices of dairy animals (N=760)

Feeding Activities	Independent Decision		Joint Decision	
	Women (%)	Spouse (%)	Women+ Spouse (%)	Spouse + Others (%)
Feeding of colostrum to a newly born calf and its quantity	36.11	6.67	39.44	17.78
Allowing the newly born calf to suckle within an hour after calving	23.89	11.11	44.44	20.56
Feeding balanced concentrate mixture on the basis of milk production	2.50	14.72	15.83	66.94
Feeding green fodder in ad lib to animal round the year	4.44	36.11	12.50	46.94
Time of feeding concentrate	21.94	16.39	33.61	28.06
Clean and fresh drinking water for animals	49.44	14.44	33.06	3.06
Grazing / Stall feeding	36.11	23.61	5.28	35.00
Growing the latest variety green fodder / perennial fodder	0.56	33.61	1.67	64.17
Chopping of straw	5.83	67.50	6.94	19.72
Conservation of fodder for lean season	3.06	6.94	2.22	87.78

Table 4: Decision making pattern of the respondents in major health care practices of dairy animals (N=760)

Health care Activities	Independent Decision		Joint Decision	
	Women (%)	Spouse (%)	Women+ Spouse (%)	Spouse + Others (%)
Use of sterilized scalpel for cutting the naval cord and application of tincture iodine	0.00	1.94	0.00	98.06
Dehorning of calves at the age of 7-21 days	0.28	0.00	0.00	99.72
Drying off animal 2 months before calving	27.22	12.22	11.39	49.17
Castration of male calf between 1-2 years	1.39	0.56	0.00	98.06
If placenta is not shed normally then removing it with in 24 hrs of calving	37.22	25.56	15.83	21.39
Selection of concentrate feed	31.94	25.56	22.22	20.28
Deticking and delicing	6.39	10.56	1.11	81.94
Timely and regular vaccination against the common contagious diseases	46.11	31.67	11.11	11.11
Timely treatment of the sick animal by vet staff	31.67	17.50	15.56	35.28
Isolation of sick animals to the healthy	1.39	1.11	4.72	92.78
Regular deworming of calves	18.89	16.94	10.00	54.17

Table 5: Decision making pattern of the respondents in major management practices of dairy animals (N=760)

Management Activities	Independent Decision		Joint Decision	
	Women (%)	Spouse (%)	Women+ Spouse (%)	Spouse + Others (%)
Cleaning of shed with disinfectants	0.56	0.28	2.78	96.39
Milking method	44.44	42.22	8.33	5.00
Cleaning of milking utensils	32.22	60.83	1.94	5.00
Identification and isolation of sick animals	1.94	1.39	2.50	94.17
Marketing of live animals	26.67	52.50	2.22	18.61
Marketing of livestock products	4.72	1.94	0.00	93.33
Selection of livestock enterprises	1.39	1.11	0.00	97.50
Availing credit facilities for livestock	0.83	0.56	0.28	98.33
Animal insurance	0.00	0.00	0.00	100.00

sterilized scalpel for cutting the naval cord and application of tincture iodine (98.06 %), dehorning of calves at the age of 7-21 days (99.72%), drying off animal 2 months before calving (49.17%) and the castration of male calf between 1-2 years (98.06%) were the decision taken by other than spouse of the family in health care practices of dairy animals. Verma (1984) found that decisions were taken by male family head alone on vaccination of animals, feeding of minerals and nutrients and Joint decisions of husband and wife were reported for feeding of balanced ration, disinfection of sheds and deworming of animals. Khandekar (1992) also found that decisions were taken jointly by 46 per cent respondent with respect to treatment of animals suffering from reproductive disorders.

Management related activities: The share of women as independent decision maker as well as joint was found more with respect to method of milking an animal, cleaning of utensils before milking etc. The marketing of live animals, products etc were a major decision of maximum males either independently or taken by other member of the family. Cleaning of utensils (32.22%) and deciding the milking method (44.44%) were the decision taking independently by females. The share of women in decision making was also found low in most of the activities. Subba, 2010 also revealed that majority of the males were taking the decision independently in selling and purchase of animals. Reshma et al (2014) while studying the entrepreneurial characteristics and decision making behaviour of farm women in livestock production activities in Karnataka revealed that farm women dominated in decision making of livestock produce to be sold, availing loans, selection of animals/breed and medical care. Shreyansh et al (2018) also found that majority of men farmers were involved in cattle fair and krishi mela (96.66%) and women farmers were involved in marketing livestock products (75.00%) in Karnataka which was not very much true for the women came from mid western plain zone of Uttar Pradesh.

CONCLUSIONS

Inspite of handling most of the critical jobs by dairy women in day today related activities; their control over decision making is lower than their spouse in most of the activities showing considerable gender inequalities in study area. Farm women need

to be motivated to get technical knowledge and guidance to acquire more scientific knowledge through various trainings for increasing the livestock production. She also need to be trained in areas of personality building and confidence enhancement to increase their extent of involvement in the decision making process and in revamping the rural dairy system more gender friendly.

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