Role Performance of Kota Tribal Households in Dairying

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ABSTRACT

Dairying can be used as a tool for poverty alleviation in the country. The share of dairying in the livestock sector accounts for about 65 per cent indicating the significant role of dairying in the socio-economic situation of our country. The Indian subcontinent is anthropologically indeed rich and varied in terms of ethnic groups, languages, culture and religion. As per the census data of 1991 tribes constitute about 6.78 crores of the total population of our country. Tamil Nadu is a treasure for indigenous technical knowledge in agriculture and allied activities. The Kota tribes, which are being identified as one of the Primitive Tribal Group (PTG) live in seven settlements, generally known as Kotagiri or Kokkal. They are identified in living in places at an elevation of about 1800m Mean Sea Level (MSL) in Kothagiri taluk of Nilgiris district of Tamil Nadu. Women constitute 69 per cent of the labour force in livestock sector as against 35 per cent in crop farming. Farm women's contribution to agriculture is not adequately reflected in the available statistics and hence there is need for better understanding in this regard. The studies are lagging in the area of role performance, where we can't differentiate the exact role performed by the males and females of tribal households in the field of dairying. The results of this study through lights on the activities like attending the animal at the time of parturition, post parturient care of animals, feeding and watering of animals, cutting of grass and chopping of straw, grazing of animals, care of sick animals, care of new born calf, milking of animals, control etc were taken regularly and sometimes by the females. Most of the outside activities viz. Taking animals to the hospital and Artificial Insemination (A.I.), Pregnancy Diagnosis (P.D.) etc., repairing of shed, equipments etc., were performed by males. It is clear in overall role performance that most of the dairy farming activities namely breeding, feeding, health care and management were regular activities for females whereas the other activities were performed regularly by males.

Key words: *Dairying, Artificial Insemination (A.I.), Pregnancy Diagnosis (P.D.), Parturition & Post parturient care.*

Indian agriculture includes crop husbandry, livestock and poultry husbandry, forestry, agro based industries etc. India's status in dairying is characterized by the fact that this country owns one of the largest livestock population in the world and has now emerged as the largest global producer of milk with a record production level of 84.6 million tones (*Government of India, 1999-2000*). Dairying can be used as a tool for poverty alleviation in the country. The share of dairying in the livestock sector accounts for about 65 per cent indicating the significant role of dairying in the socio-economic situation of our country. The Indian subcontinent is anthropologically indeed rich and varied interms of ethnic groups, languages, culture and religion. As per the census data of 1991 tribes constitute about 6.78 crores, which constituted about 8.08 per cent of the total population excluding the population of the State of Jammu and Kashmir. Tribes occupy 20.00 per cent of the country's space and nearly 90.00 per cent of them depend on agriculture. The distribution of these tribal groups among Indian states is widely varied.

Tamil Nadu is a treasure for indigenous technical knowledge in agriculture and allied activities. According to 1991 census, the total population of the Nilgiris District is 7,10,214. Out of this, the tribal population accounts for 25,048. There are 36 Scheduled Tribe communities living in TamilNadu. Out of the above tribal communities, Kota tribal group forms the core respondents for this study. The Kotas, live in seven settlements, generally known as Kotagiri or Kokkal. They are identified in

living in places at an elevation of about 1800m Mean Sea Level (MSL) in Kothagiri taluk of Nilgiris district of Tamil Nadu. Tribals mostly live on hilltops and keep normally 3-5 milch animals as a part of mixed farming system.

For the tribal households, dairying is one of the most important and economically viable occupation which will provide a source of income to sustain their livelihood. Role of women in agricultural sector, especially as keepers of livestock, greatly improves world food security by enhancing health and livelihood of individual families (*Siva et al, 1999*). Women constitute 69 per cent of the labour force in livestock sector as against 35 per cent in crop farming. They are more industrious and hard working than men. It has been observed that tribal women are engaged in a number of dairying operations starting from feeding, watering to the post parturient care of animals. Farm women's contribution in agriculture is not adequately reflected in the available statistics and hence there is need for better understanding in this regard. The studies are lagging in the area of role performance, where we can't differentiate the exact role performed by the males and females of tribal households in the field of dairying. Keeping in view the above facts, the present study entitled "*Role performance of Kota tribal households in dairying*"-A study in Nilgiris District of Tamil Nadu has been designed to ascertain the role performed by Kota tribal households in dairying.

METHODOLOGY

The study was carried out in Nilgiris District of Tamilnadu taking into account the tribe namely Kotas. A total of 3 tribal habitations (having maximum population of particular tribe) were selected for the study. A sample of 17 households was selected randomly from each habitation. So, 51 households (51 males & 51 females) for Kota tribe were selected (17 households x 3 habitations). Thus, a total sample of 51tribal households for the above tribe was studied. Data was collected through a pre-tested and well-structured interview schedule. The Role performance was operationalized as various dairy activities performed by the male and female farmers and the ability of the respondents was studied through the scale developed by *Satyajit Roy (1998)* after making necessary modifications. Respondents were directly questioned to indicate that the roles that they had performed. These roles were categorized into regular, sometimes and never performed. To find out the association between the male and female members in role performance of various dairy farming activities Chi-square test was used. The role performed by the Kota tribal households was studied under five sub-heads i.e. Breeding practices; Feeding practices; Health care practices; Management practices and Other activities.

RESULTS AND DISCUSSION

The role performed by the male and female respondents of 51 selected Kota tribal households are as follows:

Role performed by tribal households in breeding activities : As observed from the Table 1 that taking animals for Artificial Insemination (A.I.), breeding problems, pregnancy diagnosis (P.D.) etc. was performed regularly by 62.75 per cent males followed by 19.60 per cent males who performed only sometimes. Whereas, attends the animal at the time of parturition and post parturient care of animal was sometimes performed and never performed by 31.37 per cent and 58.83 per cent males, respectively. The first activity was performed mostly be males instead of females because mostly male members bear the responsibility of taking animals to the hospital for Artificial Insemination (A.I.), breeding problems, Pregnancy Diagnosis (P.D.) etc. Whereas, the other two activities were performed by females. The probable reason might be that they are traditionally trained in taking care of animals at the time of parturition and post parturient care.

Out of the above-mentioned three activities, only the activity the time of parturition is found to be highly significant. The probable reason may be that the first and third activity can be performed individually by male and female, whereas at the time of animals parturition it is obvious that the help is essential through any means.

Role performed by tribal households in feeding activities : It could be observed from the Table 1 that majority of the activities in this field namely, feeding and watering to animals (56.86% regular and 37.26% sometime), cutting of grass (56.86% regular and 17.65% sometime), chopping of straw (45.10% regular and 31.37% sometime) and grazing of animals (50.98% regular and 19.61% sometime) were performed by the female respondents. From the data we can interpret, the males did not perform it regularly. The reasons of females higher involvement might be that those activities

Table 1. Role performance of tribal households (male and female) in different Dairying activities (N=51)

S.No.	Activities	Category	M (M=51)		F (F=51)		X^2 Value
A	*Breeding activities*						
1.	Taking animal for Artificial Insemination (A.I.),	Regular	32	(62.75)	-	(0.0)	19.88
	breeding problems, Pregnancy Diagnosis (P.D.) etc.	Sometimes	10	(19.60)	5	(9.80)	
		Never	9	(17.65)	46	(90.20)	
2.	Attend the animal at the time of **parturition**	Regular	9	(17.65)	17	(33.33)	8.59**
		Sometimes	16	(31.37)	24	(47.06)	
		Never	26	(50.98)	10	(19.61)	
3.	Post parturient care of animal	Regular	3	(5.88)	35	(68.63)	21.53
		Sometimes	18	(35.29)	9	(17.64)	
		Never	30	(58.83)	7	(13.73)	
B.	*Feeding activities*						
1.	Feeding and watering to animals	Regular	7	(13.73)	29	(56.86)	20.24
		Sometimes	11	(21.57)	19	(37.26)	
		Never	33	(64.70)	3	(5.88)	
2.	Cutting of grasses	Regular	9	(17.65)	29	(56.86)	13.80
		Sometimes	15	(29.41)	9	(17.65)	
		Never	27	(52.94)	13	(25.49)	
3.	Chopping of straw	Regular	9	(17.64)	23	(45.10)	3.65**
		Sometimes	20	(39.22)	16	(31.37)	
		Never	22	(43.14)	12	(23.53)	
4.	Grazing of animals	Regular	12	(23.53)	26	(50.98)	7.88**
		Sometimes	10	(19.61)	10	(19.61)	
		Never	29	(56.86)	15	(29.41)	
C.	*Health care activities*						
1.	Care of sick animals	Regular	11	(21.57)	24	(47.06)	7.88**
		Sometimes	19	(37.25)	19	(37.25)	
		Never	21	(41.18)	8	(15.69)	
2.	Care of a newborn calf	Regular	2	(3.92)	32	(62.74)	20.12
		Sometimes	13	(25.49)	8	(15.69)	
		Never	36	(70.59)	11	(21.57)	
3.	Taking animals to the hospital / call on veterinarian	Regular	32	(62.74)	5	(9.80)	19.88
		Sometimes	10	(19.61)	3	(5.88)	
		Never	9	(17.65)	43	(84.32)	
D.	Management Activities						
1.	Bathing of animals	Regular	28	(54.90)	11	(21.57)	14.24
		Sometimes	17	(33.33)	15	(29.41)	
		Never	6	(11.77)	25	(49.02)	
2.	Milking of animals	Regular	5	(9.80)	38	(74.51)	39.18
		Sometimes	5	(9.80)	5	(9.80)	
		Never	41	(80.40)	8	(15.69)	
3.	Control and massage of animal during milking	Regular	8	(15.69)	16	(31.37)	20.12
		Sometimes	11	(21.57)	8	(15.69)	
		Never	32	(62.74)	27	(52.94)	
4.	Disposal of cow dung and cleaning of drain	Regular	5	(9.80)	41	(80.39)	35.76
		Sometimes	9	(17.65)	7	(13.73)	
		Never	37	(72.55)	3	(5.88)	

5.	Preparation of cow dung cakes	Regular	4	(7.84)	43	(84.32)	59.65
		Sometimes	5	(9.80)	4	(7.84)	
		Never	42	(82.36)	4	(7.84)	
6.	Cleaning of sheds, mangers and equipments etc.	Regular	5	(9.80)	43	(84.31)	42.82
		Sometimes	7	(13.73)	6	(11.77)	
		Never	39	(76.47)	2	(3.92)	
7.	Cleaning of dairy utensils	Regular	4	(7.84)	39	(76.48)	36.35
		Sometimes	10	(19.61)	6	(11.76)	
		Never	37	(72.55)	6	(11.76)	
8.	Repairing of shed, equipments etc.	Regular	26	(50.98)	6	(11.76)	13.71
		Sometimes	20	(39.22)	23	(45.10)	
		Never	5	(9.80)	22	(43.14)	
9.	Weather protection to the animals	Regular	5	(9.80)	21	(41.18)	12.82
		Sometimes	22	(43.14)	16	(31.37)	
		Never	24	(47.06)	14	(27.45)	
E.	*Other activities*						
1.	Purchase of cattle feed and other equipment's	Regular	38	(74.51)	8	(15.69)	39.65
		Sometimes	9	(17.65)	0	(0.0)	
		Never	4	(7.84)	43	(84.31)	
2.	Selling and purchasing of animals	Regular	34	(66.66)	0	(0.0)	25.33
		Sometimes	9	(17.65)	7	(13.73)	
		Never	8	(15.69)	44	(86.27)	
3.	Taking milk for sale	Regular	9	(17.65)	5	(9.80)	8.59**
		Sometimes	16	(31.37)	9	(17.65)	
		Never	26	(50.98)	37	(72.55)	
4.	Preparation of milk products (Ghee / Curd etc.)	Regular	25	(49.02)	38	(74.51)	6.12**
		Sometimes	15	(29.41)	9	(17.65)	
		Never	11	(21.57)	4	(7.84)	
5.	Keeping account of milk and milk products sold	Regular	11	(21.57)	5	(9.80)	12.71
		Sometimes	11	(21.57)	23	(45.10)	
		Never	29	(56.86)	23	(45.10)	

Note: Figures in parenthesis indicates percentage in their respective category.

can be performed inside the home. But as far as the male respondents were concerned, they were more involved in field related activities.

The findings from Table suggested that the value of Chi-square test for the activity of role performance in feeding activities (i.e. Chopping of straw and Grazing of animals) were found to be highly significant, where as the first two activities were not found to be significant. The possible reason attributed may be that the physical works like chopping of straw as well as taking the animals for grazing need each other's help.

Role performed by tribal households in health care activities : The data presented in the Table 1 that Kota females involvement in this field was also higher. Care of sick animals (47.06% regular and 37.25% sometime) and care of newborn calf (62.74% regular and 15.69% sometime) were mostly done by females. Whereas, taking animal to the hospital was done regularly by 62.74 per cent males and sometimes done by 19.61 per cent males. As the first two activities were mostly family related, the females managed them with more involvement apart from their regular household chores. But the third activity required taking animal to hospital or calling on a veterinarian was mostly done by males.

The value of Chi-square for the care of sick animals activity in role performance of health care was found to be highly significant, where as the second and third activity were not to be found significant. The reason for this might be that the women traditionally possess the quality of nurturing which makes them to take care of sick animals.

Role performed by tribal households in management activities : It is evident from the Table 1 in the area of management activities, bathing of animal (54.90 %

regular and 33.33% sometime) and repairing of shed, equipments etc. (50.98% regular and 39.22% sometime) were mostly done by the Kota males. Whereas the other activities like, milking of animals (74.51% regular and 9.80% sometime), control and massage of animals during milking (31.37% regular and 15.69% sometime), disposal of cow dung and cleaning of drain (80.39% regular and 13.73% sometime), preparation of cow dung cake (84.31% regular and 7.84% sometime), cleaning of sheds, mangers, equipments etc. (84.31% regular and 11.77% sometime), cleaning of dairy utensils (76.48% regular and 11.76% sometime) and weather protection to the animals (41.18% regular and 31.37% sometime) were mostly done by the females. Overwhelming role performance of the females was seen in management activities compared to males, reason was possibly the same household related activities.

The findings from Table 1 also suggested that the value of Chi-square test for the management activities were found to be insignificant. The possible explanations could be that the activities related to the management can be performed by both of them individually without each other's help. Further all the responses were not equally likely. This proved that the association is not required between male and female in management activities.

Role performed by tribal households in other activities : It is clear from the Table 1 that purchase of cattle feed and other equipments (74.51% regular and 17.65% sometime), selling and purchasing of animals (66.66% regular and 17.65% sometime) and taking milk for sale (17.65% regular and 31.37% sometimes) was mostly done by males. Whereas, preparation of milk products like ghee, chhana, curd etc. (74.51% regular and 17.65% sometime) and keeping account of milk and milk products sold (9.80% regular and 45.10% sometime) was done mostly by females. In this area, males were dominant as compare to the female because most of the outside activity falls under this category.

The findings from table also showed that the value of Chi-square test for the role performance in other activities i.e. Taking milk for sale and Preparation of milk products (Ghee / Curd etc.) were found to be highly significant The possible reasons might be that male members mostly did the activities like purchase of cattle feed and other equipments, selling and purchasing of animals and keeping account of mik and milk products.

CONCLUSION

Majority of the activities like attending the animal at the time of parturition, post parturient care of animals, feeding and watering of animals, cutting of grass and chopping of straw, grazing of animals, care of sick animals, care of new born calf, milking of animals, control and massage of animal during milking, preparation of cow dung cakes, disposal of cow dung and cleaning of drain, cleaning of dairy utensils, cleaning of sheds, mangers, equipments etc., weather protection to the animals and preparation of milk products were regular and sometimes activities of females. Most of the outside activities were performed by males. viz. Taking animals to the hospital and Artificial Insemination, P.D. etc., repairing of shed, equipments etc., purchase of cattle feed and other equipments, selling and purchasing of animals, taking milk for sale and keeping account of products sold. It is clear in overall role performance that most of the activities namely breeding, feeding, health care and management were regular activities for females whereas only other activities were a regular activity for males.

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