CONSTRAINTS PERCEIVED BY THE MEENA TRIBES IN ADOPTION OF IMPROVED DAIRY FARMING PRACTICES

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ABSTRACT

The present investigation was conducted in Udaipur and Banswara district of Rajasthan to study the constraints experienced by the Meena tribes in adoption of improved dairy farming practices (IDFPs). The study reported that majority of respondents experienced the constraints such as preference of natural service, lack of good breed-able bulls, lack of A. I. centres, ill equipped A.I. centres, lack of service at A.I. centres, distant location of veterinary hospital in breeding practices; whereas majority of the respondents experienced constraints in feeding practices such as belief that colostrums feeding is unhygienic and it may be harmful to the health of calves, high cost involved in purchase of ingredients concentrate mixture and lack of knowledge about proper amount of concentrate feeding. As far as constraints in management are concerned, non-availability of livestock extension officers and veterinary doctors in time, distant location of veterinary dispensary and belief that anger of god(s)/ goddess(s) cause diseases in animals were experienced. Regarding fodder production practices, preference of growing food crops and cash crops rather than fodder crops, non-availability of surplus land for fodder cultivation and lack of irrigation water facilities round the year were the main constraints experienced by the tribes.

Key words: *Constraintsl; Breeding practices; Colostrums; Livestock*

INTRODUCTION

Numerically the Meena tribe is the largest tribal group of Rajasthan state followed by the Bhil. The homeland of the Meena is consist in the districts Jaipur, Dausa, Sawaimadhopur, Alwar, Bharatpur, Bundi, Udaipur and Banswara. The Meena tribes reside in compact villages with other groups in a village.

The nature of the Meenas' economy perfectly resembles the economy of semi-arid zone of the northeastern part of the state. The Meenas are essentially agriculturist. Their economy has witnessed wider diversifications (Anonymous, 2001). Dairy farming is one of main occupation of the Meena tribes along with agriculture. More then 40 per cent of total income of a Meena family comes from dairy farming. Keeping this in view, a study was conducted with a specific objectives to find out the constraints experienced by the Meena tribes in adoption of improved dairy farming practices (IDFPs) was undertaken.

METHODOLOGY

Constraints in the present investigation have been operationalised as the reason for non- adoption of improved breeding, feeding, health-care, management and fodder production practices. These constraints were ascertained by asking open-ended questions. For that purpose present investigation was conducted in Udaipur and Banswara district of Rajasthan, which were selected purposively on the basis of highest percentage of tribal to total population in the state. Two blocks from each district were selected randomly. Thus, 4 blocks from both districts were selected. Two villages from each block were selected randomly. Hence, 8 villages were taken for the study. For the respondents' selection, proportional random sampling technique was applied. From each selected village, 15 respondents were selected among Meena tribe. Thus, from both district 60 respondents were selected for the collection of data.

RESULTS AND DISCUSSION

Breeding constraints: Meena tribe experienced the major constraints were preference of natural service (86.66%), lack of good breed-able bulls (85.00%), lack of A.I. centres, ill equipped, distant location of veterinary hospital (83.33%), as 1st, 2nd, and 3rd, ranks, respectively whereas, high cost involved in calling veterinary staff for treatment of breeding related problems (65.00%), anoestrus and repeat breeding (53.33%) and poor conception rate in animals (50.00%), large number of villages under one livestock extension officers (36.66%), scarcity of resources to maintain cross bred / superior breed of milch animals (36.66%) and lack of knowledge about pregnancy diagnosis, false belief that animal, which are covered through natural servicing, are invariably pregnant (30.00%), lack of knowledge about right time of serving animal after on set of heat, getting pregnancy diagnosis done after service time of animals after calving (30.00 %) were ranked 4th, 5th, 6th, and 7th, and 8th ranks, respectively (Table 1). These findings also supported by Fulzele (1994), Pandey (1996) and Singh (1990).

Feeding constraints: The data in Table 2 show that prevalence of the belief that colostrums feeding is unhygienic and it may be harmful to the health of calves (85.00%), high cost involved in purchase of ingredients of concentrate mixture (81.66%) and lack of knowledge about proper amount of concentrate feeding

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(76.66%) were on 1st, 2nd. and 3rd ranks, respectively. Whereas, beliefs like available grasses, weeds and leaves of forest trees collected from nearby forest area are sufficient for animals feeding (70.00%); advance pregnant animals need to be fed low quantity of concentrate, as these are hot for the animals (56.56%); non availability of information about balance feeding (43.33%) and lack of awareness about treatment of poor quality straw to improve its nutritive value (43.33%) were having 4th, 5th and 6th positions respectively. Belief that feeding should be given on the basis of the production i.e. concentration only for milch animals (36.66%), scarcity of green fodder around the year (33.33%) and distant location of market for purchase of concentrate and mineral mixture (30.00%) were 7th, 8th and 9th ranks constraints, respectively. These findings are supported by Fulzele,(1994), Pandey (1996) and Singh(1990).

Table 1. Constraints related to breeding practices experienced by Meena tribes. (N=60)

S. No.	Constraints	Mean	Ranks
1	Preference of natural service.	52 (86.66)	I
2	Lack of good breed able bulls.	51 (85.00)	II
3	Lack of A.I. Centres, ill equipped A.I. Centres, Lack of services at A.I. Centres, Distant location of Veterinary hospital	50 (83.33)	III
4	High cost involved in calling Veterinary staff for treatment of breeding related problems.	39 (65.00)	IV
5	Anoestrus and repeat breeding.	32 (53.33)	V
6	Poor conception rate in animals.	30 (50.00)	VI
7	Large numbers of villages under one Livestock Ext.Officers.	22 (36.66)	VII
8	Scarcity of resources to maintain crossbred / superior breed of milch animals.	22 (36.66)	VII
9	Lack of knowledge about . pregnancy diagnosis false belief that animals, which covered through natural services, are invariably pregnant	18 (30.00)	VIII
10	Lack of knowledge about right time of servicing animals after onset of heat, getting P.D. done after service time of animals after calving.	18 (30.00)	VIII

Figures in parentheses indicate percentage

Health care constrains: The data in Table 3 revealed that non-availability of livestock extension officers and veterinary doctors in time (88.33%), distant location of veterinary dispensary (73.33%), cost of veterinary medicines and vaccines is very high (73.33%), belief that anger of god(s) / goddess(s) causes disease in animals (68.33%), belief that vaccination reduce milk yield in animals (63.33%), were on 1st, 2nd, 3rd, 4th and 5th ranks constraints, respectively. Whereas, lack of awareness about importance of vaccination (56.66%), lack of knowledge about the symptoms of common contagious diseases and their prevention measures (53.33%), lack of knowledge / disposing off the carcasses of diseased animals (51.66%), lack of knowledge about the importance of isolating the diseased animals (46.66%) and more faith on Jadu / Tona for treatment of animals rather than modern veterinary treatment (43.33%) were on 6th, 7th 8th, 9th and 10th ranks, respectively.

Table 2. Constraints related to feeding practices experienced by Meena tribes. (N=60)

S. N.	Constraints	Mean	Ranks
1	Prevalence of the belief that . colostrum feeding is unhygienic and it may be harmful to the health of calves	51 (85.00)	I
2	High cost involved in purchase of ingredients of concentrate mixture.	49 (81.66)	II
3	Lack of knowledge about proper amount of concentrate feeding.	46 (76.66)	III
4	Belief that available feed like grasses, weeds and leaves from fodder trees collected from nearby forest area is sufficient for animals feeding.	42 (70.00)	IV
5	Belief that advanced pregnant animals need to be fed low quantity of concentrates, as these are 'hot' for the animals.	34 (56.66)	V
6	Non- availability of information about balance feeding.	26 (43.33)	VI
7	Lack of awareness about treatment poor of quality straw to improve its nutritive value.	26 (43.33)	VI
8	Belief that feeding should be given on the basis of production (i.e. concentration only for milch animals).	22 (36.66)	VII
9	Scarcity of green fodder round the year.	20 (33.33)	VIII
10	Distant location of market for purchase of concentrate and mineral mixture.	18 (30.00)	IX

Figures in parentheses indicate percentage

Management constraints : Data cited in Table 4 show that limited space and other resources available for providing scientific housing to dairy animals (91.66%), inadequate credit facilities for purchasing necessary input (85.00%), lack of knowledge about clean milk production practices (83.33%), lack of knowledge about right time of drying off pregnant animals (70.00%), and high investment in scientific management of animals (68.33%) were 1st, 2nd, 3rd, 4th,and 5th ranks constraints, respectively. Whereas lack of awareness about cleaning and sanitation of animals and cattle shed (60.00%), easy availability of local substitutes (55.00%), lack of knowledge about importance of deworming and dehorning (46.67%), reliance on the indigenous methods of deworming and castration as they are considered to be more convenient, effective and cheap (43.33%) and scarcity of clean drinking water facilities for animals (36.66%) were 6th, 7th, 8th, 9th and 10th position respectively as constraints perceived by Meena tribes in adoption of improved management practices. These findings are also supported by Fulzele,(1994), Pandey (1996) Singh (1990).

Table 3. Constraints related to health-care practices experienced by the dairy farmers (N=60)

S. N.	Constraints	Mean	Ranks
1	Non-availability of LEO and veterinary doctors in time.	53 (88.33)	I
2	Distant lactation of veterinary dispensary.	52 (86.66)	II
3	Cost of veterinary medicines and vaccines is very high.	44 (73.33)	III
4	Belief that anger of god(s) / goddess(s) cause diseases in animals.	41 (68.33)	IV
5	Belief that vaccination reduce milk yield in animals.	38 (63.33)	V
6	Lack of awareness about the importance of vaccination.	34 (56.66)	VI
7	Lack of knowledge about the symptoms of common contagious diseases and their prevention measures	32 (53.33)	VII
8	Lack of knowledge / disposing off the carcass of diseased animals.	31 (51.66)	VIII
9	Lack of knowledge about the importance of isolating the diseased animals.	28 (46.66)	IX
10	More faith on jadu / tona for treatment of animals rather than modern veterinary treatment.	26 (43.33)	X

Figures in parentheses indicate percentage

Table 4. Constraints related to management practices experienced by Meena tribes. (N=60)

S. N.	Constraints	Mean	Ranks
1	Limited space and other resources available for providing scientific housing to dairy animals.	55 (91.66)	I
2	Inadequate credit facilities for purchasing necessary input.	51 (85.00)	II
3	Lack of knowledge about clean milk production practices.	50 (83.33)	III
4	Lack of knowledge about right time of drying off pregnant animals	42 (70.00)	IV
5	High cost investment in scientific management of animals.	41 (68.33)	V
6	Lack of awareness about cleaning and sanitation of animals and cattle shed.	36 (60.00)	VI
7	Easy availability of local substitutes.	33 (55.00)	VII
8	Lack of knowledge about importance of deworming and dehorning.	28 (46.67)	VIII
9	Reliance on the indigenous methods of deworming and castration as they are considered to be more convenient, effective and cheap.	26 (43.33)	IX
10	Scarcity of clean drinking water facilities for animals.	22 (36.66)	X

Figures in parentheses indicate percentage

Fodder production constraints : The data in Table 5 indicate that preference for growing food crops and cash crops rather than fodder crops (86.66%), non-availability of surplus land for fodder cultivation (78.33%), and lack of irrigation water facilities round the year (60.00%) were 1st, 2nd and 3rd ranks constraints , respectively. Whereas lack of fodder storage awareness and facilities (51.11%), improved seed and fertilizers are costly (50.00%), fodder crops get damaged due to unfavourable weather conditions (48.33%), lack / shortage of availability of H.Y.V. seeds (41.66%), inadequate knowledge in fodder cultivation and feeding practices (38.33%), easy availability of local substitutes (36.66%) were 4th, 5th, 6th, 7th, 8th and 9th positions, respectively as constraints experienced by Meena tribes in adoption of improved fodder production practices.

Table 5. Constraints related to fodder production practices experienced by Meena tribes. (N=60)

S. No.	Constraints	Mean	Ranks
1	Preference for growing food crops and cash crops rather than fodder crops	52 (86.66)	I
2	Non-availability of surplus land for fodder cultivation.	47 (78.33)	II
3	Lack of irrigation water facilities round the year	36 (60.00)	III
4	Lack of fodder storage awareness and facilities	31 (51.11)	IV
5	Improved seed and fertilizers are costly	30 (50.00)	V
6	Fodder crops get damaged due to unfavourable weather conditions	29 (48.33)	VI
7	Poor resources for green fodder cultivation	25 (41.66)	VII
8	Lack / shortage of availability of H.Y.V. seeds	25 (41.66)	VII
9	Inadequate knowledge in fodder cultivation and feeding practices	23 (38.33)	VIII
10	Easy availability of local substitutes	22 (36.66)	IX

Figures in parentheses indicate percentage

CONCLUSION

For the adoption of improved dairy farming practices among Meena tribes the main constraints were lack of good breed-able bulls, high cost involved in purchase of ingredients of the concentrate mixture, non-availability of veterinary doctors & distant location of veterinary dispensary, limited space and other resources available for providing scientific housing to dairy animals and preference to growing food/cash crops rather than fodder crops, limited irrigation facilities for fodder crop round the year were the major constraints and these constrains may be overcome with the help of education, training by the KVK and extension personnel.

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