

KNOWLEDGE AND ADOPTION OF ANIMAL HUSBANDRY PRACTICES AMONG THE FARMERS OF SIKAR DISTRICT OF RAJASTHAN

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ABSTRACT

Animal husbandry sector plays a vital role in providing household nutritional security, increased income and employment especially to the women and in rural transformation. The present study was conducted in 6 adopted villages of KVK, Fatehpur. From each adopted village 15 animal owners (Farmers) were selected randomly to make a total sample of 90 respondents. The findings of the study revealed that highest knowledge (93.3%) was found in colostrums feeding to newly born calves followed by leguminous green fodder, artificial insemination, use of mangers and clean milk production i.e. 92.2, 91.1, 90.0 and 82.6 per cent, respectively. Whereas, average knowledge was recorded in proper drainage system, proper time of vaccination and control of external parasites i.e., 40.0, 47.8 and 50.0%, respectively. Further the knowledge of the respondents was found poor in urea molasses treatment. The average maximum knowledge of animal owners (Farmers) among all animal husbandry practices was observed for clean milk production (82.6%), followed by breeding of dairy animals (78.9%), feeding of dairy animals (78.0%), housing management (60.6 %) and health & hygiene (53.3 %). The study also revealed that 40 to 60 per cent adoption was found full in practices like dry fodder feeding, clean milk production, castration, use of mangers, source of drinking water and chaffing of fodder etc. The non-adoption of the animal husbandry practices was observed in health & hygiene (56.3%) followed by the housing management (31.7%), feeding of dairy animals (26.6%), breeding of dairy animals (17.2%) and clean milk production (6.7%). Therefore, to increase milk production, much need to improve the knowledge level of the animal owner (farmers) through trainings & other extension activities for full adoption of animal husbandry practices.

INTRODUCTION:

Animal husbandry sector plays a vital role in providing household nutritional security, increased income and employment especially of women and in rural transformation. Animals provide a diverse range of output for cultivation, irrigation, transportation, fiber and leather goods, manure for fertilizer and fuel besides direct production of milk and meat for human consumption. Livestock provide economic security and social status to the family. Thus, progress in livestock sector is directly related to a more balanced development of rural economy and upliftment of poorer sections of society.

Straws, stovers and other agricultural byproducts would continue to be major inputs as livestock feed for ruminants. There is large shortage of green fodder and concentrates for livestock feeding. The programmes on production of feed and fod-

der are being further strengthened both for increasing bio-mass availability and enrichment of straws and stovers. Livestock production is severely affected by devastating animal diseases. Keeping the importance of breeding, feeding, management and health care practices to increase clean milk production and productivity, the present study was undertaken with following objectives:-

1. To study the knowledge of animal owners about animal husbandry practices.
2. To study the extent of adoption of animal husbandry practices by the animal owners.

RESEARCH METHODOLOGY

The present study was conducted in Sikar district of Rajasthan. From the district three Panchayat Samities namely *Fatehpur*, *Laxmangarh* and *Dhod* were purposively selected where the maximum ani-

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Table 1: Knowledge and adoption of animal management practices (n=90)

S.No.	Particular practices	Knowledge(%)		Adoption(%)		
		Yes	No	Full	Partial	No
A.	Breeding					
1.	Breeding of dairy animals					
a.	Cow : cross / local	86.7	13.3	23.3	57.8	18.9
b.	Buffalo: non- descript/ improved	53.3	46.7	20.0	63.3	16.7
2.	Artificial insemination	91.1	8.9	56.7	21.1	22.2
3.	Castration	84.4	15.6	61.1	27.8	11.1
	Average	78.9	21.1	40.3	42.5	17.2
B.	Feeding					
1.	Balance ration					
a.	Green fodder					
	Leguminous	92.2	7.8	26.7	42.2	31.1
	Non-Leguminous	82.2	17.8	21.1	35.6	43.3
b.	Dry fodder	88.9	11.1	80.0	20.0	000
c.	Balance concentrate	68.9	31.1	31.1	41.1	27.8
d.	Minerals	60	40	24.4	31.1	44.4
2.	Colostrum feeding to newly born calves	93.3	6.7	33.3	44.4	22.2
3.	Source of drinking water	100	0	66.7	33.3	000
4.	Use of mangers	90	10	62.2	26.7	11.1
5.	Chaffing of fodder	87.8	12.2	61.1	25.6	13.3
6.	Urea molasses treatment	27.8	72.2	8.9	13.3	77.8
7.	Feeding of concentrates during pregnancy	66.7	33.3	20	53.3	26.7
8.	Feeding of concentrates during lactation	77.8	22.2	33.3	45.6	21.1
	Average	78.0	22.0	39.1	34.4	26.6
C.	Housing					
1.	Type of housing					
a.	Kuchha	83.3	16.7	50	46.7	3.3
b.	Pucca	72.2	27.8	42.2	52.2	5.6
2.	Ideal cattle shed					
a.	Sloppy floor	46.7	53.3	13.3	33.3	53.3
b.	Proper drainage system	40	60	11.1	24.4	64.4
	Average	60.6	39.4	29.2	39.2	31.7
D.	Health & hygiene					
1.	Deworming	62.2	37.8	16.7	31.1	52.2
2.	Control of external parasites	50	50	17.8	33.3	48.9
3.	Proper time of vaccination	47.8	41.1	8.9	23.3	67.8
	Average	53.3	43.0	14.4	29.3	56.3
E.	Clean Milk production					
1.	Methods of milking	82.2	17.8	37.8	55.6	6.7
2.	Cleaning of udder	82.2	17.8	72.2	24.4	3.3
3.	Cleaning of hands and utensils	83.3	16.7	57.8	32.2	10
	Average	82.6	17.4	55.9	37.4	6.7

mal husbandry activities (trainings & fodder demonstrations) were conducted by KVK, Fatehpur during the years 2007, 2008 and 2009. From each Panchayat Samiti free adopted villages and from each adopted village 15 animal owners (Farmers) were selected randomly. Thus, total sample of study consists of 90 respondents from 6 village's.

The data were collected through personal interview schedule consisting of set of questions, which were asked to the farmers by the investigator in face to face situation to give their response about each technology for the extent of knowledge and adoption of recommended animal husbandry practices. The collected information was analyzed using the simple statistical techniques.

RESULTS AND DISCUSSION

Knowledge level of animal owner farmers

The Table 1 indicated that knowledge level of farmer's in case of breeding of dairy animals regarding artificial insemination was found maximum (91.1%) as compare to the breeding of cows (86.7%) & buffalo (53.3%) and castration of the male animals (84.4%). In case of feeding practice 'Source of drinking water' was known by cent percent respondents followed by colostrums feeding (93.3%), leguminous green fodder (92.2%), use of mangers (90.0%), chaffing of fodder (87.8%), feeding of concentrates during lactation (77.8%), feeding of concentrates during pregnancy (66.7%), and urea molasses treatment (27.8%).

The farmer's knowledge level about Kuchha and Pucca housing were found 83.3% and 72.2%, respectively. In case of ideal cattle shed practice only 46.7% farmers knew use of sloppy floor and 40.0% proper drainage system at their farms. The knowledge of the respondents regarding health & hygiene, approximately 50% of the respondents were aware about the deworming (62.2%), control of external parasites (50.0%) and proper time of vaccination (47.8%). Similar findings have been also reported by Singh (1987). The knowledge level of farmers about all the aspects included in clean milk production i.e. methods of milking, cleaning of udder and cleaning of hands & utensils were known by the 82.2, 82.2 and 83.3% respondents, respectively. The Table 1 also indicates that knowledge of animal owners

(Farmers) regarding animal husbandry practices was observed for clean milk production (82.6%), followed by breeding of dairy animals (78.9%), feeding of dairy animals (78.0%), housing management (60.6 %) and Health & hygiene (53.3 %). The overall results revealed that the farmers were found to more familiar to all animal husbandry practices (50 to 80%).

Extent of adoption of animal husbandry practices by animal owner

The respondents were also asked about the adoption of different practices of animal husbandry. The results revealed that adoption of clean milk production was (55.9%) followed by the breeding of dairy animals, feeding, housing and health & hygiene with 40.3, 39.1, 29.2 and 14.4%, respectively. Similarly, Sharma and Singh (2010) and Kumar, *et. al.* (2001) observed that medium level of adoption about feeding and health care practices ranging from 51.57 to 57.50 percent in buffalo also support the present findings.

The average partial adoption was observed maximum under the practices breeding of dairy animals (42.5%) followed by the housing management 39.2%, clean milk production 37.4%, feeding 34.4% and health & hygiene 29.2%.

The non-adoption among all the animal husbandry activities was observed in health & hygiene (56.3%) followed by the housing management (31.7%), feeding (26.6%), breeding of dairy animals (17.2%) and clean milk production (6.7%), however, the adoption (25 to 50%) was not as much as knowledge they have (50-80%).

CONCLUSION

From the study it is concluded that after conduction of the fodder demonstrations and trainings in the study area the knowledge level of animal owners was found maximum about animal husbandry practices like colostrums feeding to newly born calves (93.3%) followed by leguminous green fodder, artificial insemination, use of mangers, clean milk production 92.2, 91.1, 90.0 and 82.6 per cent, respectively. Whereas, low knowledge was recorded in urea molasses treatment, proper drainage system, proper time of vaccination and control of external parasites i.e. 27.8, 40.0, 47.8 and 50.0%, respectively. The study

also revealed that extent of adoption was found good (40 to 60 %) in practices like dry fodder feeding, clean milk production, castration, use of mangers, source of drinking water and chaffing of fodder etc. The non-adoption among all the animal husbandry practices was observed maximum in health & hygiene (56.3%) followed by the housing management 31.7%, feeding of dairy animals 26.6%, breeding of dairy animals 17.2% and clean milk production 6.7%.

Therefore, there is a need of training to the animal owner farmers about all animal husbandry practices including health & hygiene, proper time of vaccination, deworming, proper drainage system in housing and feeding of concentrates during pregnancy.

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