ADOPTION OF IMPROVED DAIRY FARMING PRACTICES AMONG TRIBAL COMMUNITY

H.R. Meena, K.L. Meeena and R.M. Fulzele
Division of Extension Education,
Indian veterinary Research Institute, Izatnagar-243122, Bareilly-UP
drhrmeena@yahoo.co.in
Received 8-8-11 Accepted 24-10-2012

ABSTRACT

The present study was conducted in southern Rajasthan. A total of 200 respondents belong to tribal communities were selected purposively. The calculated 'r' value relationship with overall adoption of IDFPs indicated that socio-economic, socio-psychological and communication characteristics of the tribal dairy farmers were found to have positively significant relationship at one per cent level of probability with overall adoption of IDFPs.

KEY WORDS : Adoption, dairy farming, improved practices, tribal dairy farmers.

INTRODUCTION

Adoption of any improved technology involves a process in which awareness is created, attitudes are changed and favourable conditions for adoption are provided. Wilkening (1953) described the process of adoption, deciding and acting over a period of time. In this context, tribal dairy farmers still out of line in adoption of much improved dairy farming practices. Tribe farmers not only want to increase the productivity of milch animals but also wish to raise the economic status through increased milk production. To enhance the production potential of our milk animals, mass adoption of improved farming practices by the dairy farmers is a crucial factor. At the same time, adoption behaviour of the dairy farmers depends on education; extension contact and annual income were found having positively significant correlation with technology adoption of all the selected enterprises, while the variable operational land holding had shown positive and significant relation with dairy farming (Bhople and Thakare 1994; Kunzru and Tripathi 1994; Singha et al. 2012). Considering this theoretical background, the study was carried out to find the correlation with socio-economic, socio-psychological and communication characteristics of the dairy farmers in relation to adoption of improved dairy farming practices among the tribes dairy farmers.

MATERIALS AND METHODS

The present study was conducted in Rajasthan state. Two districts namely Udaipur and Banswara were selected purposively on the basis of highest concentration of tribal population to total population. Eight villages were selected randomly from the two districts. All the respondents of these eight selected villages were categorized on the basis of tribal communities i.e. Meena, Bhil, Garasia, and Damor, using the proportional random sampling technique, 25 respondents representing the above four categories were selected randomly. A total of 200 respondents were selected from both the districts for the present investigation.

RESULTS AND DISCUSSION

Adoption of breeding practices

In pooled sample, majority of the tribal 52 per cent had medium level of adoption followed by 25 and 23 per cent in low and high level of adoption, respectively. It could be concluded that adoption of improved breeding practices was higher in Meena and Damor tribes in comparison of Bhil and Garasia tribes. Higher adoption level in Meena and Damor tribes in improved breeding practices may be due to the fact that they had large herd size, land holding and are in good economic position and more resources availability due to their better economic position and more interested in dairy

Table 1: Distribution of the tribal according to adoption of improved dairy farming practices

Category score	Tribal Groups				
	Meena	Bhil	Garasia	Damor	Pooled
Breeding practices					
Low (<10.80)	12 (20)	13 (26)	11 (24)	15 (33)	50 (25)
Medium (10.8-24.84)	32 (53)	28 (56)	21 (47)	24 (53)	104 (52)
High (>24.84)	16 (27)	9 (18)	13 (29)	6 (14)	46 (23)
Feeding practices					
Low (<8.70)	9 (15)	10 (20)	12 (26)	10 (22)	41 (20)
Medium (8.70-23.22)	30 (50)	32 (64)	26 (59)	26 (58)	114 (57)
High (>23.22)	21 (35)	18 (16)	7 (15)	9 (20)	45 (23)
Health care practices					
Low (<7.44)	20 (34)	31 (62)	18 (40)	15 (33)	84 (42)
Medium (7.44-22.92)	29 (48)	12 (24)	17 (38)	21(48)	79 (39)
High (>22.92)	11 (18)	7 (14)	10 (22)	9 (20)	37 (19)
Management practices					
Low (<8.82)	9 (15)	6 (12)	10 (22)	5 (11)	30 (15)
Medium, (8.22-22.02)	37 (62)	32 (64)	27 (60)	31 (69)	127 (63)
High (>22.02)	14 (23)	12 (24)	8 (18)	9(20)	43 (22)
Fodder production practices					
Low (<7.98)	6 (10)	8 (15)	7(16)	6(13)	27(14)
Medium (7.98-22.32)	9(15)	19 (38)	20 (44)	18(40)	66(33)
High (>22.32)	45 (75)	23 (46)	18(40)	21(47)	107(53)
Overall adoption of IDFPs.					
Low (<43.74)	8 (14)	13 (26)	9 (20)	8(18)	38(19)
Medium (43.74-55.14)	33(55)	20 (40)	21(47)	23(51)	97(48)
High (>24.84)	19(32)	17 (34)	15(33)	14(31)	66(33)

Figures in ( ) indicate percentage

farming, they are able to allocate their resources for getting new ideas or practices.

Adoption of feeding practices:

In pooled sample, the majority of the tribal (57%) fell in medium category of adoption. Adoptions of feeding practices are almost similar in all selected tribal communities, by this it can be said that

Table 2 : Correlation coefficient of the selected trait of tribal with overall adoption of improved dairy farming practices.

Sl. No.	Traits	Meena ('r' value)	Bhil ('r' value)	Garasia ('r' value)	Damor ('r' value)	Pooled ('r' value)
1	Age	0.1979	0.2943*	0.3458*	0.3172*	0.1869
2	Family Size	0.2678*	0.3430*	0.3014*	0.4387**	0.2327*
3	Education	0.4922**	0.1391	0.1211	0.2401	0.1989
4	Family Education Status	0.3240*	0.3710**	0.1713	0.3017*	0.2362*
5	Social Participation	0.5530**	0.5490**	0.4976**	0.4145**	0.3924**
6	Land Holding	0.4594**	0.4920**	0.3320*	0.4591**	0.5216**
7	Herd Size	0.5057**	0.3337*	0.3477*	0.4940**	0.3117**
8	Milk Production	0.5450**	0.3379*	0.3778**	0.3731**	0.4229**
9	Milk Consumption	0.3274*	0.2866*	0.3792**	0.2259	0.3878**
10	Milk Sale	0.4005**	0.1181	0.4130**	0.4243**	0.4356**
11	Annual Income	0.2628*	0.2988*	0.3031*	0.3507*	0.3568**
12	Attitude toward IDFP	0.3206*	0.3896**	0.3048*	0.3440*	0.6117**
13	Economic Motivation	0.4998*	0.4343**	0.2266	0.3063*	0.4265**
14	Risk Orientation	0.1967	0.0542	0.0770	0.0191	0.2249*
15	Extension Contact	0.5495**	0.5331**	0.5393**	0.5086**	0.6845**
16	Mass Media exposure	0.4069**	0.4490**	0.4827**	0.4442**	0.5715**
17	Knowledge	0.5503**	0.3807**	0.3376*	0.4332**	0.4512**
18	Adoption of breeding	0.5737**	0.5339**	0.6439**	0.4472**	0.5624**
19	Adoption of feeding	0.4354**	0.5139**	0.40000**	0.5485**	0.4875**
20	Adoption of health care	0.5617**	0.4537**	0.3269*	0.5510**	0.4271**
21	Adoption of management	0.3825**	0.3241*	0.3639*	0.3528*	0.5547**
22	Adoption of fodder production	0.6692**	0.4496**	0.6031**	0.4613**	0.5219**

* Significant at 5% level of significance, ** Significant at 1% level of significance.

most of the tribal farmers adopting improved feeding practices at a reasonable position. It may be due to that tribal are familiar with improved feeding practices from birth in a farming communities.

Adoption of health care practices:

Almost an equal percentage was found in low and medium (42 & 39%) category of adoption, respectively. About 19 per cent respondents fell in high level of adoption of health- care practices. It can be concluded that adoption of improved animal health was low in all tribe communities because health care practices are more complex and more costly.

Adoption of management practices:

Majority of the respondents 63 per cent fell in medium category of adoption. Similar finding have been reported by Sawarkar et al. (2001). On the basis of finding we can say that adoption of improved management practices by the tribal farmers are in good position but practices like ventilation ,light, proper sanitation in shed and drainage system in animal shed are still not adopted by the tribal farmers because lack of awareness regarding benefits of such types of practices and cost involvement.

Adoption of fodder production practices:

Majority of the respondents (53%) fell in high level of adoption followed by 33 per cent in medium and 14 per cent in low level of adoption. It can be concluded from the above finding that high level of fodder production practices was due to the farmers are familiar with cultivation of crops from eminent period of time and they are well known about cultural practices of crops because the main occupations of the majority farmers is agriculture and other are subsidiary.

Overall adoption of IDFPs:

It could be observed from table 1 that more than half of the respondents (55 & 51%) fell in medium category in Meena and Damor respectively. Whereas (40 & 47%) Bhil and Garasia tribal fell in Medium category of adoption, respectively. 32, 34, 33 and 31 per cent Meena, Bhil, Garasia and Damor respondents fell in high level of adoption respectively. However 13 per cent Meena, 26 per cent Bhil, 20 per cent Garasia and 27 per cent Damor tribal fell in low level of adoption of overall adoption of improved dairy farming practices. 48 per cent fell in medium and 32 per cent in high level of adoption, respectively. Ninety per cent tribes fell in low-level adoption of overall IDFPs. Chauhan et al. (2006) reported that the overall trend indicates that as magnitude of land holding increases, the farmers inclined more towards the adoption of improved dairy practices.

Relationship between Adoptions of overall Improved Dairy Farming Practices (IDFPs)

Social participation, land holding, herd size, milk production, milk consumption, milk sale, annual income, attitude towards dairy farming, economic motivation, extension contact, mass media exposure, knowledge about IDFPs, adoption of breeding, feeding, health care, management and fodder production practices were found to have positively significant relationship at 1 per cent level of probability with overall adoption of IDFPs. Whereas, Family size, family education status and risk orientation observed positively significant at 5 per cent level of probability with adoption of overall adoption of improved dairy farming practices as depicted in table 2.

It could be derived from the above findings that those tribal dairy farmers who had higher social participation, land holding, herd size, milk production, milk consumption, milk sale, annual income, attitude towards dairy farming, economic motivation, extension contact, mass media exposure, knowledge about IDFPs, adoption of breeding, feeding, health care, management and fodder production practices positive and highly significance relation with overall adoption of IDFPs. Khode et al. (2009) concluded that education and socio-economic status were highly significant, whereas total annual income, land size, social participation, utilization of communication sources, dairy herd

size, daily milk production, daily milk sale, milk production from purchased dairy cattle, knowledge level, attitude towards dairy farming and economic motivation were found significantly correlated with adoption of improved dairy cattle management practices

REFERENCES

Bhople, R. S, and Thakare, S, M (1994). Farm information source utilization, adoption and transfer behaviour of farmers; Rural India. **57(7)**, 153-154.

Chauhan, D.S., Kamble,V.J., Padghan,P.V., Khandare N.O., and Kamble,R.R. (2006). Dairy farming practices adopted in tribal area of kinwat tehsil (district - Nanded).Indian J. Anim. Res., **40 (1),** 64 – 66.

Khode, N.V., Sawarkar, S.W., Banthia, V.V., Nande, M.P., and Basunathe, V.K. (2009). Adoption of improved dairy cattle management practices under Vidarbha Development Programme Package. Indian Res. J Ext. Edu. **9 (2),** 80-84.

Kunzru, O. N. and Tripathi, H(1994). A comparative study of adoption of dairy farm technologies between non-members and members of dairy co-operative villages; Indian Journal of Animal Sciences. **64(5),** 501-507.

Sawarkar S.W.; M.M. Borkar, S.V. Upadhye and S.B. Jadhao (2001). Characteristics of dairy owners, their awareness,adoption and constraints in adoption of artificial insemination practices in Vidarbha region. Ind. J. Dairy Sci., **54 (4),** 194-202.

Singha, A. K., Baruah, M.J., Bordoloi, R., Dutta, R. and Saikia, U.S. (2012). Analysis on Influencing Factors of Technology Adoption of Different Land Based Enterprises of Farmers under Diversified Farming System. Journal of Agricultural Science, **4(2)**, 139-146.

Wilkening, E.A. (1953). Adoption of improved farm practices as related to family factors, Wisconsin Experiment Station, Research Bulletin, 183, Wisconsin.

❑