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Knowledge of Dairy Farmers about Improved Animal Management Practices

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Abstract

The investigation was carried out with 200 dairy farmers of Jalgaon district of Maharashtra. Ten villages of Jalgaon district of Maharashtra were selected and from each village 20 respondents were selected randomly. The information on socio-economic status and knowledge of improved management practices were collected through personal interviews of the respondents. It was found that, 29 percent of farmers were medium category followed by (27 percent) small category, (23 percent) marginal, (14.5 percent) large and only (6.5 percent) farmers belonged to landless, categorie. Middle age group farmers were highest followed by young age and older age group. It was observed that majority of the farmers were educated upto primary school level. Correlation of socio-economic characteristic with knowledge revealed that age of dairy farmers, family size and annual income was positive but non-significant. Education, land holding, social participation and source of information of dairy farmers were positively and significantly correlated. Animal herd size of the farmer had very weak and non-significant correlation with knowledge of improved animal management practices. Risk orientation attitude had negatively and non-significant correlation with level of knowledge of improved dairy cattle management practice. Socio-economic profile of the dairy farmer influences the knowledge of improved animal management practices.

Key words: Improved Animal management practices, Independent variables, Knowledge, Socio-economic characteristic

Livestock provide economic security and social status to the rural families. Animal husbandry is second largest economical activity in rural india next to agriculture (Sabapara *et al.*, 2013). Livestock sector is directly related to a more balanced development of rural economy and upliftment of poorer sections of the society. More than 80 per cent of rural families keep cattle that provide, milk for consumption, income from sale of milk and drought power for agriculture, thus dairy sector significantly helps in on poverty reduction in rural areas (Rahman and Gupta, 2015). Majority of these animals are reared under sub-optimal conditions due to low economic status of livestock owners. Most of the farmers are not aware of scientific animal management practices and adoption of improved dairy practices is pre-requisite for development of dairy industry (Aulakh and Singh, 2015). Milk production in India is in the hand of small rural producer and 70 per cent of production scattered all over the country. The unorganized sector in milk marketing, still accounts for nearly 80 per cent of marketed milk and milk

products in the country (Bairagi, 2013). The quality of milk and milk products in dairy product supply chain is affected by the knowledge of dairy farmer about improved animal management practices (Singh and Gupta, 2015). The study was carried out to asses the socio-economic profile and knowledge of improved animal management practices among the dairy farmers (members of Jalgaon Dstrict Milk co-operative Union) in the study area.

MATERIALS AND METHODS

The present study was conducted by selecting 200 dairy farmers of Jalgaon district Milk co-operative Union. Ten villages of Jalgaon district of Maharashtra were selected and from each village 20 respondents were selected as per the procedure followed by Sabapara *et al*. (2013). Jalgaon district is located in the North West region of the state of Maharashtra. The Jalgaon is located between 21°C North latitude and 75.45° East longitude. Jalgaon district receives an average rainfall of about 750 mm and the maximum temperature 34.9°C and minimum 19.9°C. The basic instrument used for the study was structured interview schedule. The data was collected through personal interviews of the respondents, so as to get valid and complete responses. The tabulated data was subjected to statistical analysis. Ex-post facto research design was used for the present study. Kerlinger (1964) stated that ex-post facto research design is worthy to apply when the independent variable has already acted upon.

RESULTS AND DISCUSSION

Socio-economic characteristic of dairy farmers

There were highest proportion of dairy farmers of middle age group, followed by young age group and older age group. The findings are in harmony with the findings of Vekariya *et al*. (2016). It was observed that majority of farmers were educated upto primary school level (Table 1).

The highest per cent of primary school level educated dairy farmers clearly indicate about adequate primary schooling facilities available to farmers. Similar findings are reported by Jadav *et al*. (2014) for dairy farmers from Surat district of Gujrat. It was found that more than half of the farmers were of medium family size followed by small family size, while 17 percent belonged to the category of large family size. The findings are in agreement with the results of Kasish and Dhawan (2015). Further, it was observed that the majority of farmers possessed medium animal herd size and just 15 percent dairy farmers belonged to large herd size. These findings are in close agreement with Lohakare *et al*. (2015). It was found that, (29 per cent) of farmers were of medium category followed by (27 per cent) small category, (23 per cent) marginal, (14.5 percent) large and only (6.5 per cent) farmers belonged to landless categorie. As far as annual income is concerned, (41.5 percent) farmers had medium level of income followed by low level of income (36 per cent) and high level of income (22.5 percent). Jadav *et al*. (2014) reported similar findings. Major proportion of farmers had medium level of social participation, followed by low level of participation and (21.5 percent) had high level of participation. High social participation of dairy farmers may be due to their more interest and attitude for participation of social activities. Large proportion of farmers had medium level of use of different source of information followed by (23 per cent) having low use of source of information and (18 per cent) had high level of use of source of information. Source of information will have positive impact on knowledge of dairy farmers. Similar findings were reported by Sharma *et al*. (2007) There were highest percent of farmers of medium risk orientation (68.5 per cent) which may be due to assured profitability from dairy business.

Table 1: Distribution of dairy farmers of according to their socio-economic profile

(N=200)

Profiles	Category	Frequency	Percentage
Age	Young age (up to 33 years)	45	22.50
	Middle age group (34 to 55 years)	129	64.50
	Old age Group (56 years and above)	26	13.00

	Illiterate	24	12.00
	Can read only	2	01.00
	Can read and Write	2	01.00
Education	Primary School	65	32.50
	Middle School	51	25.50
	High School	43	21.50
	Graduate	13	06.50
	Small family size (up to 4 members)	51	25.50
Family size	Medium family size (5 to 9 members)	115	57.50
	Large family size (10 member and above)	34	17.00
	Small Herd Size (Up to 2)	18	9.00
Herd size	Medium Herd Size (3 to 7)	152	76.00
	Large Herd Size (8 and above)	30	15.00
	Land less (No Land)	13	6.50
	Marginal (Up to 2.5 acres)	46	23.00
Land holding	Small (above 2.5 to 5 acres)	54	27.00
	Medium (above 5 to 10 acres)	58	29.00
	Large (above 10 acres)	29	14.50
	Low (up to ₹ 50000)	72	36.00
Annual income	Medium (₹ 51000 to 100000)	83	41.50
	High (₹ 101000 and above)	45	22.50
	Low Social participation	75	37.50
Social participation	Medium Social participation	82	41.00
	High Social participation	43	21.50
Source of information	Low (Score up to 12)	46	23.00
	Medium (Score up to 13 to 22)	117	58.50
	High (Score 23 and above)	37	18.50
Risk orientation	Low (Score up to 17)	32	16.00
	Medium (Score 18 to 23)	137	68.50
	High Score (Score 24 and above)	31	15.50
	Total	200	100.00

Correlation of socio-economic characteristic of dairy farmers with level of knowledge

The age of dairy farmers was having positive but non-significantly correlation with level of knowledge of dairy animal management practices (Table 2). These findings were in agreement with Shekhawat *et al.* (2013). Education level of dairy farmers was significant and positively correlated with level of knowledge about the improved management practices. Education is directly and proportionately correlated with knowledge and education must have been working as a driving force in increasing the knowledge. Similar findings were reported by Ashwar *et al.* (2012).

Table 2: Correlation coefficient of different Independent variable with knowledge of dairy farmers

Independent variable	Correlation Coefficient
Age	0.070 NS
Education	0.148*
Family Size	0.091 NS
Herd Size	-0.009 NS
Land Holding	0.180 **
Annual Income	0.186**
Social participation	0.285**
Source of Information	0.161*
Risk Orientation	- 0.029 NS

**P<0.01 * P<0.05 N S = Non Significant

The family size of farmers and level of knowledge were positive and non-significantly correlated. While Satyanarayan and Jagadeeswary (2010) had reported that family size had negative and non significant relationship with knowledge. Animal herd size of the farmer had very weak and non-significant correlation with level of knowledge of management of dairy animal practices, which indicate little relationship with herd size and knowledge. Sharma and Singh (2008) also reported silimar findings in buffalo feeding practices. Land holding of dairy farmer has highly significant and positive correlation. The increase in land holding will results in increase income, which in turn lead to increased social participation and gain in knowledge. These observations are in agreement with the findings of Satyanarayan. and Jagadeeswary (2010). Social participation of dairy farmers had highly significant and positive correlation. Similar findings were also reported by Aulakh and Singh (2015). It was observed that source of information was positive and significantly correlated with knowledge of improved animal husbandry practices. The above findings are in close agreement with Bhatt and Patel (2011). Risk orientation attitude had negatively and non-significant correlation. Contarary to our findings, Arunkumar and Meti (2013) found positive and highly significant correlation of risk orientation with knowledge of improved animal management practices among women dairy farmers from Mandya district of Karnataka State.

CONCLUSION

It is concluded that there was a positive and non-significant correlation of age, family size and negative non-significant correlation with herd size and risk orientation may lead to conclusion that these variables influence very little on level of knowledge. The positive significant correlation of education and sources of information and positive highly significant correlation of land holding size, annual income and social participation with knowledge level of dairy animal management practices indicates that increase in the selected characteristics will increase the knowledge level. Improvement in animal management practices through ehnancing the existing level of knowledge of dairy farmers through extension activities will increase the milk production in the country.

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