

Knowledge of Dairy Farmers about Improved Animal Husbandry Practices in Kheda District of Gujarat

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ABSTRACT

The present study was undertaken in Kheda district in Gujarat with the objectives to study the knowledge and socio – economic status of the dairy farmers in adoption of some improved animal husbandry practices. It was observed that 52 per cent dairy farmers belonged to middle age group, 60 per cent obtained secondary education, 80 per cent had membership of social organisation, 32 per cent possessing marginal land holding and 70 per cent were dependent upon canal irrigation. Fifty four per cent of farmers had big size family (more than five members) whereas 60 per cent had one earning member in a family and 78 per cent were engaged in agriculture and animal husbandry. Seventy to ninety per cent of dairy farmers had high level of knowledge regarding breed improvement, nutritional management, water management, improved animal husbandry practices of milking management and disease control practices. Thus, it was concluded that dairy farmers of Kheda tehsil possessed medium to high level of knowledge regarding improved animal husbandry practices.

Key words: Knowledge, Improved Animal Husbandry Practices, Socio-Economic Status, Dairy Farmers

INTRODUCTION

In Gujarat, dairy farming is providing subsistence to millions of small, marginal land less farmers. The milch animals are being reared mainly through the utilisation of crop residues and thus, the milk production is essentially a subsidiary activity in agriculture. There are 13,141 dairy cooperative societies with 27,16,000 members. It is a known fact that the bulk of milk production is handled by small milk producers who are illiterate and unaware of economic aspects of milk production. Therefore, there is a need for poverty alleviation through adoption of dairying as commercial enterprise. However, most of the rural farmers who keep dairy animals don't follow the recommended package of practices of dairy management. Hence, it was felt that there is an urgent need to sensitise the dairy farmers about the scientific technologies and various interventions required in dairy production, in order to enhance milk quality and quantity from dairy animals.

Keeping in view the above situation, the present study was undertaken with the objectives to study the knowledge and socio-economic status of the dairy farmers in adoption of some improved animal husbandry practices.

MATERIALS AND METHODS

The study was carried out in 5 villages of Kheda tehsil of Kheda district . The dairy farmers having dairying as their major or subsidiary occupation were randomly selected from the selected villages. For this purpose, a comprehensive list of dairy farmers was prepared with the help of secretaries of milk co-operative societies, artificial insemination worker and village extension worker. Thus, a total sample size of 50 respondents was taken for this study.

The knowledge of an innovation is prerequisite for adoption. For measuring the knowledge regarding improved practices of animal husbandry knowledge scale was developed. On the basis of information collected for this purpose,

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respondents were classified in three groups namely high, medium and low. The data were collected through the personal interview to get first hand information and classified with the help of average, frequency and percentage.

RESULTS AND DISCUSSION

Age

The data revealed that majority of the dairy farmers belonged to middle age group (52%) followed by old age group (28%) where as only 20 per cent belonged to the young age group. This was probably due to the fact that the younger generation is less interested in taking up dairy farming as their occupation. Moreover, middle age is considered as the most productive time period in the life of an individual. These finding are similar to those reported by Toppo (2005), Bhatt (2006) and Sen (2007).

Education

It was found 60 per cent of the dairy farmers had obtained secondary education, where as 20 per cent and 12 per cent had primary and graduate level education respectively. Only 4 per cent people have higher education and 6 per cent of the respondents were illiterate. It was therefore, concluded that 80 per cent of the dairy farmers were having primary or secondary level of education. The probable reason might be the facility for primary to higher secondary education available at the village and the nearby cities which have encouraged the dairy farmers to study up to that level. Similar findings have been reported by Gour (2002), Bhatt (2006) and Sen (2007).

Social Participation

Social participation denotes that extent to which an individual is actively involved in the affairs of the community. It was observed that 80 per cent of the dairy farmers were the members of various social organisations like milk co-operatives society, gram panchayat and village co-operatives society. These findings were in agreement with those of Khokhar (2008) and in contradictions to those of Bhatt (2006).

Use of information and land holding

Majority of respondents using television,

newspaper, and poster/charts displayed in village level dairy co-operatives as a source of information of improved animal husbandry practices. Furthermore, it was noted that 36 per cent of the dairy farmers were small, 32 per cent marginal, 16 per cent medium, 6 per cent large and 10 per cent landless. Therefore, it can be said that majority (80%) of the farmers had only 1 to 4 hectares of land. This might be due to high density of population in Kheda district as well as industrialisation and urbanisation might have played an important role in reduction of per capita availability of land. These results were in agreement with Bhatt (2006) and Sen (2007).

Family Size

The size of family plays an important role while taking a decision regarding adoption of an innovation. It was noticed that 54 per cent of respondents had big size family with more than five members and 46 per cent of respondents had small family size (up to 5 members). It was noticed that 60 per cent families were with one earning member, 28 per cent with 2 earning members and only 12 per cent families were there with more than 2 earning members. In Kheda tehsil, 70 per cent farmers were dependant on canal irrigation and 3 per cent possessed own bore well whereas 6 per cent farmers were totally dependent upon annual rainfall.

Occupation

Occupation refers to an engagement of dairy farmers in different activities as a source of income for their livelihood. Seventy eight per cent of the dairy farmers were engaged in agriculture and animal husbandry only. The persons having agriculture, animal husbandry and government service or private employees were 4 per cent and 12 per cent were engaged in business along with agriculture and animal husbandry. Hence, it can be said that 80 per cent respondents were found to be dependent on agriculture, dairy farming and related occupations under two or three tier production system. This finding was in agreement with Gour (2002) and Sen, (2007).

Herd size

Herd size is the total number of animals owned by a farmers at his dairy unit. It was

observed that 76 per cent farmers were keeping buffalo, 20 per cent rearing both a cow and buffalo and 4 per cent only cow and were not aware of the importance of crossbred cow rearing and dairy business. These findings were in contrast to those reported by Gour (2002).

Linkages with Extension Agencies

It was noticed that majority of farmers were found to have contact with the officer of dairy co-operatives, subject matter specialist of K.V.K followed by government veterinary doctor and village extension workers for getting information

Table 1. Distribution of the dairy farmers according to their personal and socio- economic characteristics (n=50)

Sr. No.	Characteristics	Frequency	Percentage
1	Age		
	Young age(18 to 35 years)	10	20
	Middle age(36 to 50 years)	26	52
	Old age(above 50 years)	14	28
2	Education		
	Illiterate	2	4
	Primary Education	10	20
	Secondary Education	30	60
	Higher Education	2	4
	Graduate	6	12
3	Membership in Social Participation		
	Membership	40	80
4	Use of source of information		
	News Paper	30	60
	Poster/Charts	28	56
	Radio	20	40
	Television	38	76
	Godarshan/Krishigovidya	5	10
5	Land Holding		
	Landless	5	10
	Marginal Farmers	16	32
	Small Farmers	18	36
	Medium Holding	8	16
	Big Farmers	3	6
6	Family Size		
	Small Family (up to 5 persons)	23	46
	Big Family (Above5 persons)	27	54
7	Earning members in family		
	1 earning member	30	60
	2 earning members	14	28
	More than 2 members	6	12
8	Irrigation Facility		
	No Irrigation facility	6	12
	Canal and Borewell	6	12
	Canal	35	70
	Borwell	3	6
9	Occupation		
	Animal Husbandry	3	6
	Agriculture and Animal Husbandry	39	78
	Agriculture, Animal Husbandry and Service	2	4
	Agriculture, Animal Husbandry and Business	6	12
10	No. of animals possessed		
	Only Cow	2	4
	Only Buffalo	38	76
	Both Buffalo and Cow	10	20

of improved animal husbandry practices. This was probably due to the fact that the farmers might have taken interest in various effective transfers of technology services provided by extension agencies of state agriculture department, Amul dairy, state animal husbandry department, veterinary college and K.V.K. Similar findings were reported by Gour (2002), and Bhatt (2006).

Average performance of milch animals

Six per cent farmers had local cows with 6 to 10 l/d, 4 per cent had animals up to 5 l/d. whereas 12 per cent had cross bred cows producing milk

more than 10 l/d. On the other hand 54 per cent farmers were keeping buffalo with 5 l/d followed by 30 per cent with 6 to 10 l/d and 8 per cent with more than 10 l/d.

It was evident from the data (Table4) that the knowledge level of all the farmers was quite high in terms of recommended package of practices. Only disease control and calf management were the areas where special attention was required.

CONCLUSION

Fifty two per cent of dairy farmers belonged to middle age group, acquired secondary

Table 2. Linkages with extension agencies

Sr.No.	Extension Worker	Visited		Never Visited	
		Frequency	Percentage	Frequency	Percentage
1	Veterinary Officer	14	28	36	72
2	Livestock Inspector	2	4	48	96
3	Deputy Director A.H.	3	6	47	94
4	Extension Worker	14	28	36	72
5	SMS of KVK	41	82	9	18
6	Officer of Dairy Co-operatives	41	82	9	18

Table 3. Performance of dairy animals

Sr.No.	Particulars	Local Cow		Crossbred Cow		Buffalo		
		Frequency	%	Frequency	%	Frequency	%	
1	Age at first calving	0 to 3	0	0	0	1	2	
		3 to 5	0	0	0	1	2	
	(in years)	Above 5	4	8	6	12	36	72
2	No. of lactation	1 to 2	2	4	2	4	13	26
		2.1 to 4	1	2	3	6	18	36
	(in years)	Above 4	1	2	1	2	8	16
3	Average milk production	Up to 5 lit.	2	4	0	0	27	54
		6 to 10 lit.	3	6	0	0	15	30
	(litres/day/ animal)	Above 10 lit.	0	0	6	12	4	8

Table 4. Distribution of the dairy farmers on the basis of knowledge about improved animal husbandry practices

Sr.No.	Improved A.H. practices	Knowledge					
		High		Medium		Low	
		Frequency	%	Frequency	%	Frequency	%
1	Breed Improvement	36	72	8	16	6	12
2	Calf management	32	64	5	10	13	26
3	Nutritional management	37	74	5	10	8	16
4	Water management	46	92	3	6	2	4
5	Animal shed management	43	86	5	10	3	6
6	Milking management	35	70	5	10	10	20
7	Disease control	35	70	3	6	12	24
8	Improved reproductive practices	41	82	4	8	5	10

education, were active members of rural social organisations, using television, newspaper and posters/charts as a source of information of improved animal husbandry practices. Most of the dairy farmers were marginal and dependent on canal irrigation, big size family and have members more than five and have one earning member in family but were found to have high level of knowledge regarding breed improvement, nutritional management and improved disease control practices.

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