KNOWLEDGE OF MILCH ANIMAL REARING FARMERS

MALIVAD Y.G.*, BHATT M.R. AND MANJUNATH H.L.

Department of Extension Education, N. M. College of Agriculture, Navsari Agricultural University, Navsari, 396 450, Gujarat
*Corresponding Author: Email- malivadyogesh@gmail.com

Abstract- The Present investigation was conducted in Navsari district of Gujarat state during 2015 to study 100 milch animal management practices adopted by farmers in Navsari, Jalalpore, Gandevi, Chikhli and Vansda talukas of Navsari district. Independents and dependent variables taken for investigation. Personal variable Characters like age, education, size of family, social participation, source of information, animal husbandry experience, herd size, occupation, land holding, innovativeness, risk orientation, scientific orientation, economic motivation. In results majority middle age (58.00 per cent), secondary education (43.00 per cent), medium (49.00 per cent) size of family, poor (48.00 per cent) social participation, source of information (70.00 per cent) frequently accessed the information, medium (59.00 per cent) level of animal husbandry experience, medium (41.00 per cent) 3 to 4 animal livestock possession, occupation (70.00 per cent) two livelihood activity, small (57.00 per cent) land holding, (50.00 per cent) higher level of innovativeness, medium level (73.00 percent) of risk orientation, moderate level (64.00 per cent) of scientific orientation and (63.00 per cent)moderate level of scientific orientation. Than in overall knowledge about breeding, feeding, management, healthcare, milking and housing. The majority (78.00 per cent) of the milch animal farmers had medium level of knowledge followed by 12.00 per cent of the milch animal farmers had low level of knowledge while 10.00 per cent milch animal farmers was found in high level category of knowledge.

Keywords- Knowledge, milch animal, Navsari, management.

Introduction

The life of man has begun along with this environment and its entities, he has been depending on these entities to harness his needs and deeds, it is evident from the past archaeological studies that humans began to domesticate animals, started taking them later on discovered the beneficial food items from the animals, milk of animals was also a food for early men like milk of goat, sheep, camel, cow and buffalo. It is believed that most preferred animal milk was that of cow and followed by buffalo the reason behind this preference may be their availability in various climatic zones of the world. Cow has been bestowed with the holy and divine status in Indian mythologies, it is been worshiped as divine power and a nurturing mother by Indians. The Greeks, the Egyptian and the Indian civilization has evidences of the presence of livestock, they were used for draft purpose in agriculture as well as for milk purpose, the ancient medicine, the Ayurveda, Unani, etc. all had use of milk in treatment, for millions of years before known history, cattle roamed on the Earth at will. Wherever land masses were contiguous. Cattle were domesticated for the first time in southern Turkistan sometime around 8000 B.C. The purpose of domestication was probably draught. But soon man learned to use domesticated cattle for milk and meat. Dairy products followed it is but natural for such ancient records to be vague and incomplete, cattle specially cow and buffalo had a paramount importance since ages.

Livestock is an important source of income and employment in rural areas this sector plays a critical role in the welfare of India's rural population, dairy cattle and buffalo production had undergone a major transformation thus resulting into a substantial increase

in milk production and dairying has become a viable tool to diversify the agricultural production thus helping our country to achieve top position in milk production in the world which could be attributed to increase in the population of high yielding crossbred cattle and buffaloes coupled with launching of various breed improvement programmes by the government as well and as different research and development organizations. The present study was conducted with the following specific objective is:

1. To understand the profile of farmers rearing milch animal.
2. To measure the knowledge of farmers about the milch animal management practices.

Materials and Methods

The present study was conducted in Navsari district of Gujarat state. Five talukas, *viz.*, Navsari, Jalalpore, Gandevi, Chikhli and Vansda were selected purposively. From each talukas two villages were selected and from each villages ten respondents were selected them for the study. Thus, in all, 100 milch animal rearing farmers were selected for randomly. The data were collected by the researcher with the help of a well structured interview schedule by face-to-face method of interview technique. Knowledge can be meant as understood the information possessed by an individual. For the measurement of independent and dependent variables, appropriate scales developed and adopted by the other research scientists were used with due modification. Knowledge of milch animal management practices adopted by farmers was measured by asking various questions related to scientific management practices. These are about breeding, feeding, management, health care, milking and housing.

Sr.	Level of knowledge about practices	Class range
1.	Low level of knowledge	Mean- Standard deviation
2.	Medium level of knowledge	Mean± Standard deviation
3.	High level of knowledge	Mean+ Standard deviation

The data of this study were collected by arranging personal interview and use the statistical parameters were utilized for analysis. After personal interviewed all the items collected as frequencies, analysis, percentage and average were used.

Table-1 *Personal profile of milch animal management practices adopted by farmers.* **(N=100)**

Sr. No.	Variable	Category		No.	%
A.	**Independent variables**				
1.	**Personal variables:**				
1	Age	a.	Young age (up to 30 years)	00	00.00
		b.	Middle age (31 to 50 years)	58	58.00
		c.	Old age (above 50 years)	42	42.00
2	Education	a.	Illiterate	19	19.00
		b.	Primary (up to 7th standard)	35	35.00
		c.	Secondary and Higher secondary (8th to 12th std)	43	43.00
		d.	Above Higher secondary	03	03.00
3	Family size	a.	Small size (up to 4 members)	35	35.00
		b.	Medium size (4 to 7 members)	49	49.00
		c.	Large size (above 7 members)	16	16.00
4	Social participation	a.	No social participation	11	11.00
		b.	Poor social participation	48	48.00
		c.	Moderate social participation	18	18.00
		d.	Good social participation	23	23.00
5	Source of information	a.	Rarely accessed the information	16	16.00
		b.	Frequently accessed the information	70	70.00
		c.	Regularly accessed the information	14	14.00
6	Animal husbandry experience	a.	Lower level	06	06.00
		b.	Medium level	59	59.00
		c.	Higher level	35	35.00
7	Livestock possession	a.	Small (1 to 2 animal)	22	22.00
		b.	Medium (3 to 4 animal)	41	41.00
		c.	Large(above 4 animal)	34	34.00
8	Livelihood option	a.	One livelihood activity	17	17.00
		b.	Two livelihood activity	70	70.00
		c.	Three livelihood activity	13	13.00
9	Land holding	a.	Small land holding (up to 2.00 acre)	57	57.00
		b.	Medium land holding (2.01 to 5.00 acre)	28	28.00
		c.	Big land holding (above 5.00 acre)	15	15.00
10	Innovativeness	a.	Lower level	16	16.00
		b.	Medium level	34	34.00
		c.	Higher level	50	50.00
11	Risk orientation	a.	Lower level	16	16.00
		b.	Medium level	73	73.00
		c.	Higher level	11	11.00
12	Scientific orientation	a.	Lower level	09	09.00
		d.	Medium level	64	64.00
		b.	Higher level	27	27.00
13	Economic motivation	a.	Lower level	08	08.00
		b.	Medium level	63	63.00
		c.	Higher level	29	29.00

Results and Discussions
The results and their interpretations have been presented under following heads:
It is evident from the data presented in [Table-1]:

Age
The data presented in [Table-1] shows that more than half (58.00 per cent) of the milch animal farmers were in middle age group followed by 42.00 and 00.00 per cent belonged to old and young age respectively.

Education
The data in the [Table-1] reported that (43.00 per cent) of the milch animal farmers had secondary level of education followed by 35.00, 19.00 and 03 per cent had primary, illiterate and college and above level of education respectively.

Family Size
The data presented in [Table-1] observed than majority (49.00 per cent) of the milch animal farmers had medium family size followed by 35.00 and 16.00 per cent had small and big family size respectively.

Social participation
The data presented in [Table-1] revealed that Nearly half (48.00 per cent) of the milch animal farmers had poor social participation followed by 23.00, 18.00 and 11.00 per cent of them had good social participation, moderate social participation and no social participation respectively.

Source of information
The data presented in [Table-1] found than majority (70.00 per cent) of the milch animal farmers had frequently accessed the information followed by 16.00 and 14.00 per cent had rarely and regularly accessed the information for the development of enterprise respectively.

Animal husbandry experience
The data presented in [Table-1] shows that majority (59.00 per cent) of the milch animal farmers had medium level of experience followed by 35.00 per cent of them higher level of animal husbandry experiences and 06.00 per cent of them had lover level of animal husbandry experiences respectively.

Livestock possession
The data presented in the [Table-1] reported that nearly half (41.00 per cent) of the milch animal farmers had medium sized livestock possession followed by 37.00 per cent had large sized and 22.00 per cent had small sized livestock possession.

Livelihood option
The data presented in the [Table-1] observed that the majority of the milch animal farmers (70.00 per cent) were engaged with two livelihood activity (animal husbandry + farming or laboure) followed by 17.00 and 13.00 per cent were engaged with one (animal husbandry) and (animal husbandry + farming + service or business or animal husbandry + farming + migration) and (husbandry + farming

+ service or business).

Land holding
The data presented in the [Table-1]indicates that the majority (57.00 per cent) of the milch animal farmers possessed to small land holding category followed by 28.00 and 15.00 per cent were in medium and big land holding categories respectively.

Innovativeness
The data presented in the [Table-1] found that the majority (50.00 per cent) of the milch animal farmers had higher level of innovativeness followed by 34.00 and 16.00 per cent had medium and lover level of innovativeness respectively.

Risk orientation
The data presented in the [Table-1] reported that the majority (73.00 per cent) of the milch animal farmers had medium level of risk orientation followed by 16.00 and 11.00 per cent had lower and higher level of risk orientation respectively.

Scientific orientation
The data presented in the [Table-1] shows that the majority (64.00 per cent) of the milch animal farmers had moderate level of scientific orientation followed by 27.00 and 9.00 per cent had higher level and lower level of scientific orientation respectively.

Economic motivation
The data presented in the [Table-1] found that the majority (63.00 per cent) of the milch animal farmers had moderate level of economic motivation followed by 29.00 and 8.00 per cent had higher level and lower level of economic motivation respectively.

Table-2 *knowledge of milch animal rearing farmers.*

Dependent variable: Knowledge			
Sr.	Categories of level of knowledge about practices	Frequency	Percent
A.	Breeding Practices		
1.	Low	53	53.00
2.	Medium	47	47.00
3.	High	00	00.00
	Total	100	100.00
B.	Feeding practices		
1.	Low	20	20.00
2.	Medium	64	64.00
3.	High	16	16.00
	Total	100	100.00
C.	Management practices		
1.	Low	28	28.00
2.	Medium	72	72.00
3.	High	00	00.00
	Total	100	100.00
D.	Health care practices		
1.	Low	23	23.00
2.	Medium	62	62.00
3.	High	15	15.00
	Total	100	100.00
E.	Milking		
1.	Low	19	19.00
2.	Medium	79	79.00
3.	High	02	02.00
	Total	100	100.00
F.	Housing		
1.	Low	27	27.00
2.	Medium	72	72.00
3.	High	01	01.00
	Total	100	100.00

Breeding Practices
The data presented in the data presented in the [Table-2]. that the majority (53.00 per cent) of milch animal farmers had high level of knowledge followed by 47.00 per cent of medium level of knowledge while none found in low level category of knowledge about breeding practices.

Feeding practices
The data presented in the data presented in the [Table-2] revealed that the majority (64.00 per cent) of the milch animal farmers had medium level of knowledge followed by 20.00 per cent of low level of knowledge while 16 per cent was found in high level category of knowledge about feeding practices.

Management practices
The data presented in the data presented in the [Table-2] found that the majority (72.00 per cent) of the milch animal farmers had medium level of knowledge followed by 28.00 per cent of the farmers had low level of knowledge while none was found in high level category of knowledge about management practices.

Health care practices
The data presented in the data presented in the [Table-2] observed that the majority (62.00 per cent) of the milch animal farmers had medium level of knowledge followed by 23.00 per cent of the farmers had low level of knowledge while 15.00 per cent farmers had high level category of knowledge about health practices.

Milking
The data presented in the data presented in the [Table-2] studied that the majority (79.00 per cent) of the milch animal farmers had medium level of knowledge followed by 19.00 per cent of the milch animal farmers had low level of knowledge while 2.00 per cent farmers had high level category of knowledge about milking practices.

Housing

The data presented in the data presented in the [Table-2] shows that the majority (72.00 per cent) of the milch animal farmers had medium level of knowledge followed by 27.00 per cent of the milch animal farmers had low level of knowledge while 1.00 percent milch animal farmers had high level category of knowledge about housing practices.

Table-3 *Distribution of milch animal farmers according to their overall level of knowledge about scientific management practices.*

Sr.	Categories of overall knowledge	Frequency	Per cent
1.	Low	12	12.00
2.	Medium	78	78.00
3.	High	10	10.00
	Total	100	100.00

The data presented in [Table-3] regarding the In overall knowledge about breeding, feeding, management, healthcare, milking and housing. The majority (78.00 per cent) of the milch animal farmers had medium level of knowledge followed by 12.00 per cent of the milch animal farmers had low level of knowledge while 10.00 per cent milch animal farmers was found in high level category of knowledge.

The findings are similar to the findings reported by [4,7].

Conclusion

Majority of the milch animal farmers were in middle to old age groups, had above secondary level of education, medium family size, had poor social participation, were frequently accessed the information, had medium to higher level of animal husbandry experience, had small size of land holding, had medium to large size of livestock possession, earned their livelihood from two option, possessed higher level of innovativeness, and medium level of risk orientation, scientific orientation and economic motivation. Majority of the milch animal farmers had medium level of knowledge about breeding, feeding, management, health care, milking and housing practices whereas, in overall knowledge, majority of the milch animal farmers had medium level of knowledge about scientific management practices.

Conflict of Interest: None declared

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