CHARACTERISTICS OF DAIRY FARMERS OF NORTH GUJARAT

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Received 18-2-2011 Accepted 5-8-2011

ABSTRACT

A study was conducted on the characteristics of dairy farmers of North Gujarat (Banaskantha, Sabarkantha and Mehsana districts) and the data of 240 respondent farmers' was collected by personal interview. The findings of the present study revealed that more than 3/4th of the dairy farmers were in middle age group, about 87 per cent were literate, more numbers were in low level of social participation, medium dairy farming experience, in OBC category, with medium extension contact and extension participation, small to medium farmer groups and in medium herd size (4 to 6 animals) category. The average milk production at their home was 29.76 liters per day and majority (45.48 per cent) dairy farmer were in big producers' category. More than 48 per cent were in low-income group (Rs.<50,000 per annum) but average income was Rs.72,566.00 per annum. The findings regarding psychological attributes revealed that majority (70 per cent) respondents were in medium economic motivation group and more than 62 per cent were in medium scientific orientation category.

KEY WORDS: Dairy farmers, Characteristics - Personal, Socio-psychological, Economics.

INTRODUCTION

Gujarat occupies a place of pride in the dairy development map of India. It is having a wealth of 23.53 million livestock, which includes 7.98 million cattle and 8.77 million buffaloes and 6.98 million sheep and goats, producing about 8.84 million tonnes milk. Banaskantha, Sabarkantha and Mehsana are the three leading milk producing districts in the state ranking first, second and third, respectively. Out of the total 8842.84 thousand tonnes of milk produced in the state for the year 2009-2010, more than 29 per cent came only from these three districts which indicated their contribution to dairy sector of Gujarat(Gujarat State A.H. Bulletin-2010). The knowledge and adoption of improved dairy practices therefore becomes a prerequisite for sustained growth and development of dairy farmers, which also depends on the farmer's personal, economic and socio-psychological attributes. It is, therefore of worth to study the characteristics of the dairy farmers and find out the role played by various variables in dairy farming.

MATERIALS AND METHODS

Dairy farmers of North Gujarat (Mehsana, Banaskantha and Sabarkantha districts), numbering 240 were selected for this study. Ten respondents each, decided on the basis of the variability in overall modernization in the universe, were selected from 24 villages of the above districts. Only those variables which were found to be relevant to the study were included. The dairy farmers were contacted in person and information was collected through structured interview schedule. The collected data was analyzed, tabulated and inferences were drawn accordingly.

RESULTS AND DISCUSSION

I. PERSONAL CHARACTERISTICS:

The data on personal characteristics like age, educational level, social participation, caste, dairy farming experience, extension contacts, extension participation, knowledge of improved animal

Table 1. Personal Characteristics of Dairy Farmers (n=240)

Sr. No.	Personal Characteristics	Frequency	Per cent	Average	S.D.
1	Age Group (years)				
	Young age (up to 30 years)	29	12.10	---	---
	Middle age (31 to 55 years)	181	75.40		
	Old age (Above 55 years)	30	12.50		
2	Education Level				
	Illiterate	30	12.50	---	---
	Primary to middle school (1-7std.)	61	25.43		
	High school (8-10 std)	88	36.67		
	Higher secondary school (11-12 std.)	25	10.40		
	College level(graduate), Above graduation	36	15.00		
3	Caste				
	Schedule caste (SC)	30	12.50	4.64	1.54
	ST,Nomadictribe,Denotifiednomadic tribe	9	03.75		
	Other backward classes (OBC)	146	60.83		
	Non reserved caste (NRC)	55	22.92		
4.	Dairy Farming Experience				
	Low experience	43	17.92	23.18	10.19
	Medium experience	150	62.50		
	High experience	47	19.58		
5.	Social Participation				
	Low participation	140	58.33	1.55	0.93
	Medium participation	97	40.42		
	High participation	03	01.25		
6.	Extension Contact				
	Low contact	56	23.33	9.03	5.08
	Medium contact	148	61.67		
	High contact	36	15.00		
7.	Extension participation				
	Low participation	32	13.33	2.76	1.93
	Medium participation	162	67.50		
	High participation	46	19.17		
8.	Knowledge (score)				
	Low knowledge (up to 33)	45	18.75	42.59	10.04
	Medium knowledge (33 to 53)	148	61.67		
	High knowledge (above 53)	47	19.58		
9.	Adoption (score)				
	Low adoption (up to 21)	44	18.33	30.83	9.93
	Medium adoption (22 to 41)	152	63.33		

husbandry practices and adoption are presented in Table 1.

Result indicated that more than 75 per cent of the respondents were in middle age group could be due to unsuccessful attempts to secure employment. The respondents might have resorted to take up dairy farming as a means of self-employment, which generated good remuneration. It was found that the percentage of literate farmers was seven times higher than the illiterate dairy farmers. This is a positive sign to increase the pace of dissimination of improved animal husbandry practices. As far as cast of respondents was concerned majority of the respondents were from socially and economically backward caste categories. In the villages of north Gujarat the Chaudhary (Anjana) Patel, Thakor and Prajapati communities belonging to SEBC are in majority and have been engaged in dairy farming business. This might be the reason for majority of dairy farmers in our study, being in the OBC category.

Though the dairy farmers with medium level of experience were maximum but the average experience was more than 23 years was of indicative that farmers had an association with dairying and animal husbandry since their childhood. It was noted that majority (58.33 per cent) of farmers were in low social participation category. The tight schedule of farm work and paucity of leisure time restricted the dairy farmers to take less interest in social organizations. Their participation was limited only to village milk co-operative societies. The personal interview revealed out of 240 dairy farmers only 11 farmers did not possess membership in the village milk co-operative society since they were trading with private milk vendors or consumers.

It was evident from the findings that more than 61 per cent farmers had medium extension contacts. The investigation revealed that farmers contact was restricted only to field veterinarians or livestock inspector. This was again due to tight schedule of farm work and paucity of leisure time. Majority of dairy farmers exhibited medium to high extension participation, which could be due to their interest in dairy farming and their aptitude for new ideas and information to improve their business. Chand (1997) reported that majority of the mixed farming business owners had no extension participation in any extension activity. Hence, the above findings may serve as an indication of the positive transformation in the attitude of dairy farmers. Regarding the knowledge of the improved animal husbandry practices majority of the dairy farmers had medium to high knowledge. However, it was very disappointing to note that more than 80 per cent of dairy farmers showed less than 53 score out of 90, which clearly indicated that there was a need to motivate dairy farmers to become more aware of improved animal husbandry practices in their own interest.

It was inferred that more than 63 per cent farmers' had medium level adoption of improved animal husbandry practices. Though farmer had medium level of knowledge and extension participation, extension contact, scientific orientation, infrastructure experience and moderately favourable attitude and good income, yet the adoption level was not satisfactory. Poor extension services due to inadequate infrastructure facilities and ill trained workers have resulted in poor knowledge and ignorance of the importance of adoption of improved animal husbandry practices. Hence, it is necessary to focus specially on animal husbandry extension by the agencies and personnel involved.

The present finding substantiates the findings of Singh (1992), Patel (1994), Vyas (1995), Bariya (1997), Dana and Kanabi (1998), Shinde et al. (1998), Meena and Chauhan (1999) and Temkar (2000), Thakker(2001), Gour (2002) and Verma and Sharma (2003). But the findings did not confirm to those of Patel (1996) and Sidhu et al. (1997).

II. SOCIO - PSYCHOLOGICAL CHARACTERISTICS:

The data on social psychological Characteristics like scientific orientation, economic motivation and attitude towards dairy farming are presented in Table 2.

Table 2. Socio - Psychological Characteristics of Dairy Farmers (n=240)

Sr. No.	Social-Psychological Characteristics	Frequency	Per cent	Average	S.D.
1.	Scientific Orientation (score)				
	Low orientation (up to 27)	38	15.83	31.41	4.45
	Medium orientation (27 to 35)	147	61.25		
	High orientation (above 35)	55	22.92		
2.	Economic Motivation (score)				
	Low motivation (up to 30)	41	17.08	34.46	4.31
	Medium motivation (31 to 40)	168	70.00		
	High motivation (above 40)	31	12.92		
3.	Attitude (score)				
	Less favourable (up to 77)	35	14.58	83.55	6.31
	Moderately favourable(78 to 90)	166	69.17		
	Highly favourable (above 90)	39	16.25		

Majority (61.25 per cent) of the dairy farmers had medium scientific orientation might be due to good literacy rate, extension contact, extension participation and better income which would have encouraged their behaviour on scientific mindset. Findings envisaged that only 17.08 per cent dairy farmers were in low economic motivation group. In the present scenario majority of people aspires a quality of life with better amenities. Thus they are always in search of opportunities for enhancing income, which was evident from the analysis. This was also a positive sign of change in aspiration of people. Majority (69.17 per cent) of dairy farmers demonstrated moderately favourable attitude towards dairy farming. This might be due to the fact that farmers understood the importance of dairy farming as means of socio-economic upliftment. Further good literacy rate, extension participation, organizational participation and better returns have also contributed in developing a positive attitude towards dairy farming.

These findings corroborate those of Patel (1994), Vyas (1995), Patel (1996), Bariya (1997), Shinde et al. (1998), Temkar (2000) and Gour (2002).

III. ECONOMIC CHARACTERISTICS:

The data on economic characteristics like land holding, number of animals, milk production and family income are presented in Table 3.

Majority of the farmers were marginal farmers followed by small farmers. Increasing trend of nuclear families in the villages and low inheritance of land in society had left the farmers with a small piece of land in their custody. This was the actual reason for increasing preference towards animal agriculture or mixed faming system in North Gujarat. Regarding herd size the findings showed that majority of the dairy farmers had medium size herd. The probable reason might be the better appreciation of dairy animals in their economic well being, particularly the regular flow of income from the dairy animals which was regarded as a mobile bank. It was found that majority of farm families were in large producer group with a production of above 20 litres of milk per day was due to quite a good number of animals at their door substantially contributed towards their family income as well as purchasing power. Though majority of the dairy farmers were in low income group to

Table 3. Economic Characteristics of Dairy Farmers (n=240)

Sr. No.	Economic Characteristics	Frequency	Per cent	Average	S.D.
1	Land Holding (hectares)				
	Landless labourer	42	17.50	2.70	3.78
	Marginal farmer (1 – 2)	112	46.67		
	Small farmer (2 – 5)	63	26.25		
	Big farmer (> 5)	23	09.58		
2	Herd Size (number of dairy animals)				
	Small size herd (up to 3)	79	32.92	4.55	4.14
	Medium size herd (4 to 6)	104	43.33		
	Large size herd (above 6)	57	23.75		
3	Milk Production (litres)				
	Small producer (up to 10)	56	23.33	29.76	3.77
	Medium producer (11 to 20)	75	31.25		
	Big producer (above 20)	109	45.42		
4.	Family Income (Rupees/annum)				
	Low income (up to Rs. 50,00)	116	48.33	72,570	59.83
	Medium income (Rs.5,0001to100,000)	63	26.25		
	High income (above Rs.100,000)	61	25.42		

medium income groups, the average income of dairy farmer's family was above Rs 72000.00 per annum due to considerable quantum of milk production and regular flow of cash.

These findings were in line with the findings of Singh (1992), Thakker and Patel (1995), Patel (1996), Chaudhary (1997) and Singh et al. (1979).

CONCLUSION

The study indicated that personal, socio-psychological, and economic characteristics of the dairy farmers of Banaskantha, Sabarkantha and Mehsana, districts of North Gujarat had a definite influence in their disposition towards dairy farming. It provides a scope and an understanding for the future development of the dairy farmers of these districts.

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