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Socio-economic profile analysis of dairy farmers of Yadgir district of Kalyana Karnataka region

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Abstract
The study was conducted on socio-economic profile analysis of dairy farmers of Yadgir district of Kalyana Karnataka region during the year 2019-2020. Dairy farming plays an important role in social and economic livelihood of the farmers. The socio-economic profile of dairy farmers revealed that majority of the farmers (63.00%) belonged to middle age group. 32.00 per cent and 23.00 per cent were educated up to middle school and high school respectively. Majority (87.00 %) of the farmers had animal husbandry plus agriculture as main occupation, 66.00 per cent were belong to nuclear family and OBC category (61.00%), majority of farmers (80%) having local cattle's with small to medium herd size and large number of farmers belong to low milk production and getting low milk yield from local and cross breed, While, 60.00 per cent of the farmers belonged to medium mass media participation, medium extension contact (54.00 %), medium extension participation (55.00 %), medium economic motivation (56.00 %) and medium scientific orientation (50.00%).

Keywords: Socio-economic profile, dairy farming

1. Introduction
India is predominantly an agrarian society where animal husbandry forms the backbone of national economy. Dairy enterprise, next to agriculture, not only provides continuous income and improves the dietary standards of family, but also reduces unemployment to an extent. Various studies suggest that dairying has enormous potential to improve the socio-economic status of the large percentage of rural population. Dairying is an integral part of the Indian economy, more so, the rural economy. The contribution of this sector to the national income is invaluable, estimated to be about 4.11 per cent of the gross domestic product (GDP) and about 25 per cent to agricultural economy (Basic Animal Husbandry Statistics-2019). At the household level, dairying plays an important role in improving the economic condition of 70 million farm families.

India is a vast country with diversified agro climatic conditions. Majority of dairy livestock owners families are engaged in agricultural operations for about 8-9 months in a year but agriculture alone is unable to provide necessary employment and income to the people. Under such conditions, dairying constitutes an important activity of the rural population, mostly a subsidiary occupation. Livestock is directly linked with very poor landless agricultural labourers as well as small and marginal farmers. This sector provides insurance against crop failures and helps directly in increasing crop production by making available draft power, organic manure and cash income on a regular and day to day basis. Dairy farming has played significant role in socio – economic uplifting and employment generation particularly in rural sector among the landless small farmers, marginal Farmers and farm women group. Hence this study was conducted to study the socio-economic profile of dairy farmers and extent of adaption of dairy management practices.

2. Methodology
The study was conducted in Yadgir districts of Kalyan Karnataka region during the year 2019-20 to know the socio-economic characteristics and extent of adoption of improved dairy management practices by the famers. Out of 3 Taluka in the Yadgir district, randomly two taluk Shahapur and Surapur were selected for the study, subsequently five villages from each of the selected talukas were selected randomly and a total of 10 villages were selected for the purpose of study. Out of these, 10 dairy livestock owners were selected from each village randomly having 2 milch animals minimum. Thus, the total sample size was constituted 100 dairy livestock owners for present study. The selected farmers were interviewed and the desired information was collected with the help of pre-designed and pre-tested questionnaire.

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The gathered information was analyzed by using appropriate statistical tools like frequency, percentage, mean, standard deviation etc.

3. Results and Discussion
3.1 Personal and Socio-Economic Characteristics of the Dairy farmers
The socio-economic characteristics of dairy farmers of Yadgir district were studied and the results are presented in Table 1.

3.2 Age
The study revealed that (Table 1) majority (63%) of dairy farmers were middle aged followed by young (20%) since they played a major role in income generation for the family. Gautam et al. (2007) [3] and Khode et al. (2009) [4].

3.3 Education
The data in Table 1 indicates that 31.00 per cent of the farmers had high school education, 25.00 per cent of the farmers had middle school, 15.00 per cent of them were illiterate, 14 per cent had primary school, Pre University (11.00 %) and graduation and above had attained by only 4.00 per cent of farmers. The probable reason for the majority of respondents were educated up to high school and middle school level might be the reason that improper facilities of schooling available in vicinity of villages. Whereas, 15.00 per cent of the respondents were illiterates. It may be due to illiteracy of their parents, poor exposure on importance of formal education and low socio economic status Khode et al. (2009) [4], Aulakh et al. (2011) [1] and Lohakare et al. (2013) [5].

3.4 Type of Family
Data in the Table 1 indicated that majority (66.00 %) of farmers belonged to nuclear type family and 34.00 per cent belong to joint type family. Satyanarayan and Jagadeeswary (2010) [6].

3.5 Occupation
It was concluded from Table-1 that majority (87.00 %) of farmers had agriculture as major occupation along with dairy as subsidiary occupation followed by 10.00 per cent of them had occupation as animal husbandry along with other services labour, business etc. While, only 3.00 per cent of farmers were performing only dairy as occupation. Hence, it may be stated that majority of the respondents possessed dairy as subsidiary occupation in the study area.

3.6 Caste
As evident from the data in Table 1 that 61.00 per cent of the dairy farmers were from OBC category followed by 24.00 and 15.00 per cent were from S/ST and general category respectively. Aulakh et al. (2011) [1].

3.7 Land Holding
Regarding land holding more than one third (42.00 %) of the farmers belonged to semi medium farmers category and 22.00 per cent and 21 per cent of the farmers fell under medium and small farmers category respectively. While, 10.00 per cent of them belong to big farmers category. The probable reason might be that continuous fragmentation of lands in the family. Satyanarayan and Jagadeeswary (2010) [6].

3.8 Annual Dairy Income
The present study exhibited that majority of dairy farmers (53.00%) had low dairy annual income (<25000 Rs) and 26

per cent of them had high income (more than 60000 Rs). This might be due to the majority of the respondents had possessed local animals and only few farmers were owned crossbreed, Also farmers are not adapted scientific dairy management practices because of these farmers obtained low milk yield this led low income.

3.9 Herd Size
Heard size shows that 52.00 per cent of the dairy farmers had medium herd size (4-9 cattle) followed by 30.00 and 18.00 per cent of the farmer had small (<4 cattle) and large herd size (>10 cattle) respectively Lohakare et al. (2013) [5].

3.10 Milk Production
In regards to milk production per day, most of the farmers (44.00%) belonged to low category of milk production (less than 5 liters), 39.00 percent of them belong medium milk production (5-10 liters) and only 17.00 percent were belong to high category of milk production (more than 10 liters per day). The low milk production may be due to lack of awareness and adoption of dairy management practices and also large farmers having local animals.

3.11 Milk Sale
It was also found that 39.00 per cent of farmers sold the 5-10 liters of milk per day under the medium category of milk sale and 31.00 per cent of them belong to low milk sale category (less than 5 liters). Hence, the farmers were observed medium to low in selling the milk.

3.12 Mass Media Participation
The finding from the Table 1 indicates that, majority (60.00 %) of the respondents belonged to medium mass media participation. Whereas, 24.00 per cent and 16.00 per cent of the respondents belonged to low and high mass media participation. The reason might be that the majority of the respondents were owned televisions, newspaper and mobile phones which provide necessary information with respect to agriculture and allied aspects. Veeranna and Singh (2004) [7], Gautam et al. (2007) [3].

3.13 Extension Participation
With respect to extension participation, more than (55.00 %) of the farmers had medium extension participation followed by 28.00 and 17.00 per cent of them had low and high extension participation respectively.

3.14 Extension Contact
Regarding extension contact (Table 1), more than half (54.00 %) of the farmers belonged to medium extension contact. Whereas, 34.00 per cent of them belonged to low extension contact and only 11.00 per cent were had high extension contact. The probable reason for belonged to medium extension contact because of to solve their farm and dairy problems they had contacted officials of different departments like agriculture, veterinary, horticulture etc. Veeranna and Singh (2004) [7].

3.15 Scientific Orientation
Regarding scientific orientation, half of the respondents had medium scientific orientation and 30 per cent of them had low scientific orientation

3.16 Economic Motivation
The data from Table 1 show that, more than half (56.00%) of the respondents had medium economic motivation category

and 34.00 per cent of them had low economic motivation. The possible reason for medium and low economic motivation could be due to their low economic position and standard of living.

Table 1: Personal and Socio-Economic Characteristics of the Dairy farmers, (n= 100)

Variables	Category	No.	%	Mean	SD
Age	Young (Up to 35 years)	20	20		
	Middle (36 to 45 years)	63	63	42.31	-----
	Old (Above 45 years)	17	17		
Education	Illiterate	15	15		
	Primary Education	14	14		
	Middle School	25	25	-----	-----
	High School	31	31		
	PUC	11	11		
	Graduate and above	04	04		
Type of family	Nuclear Family	66	74	----	----
	Joint Family	34	32		
Occupation	Only dairy (Main)	03	03		
	Agriculture + dairy (subsidiary)	87	83	---	----
	Dairy +Others (labor, business and services)	10	14		
Caste	General	15	15		
	OBC	61	59	----	----
	SC/SCT	24	24		
Land holding	Marginal Farmers(Up to 2.50)	05	05		
	Small Farmers (2.51 to 5.00)	21	16		
	Semi Medium Farmers (5-10.00)	42	38	9.11	----
	Medium Farmers (10-25.00)	22	18		
	Big Farmers(Above 25.00)	10	10		
Total income (Rs./annum):	Low (<24842 Rs)	53			
	Medium (24842 – 60575Rs)	21		42708	35733
	High (>60575Rs)	26			
Herd size (No. of animals)	Small (<3)	30	30		
	Medium (4-9)	52	52	--	--
	Large (>10)	18	18		
Milk Production (Per day)	Low (<5)	44	44		
	Medium (5– 10)	39	39	-	-
	High (>10)	17	17		
Milk Sale (per day)	Low (<4)	31	30		
	Medium (5– 10)	39	39	--	--
	High (>10)	16	15		
Mass media participation	Low (<8.47)	24	24		
	Medium (8.47 – 16.49)	60	60	12.48	8.02
	High (>16.49)	16	16		
Extension participation	Low (<1.77)	28	28		
	Medium (1.77 – 5.45)	55	55	3.61	3.69
	High (>5.45)	17	17		
Extension contact	Low (<3.22)	35	35		
	Medium (3.22 – 6.62)	54	54	4.46	3.24
	High (>6.62)	11	11		
Scientific Orientation	Low (<3.97)	35	35		
	Medium (3.97 – 7.25)	50	50	5.61	3.29
	High (>7.25)	15	15		
Economic Motivation	Low (<7.67)	34	34		
	Medium (7.67 – 12.95)	56	56	10.31	5.19
	High (>12.95)	10	10		

4. Distribution of respondents according to Possession of Dairy Animals

The data (Table 2) showed farmers with local animals were very high (80), whereas only 25 farmers had crossbred animals. It also reveals that among 80 farmers with local cows/buffalos owned 47 farmers possessed less than 4 local cows/buffalo, followed by 27 farmers had 4-8 local cows/ buffaloes and only 6 of them had more than 8 local cow/buffaloes. In case of crossbreed animals, among 25 crossbreed owned farmers, 11 of them possessed less than 4 cross bred cow/buffalo and 10 farmers had 4-6 cross breeds and only 4 farmers owned more than 8 cross breed animals. The reason for not possessing more number of crossbred cattle might be due to the high cost involved in purchasing of these animals. Another reason might be that crossbreed cattle's required extra care for their maintenance Beerannarvar (1995) [2].

Table 2: Distribution of respondents according to Possession of Dairy Animals, (n=100)

S. No	Category	No of dairy animals owned	No. of farmers
1	Cross breed cows/Buffaloes	<4	11
		4-6	10
		6 and above	04
Total			**25**
2.	Local Cows /Buffaloes	<4	47
		4-8	27
		8 and above	06
Total			**80**

5. Milk yield of dairy animal obtained by the Dairy farmers

The data in Table 3 showed that among the 25 crossbreed owned farmers, 12 farmers getting milk yield of 8 liters and above per day and 7 farmers obtained milk yield of 5-8 liters per day, While 6 of them obtained up to 5 liters milk per day. Data regarding farmers with local cows showed that among the 83 local cow owned farmers, 48 farmers obtained milk yield of 2-3 liters per day and 30 farmers obtained 4-5 liters of milk yield, While, only 5 of them getting milk yield of 5 liters and above. In case of farmers with buffaloes; among 63 buffalo owned farmers, 32 farmers obtained milk yield of 3-4 liters per day, 22 farmers obtained milk yield of 5 liters and above and 9 of them obtained 2-3 liters milk per day.

Table 3: Milk yield of dairy animal obtained by the Dairy farmers, (n=100)

S. No	Category	Milk yield (liters per day)	No. of farmers
1	Cross breed cows/Buffaloes	Upto 5 liters	06
		5-8 liters	07
		8 and above	12
Total			**25**
2.	Local Cows	2-3 liters	48
		4-5 liters	30
		5 and above	05
Total			**83**
3.	Buffaloes	2-3 liters	9
		4-5 liters	32
		5 and above	22
Total			**63**

6. Conclusion

It can be concluded that majority of dairy farmers were belonged middle to young age group, educated up to secondary level and belonged to OBC category, had low annual dairy income and majority of them belonged to nuclear family with animal husbandry plus agriculture as main occupation, had medium extension participation, extension contact and mass media exposure, majority of respondents had small size of herd, belong to low milk production and getting low milk yield from local and cross breed. Socio-economic parameters of Yadagiri dairy farmers reveals that there is a scope for further improvement in socio-economic status, which ultimately lead to animal husbandry development.

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