



## **Profile Characteristics of the Dairy Women SHG Members under “Shri Kshethra Dharmasthala Rural Development Project (SKDRP)” in Karnataka**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. Author BBP designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors RC and KVM managed the analyses of the study. Author KVM managed the literature searches. All authors read and approved the final manuscript.*

### **Article Information**

DOI: 10.9734/AIR/2020/v21i1030255

#### Editor(s):

(1) Dr. Figen Balo, Firat University, Turkey.

#### Reviewers:

- (1) Roberto de Souza Gomes da Silva, Federal University of Rio Grande, Brazil.
  - (2) Diocélia Antônia Soares do Nascimento, Universidade Federal do Pará (UFPA), Brazil.
  - (3) D. B. V. Ramana, ICAR-Central Research Institute for Dryland Agriculture, India.
- Complete Peer review History: <http://www.sdiarticle4.com/review-history/61826>

**Original Research Article**

**Received 10 August 2020**  
**Accepted 17 October 2020**  
**Published 13 November 2020**

### **ABSTRACT**

The present study assessed the profile characteristics of dairy women SHG members in Kolar and Bengaluru rural districts of Karnataka during 2017–18 using “ex-post facto” research design. A sample of 120 respondents was selected and data was collected from the respondents by personal interview method using a pre-tested structured interview schedule. Results revealed that under Socio-personal profile of the women SHG members, majority of respondents were young having small family size, secondary level of education high level of experience in SHG, more than half not attending any training and most of the respondents following Dairy + Agriculture & allied activities as their occupation. Under Socio-economic profile, majority were small farmers, having small herd size, medium level of milk production, selling milk to dairy cooperatives, having low level of annual income followed by household milk consumption and milk marketing. Under formal sources of communication and information seeking for the women SHG members, majority had accessed information from Veterinary doctor, Extension personnel, KMF officials and SKDRDP officials. Under Informal sources of communication, most of women regularly consulted family members as

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their main informal sources of communication followed by relatives and friends and neighbours. Finally under mass media sources of communication, most of the respondents regularly accessed television, exhibitions, farm magazine and social media.

*Keywords: Dairy; women farmers; SHG; communication.*

## 1. INTRODUCTION

Dairy sector provides a steady source of income to the farmers by enhancing their earning and enabling them to improve their standards of living [1]. Dairy units are one of the potential sources of additional income and employment generation. Demand for dairy products in India is likely to grow significantly in the coming years, driven by higher income and purchasing power of consumers and their increasing interest in nutritional value. Further, the consumption of processed and packaged dairy products is increasing in urban areas [2]. Hence, dairy entrepreneurship activity plays an important role in dairy enterprise to make dairying a most profitable sector. A sustainable and financially viable dairy farm could generate income and self employment through entrepreneurship. In this context, entrepreneur is one of the most important inputs for development of dairy enterprise which may prove phenomenal for economic development of farming community. The development of agriculture and allied entrepreneurship in rural areas is directly related to the socio-economic development of the society. Majority of rural women are engaged in farming activities. Therefore, role of women as "entrepreneur" is very important in agricultural and socio-economic development of the nation. According to FAO [3], where in 750 to 900 million people (12 to 14 per cent of the world) rely on dairy farming, SHGs are traditionally responsible for milking animals, processing milk and other dairy related activities. In this context, it was felt necessary to determine entrepreneurship among the women self help group members.

*Shri Kshethra Dharmasthala Rural Development Project* (SKDRDP) is a registered NGO working towards rural development. SKDRDP initiated self-help group (SHG) model for sustained inclusive growth, on the lines of joint liability groups (JLGs) and providing infrastructure and finance through micro credit for the rural people across Karnataka. The project concentrated on

the empowerment of rural women. SKDRDP has developed a new cadre called the *Sevaprathinidhi*, for housewives and unemployed young women in rural areas who work in their spare time and support the SHG movement in the village. Most *sevaprathinidhi* are women and this has positively affected women men ratio in the organisation. Hence SKDRDP adopted the self-help mode by organizing Self-help Groups [4]. In the light of these above facts, the present study was undertaken to assess the Profile characteristics of Dairy women SHG members under "Shri Kshethra Dharmasthala Rural Development Project (SKDRP)" in Karnataka.

## 2. MATERIALS AND METHODS

The present study was conducted in Kolar and Bengaluru rural districts of Karnataka during 2018-19 using ex-post facto research design. Random sampling and purposive sampling method was adopted for selection of sampling units. Two districts namely Kolar and Bengaluru Rural were selected randomly from the purposively selected southern region of Karnataka. From each districts two Taluks were randomly selected. From each Taluk, three villages were selected purposively based on highest number of women SHGs and in each village one SHG with highest number of members who had taken loan from NGO for dairying purpose were selected purposively. Further, from the selected SHG, ten women respondents were selected according to criteria that respondent should possess two milch animals and minimum two years of experience as SHG member, since its inception. Further, from each Taluk five NGO workers were also taken as respondents. Thus, the total sample size was 140. Index was developed to measure the entrepreneurial behaviour of the women dairy farmers for this study. A pre-tested interview schedule was used to collect the data through personal interview method. The data collected during the months of January-February, 2019 were tabulated and analyzed by using suitable statistical measures.

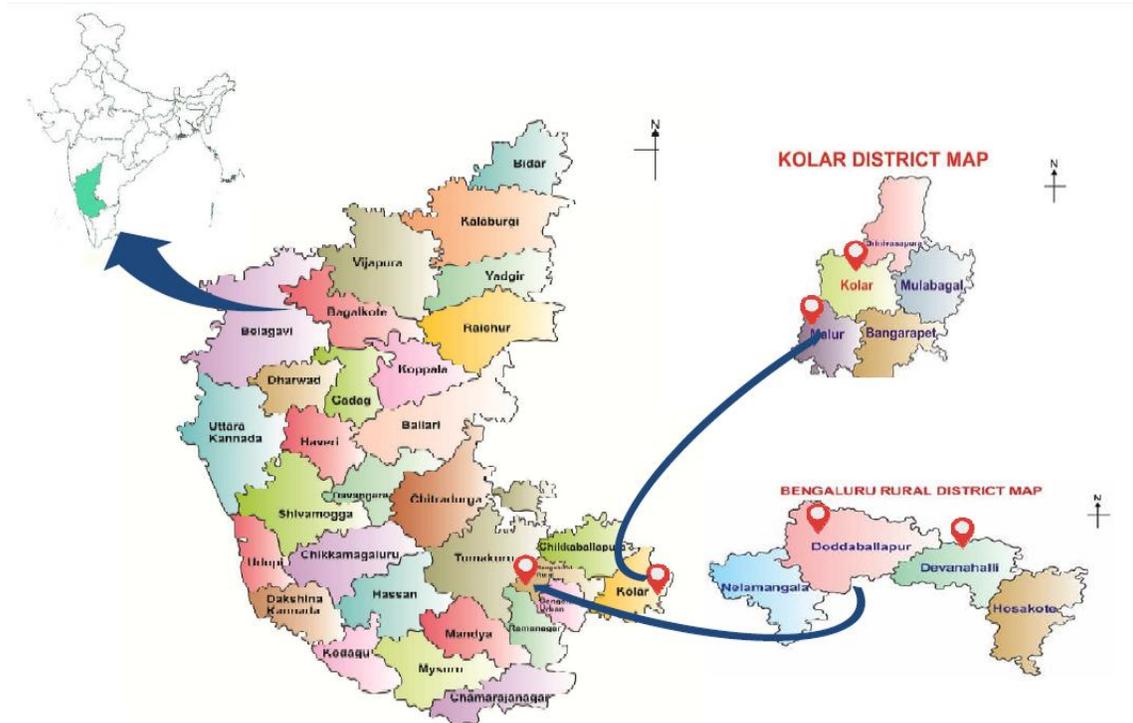


Fig. 1. Map of rural districts of Karnataka

### 3. RESULTS AND DISCUSSION

#### 3.1 Socio-Personal Profile of the Women SHG Members

The results presented in Table 1 indicated that more than half (55.8 per cent) of the respondents were found belonging to young age group of up to 35 years, followed by rest of (44.8 per cent) the respondents who were middle age (36- 50 yrs.) and no respondent was found in old age that is above fifty years. The reason might be due to dairying being an assured and important source of income unlike agriculture which is uncertain therefore, more of young and middle aged women were taking up dairying as subsidiary occupation and also due to active involvement of SKDRDP in empowering women in study area.

Nearly two third of the respondents (64.2 per cent) had small size of family, followed by medium (28.3 per cent) and large family size (7.5 per cent), respectively. It was observed that the majority (90 per cent) of respondents belonged to nuclear family whereas very few respondents (10 per cent) found belonged to joint family. The reason might be due to crisis of decreasing resources due to growing population such as

high expenses required for mere survival as well as for basic needs like good education for children and standard of living. It was found that nearly two third (58.3 per cent) of the respondents were educated up to secondary class level, followed by illiterate (11.7 per cent), middle level (10.9 per cent), graduate and above (08.3 per cent), senior secondary level (06.7 per cent) and primary (04.7 per cent) level of education. More than one third (40 per cent) of the respondents family members had medium level of education, followed by lower level (34.7 per cent) and higher level (25.8 per cent) of family education status, respectively. This may be due to their young and middle age profile, socio-economic profile and awareness about the importance of education and formal schooling helps the women practicing dairy to gather new information required for dairy farming which in turn might create positive outlook to manage the dairy enterprise.

More than half (55 per cent) of the SHG members possessed high level of experience in Self help Group, followed by low (24.7 per cent) and medium (20.8 per cent) level of experience in SHG, respectively. It might be due to higher level of awareness about the self help groups in the study area which might led to women joining

the SHGs. Nearly majority (49.7 per cent) of respondents underwent training related to dairy farming, solar training, mushroom cultivation and training related to agricultural activities followed by more than majority (51.8 per cent) of respondents who had not undergone the trainings organized by SKDRDP with the help of RUDSETI. The reason might be that women had less access to training due to lack of family support and more family responsibility which resulted in women not to attend the training programmes outside their social system. It could be observed that more than four fifth per cent of respondents (95.8 per cent) were found to be engaged in dairying + agriculture and allied

activities as occupation, followed by a small per cent of respondents practicing dairying with other activities (03.3 per cent) and negligible per cent of respondents practicing dairy and labour (0.8 per cent), respectively. Since the region being prone to drought, scanty of rainfall distribution and no permanent irrigation water facility, income from rainfed agriculture is highly fluctuating making the farmers to go for dairy as major subsidiary occupation which ensures a regular guaranteed source of income. It was noteworthy that no respondent engaged in dairy as a sole occupation.

Findings of the study are in line with [5,6,7].

**Table 1. Distribution of respondents based on socio-personal variables (n=120)**

Sl. no	Category	Frequency	Percentage
<b>1</b>	<b>Age ( in years )</b>		
	Young (Up to 35)	67	55.83
	Middle (36-50)	53	44.17
	Old (>50)	00	00.00
<b>2</b>	<b>Family size (No. of family members)</b>		
	Small (3-4)	77	64.16
	Medium (5-6)	34	28.34
	Large (7-8)	09	07.50
<b>3</b>	<b>Family type</b>		
	Nuclear Family	108	90.00
	Joint Family	12	10.00
<b>4</b>	<b>Education status</b>		
	Illiterate	14	11.66
	Read only	00	00.00
	Primary	05	04.16
	Middle	13	10.86
	Secondary	80	58.33
	Senior secondary	08	06.66
	Graduate and above	10	08.33
<b>5</b>	<b>Educational status of family (Score)</b>		
	Low (1.50-2.22)	41	34.16
	Medium (2.23-2.86)	48	40.00
	High (2.87-3.50)	31	25.84
<b>6</b>	<b>Experience in SHG (Years)</b>		
	Low (2.0-3.0)	29	24.16
	Medium (3.5-4.0)	25	20.84
	High (4.5-5.0)	66	55.00
<b>7</b>	<b>Trainings</b>		
	Attended training	59	49.16
	Not attended training	61	51.84
<b>8</b>	<b>Occupation</b>		
	Dairy + labour	01	00.83
	Dairy + Agriculture & allied activities	115	95.84
	Dairy+ other activities	04	03.33
	Only dairy	00	00.00

### 3.2 Socio-Economic Profile of the Women SHG Members

From Table 2 it could be confirmed that a nearly one third (31.7 per cent) of the respondents owned small land holdings followed by semi-medium (26.7 per cent), marginal (15 per cent), medium (23.3 per cent) and large land holdings (03.3 per cent), respectively. The respondents possessed small sized land holding maybe due to sub-division of land because of separation of the families. Majority (60.8 per cent) of the respondents had small herd size (3-5 dairy animals), followed by a considerable percent of (22.5 per cent) households with six to ten animals and more than ten animals (16.7 per cent). This could be due to the small land holding, economic status of the respondents and mainly due to dairying followed as a subsidiary occupation in study area.

More than two third (72.5 per cent) of the women SHG members had low level of total annual income (<4.13 lakh), followed by 20.8 per cent with medium level income (4.13-7.50 lakh) and remaining had high (06.7 per cent) levels of total annual income (>7.5 Lakh). This might be due to the occupational profile as dairying with less herd size and small landholdings of the respondents who were utilizing land for the production of crops for their own family consumption and therefore, less area was allotted for cultivation of fodder crops. It was clear from the Table 2 that the nearly two third (63.3 per cent) of the respondents had medium levels of milk production (30-56 litres), followed by high (20 per cent) and low (16.7 per cent) level of milk production. Majority of the farmers possessed crossbred animals which might be the reason for the present findings. Majority (53.3 per cent) of the households required more than one litre of

**Table 2. Distribution of respondents based on socio-economic profile (n=120)**

Sl. no	Category	Frequency	Percentage
<b>1</b>	<b>Land Holding (Hectares)</b>		
	Marginal Up to 1	18	15.00
	Small 1.10-2.00	38	31.66
	Semi-medium 2.10-4.00	32	26.66
	Medium 4.10-10.00	28	23.33
	Large >10	04	03.35
<b>2</b>	<b>Dairy Herd Size</b>		
	Small (03-05)	73	60.83
	Medium (06-10)	27	22.51
	Large (11-21)	20	16.66
<b>3</b>	<b>Total Annual Income (In lakh Rs.)</b>		
	Low (0.65-4.13)	87	72.50
	Medium (4.14-7.50)	25	20.83
	High (7.51-16.9)	08	06.67
<b>4</b>	<b>Milk Production ( in litres/day)</b>		
	Low (12-29)	20	16.66
	Medium (30-56)	76	63.34
	High (57-90)	24	20.00
<b>5</b>	<b>Household Milk Consumption ( in litres/day)</b>		
	Low (01-1.50)	64	53.33
	Medium (02-2.50)	34	28.33
	High (03-5.00)	22	18.34
<b>6</b>	<b>Milk Marketing ( in litres/day)</b>		
	Low (11-30)	57	47.50
	Medium (31-50)	39	32.50
	High (51-88)	24	20.00
<b>7</b>	<b>Milk marketing channel</b>		
	Dairy cooperatives	109	90.84
	Private Dairies	00	00.00
	Milk vendors	00	00.00
	Direct to customer	11	09.16

milk per day for household consumption followed by more than two litre milk per day by nearly one third per cent (28.3 per cent) and more than three litres of milk per day by less number (18.3 per cent) of respondents. This might be related to the family type and family size of the respondents and preference to earn more income to meet their family needs.

It could be observed from the Table 2, the most (47.5 per cent) of the respondents had lower milk marketing (11-29 litres/day), followed by a nearly one third of respondents (32.50 per cent) with medium and high levels (20 per cent), who disposed more than 50 litres/day respectively. This might be related to the herd size and milk production. Majority of respondents had small level of herd size (3-5 dairy animals). It could be seen that the milk was marketed by majority (90.8 per cent) of the respondents through the Milk Producers Co-operative Society (MPCS) operating at village level, followed by a meager percentage (09.7 per cent) of the respondents disposing milk directly to consumers. This might be due to the well established dairy cooperatives at village level by the State Milk Federation assuring marketing support and regular payment with incentives. Hence, only small per cent of milk was marketed directly to consumers to get the money for daily requirement of household.

The above findings are similar with the findings of [8,9,10].

### 3.3 Sources of Communication for the Women SHG Members

There are three important categories of communication sources were taken for study such as formal sources, informal sources and mass media sources of communication.

The Table 3 showed that majority of members of women self-help group had regularly accessed the formal sources of communication and information seeking such as Veterinary doctor (88.3 per cent), Livestock inspector (44.7 per cent), Extension personnel (53.3 per cent), KMF officials (69.7 per cent), SKDRDP officials (80 per cent) and only few respondents regularly accessed University scientists (10.8 per cent) respectively. It might be due to their young age with good educational status, good achievement motivation of the respondent.

Most (95.8 per cent) of women self help group members regularly consulted family members as their main informal sources of communication. Majority of respondents rarely utilized relatives (55 per cent) and friends & neighbours (65.8 per cent) as their informal communication sources for successfully running the dairy unit. This might be due to dependent nature of women respondents towards more informal sources such as family members and friends.

**Table 3. Distribution of respondents based on communication sources (n=120)**

Sl. no	Communication sources	Percent of respondents			
		Regularly	Occasionally	Rarely	Never
<b>A</b>	<b>Formal Sources</b>				
1	Veterinary doctor	88.33	10.00	01.67	00.00
2	Livestock inspector	44.16	55.84	00.00	00.00
3	Extension personnel	53.33	30.00	04.17	12.50
4	University scientists	10.83	08.34	07.50	73.33
5	KMF officials	69.16	18.35	10.83	01.66
6	SKDRDP officials	80.00	12.50	07.50	00.00
<b>B</b>	<b>Informal Sources</b>				
1	Family members	95.83	04.17	00.00	00.00
2	Relatives	21.66	10.83	55.00	12.50
3	Friends and Neighbours	02.50	07.50	65.84	24.06
<b>C</b>	<b>Mass Media Sources</b>				
1	Reading newspaper	50.84	25.00	12.50	11.66
2	Listening to radio	00.00	00.00	15.00	85.00
3	Watching television	94.16	05.84	00.00	00.00
4	Exhibitions	60.83	15.83	05.84	17.50
5	Reading farm magazines	75.83	05.00	04.17	15.00
6	Social Media	79.16	06.62	03.33	10.83

Table 3 showed that nearly most of the respondents regularly accessed mass media sources of communication such as newspaper (50.8 per cent), television (94.7 per cent), exhibitions (60.8 per cent), farm magazines (75.8 per cent) and social media (79.7 per cent) for successfully running the dairy unit, respectively. Only few respondents rarely accessed Radio (15 per cent) for listening to regional news. This might be due to availability of mass media sources such as television, newspaper, magazines etc., at each individual level, group level and good education status of respondents enabled their easy access to mass media.

The above findings are similar with the findings of [11,12,9].

#### 4. CONCLUSION

Based on the findings it is suggested that, it is endeavor of all those stakeholders involved in dairy sector to give more emphasis on women education and social participation to make them more aware of day to day technological developments and the impact of adoption of those scientific practices on their enterprises and livelihood, which in turn makes them more knowledgeable and there by better entrepreneurial behavior. Majority of the respondents were educated up to secondary level of education, had high level of experience in SHG, practicing agriculture and allied activities as occupation with small herd size. Most of the women self help group members had regularly accessed the formal along with informal and mass media sources of communication. Majority were having medium level of milk production with dairy cooperatives as their main milk marketing channel. The overall assessment of the profile of SHG women farmers indicated that dairy farming, the study area was having better opportunity and potentiality to prosper in the field of dairy farming and there is strong need to sensitize and train the farmers about the entrepreneurship in dairy through adequate extension, policy and financial support for holistic development of dairy sector in Karnataka state.

#### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

#### ACKNOWLEDGEMENTS

Authors are thankful to all the faculty and staff members of the Dairy Extension Division, ICAR-National Dairy Research Institute, Karnal, Haryana. Thanks are also due to Staff of SKDRP, local informants and village headmen for their valuable support and cooperation throughout the field work.

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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