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## Attitude and knowledge of Ksheerasagaram beneficiaries in dairy farming in Wayanad district

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### Abstract

Kudumbashree, a forerunner of women empowerment in Kerala, is empowering women through numerous microenterprises. Several microenterprises were bought up by Kudumbashree units and one such livestock activity is Ksheerasagaram, a dairy farming project. A study was carried out to examine the knowledge and attitude of Ksheerasagaram beneficiaries about dairy farming in Wayanad district. By adopting multi stage sampling technique 25 beneficiaries were selected arbitrarily from each taluk i.e. Vythiri, Mananthavady and Sulthan Bathery. The total sample size was 75 and data was collected using the personal interview. Attitude scale and knowledge test developed by Goswami (1987) was used to measure the beneficiaries' attitude and knowledge about dairy farming. The study revealed that majority of the Ksheerasagaram beneficiaries studied were of middle age, belonging to Hindu religion and unreserved communities. It could also be observed that majority of them were living as nuclear families and size of the family was three to four members. Primary occupation was animal husbandry with above ten years of experience. Land owned by majority of beneficiaries was below one acre with small herd size. The study explored the attitude of beneficiaries towards animal husbandry and it revealed that the beneficiaries had neither extreme unfavourable nor too much favourable attitude towards dairy farming. Exploration on knowledge level also indicated that the beneficiaries were distributed almost evenly among categories of knowledge possession from very low to very high.

**Keywords:** Attitude, knowledge, Ksheerasagaram, Kudumbashree, beneficiary

### Introduction

Livestock being the most potential sub-sectors of agriculture which plays an indispensable role in upholding human health and national economy of the country. Livestock provides livelihood to two-third of rural community. It also provides employment to about 8.8% of the population in India. India has vast livestock resources. Livestock sector contributes 4.11% GDP and 25.6% of total Agriculture GDP.

Entrepreneurship is a new facet in agriculture. The entrepreneurs are key persons of any country for promoting economic growth and technological change. Government of India has been promoting these entrepreneurs by providing them with financial assistance and developing income generating patterns. Kudumbashree – women self-help group started in the year 1998 has been empowering women by engaging them in income generating activities. A number of income generating activities have been governed by Kudumbashree and Ksheerasagaram is one among them. The name Ksheerasagaram is derived from Malayalam - Ksheerasagaram ('Ksheera' meaning milk product and 'sagaram' meaning ocean). The interested individuals with the help of Kudumbashree CDS prepare a project report on the interested livestock activity and the report would be submitted to bank for availing loan. The sanctioned amount would be credited to the beneficiaries account as bank loan and subsequently after the establishment of the enterprise one third of the total cost of the project would be credited to the loan account of the beneficiaries by the District Kudumbashree Mission as a subsidy amount to the project. The payback period for the loan availed is three years. Animals could be procured locally with the assistance of personnel of Department of Animal Husbandry of the state. The provision for the number of animals that could be purchased by each beneficiary in Ksheerasagaram were two cows. To fast-track the socio economic development of farm women together with their empowerment it is very imperative to provide income generating avenues to the specific target groups.

## Materials and Methods

The research design implemented for the present study was Ex Post facto research design. The unit of study was Ksheerasagaram beneficiaries. Multi stage sampling technique was used to select the final respondents for the study. At first stage Wayanad district was purposively selected for the study followed by selection of three taluks namely Vythiri, Mananthavady and Sulthan Bathery of the district in the second stage. The third stage was selection of LWSHG at the block level. In case of Ksheerasagaram five groups each consisting of five members were selected randomly from each of the three taluks of the district thus making 75 respondents each for Ksheerasagaram. Interview schedule was used as a tool to collect information from the respondents. In order to measure this variable, the attitude scale developed by Goswami (1987) [1] was used. The scale consisted of 8 statements. Out of the eight statements, four were positive which were scored as 3, 2, 1 for agree, undecided and disagree respectively and four were negative, which were scored in the reverse order. The achievable scores of an individual ranged from 8 to 24. The respondents were categorised into four groups as highly unfavourable, unfavourable, favourable and highly favourable using Delinious and Hodges method. To measure the knowledge of dairy practices, knowledge test developed by Goswami (1987) [1] was used. The test comprised of five components: eight items about deworming practices; 12 items about artificial insemination; 28 items about vaccination against diseases; 20 items about feeding of concentrates; five item about feeding of green fodder, totalling 73 items. On the basis of score obtained by the beneficiaries, they were categorised as very low, low, high and very high knowledge category using Delinious and Hodges method.

## Results and Discussion

### Socio economic profile of beneficiaries

The socio-economic profile of respondents of the study sample are tabulated in the Table 1. It can be observed that 74.67 percent of the beneficiaries belonged to middle (36 to 55 years) age. The reason may be due to the fact that middle aged persons are more capable, cosmopolite and enthusiastic to carry out activities of the farm in addition to household work. Another reason may be that there was the age limit to join as an affiliate of Ksheerasagaram is 60 years. This trend was supported by George *et al.* (2010) [2]. It is evident that majority 57.33% of the beneficiaries were Hindus. As per census 2011 religion wise population of Wayanad district Hindu population is highest so this might be the reason for majority of respondents being Hindu in the present study. The data in Table 1 revealed that more than half 57.33% of

beneficiaries belonged to the unreserved communities. The findings were different from Tajpara *et al.* 2016 [3], who observed that majority of respondents belonged to other backward caste. About 40.00% of Ksheerasagaram beneficiaries had primary education. This may be because traditionally women have always been made to look after home affairs and there is no cheer and motivation to go for higher education. These findings assume significant against the fact that Kerala is the state with highest literacy rate and education up to primary level is compulsory and free, females have equal opportunities when compared to males. The above finding is in contrast with Bhushan *et al.* (2015) [4] where who found that majority of respondents were illiterate in his study. With respect to family type it is clear from Table 1 that majority 84.00% of beneficiary families were nuclear followed by 16.00% of the joint families. This is in line with Subhadip, 2016 [7]. This might be due to the desire to live an autonomous life with basic facilities and to give better education and future to their children. Family size was three to four members for 66.67% of the beneficiaries, and is in line with George *et al.* 2010 [2]. The reason is most of the respondents were of middle aged with nuclear family type.

Agriculture was the primary occupation for majority 88.00% of the beneficiaries. The findings were in contrast to that Saroj and Singh, 2015 [8]. The reason for this may be majority of the farmers had land below one acre in which they were engaged in growing agricultural products and 96.14% of the Wayanad population is from rural. The results were in conformity with the findings of Rewani and Tochhawng (2014) [9]. Majority 94.67% of the Ksheerasagaram beneficiaries considered animal husbandry as their secondary occupation. Majority (66.67%) of beneficiaries had above ten years of experience in dairy farming followed by 21.33% and 12.00% of beneficiaries who had five to ten and one to five years of experience in dairy farming and is in line with Khode *et al.* 2009 [10]. The reason may be due to earlier household occupation which has been continued by the members.

Land owned by 66.67% of the beneficiaries was below one acre and 1.33% of beneficiaries were landless. The reason may be the result of fragmentation and subdivisions of land by family members as in this study majority of the beneficiaries belonged to nuclear family type. The above findings were in line with Chethan, (2014) [5].

As per herd size, more than half 58.67% of beneficiaries had less than four cattle. The reason may be as per the Ksheerasagaram livestock activity two cattle have been provided for each member. The other reason may be most of the beneficiaries sell male calves and unproductive cattle in order to generate income. The above findings were line with that of Rahman and Gupta (2015) [11].

**Table 1:** Socio economic profile of beneficiaries

Variables	Category	Frequency
Age (years)	Young age ( $\leq 35$ )	11 (14.67)
	Middle Age (35 to 50)	56 (74.67)
	Old Age ( $\geq 50$ )	8 (10.67)
Religion	Hindu	43 (57.33)
	Muslim	12 (16)
	Christian	20 (26.67)
	Others	0
Caste	General	43 (57.33)
	SC	0
	ST	10 (13.33)
	OBC	22 (29.33)
Education	Illiterate	4 (5.33)
	Primary	30 (40)
	Secondary	23 (30.67)
	Higher secondary	14 (18.67)
	Diploma	2 (2.67)
	Under graduation	2 (2.67)
	Post-graduation	0
Family type	Joint	12 (16)
	Nuclear	63 (84)
Family size	1 to 2 Members	2 (2.67)
	3 to 4 Members	50 (66.67)
	5 to 6 Members	23 (30.67)
	7 to 8 Members	0
Primary occupation	Unemployed	11 (14.67)
	Animal husbandry	45 (60)
	Agriculture	14 (18.67)
	Govt. employee	1 (1.33)
	Self-employment	4 (5.33)
	Farm labour	0
	Any other	0
Secondary occupation	Nil	15 (20)
	Animal husbandry	30 (40)
	Farm labour	0
	Agriculture	29 (38.67)
	Self-employment	1 (1.33)
	Any other	0
Experience	Least (Less than 1 year)	0
	Less (1 to 5 years)	9 (12)
	Experienced (5 to 10 years)	16 (21.33)
	Highly experienced (Above 10 years)	50 (66.67)
Land owned	Up to 10 cents	9 (12)
	Below 1 acre	50 (66.67)
	1-2 acres	12 (16)
	Above 2 acres	4 (5.33)
Herd size	Small ( $>4$ )	44 (58.67)
	Medium (4-6)	19 (25.33)
	Large ( $<6$ )	12 (16)

**Attitude of beneficiaries towards dairy farming**

Data in Table 2 illustrates that 30.67% of beneficiaries had favourable attitude towards dairying followed by 29.33%,

26.67% and 13.33% of beneficiaries had unfavourable, highly unfavourable and highly favourable attitude respectively.

**Table 2:** Attitude towards dairy farming

Attitude towards dairy farming	Frequency	Percentage
Highly unfavorable (12-14)	20	26.67
Unfavorable (14.01-17)	22	29.33
Favorable (17.01-19)	23	30.67
Highly favorable (19.01-22)	10	13.33
Total	75	100

The results were similar to the findings by Ukabhai (2013)<sup>[12]</sup> and Kavithaa *et al.* (2014)<sup>[13]</sup> who observed that majority of the respondents had a neutral attitude towards dairy farming in his study but in contrast to Chethan (2014)<sup>[5]</sup>. The additional years of experience in respective livestock farming activities interlaced with their daily life processes would have created a spiritual association with their enterprise which might have reflected in their favourable attitude. As rearing livestock is not considered as white collar job they lack status in the society and which would have been echoed in their unfavourable attitude.

**Knowledge of beneficiaries about dairy farming  
Knowledge test on deworming**

**Table 3:** Knowledge about deworming

Knowledge about deworming	Frequency	Percentage
Very low (0-2)	0	0
Low (3-4)	27	36
High (5-6)	30	40
Very high (7-8)	18	24
Total	75	100

It is evident from table 3 that majority 40.00 percent of beneficiaries had high level knowledge about deworming followed by 36.00 percent, 24.00 percent and zero percent of beneficiaries had low, very high and very low level of knowledge about deworming respectively. The above results were in line with Saha *et al* (2016)<sup>[6]</sup> who observed majority had knowledge about health care practices.

**Knowledge about artificial insemination**

**Table 4:** Knowledge about artificial insemination

Knowledge about artificial insemination	Frequency	Percentage
Very low (0-3)	3	4
Low (4-6)	20	26.67
High (7-9)	36	48
Very high (10-12)	16	21.33
Total	75	100

Table 4 depicts that majority 48.00% of the beneficiaries had high level of knowledge followed by 26.67 percent, 21.33 percent and 4.00 percent having low, very high and very low level of knowledge about artificial insemination respectively.

**Knowledge about vaccination against diseases**

**Table 5:** Knowledge about vaccination against diseases

Knowledge about vaccination against diseases	Frequency	Percentage
Very low (0-7)	3	4
Low (8-14)	21	28
High (15-21)	37	49.33
Very high (22-28)	14	18.67
Total	75	100

Data in table 5 shows that that majority 49.33% of the beneficiaries had high level of knowledge followed by 28 percent, 18.67 percent and 4.00 percent having low, very high and very low level of knowledge about vaccination against diseases respectively.

**Knowledge about feeding of concentrates**

**Table 6:** Knowledge about feeding of concentrates

Knowledge about feeding of concentrates	Frequency	Percentage
Very low (0-5)	3	4
Low (6-10)	30	40
High (11-15)	36	48
Very high (16-20)	6	8
Total	75	100

Data in table 6 shows that that majority 48.00% of the beneficiaries had high level of knowledge followed by 40.00 percent, 8.00 percent and 4.00 percent having low, very high and very low level of knowledge about feeding of concentrates respectively.

**Knowledge about feeding of green fodder**

As there were only five statements in this scale the average knowledge about feeding of green fodder was calculated which 2.65 is.

**Overall knowledge of beneficiaries about dairy farming**

Data in Table 7 and graph 1 indicates that 37.33%, 25.33%, 18.67% and 18.67% of Ksheerasagaram beneficiaries were having high, low, very high and very low knowledge about dairying respectively. As most of the beneficiaries belonged to middle aged group and had primary level of education this had made them to utilize the information sources such as mass media which has helped them to upgrade their knowledge. Another reason may be women since the ancient era were deployed in agricultural activities which had impact on their knowledge level. The results were identical to findings of Chethan (2014)<sup>[5]</sup> and Jiji and Vijayan (2012)<sup>[14]</sup> who noted that most of the respondents had medium knowledge.

**Table 7:** overall knowledge about dairying

Knowledge about dairy farming	Frequency	Percentage
Very low (26-37)	14	18.67
Low (37.01-45)	19	25.33
High (45.01-49)	28	37.33
Very high (49.01-65)	14	18.67
Total	75	100

**Conclusion**

On the basis of findings of the study it may be concluded that maximum beneficiaries had low to high level of knowledge about dairy farming practices. Hence, there is lot of opportunity for increasing the current level of knowledge about improved animal husbandry practices. More training programmes, demonstrations, field days, webinars, exhibitions, camps, radio/TV talks should be organized to increase the know-how of the beneficiaries

**References**

1. Goswami AA. Study of the knowledge level of the livestock owners about selected animal husbandry practices. M.V.Sc. thesis, Division of Extension Education, Indian Veterinary Research Institute, Uttar Pradesh; c1987.
2. George A, Rajkamal PJ, Jiji RS. Analysis of socio-personal profile of livestock based selfhelp group members of Thrissur district. J Ind. Vet. Ass. 2010;10(1):38-42.
3. Tajpara MM, Chandawat MS, Bhorniya MF, Bochalya BC, Kalsariya BN. Knowledge level of beneficiaries'

- dairy farmers about recommendations of SAUS on improved animal husbandry practices. *Int. J Agri. Sci.* 2016;8(21):1396-1398.
4. Bhushan B, Sudan RS, Sethi S. Analysis of socio-economic characteristic of SHG (Self Help Group) of women associated with dairy farming. *J Ani. Res.* 2015;5(4):839-842
  5. Chethan GN. Impact assessment of the Livestock Development for Livelihood Support Programme in Wayanad district. M.V.Sc thesis, Kerala Veterinary and Animal Sciences University, Pookode; c2014.
  6. Saha D, Akand A, Hai A. Livestock farmers knowledge about rearing practices in Ganderbal district of Jammu & Kashmir. *Ind. Res. J Ext. Edu;* c2016.
  7. Subhadip P. Social and economic empowerment of rural women through self help groups (shgs): a case study in West Bengal, India. *Int. J Agri. Sci.* 2016;8(32):1673-1676.
  8. Saroj L, Singh CS. Women empowerment through microfinance (SHGs): A study of Ajmer district, Rajasthan, India. *Int. Res. J Social Sci.* 2015;4(11):1-6.
  9. Rewani SK, Tochhawng L. Social empowerment of women self-help group members engaged in livestock rearing. *Ind. Res. J Ext. Educ.* 2014;14(2):116-119.
  10. Khode NV, Sawarkar SW, Banthia VV, Nande MP, Basunathe VK. Adoption of improved dairy cattle management practices under Vidarbha Development Programme Package. *Ind. Res. J Ext. Edu.* 2009;9(2):80-84.
  11. Rahman S, Gupta J. Knowledge and adoption level of improved dairy farming practices of SHG members and non-members in Kamrup district of Assam, India. *Indian J Ani. Res.* 2015;49(2):234-240.
  12. Ukabhai CK. Participation of farm women in decision making process with respect to animal husbandry practices. Ph.D. thesis, Junagadh Agricultural University, Junagadh; c2013.
  13. Kavithaa NV, Jiji RS, Rajkumar NV. Knowledge and attitude of the members of women self-help groups in goat farming in Thrissur district. *Int. J Sci. Environ. Technol.* 2014;3(1):198-202.
  14. Jiji RS, Vijayan R. Knowledge of improved livestock and poultry farming practices among tribal women of western ghat region of Nedumangadu taluk in Thiruvananthapuram district. *J Vet. Anim. Sci.* 2012;43:52-55.