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Socio-economic profile of Kangayam cattle farmers of Tamil Nadu

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Abstract

The present study was conducted in Coimbatore, Erode, Karur and Tirupur districts of Tamil Nadu with an objective to ascertain socio-economic characteristics of farmers who are rearing Kangayam cattle. By adopting snowball sampling technique, 50 Kangayam cattle farmers were identified and selected from each district, thus a total of 200 respondents were selected for the study. A well-structured, pre - tested interview schedule was developed for collection of data and the data was analyzed by using appropriate statistical methods. Results revealed that majority (60.00 per cent) of the respondents belonged to the old age group, 27.50 per cent of the respondents were educated up to secondary level of formal education, 65.00 per cent belonged to nuclear family setup. Majority (58.00 per cent) of farmers had 2.5 to 5 acres of land and belonged to small farmers category, 47.50 per cent had medium annual income of 3.06 lakhs to 4.05 lakhs. More than half of the respondents (67.00 per cent) were primarily agricultural farmers and kept the animal husbandry as their secondary source of income. Forty three per cent of the Kangayam cattle farmers possessed medium level (three to five TLU) of Kangayam herd size, 63.50 per cent of respondents possessed medium experience in Kangayam cattle farming. Majority (58.50 per cent) of the respondents had medium level of extension agency contact, 49.00 per cent had medium level of mass media usage, 47.00 per cent of farmers had high level of participation in the activities of local social organisations and 57.00 per cent had medium level of decision making behavior. More than one – half of the farmers (51.50 per cent) belonged to medium level of risk orientation, 49.00 per cent of the respondents had medium level of economic motivation. It was found that majority of the farmers maintain this breed as a traditional practice for livelihood, agriculture and draught purpose. Hence, programmes should be made in such a way that by involving the local community for conservation of the breed and also to get more returns from the existing system of livestock farming thereby enhancing the livelihood of the farmers.

Keywords: Kangayam cattle farmers, social organisation and livelihood

Introduction

India is predominantly an agrarian society where animal husbandry forms the backbone of agricultural economy. Livestock has been integral component of traditional agriculture and played a pivotal role in overall social development through contributions to milk, meat, hides and draught power for agricultural operations. The indigenous cattle breeds have evolved over generations to adapt to the agro-climatic conditions and socio-economic needs of the people. In agrarian countries like India, draught cattle breeds of indigenous origin play a vital role of social, cultural, emotional and ecological perspectives in addition to economic and livelihood contribution. One such popular and well known excellent draught breed is Kangayam which is concentrated in Western agro-climatic zone of Tamil Nadu. It is a sturdy breed suitable for agricultural operations and hauling. It is disease resistant and has low body mass index, low metabolic rate and low water requiring, has capacity to withstand heat and humidity, stress and has good resilience capacities. These qualities make it suitable for adapting to climate change.

Materials and Methods

Coimbatore, Erode, Karur and Tirupur districts of Tamil Nadu were purposively selected since these districts were identified as the breeding tract with considerable Kangayam cattle population. Descriptive research design was employed in this study to obtain pertinent and precise information concerning the phenomenon under quest and to draw possible valid general conclusions. Since the Kangayam cattle farmers were scattered in the selected four districts, Key informants including local Veterinarians, representatives of NGOs and progressive farmers were involved to identify the initial respondents for the study in each

district. Through these initially identified respondents, other respondents were identified and selected through snowball sampling technique leading to a total of 50 respondents in each district. Thus a total of 200 respondents were selected for the study. A well-structured pre - tested interview schedule was developed for collection of data and the data

was analyzed by using appropriate statistical methods.

Results and Discussion

Socio- Personal Profile of the Kangayam Cattle Farmers

The socio personal details of the farmers were collected and presented in Table 1.

Table 1: Socio personal profile of Kangayam cattle farmers (n=200)

S. No	Profile Characteristics	Categories	Frequency	Percentage
1	Age	Young	32	16.00
		Middle	48	24.00
		Old	120	60.00
2	Educational Qualification	No formal education	6	3.00
		Can read and write	20	10.00
		Primary	15	7.50
		Middle	26	13.00
		SSLC	55	27.50
		Higher secondary	45	22.50
		Degree	22	11.00
		PG	2	1.00
3	Marital status	Others (Diploma, ITI etc..)	9	4.50
		Married	182	91.00
		Unmarried	18	9.00
4	Type of family	Others (Divorce)	0	0.00
		Nuclear	130	65
		Joint	70	35
5	Primary Occupation	Agriculture	134	67.00
		Animal Husbandry	28	14.00
		Others	38	19.00
6	Secondary Occupation	Agriculture	28	14.00
		Animal Husbandry	162	81.00
		Others	10	5.00
6	Land holdings	Landless	0	0.00
		Marginal farmers	32	16.00
		Small farmers	116	58.00
		Large farmers	52	26.00
7	Kangayam herd size	Small	30	15.00
		Medium	132	66.00
		Large	38	19.00
8	Livestock possession (other than Kangayam cattle)	Small	27	13.50
		Medium	148	74.00
		Large	25	12.50
9	Experience in Kangayam cattle farming	Low	51	25.50
		Medium	127	63.50
		High	22	11.00
10	Extension Agency contact	Low	30	15.00
		Medium	117	58.50
		High	53	26.50
11	Mass media usage	Low	40	20.00
		Medium	98	49.00
		High	62	31.00
12	Social participation	No participation	14	12.00
		Low	30	15.00
		Medium	52	26.00
13	Decision making behaviour	High	94	47.00
		Low	35	17.50
		Medium	114	57.00
14	Risk orientation	High	51	25.50
		Low	30	15.00
		Medium	103	51.50
15	Economic motivation	High	67	33.50
		Low	34	17.00
		Medium	98	49.00
		High	68	34.00

It could be observed from the Table 1 that more than half of the respondents (60.00 per cent) belonged to old age group followed by nearly one-fourth (24.00 per cent) of them belonged to middle age and the rest (16.00 per cent) belonged to young age group farmers. This might be due to the fact that older generation understood the importance of native cattle in their farming as well as social system than the young ones. Educational qualification revealed that 27.50, 22.50, 13.00 per cent of Kangayam farmers were educated up to secondary level of formal education followed by higher secondary and middle level of education. Further, it could be observed that about one-fifth (20.50 per cent) of the respondents in total were of below middle level of education and 16.50 per cent of them had more than higher secondary level like graduate, post graduate and diploma etc. This might be due to the fact that majority of the respondents were of old age and may not had the opportunity to get formal education. This finding is in line with the study of Anjali (2019) [1].

Data in Table 1 revealed that majority of the respondents (91.00 per cent) were married and only a meager (9.00 per cent) were unmarried and none were divorced. More than half of the respondents (65.00 per cent) were living in nuclear family setup with a family size of upto four members in a family and the remaining 35.00 per cent of the respondents were in joint family setup with a family size of more than four members. Similar findings were documented by Thombre *et al.*, (2015) [8] and Joshi (2017) [3]. The social commitment, land usage pattern and culture prevailing in the study area which would help them to carry out farming operations with family labours might be the reason for the existence of substantial amount of joint family pattern.

More than half of the respondents (67.00 per cent) in the study area were primarily agricultural farmers and kept the animal husbandry as their secondary source of income. Further, about 26.00 per cent of the respondents took animal husbandry as their primary occupation and other jobs as their secondary occupation. It could also be observed that about seven per cent of the respondents doing other jobs like business, self-employed, etc., primarily and having animal husbandry as their secondary source of income. This finding is in line with Verma *et al.*, (2014) [10].

Annual income (other than Kangayam cattle) revealed that majority (47.50 per cent) of the respondents had an annual income of 3.06 lakhs to 4.05 lakhs and belonged to medium category of annual income followed by high category (30.00 per cent) with an annual income of 4.06 lakhs to 6.50 lakhs and about 22.50 per cent of the respondents had low level of income ranging from 1.6 lakhs to 3.05 lakhs per annum.

Further it was found that more than half of the respondents (58.00 per cent) were having 2.5 to 5 acres of land and belonged to small farmers category followed by large farmers (26.00 per cent) who have more than five acres of land in their possession. Reasonable proportions (16.00 per cent) of the respondents were marginal farmers with land holding of less than 2.5 acres of land.

It could be inferred that, about 43.00 per cent of the respondents possessed medium level (three to five TLU) of Kangayam herd size followed by small herd size of zero to three TLU (37.50 per cent) and large herd size (five to eight TLU) possessed by 19.50 per cent of the respondents. Similar finding was reported by Thesinguraja (2017) [7]. Table 1 also indicated that half of the respondents (52.50 per cent) possessed medium level (four to seven AUE) of herd size followed by small herd size of zero to three AUE (32.50 per

cent) and the remaining 15.00 per cent of the respondents possessed large herd size (seven to eleven AUE). The reason may be due to the limited land holdings and lack of grazing facilities for livestock rearing.

Experience in Kangayam cattle farming indicated that majority (63.50 per cent) of respondents had medium experience in Kangayam cattle farming followed by low (25.50 per cent) and high (11.00 per cent) level of experience. Since majority of respondents were in old to medium age categories, they hold reasonable medium and high Kangayam cattle farming experience. Further it was inferred that nearly one fourth of the respondents had low level of experience which indicates that more number of new farmers have started to get involved in Kangayam cattle farming in the recent years. Similar findings were documented by Verma *et al.*, (2014) [10] and Vekariya *et al.*, (2016) [9].

Majority (58.50 per cent) of the respondents belonged to medium level of extension agency contact followed by more than one-fourths (26.50 per cent) of them belonged to high category whereas only 15.00 per cent belonged to low level of extension agency contact. The reason for medium to high level of extension agency contact by the respondents was that they were frequently contact the local veterinarians, milk co-operative officials, progressive farmers and input dealers for clearing their doubts regarding livestock farming/health care since they were found in and around their own villages. This finding is in line with Thesinguraja (2017) [7] and Mahesh *et al.*, (2020) [4].

It was found that nearly half of the respondents (49.00 per cent) had medium level of mass media usage followed by high level category (31.00 per cent) with regard to animal husbandry information. 47.00 per cent of respondents had high level of participation in the activities of local social organisations either in the present or past years category followed by medium (26.00 per cent) and low (15.00 per cent). Majority of the farmers (57.00 per cent) had medium level of decision making behaviour followed by 25.50 per cent with high level of decision making and the remaining 17.50 per cent had low level of decision making behaviour in animal husbandry activities which implies the decisions on farming activities were taken collectively in the family. This is in line with Raina *et al.*, (2016) [5].

More than one – half of the respondents (51.50 per cent) belonged to medium level of risk orientation which indicates that they are skeptical in taking risk regarding livestock activities like expansion of farm, introduction of new technology etc., followed by high level of risk orientation (33.50 per cent) and few respondents (15.00 per cent) belonged to low level of risk orientation. This was in agreement with the findings of Raina *et al.*, (2016) [5] and Chandrasekar *et al.*, (2017) [2]. Nearly one half (49.00 per cent) of the respondents had medium level of economic motivation followed by high level (34.00 per cent) and the rest 17.00 per cent of the respondents had low level of economic motivation. The medium to high level of economic motivation indicates that the respondents were thriving to improve in their economical status there by achieving a better status. This is in line with the findings of Reshma *et al.*, (2014) [6].

Conclusion

The socio - economic characteristics of the farmers are important for better policy making decisions. Livestock farming is the major source of income for the Kangayam

cattle farmers as it provides good source of the dietary needs of the family. Hence, efforts should be undertaken by the Government, Veterinary Universities and other extension agencies in providing information on livestock farming practices so that they could bring about change in their living and improve the socio-economic status of livestock farmers.

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