

SOCIO-PERSONAL AND SOCIO-ECONOMIC PROFILE OF RURAL YOUTH FROM LIVESTOCK REARING HOUSEHOLDS IN THE MARATHWADA REGION OF MAHARASHTRA

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ABSTRACT

The present study was conducted to assess the socio-personal and socio-economic characteristics of rural youth belonging to dairy animal-owning households in the Marathwada region of Maharashtra. A total of 270 rural male youth aged 15–29 years were selected through a multistage sampling procedure from 18 villages across six tehsils in Dharashiv, Latur and Nanded districts, with 90 respondents representing each district. Data were analyzed using descriptive statistics, one-way analysis of variance (ANOVA) and the Kruskal–Wallis test. The findings revealed that the highest proportion (45.90%) of respondents belonged to the 20–26 years age group, with a mean age of 22.98 ± 4.26 years. Nearly half (47.80%) belonged to the general social category, while 43.70 per cent had attained graduate-level education. The majority of respondents belonged to small families (86.30%), nuclear families (62.60%) and were unmarried (73.70%). Regarding socio-economic characteristics, the majority possessed medium-sized livestock herds (85.60%), with a mean herd size of 7.24 ± 4.316 Standard Animal Units (SAU). About 34.80 per cent of respondents were small landholders, followed by semi-medium (32.20%) and marginal (25.20%) landholders, with an average landholding of 1.81 ± 1.345 hectares. Significant inter-district differences were observed in social category, educational attainment, family size and annual family income, whereas age, family type, marital status, herd size and landholding did not differ significantly across districts.

Keywords: Rural youth, Socio-personal characteristics, Socio-economic profile, Livestock farming, Dairy farming households, Marathwada, Maharashtra.

INTRODUCTION

Rural youth constitute a vital segment of the population and play a significant role in agricultural development, technological advancement and socio-economic transformation. India possesses a substantial demographic advantage due to its large youth population, which offers immense opportunities for economic growth and rural development. According to the National Youth Policy (2014), individuals aged 15–29 years are categorized as youth. Their active involvement in agriculture and allied activities is essential for ensuring sustainable rural livelihoods, employment generation and food security. Agriculture and livestock farming remain important sources of livelihood for rural households in India. Livestock farming provides opportunities for regular income, employment and entrepreneurship among rural youth. Encouraging rural youth to participate in livestock based enterprises is therefore essential for strengthening the rural economy and ensuring the sustainability of livestock production systems. The Marathwada region of Maharashtra is predominantly agrarian, where crop cultivation and livestock farming constitute important components of rural livelihoods. Understanding the socio-personal and socio-economic profile of rural youth belonging to livestock rearing households is essential for formulating need based extension strategies, skill development programmes and livestock entrepreneurship initiatives. However, region-specific information regarding these characteristics remains relatively limited. Therefore, the present study was undertaken to assess the socio-personal and socio-economic characteristics of rural youth from livestock rearing households in the Dharashiv, Latur and Nanded districts of the Marathwada region of Maharashtra.

MATERIALS AND METHODS

The present study was conducted in the Marathwada region of Maharashtra to assess the socio-personal and socio-economic characteristics of rural youth belonging to dairy animal owning households. Three districts, namely Dharashiv, Latur and Nanded, were purposively selected for the study. From each selected district, two tehsils were selected, followed by three villages from each tehsil, making a total of 18 villages across six tehsils. Subsequently, 15 male rural youth aged 15–29 years belonging to dairy animal-owning households were randomly selected from each village. Thus, a total of 270 respondents, comprising 90 rural youth from each district, constituted the sample for the study. The socio-personal characteristics considered in the study included age, social category, educational status, family size, family type and marital status. The socio-economic characteristics comprised livestock herd size, landholding and annual family income. Livestock herd size was expressed in Standard Animal Units (SAU), landholding in hectares and annual family income in Indian rupees. The collected data were classified, tabulated and analyzed using appropriate descriptive and inferential statistical methods. Descriptive statistics, including frequency, percentage, mean and standard deviation, were employed to describe the socio-personal and socio-economic characteristics of the respondents. One-way analysis of variance (ANOVA), Kruskal–Wallis test and Chi-square test were also used in the data analysis. Statistical significance was assessed at the 5 per cent ($p < 0.05$) and 1 per cent ($p < 0.01$) levels.

RESULTS AND DISCUSSION

Socio-personal and socio-economic profile of rural youth

Socio-personal characteristics

Variables studied under socio-personal characteristics of rural youth were age, social category, education, family size, family type and marital status.

(a) Age

A perusal of Table 1 shows that about 45.90 percent of the rural youth fell under 20-26 age group, followed by 27.00 percent in both age groups 15-19 and 27-29 categories. The age of respondents ranged between 15 to 29 years with mean age of 22.98 ± 4.26 years. One way ANOVA was used to find the

difference between the ages of respondents in three districts. The F-value 0.295 was non-significant, which indicates no statistical difference in the mean age of respondents in three districts. The study conducted by Tripathi et al. (2018) reported that the majority of rural youth were in age group of 21 – 29 years. However, Chouhan (2018) reported that majority (60%) of the rural youth belonged to middle age (24 to 29 years). The findings are in conformity with Singh and Fulzele (2005), Hari (2014) and Chouhan (2018).

(b) Social category

Table 1 shows the distribution of the sample population according to their social category. Out of the total, 47.80 percent of the respondents belonged to General category, followed by Nomadic Tribes 24.40 percent, Other Backward Communities (OBCs) 16.30 percent, Scheduled Caste (10.10%) and Scheduled Tribes (1.10%). Kruskal Wallis test (H-value 28.657) shows significant (<0.01) difference among three districts with respect to social category with mean ranks of 102.78, 145.33 and 158.39, respectively. Similar findings were reported by Hari (2014) and Chouhan (2018). However Ghimiray (2020) reported that majority of the rural youth were belonged to ST category.

(c) Education

Table 1 reveals that 43.70 percent of the respondents had graduate level education, followed by, intermediate (27.40%), high school (21.50%), Post graduate and above (5.60%), and middle school (1.90%). More than half (53.30%) of the youths from Latur district were graduated. Further it was also observed that no respondents from any district was either illiterate or primary level educated. Thus, the literacy rate among youth was 100 percent. The H-value 11.168 was significant at 1 percent level of significance, which indicates that there was significant difference in the education level of the respondents in three districts. The results are in line with findings of Bhanu (2006), Hari (2014) and Tripathi *et al* (2018).

(d) Family size

Table 1 reveals that majority (86.30%) of the respondents belonged to small family size comprising of 4-7 members followed by 12.60 percent medium (8-11 members) and 1.10 percent large (12-15 members) families in the study area. Family size ranged between 4-17 in numbers with mean family size of 5.92 ± 1.65 members per family, which is higher than the average family size (4.6) in rural Maharashtra (Census, 2011). One way ANOVA was used to find the difference between family sizes of youth in three districts. Chi-square value shows association between family size and districts. It means that, there was significant (<0.05) difference in the family size of youths in selected districts. The result corroborates with results reported by Tripathi *et al.* (2018) and Karthik *et al.* (2021).

Table 1: Distribution of respondents based on their socio-personal characteristics

District	Dharashiv	Latur	Nanded	Pooled	Range/F-value/ Kruskal Wallis
	n=90	n=90	n=90	N=270	
Age (years)					
15-19	27 (30.00)	23 (25.60)	23 (25.60)	73 (27.00)	Range 15-29 (years)
20-26	37 (41.10)	45 (50.00)	42 (46.70)	124 (45.90)	
27-29	26 (28.90)	22 (24.40)	25 (27.80)	73 (27.00)	
Mean±SD	22.71±4.48	23.04±4.11	23.18±4.23	22.98±4.26	F-value 0.295 ^{NS}
Social Category					
General (1)	60 (66.70)	42 (46.70)	27 (30.00)	129 (47.80)	H-value 28.657**
OBC (2)	15 (16.70)	6 (6.70)	23 (25.60)	44 (16.30)	
SC (3)	9 (10.00)	10 (11.10)	9 (10.00)	28 (10.40)	
ST (4)	1 (1.10)	1 (1.10)	1 (1.10)	3 (1.10)	
NT (5)	5 (5.60)	31 (34.40)	30 (33.30)	66 (24.40)	
Median	1	2	2	2	
Mean rank	102.78	145.33	158.39		
Education					
Illiterate (0)	0	0	0	0	H-value 11.168**
Primary (1)	0	0	0	0	
Middle (2)	3 (3.30)	0 (0.00)	2 (2.20)	5 (1.90)	
High School (3)	27 (30.00)	19 (21.10)	12 (13.30)	58 (21.50)	
Intermediate (4)	26 (28.90)	15 (16.70)	33 (36.70)	74 (27.40)	
Graduate (5)	31 (34.40)	48 (53.30)	39 (43.30)	118 (43.70)	
Post graduate and above (6)	3 (3.30)	8 (8.90)	4 (4.40)	15 (5.60)	
Median	4	5	4	4	

Mean rank	115.93	152.21	138.36		
Family size					
Small (4 to 7)	81 (90.00)	79 (87.80)	73 (81.10)	233 (86.30)	
Medium (8 to 11)	9 (10.00)	9 (10.00)	16 (17.80)	34 (12.60)	F-value 3.575*
Large (12 to 15)	0 (0.00)	2 (2.20)	1 (1.10)	3 (1.10)	
Mean±SD	5.66±1.45	5.83±1.79	6.28±1.65	5.92±1.65	
Family type					
Nuclear (1)	53 (58.90)	61 (67.80)	55 (61.10)	169 (62.60)	--
Joint (2)	37 (41.10)	29 (32.20)	35 (38.90)	101 (37.40)	H-value 1.639 ^{NS}
Median	1	1	1	1	
Mean rank	140.50	128.50	137.50		
Marital status					
Married (1)	24 (26.70)	23 (25.60)	24 (26.70)	71 (26.30)	
Unmarried (2)	66 (73.30)	67 (74.40)	66 (73.30)	199 (73.70)	H-value 0.038 ^{NS}
Median	2	2	2	2	
Mean rank	135.00	136.50	135.00		

Figures in parentheses indicate the percentage, *Significant at 5% level ($p < 0.05$), ** Significant at 1% level ($p < 0.01$) and NS: Statistically non-significant

(e) Family type

Majority (62.20%) of the respondents belonged to nuclear families and rest (37.40%) to the joint family system (Table 1). In Latur district, 67.80 percent respondents belonged to the nuclear family system, followed by Nanded (61.10%) and Dharashiv (58.90%). In Dharashiv, 41.10 percent respondents hailed from joint families and followed by Nanded (38.90%) and Latur (32.20%). Kruskal Wallis test showed non-significant difference in family type of youths from three districts. Similar findings were reported by Hari (2014), Tripathi *et al.* (2018) and Karthik *et al.* (2021).

(f) Marital status

Nearly three-fourth (73.70%) of the youth were unmarried and one-fourth (26.30) percent were married (Table 1). Kruskal Wallis test showed non-significant difference in marital status of youths from three districts. Chouhan (2018), Chaudhary *et al.* (2019) and Chinchmalatpure *et al.* (2019) also found that majority of the respondents were unmarried.

Socio-economic characteristics of rural youth

(a) Herd size

It is apparent from the Table 2 that, the herd size of the respondents ranged from 1.73 to 38.82 SAUs with a mean of 7.24 ± 4.316 . The pooled data reveals that majority (85.60%) of the respondents had medium herd size (2.89 to 11.53), followed by 10.40 percent large (11.54 to 38.82) and 4.10 percent had small herd size (1.73 to 2.88). F-value revealed non-significant differences between the three districts with respect to their herd size. Nanded district had the highest (88.90%) respondents with medium herd size, followed by Latur (86.70%) and Dharashiv (81.01%). Tripathi *et al.* (2018) and Karthik *et al.* (2021) reported on the same line that the majority of respondents possessed medium herd size.

(b) Land holding

A perusal Table 2 shows that the mean landholding of the respondents in the study area was 1.81 ± 1.345 ha. In pooled data, 34.80 percent respondents belonged to small category, followed by semi-medium (32.20%), marginal (25.20%) and medium (7.40%). Only 0.40 percent of the total respondents had more than 10 ha. land. One way ANOVA was used to find the difference between land holding of respondents in three districts. The F-value 1.637 was non-significant, which implies that there was no significant difference in average land holding of respondents in three districts. Maharashtra state average operational land holding was 1.35 ha (Agricultural Census 2015-16). Singh and Fulzele (2005) and Karthik *et al.* (2021) also reported that majority of the respondents were small farmers.

Table 2: Distribution of respondents based on their socio-economic characteristics

District	Dharashiv n=90	Latur n=90	Nanded n=90	Pooled N=270	Range/ Chi-square/F-value/ Kruskal Wallis
Herd Size (SAU)					
Small (1.73 to 2.88)	5(5.6)	4(4.4)	2(2.2)	11(4.1)	Range 1.73 to 38.82
Medium (2.89 to 11.53)	73(81.1)	78(86.7)	80(88.9)	231(85.6)	F-Value 1.736 ^{NS}
Large (11.54 to 38.82)	12(13.3)	8(8.9)	8(8.9)	28(10.4)	
Mean $\pm$ SD	7.89 $\pm$ 4.696	6.71 $\pm$ 4.909	7.12 $\pm$ 3.072	7.24 $\pm$ 4.316	
Landholding					
Marginal (≤ 1.00 ha)	27 (30.00)	27 (30.00)	14 (15.60)	68 (25.20)	F-Value 1.637 ^{NS}
Small (> 1 to ≤ 2)	31 (34.40)	33 (36.70)	30 (33.30)	94 (34.80)	
Semi-medium (> 2 to ≤ 4)	27 (30.00)	21 (23.30)	39 (43.30)	87 (32.20)	
Medium (> 4 to ≤ 10)	4 (4.40)	9 (10.00)	7 (7.80)	20 (7.40)	
Large (> 10)	1 (1.10)	0 (0.00)	0 (0.00)	1 (0.40)	
Mean $\pm$ SD	1.73 $\pm$ 1.413	1.69 $\pm$ 1.395	2.02 $\pm$ 1.208	1.81 $\pm$ 1.345	

Annual Family Income (in lakh)					
Low (1.57 to 2.72)	9 (10.00)	21 (23.30)	1 (1.10)	31 (11.50)	
Medium (2.73 to 7.40)	61 (67.80)	63 (70.00)	75 (83.30)	199 (73.70)	F-value 12.504**
High (7.41 to 14.03)	20 (22.20)	6 (6.70)	14 (15.60)	40 (14.80)	χ^2 28.742**
Mean $\pm$ SD	5.44 $\pm$ 2.71	4.11 $\pm$ 2.01	5.66 $\pm$ 1.88	5.07 $\pm$ 2.33	

Figures in parentheses indicate the percentage, *Significant at 5% level ($p < 0.05$), ** Significant at 1% level ($p < 0.01$) and NS: Statistically non-significant

(c) Annual Family Income

The majority (73.70%) of the respondents in the study area belonged to medium income group, followed by high (14.80%) and low (11.50%) income group (Table 2). One-way ANOVA showed highly significant ($F=12.504$, $p < 0.01$) differences in annual family income among respondents of three different districts of study the area. Mean annual family income was 5.07 ± 2.33 lakh, which was much higher than per capita income in Maharashtra state (₹ 2,15,233) for the year 2021-22 (Economic Survey of Maharashtra, 2022-23). The chi-square value indicates a correlation between districts and annual family income. This indicates that there was a notable variation in the respondents' annual family income across districts. The findings contradict results of Hari (2014), Rani and Rampal (2015) and Karthik *et.al.* (2021).

CONCLUSION

The study revealed that rural youth from livestock rearing households in the Marathwada region were predominantly educated, unmarried and belonged to nuclear families with relatively small family sizes. Most respondents possessed medium-sized livestock herds, small to semi-medium landholdings and medium annual family incomes. Significant inter-district variations in educational attainment, social category, family size and annual family income indicate differences in the socio-economic circumstances of rural youth across the study area. The findings emphasize the importance of developing need-based livestock extension programmes, entrepreneurship training and skill development initiatives tailored to the educational and socio-economic backgrounds of rural youth. Such interventions may help strengthen their capacity to pursue livestock farming as a sustainable livelihood option.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

- Anonymous (2014) National Youth Policy. Ministry of Youth Affairs and Sports, Government of India. pp.70
- Bhanu V. L. (2006) Study on aspirations of rural youth and their attitude towards rural development activities Thesis submitted to the University of Agricultural Sciences, Dharwad in partial fulfillment of the requirements for the Degree of Master of Science in Agricultural Extension Education
- Chaudhary, R., Y. Janjhua, N.Sharma, D.Sharma, A. Pathania, and K. Kumar, (2019) Factors determining rural youth participation in agriculture-based livelihood activities: A case study of Karsog in Himachal Pradesh. *International Journal of Economic Plants*, 6 (2) : 85-89.
- Chinchmalatpure, U. R., and V. S. Tekale (2019) Aspiration of rural youth towards agriculture. *Indian Journal of Extension Education*, 55 (2) : 25-30.
- Chouhan V. (2018) Participation of rural youth in agricultural activities in Tikamgarh district of Madhya Pradesh unpublished M.Sc. Thesis, Submitted to the Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur.
- Economic Survey of Maharashtra (2022-23), Directorate of Economics and Statistics, Planning Department, Government of Maharashtra, Mumbai
- Ghimiray S. (2020) Determinants of youth involvement in agriculture sector in Sikkim, unpublished Ph.D. Thesis, submitted to Sikkim University.
- Government of India (2011). *Census of India 2011*. Office of the Registrar General and Census Commissioner, Government of India, New Delhi.
- Government of India (2015–16). *Agricultural Census 2015–16*. Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi.
- Hari R. (2014) Determinants of rural youth participation in farming Unpublished Ph.D. Thesis, Submitted to Deemed University ICAR-Indian Veterinary Research Institute, Izatnagar, (UP).
- Karthik, D., M.C.A. Devi, S. Subash, P.K. Dixit, K.P. Ramesha, K. Jayaraj Rao, and M.Sivaram, (2021) Profile characteristics of youth in dairying in Telangana state, India. *Small (up to 5 members)*, 138 : 62-73.
- Rani, A., and V.K. Rampal (2015) Aspiration of rural youth from farming families in Ludhiana district of Punjab. *Research Journal of Agricultural Sciences*, 6 (Special) : 1543-1548.
- Singh, K., & Fulzele, R. M. (2005). Preferences of rural youths' in dairy farming activities. *Journal of Dairying, Foods and Home Sciences*, 24 (3and4) : 190-193.
- Tripathi, H., Dixit, V. B., Singh, S., & Yadav, R. (2018). *Measuring the attitude of rural youth towards farming: An exploratory study of Haryana*.
