

Original Research Article

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Socio Economic Characteristics of Buffalo Farmers in Haryana

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ABSTRACT

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The present study was conducted in randomly selected Karnal, Kurukshetra and Hisar districts of Haryana. A total of 120 buffalo farmers form part of the study. An ex post facto research design was used for the study. It was found that 68.30, 16.70 and 15.00 per cent respondents belonged to middle, old and young age group, respectively. An overwhelming majority (93.30%) of the respondents who practiced buffalo farming were male, followed by only 6.70 per cent females. More than half (60.80%) of the buffalo farmers were from general caste followed by 32.50 and 6.70 per cent from backward caste and schedule caste, respectively. Around half (51.70%) of the respondents' belonged to joint families followed by 48.30 per cent nuclear families. A majority (76.70 %) of the respondents were having small size herds followed by 20.00 per cent medium and only 3.30 per cent possessed large size herds. It was found that 60.80, 34.20 and 5.00 per cent farmers belonged to low, medium and high income groups.

Introduction

India is the leading milk producer nation in the world contributing 18.60 per cent in the total milk production of the world. The livestock sector is contributing 4.50 per cent in the total Gross Value Added and 25.80 per cent in the agricultural Gross Value Added at current basic prices (GOI, 2017^a). The improvement of dairy production will be particularly important in the coming years, as the demand for livestock products is expected to double by 2020 (Rangnekar, 2006).

Buffalo husbandry in the Indian context is very intimately interwoven with the country's rural economy that its prevalence as a source of food and additional income transcends all socio-economic boundaries of rural life. This is a blessed heritage of people of India which needs to be resurrected through applied innovations and cooperative human resource utilization.

In India, most of the population depends on agriculture and livestock production which are linked to each other in various aspects. In

turn, the majority of them depend on the livestock sector directly or indirectly for their subsistence. This sector is providing employment to 8.80 per cent of the population and livelihood to 20.6 million people. The country has around 2.29 per cent land area of the world and sustaining 11.60 per cent of the world livestock population. India possesses the largest animal husbandry sector of the world with around 512.06 million livestock heads (GOI, 2017^b).

Materials and Methods

The present study was conducted in three districts of Haryana i.e. Karnal, Kurukshetra and Hisar. Four villages from each district to a total of twelve villages constituted the study area. From each selected village, a sampling frame having the list of buffalo farmers possessing at least one adult female buffalo was prepared with the help of the veterinary surgeons. Ten buffalo farmers were selected randomly, from the list, to arrive at a total sample size of 120 farmers. An ex- post facto research design was used in the study.

Results and Discussion

Age

A perusal of Table 1 indicates that the average age of the buffalo farmers was 47.74 years, while a majority (68.30 %) of the respondents belonged to middle age (38-56) years. Only 15.00 per cent of respondents were in young age (19-37) years group, whereas 16.70 per cent were in the old age group (57-75) years. The results were in line with the findings of Rachna *et al.*, (2017) who conducted study on socio-economic profile of dairy farmers in Haryana, and observed that majority (73.30%) of the respondents were in middle age group followed by 15.00 per cent and 11.70 per cent in each old and young age group, respectively with a mean age of about 43 years.

Sex

It is evident from Table 2 that an overwhelming majority (93.30 %) of the respondents selected for the study practiced buffalo farming were male and only 6.70 per cent of respondents were females.

Caste

As shown in Table 3 most of the buffalo farmers (60.80 %) were from general caste followed by 32.50 per cent other backward castes and the remaining 6.70 per cent belonged to schedule caste. The observations were in accordance with Sarita (2017) and Yadav (2018) who in their study on dairy farmers of Haryana found that majority of the respondents 50.00 per cent and 75.80 per cent respectively represented the general category.

Family type

As indicated in Table 4 that 51.70 per cent of the respondents' belonged to joint families while remaining 48.30 per cent represented nuclear families. Similar findings were reported by Rachna *et al.*(2017) who studied the socio-economic profile of dairy farmers in Haryana and found that majority (65.00 %) of the dairy farmers' belonged to joint families.

Family size

As far as Table 5 is concerned 50.00 per cent of the farmers had a small family size (1-5 members) followed by 36.70 per cent (6-10 members) medium family size and only 13.30 per cent had large sized (11-15 members) families. The observation was in line with the findings of Yadav (2018) who studied the effectiveness of breeding services of animal husbandry department in Haryana and found that majority (73.30 %) of the respondents had small size families (up to 7 members).

Table.1 Distribution of respondents according to their age

Age (in years)	Frequency (n = 120)	Mean = 47.7 SE = 0.901
Young (19-37)	18(15.00)	
Middle (38-56)	82(68.30)	
Old (57-75)	20(16.70)	

Figures in parenthesis indicate percentage, SE- standard error

Table.2 Distribution of respondents according to their sex

Sex	Frequency (n = 120)
Male	112 (93.30)
Female	8 (6.70)

Figures in parenthesis indicate percentage

Table.3 Distribution of respondents according to their caste

Caste	Frequency (n = 120)
General	73 (60.80)
OBC	39 (32.50)
SC	8 (6.70)

Figures in parenthesis indicate percentage

Table.4 Distribution of respondents according to their type of family

Type of family	Frequency (n = 120)
Nuclear	58 (48.30)
Joint	62 (51.70)

Figures in parenthesis indicate percentage

Table.5 Distribution of respondents according to their family size

Family size	Frequency (n = 120)	Mean = 6.45 SE = 0.267
Small (1-5)	60 (50.00)	
Medium (6-10)	44 (36.70)	
Large (11-15)	16 (13.30)	

Figures in parenthesis indicate percentage, SE- standard error

Table.6 Distribution of respondents according to their education

Education	Frequency (n = 120)
Illiterate	8 (6.70)
Primary school	13 (10.80)
Middle school	11 (9.20)
High school	40 (33.30)
Secondary school	31 (25.80)
Graduation and above	17 (14.20)

Figures in parenthesis indicate percentage

Table.7 Distribution of respondents according to their primary occupation

Primary Occupation	Frequency (n = 120)
Agriculture	70 (58.30)
Livestock	25 (20.80)
Labour	1 (0.80)
Others	24 (20.00)

Figures in parenthesis indicate percentage

Table.8 Distribution of respondents according to their secondary occupation

Secondary occupation	Frequency (n =120)
Agriculture	16 (13.30)
Livestock	91 (75.80)
Labour	10 (8.30)
Others	3 (2.50)

Figures in parenthesis indicate percentage

Table.9 Distribution of respondents according to their experience in buffalo rearing

Experience in buffalo rearing (in years)	Frequency (n = 120)	Mean = 28.47 SE = 0.818
Low (0-9)	1 (0.80)	
Medium (10-31)	79 (65.90)	
High (>31)	40 (33.30)	

Figures in parenthesis indicate percentage, SE- standard error

Table.10 Distribution of respondents according to their landholding size

Land holding	Frequency (n = 120)
Landless	26 (21.70)
Marginal farmer (< 1 ha)	18 (15.00)
Small farmer (1-2 ha)	29 (24.20)
Semi-medium farmer (2-4 ha)	5 (4.20)
Medium farmer (4-10 ha)	29 (24.20)
Large farmer (> 10 ha)	13 (10.80)

Figures in parenthesis indicate percentage

Table.11 Distribution of respondents according to their herd size

Herd size	Frequency (n = 120)
small (1-5)	92 (76.70)
Medium (6-10)	24 (20.00)
Large (11-15)	4 (3.30)
Mean = 3.62	SE = 0.229

Figures in parenthesis indicate percentage, SE- standard error

Table.12 Distribution of respondents according to their gross annual income

Total income	Frequency (n= 120)
Low (50,000-7,00,000)	73 (60.80)
Medium (7,00,001-14,00,000)	41 (34.20)
High (14,00,001-21,00,000)	6 (5.00)
Mean = Rs. 6,06,768	
Agricultural gross annual income	Frequency (n = 120)
Low (0-60,00,00)	91 (75.80)
Medium (6,00,001-12,00,000)	19 (15.80)
High (12,00,001-18,00,000)	10 (8.40)
Mean = Rs. 3,52,166.66	
Livestock gross annual income	Frequency (n = 120)
Low (20,000-2,20,000)	109 (90.80)
Medium (2,20,001-4,20,000)	10 (8.40)
High (420,001-6, 20,000)	1 (0.80)
Mean = Rs. 1,23,235	
Nonagricultural gross annual income	Frequency (n = 120)
Low (0-4,00,000)	105 (87.50)
Medium(4,00,001-8,00,000)	5 (4.20)
High (8,00,001-12,00,000)	10 (8.30)
Mean = Rs. 1,31,366	

Figures in parenthesis indicate percentage

Table.13 Distribution of respondents according to their mass media exposure

Mass media exposure	Frequency (n = 120)
Low	18 (15.00)
Medium	52 (43.30)
High	50 (41.70)
Mean = 19.41	SE = 0.065

Figures in parenthesis indicate percentage, SE- standard error

Table.14 Distribution of respondents according to their localite extension agency contact

Extension agency contact localite	Frequency (n= 120)
Low	8 (6.60)
Medium	54 (44.60)
High	59 (48.80)
Mean = 10.96	SE = 0.056

Figures in parenthesis indicate percentage, SE- standard error

Table.15 Distribution of respondents according to their cosmopolite extension agency contact

Extension agency contact cosmopolite	Frequency (n =120)
Low	53 (44.20)
Medium	28 (23.30)
High	39 (32.50)
Mean = 16.22	SE = 0.080

Figures in parenthesis indicate percentage, SE- standard error

Table.16 Distribution of respondents according to their level of social participation

Social participation	Frequency (n = 120)
Low	95 (79.20)
Medium	8 (6.70)
High	17 (14.20)
Mean total score = 2.53	SE = 0.064

Figures in parenthesis indicate percentage, SE- standard error

Education

As Table 6 indicates 33.30 per cent of the buffalo farmers possessed high school education, followed by 25.80 per cent secondary school, while 14.20 per cents were graduates and above. It was found that 10.80 per cent and 9.20 per cent were studied upto primary school and middle school respectively, whereas 6.70 per cent were illiterate.

The observations were in concurrence with the finding of Ahuja (2015) who conducted a study on entrepreneurial behavior of dairy farmers in Haryana and revealed that majority of the respondents had more than the high school of education.

Occupation

As for as occupation was concerned more than half (58.30 %) of the respondents had agriculture as primary occupation (Table 7) and two third (75.80 %) of the respondents had livestock as a secondary occupation (Table 8).

Experience in buffalo rearing

With regard to buffalo rearing experience, it was found that around two third (65.90%) of the buffalo farmers were classified as medium, having 10-31 years of buffalo rearing experience, followed by 33.30 per cent as high > 31 years and only 0.80 per cent as low 0-9 years of buffalo rearing experience (Table 9).

The observations were in accordance with the finding of Ahuja (2015) who conducted a study on entrepreneurial behavior of dairy farmers in Haryana and revealed similar findings with regard to dairy experience.

Landholding size

With regard to landholding size it was found that 24.20, 24.20, 21.70, 15.00, 10.80 and 4.20 per cent farmers were small, medium, landless, marginal, large and semi-medium farmers, respectively. The findings were in concurrence with Sarita (2017) who conducted a study on problems and prospects of buffalo husbandry in Haryana and revealed

that majority of the respondents were small farmers with land holding (upto 2 ha) (Table 10).

Herd size

As shown in Table 11, majority (76.70%) of the respondents had small sized herds followed by 20 per cent who had medium size herds and only 3.30 per cent respondents had large herds. The observation were in line with Yadav (2018) who studied the effectiveness of breeding services of animal husbandry department in Haryana and found that majority (71.70%) of the respondents had small size of livestock holdings.

Gross annual income

As evident from Table 12, average total gross annual income of the buffalo farmers was Rs. 6, 06,768. More than half (60.80%) of the buffalo farmers were having low (Rs. 50,000-7,00,000) total gross annual income, followed by 34.20 per cent in medium income group (Rs. 7,00,001-14, 00,000) and only 5.00 per cent farmers selected for the study were placed in high income group (Rs. 14,00,001-21,00,000).

The observation were in accordance with the finding of Yadav (2018) who studied the effectiveness of breeding services of animal husbandry department in Haryana and observed that majority of the buffalo farmers (67.00%) belonged to low gross annual income category and could earn < Rs. 4,00,000 per annum.

Mass media exposure

As reflected in Table 13 it was found that a sizeable population of the buffalo farmers(43.30 %) had medium level of mass media exposure followed by 41.70 per cent who had high level of mass media exposure

and remaining 15.00 per cent had low mass media exposure. Similar results were reported by Yadav (2018) who studied the effectiveness of breeding services of department of animal husbandry in Haryana and found that majority of the buffalo farmers fell in medium category in utilizing mass media sources.

Extension agency contact

As indicated in Table 14 about half (48.80%) of the buffalo farmers had high level of personal localite extension agency contact, while 44.60 per cent had medium level of personal localite extension agency contact and only 6.60 per cent buffalo farmers were having low level of personal localite extension agency contact.

It is apparent from Table 15 that 44.20 per cent of the buffalo farmers had low cosmopolite extension agency contact, followed by 32.50 respondents having high level of cosmopolite extension agency contact and rest of 23.30 per cent had medium level of cosmopolite extension agency contact. Similar findings were observed by Ahuja (2015) and Rachna *et al.*, (2017) while studying dairy farmers of Haryana.

Social participation

As shown in Table 16, majority (79.20%) of the respondents had low level of social participation, followed by 14.20 per cent respondents were having high level of social participation and remaining 6.70 per cent respondents had medium level of social participation.

The findings were in concurrence with the observation of Ahuja (2015) and Rachna *et al.*, (2017) who did study on dairy farmers in Haryana and found that majority of the dairy farmers had low social participation.

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