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Studies on socio-economic status of Murrah Buffalo owners in vicinity of Pune

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Abstract

The investigation entitled, "studies on socio-economic status of murrah buffalo owners in vicinity of pune" was undertaken to ascertain the various management practices followed by buffalo owners in vicinity of Pune. Total 100 Murrah buffalo dairy farms in and around 30 km radius of Pune city were studied. The data was collected through pretested questionnaire. The buffalo owners were distributed in four groups on the basis of buffaloes possessed by them as group-I were having up to 10 buffaloes, group-II possessed 11 to 25 buffaloes, group-III had 26 to 50 buffaloes and group IV were having above 51 buffaloes. Majority (67%) of buffalo owners were between age of 31 to 50 years and only 17 percent of buffalo owners were above 51 years of age. In study of education 24.00 percent farmers were found illiterate, 38.00 percent of the owners had completed primary education and 11.00 percent were educated up to graduation level. Maximum (46%) farmers were landless and 26 % farmers were having land up to 1ha. Further, 38.00, 29.00, 22.00 and 11.00 percent respondents had small, medium, big and large herd size, respectively. The field survey under this investigation revealed that majority of the buffalo dairy farms run on commercial basis with an annual income more than 1.5 lakh rupees.

Keywords: Murrah Buffaloes, socio-economic status, buffalo owners

Introduction

Livestock sector plays an important role in Indian economy and is an essential part of Indian agriculture. India is endowed with vast genetic resource of bovines with an estimated number of 302.79 million. Buffaloes are the backbone of rural economy in many developing countries of the Asian region including India. India is regarded as a home of world's best buffalo germplasm

In India, livestock is more evenly distributed among landless labourers and marginal farmers however, a limited percentage of livestock is owned by private and organized sector. Animals are the best insurance against the quirks of nature due to drought, famine and other natural calamities. Dairy sector plays imperative role for upliftment of rural income in India by providing nutritious milk to humans, dung as organic fertilizer for agriculture and fuel for rural homes along with draft power for cultivation and transportation (Patbandha *et al.*, 2015) [10].

Materials and Methods

In all, 100 Murrah buffalo owners were selected randomly in and around the Pune city. These buffalo owners were grouped in to four groups according to the total number of buffaloes they possessed as under

Group	Number of buffaloes
I	Less than 10 buffaloes
II	11 to 25 buffaloes
III	26 to 50 buffaloes
IV	More than 51 buffaloes

The 100 buffalo farms were surveyed without the restriction on the number of farm for each group as Group-I-, Group-II-, Group-III- and Group-IV. The detail information as per the questionnaire were collected from each farm owner by interview method.

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An interview schedule was constructed to collect information keeping in view the objectives of the study set forth and the independent and dependent variables delineated. Initially the schedule was developed in rough form and then after it was finalized.

Compilation of data
The information collected through interview was transferred from the interview schedule to the primary tables and then to the secondary tables.

Statistical analysis
In this study, the statistical measures, such as the percentage, mean, standard error, correlation coefficient, regression analysis and 'F' test have been used as per the formula given by Snedecor and Cochran, (1994) [11].

Percentage
It was the simplest analysis used for simple comparisons. It's calculation was done by dividing frequency of particular cell by the total number of buffalo farmers belonging to the category and multiplied by 100.

Mean
It is defined as a single value which describes the whole data

$$X = \frac{X_1 + X_2 + \ldots\ldots + X_n}{n}$$

Where,
X_1, X_2, X_n = Number of observations
n = Total number of observations.

Table 1: Distribution of respondents according to age, education and land holding

Sr. No.	Particulars	Frequency	Percent
A.	**Age**		
1.	Young (Up to 30 years)	16	16.00
2.	Middle (31 to 50 years)	67	67.00
3.	Old (51 years and above)	17	17.00
B.	**Education**		
1.	Illiterate (No education)	24	24.00
2.	Primary (Up to 4th standard)	38	38.00
3.	Secondary and higher secondary (5th to 12th standard.)	27	27.00
4.	Graduation (Degree holder)	11	11.00
C.	**Land holding**		
1	No holding (Landless)	46	46.00
2	Marginal (Up to 1 ha.)	26	26.00
3	Small (1.1 to 2 ha)	15	15.00
4	Medium (2.1 to 4 ha)	06	06.00
5	Large (Above 4 ha.)	07	07.00

Table 2: Distribution of respondents according to their herd size and annual income

Sr. No.	Particulars	Frequency	Percent
A.	**Herd size**		
1.	Small size (Up to 10 buffaloes)	38	38.00
2.	Medium size (11 to 25 buffaloes)	29	29.00
3.	Big size (26 to 50 buffaloes)	22	22.00
4.	Large Size (Above 51 buffaloes)	11	11.00
B.	**Annual income**		
1	Low (Up to 50,000)	6	6.00
2	Marginal (50,001 to 1,00,000)	14	14.00
3	Medium (1,00,001 to 1,50,000)	18	18.00
4	High (1,50,001 and above)	62	62.00

Results and Discussion
Socio-Personal and economical characteristics of Murrah buffalo owners
Age, Education and Land Holding
A. Age
The chronological age of the dairy farmers at the time of interview was considered. The distribution of the buffalo farmers according to their age is presented in Table 1.
It indicates that, the highest proportion of dairy farmers (67%) belonged to middle age category of 31 to 50 years, whereas 16 percent buffalo owners were young age group up to 30 years. The buffalo owners above the age of 51 years were only 17 percent.
Thus, it can be inferred that majority of buffalo owners belonged to middle age group ranging between 31 to 50 years. Moreover, the proportion of young dairy farmers was relatively higher than that of old dairy farmers. It might be due to young generation is not much more interested in dairy farming.
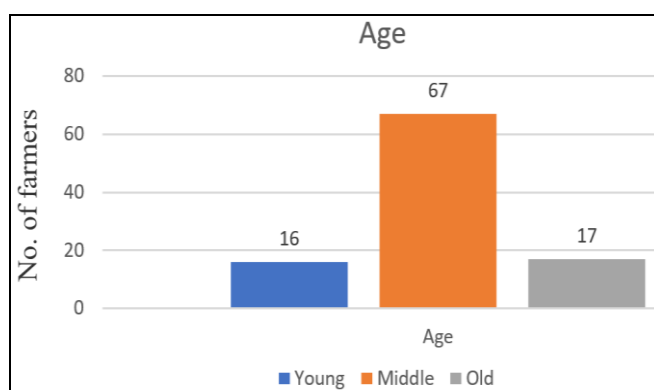The present result resembled with Dhaka *et al.* (2011) [2] studied in Bundi district of Rajasthan.

Fig 1: Distribution of respondents according to age

B. Education
Formal education of an individual influences his attitude as well as enhances comprehensive ability and skill. An educated individual is more prone to analyze ideas, cause and effect relationship of different phenomena. This also leads to increasing problem solving ability of the individual. With these views, the level of formal education of the respondent farmers was considered and the data in this regard are presented in Table 1.

It was observed that, 24 percent respondents were illiterate and 38 % had primary education. The remaining 27 percent respondents had education up to secondary and higher secondary level and 11 percent farmers were graduate.

In fact, agriculture and allied fields are more technical and complicated. Therefore, it is imperative to increase the educational level of the dairy farmers.

Similar results were reported by Meena *et al*. (2012) [6] while studying in dairy farming in Rajasthan.
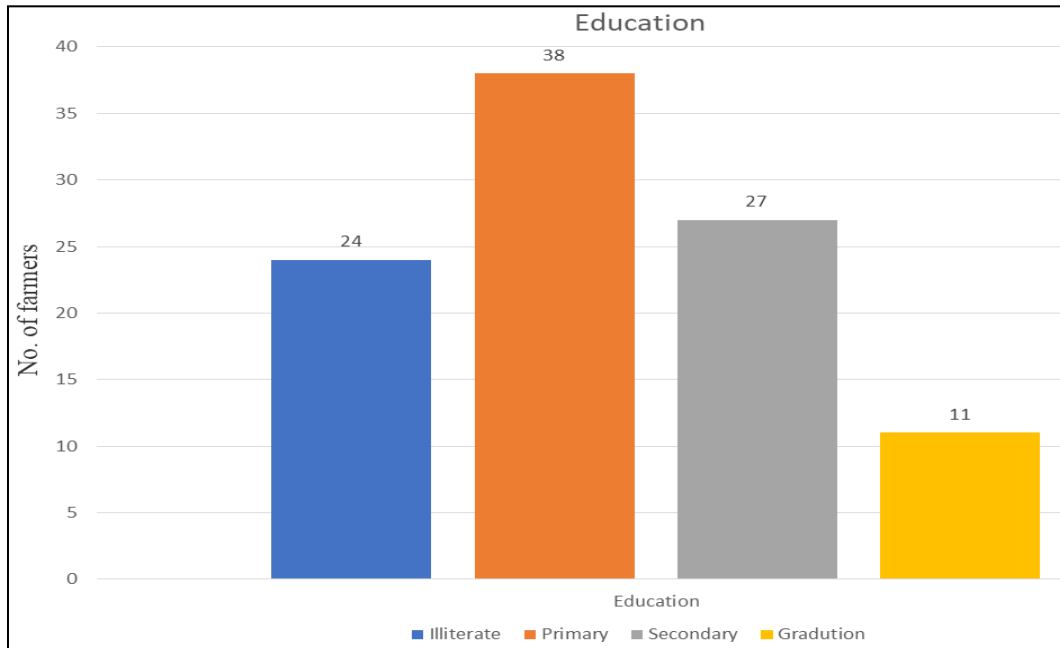

Fig 2: Distribution of respondents according to education

C. Land Holding
Size of land holding refers to the number of hectares of land operated by the respondents. The distribution of respondents according to their size of land holding as classified into five different groups are shown in Table 1.

It was noticed that, 46 percent respondents were landless, 26 percent respondents had marginal farm size, 15 percent respondents had small farm size, 6 percent respondents had medium size land holding and remaining 7 percent

respondents had large farm size. The data indicated that a large proportion of farmers i.e. 46 percent were landless.

These observations indicated that the buffalo dairy farms located in the vicinity of Pune city were mostly run by primary educated, landless and middle aged group farmers as a major source of their livelihood.

The results are in accordance with Nagrale (2016) [7] who worked on dairy farmers of Kaij tahsil of Beed district.
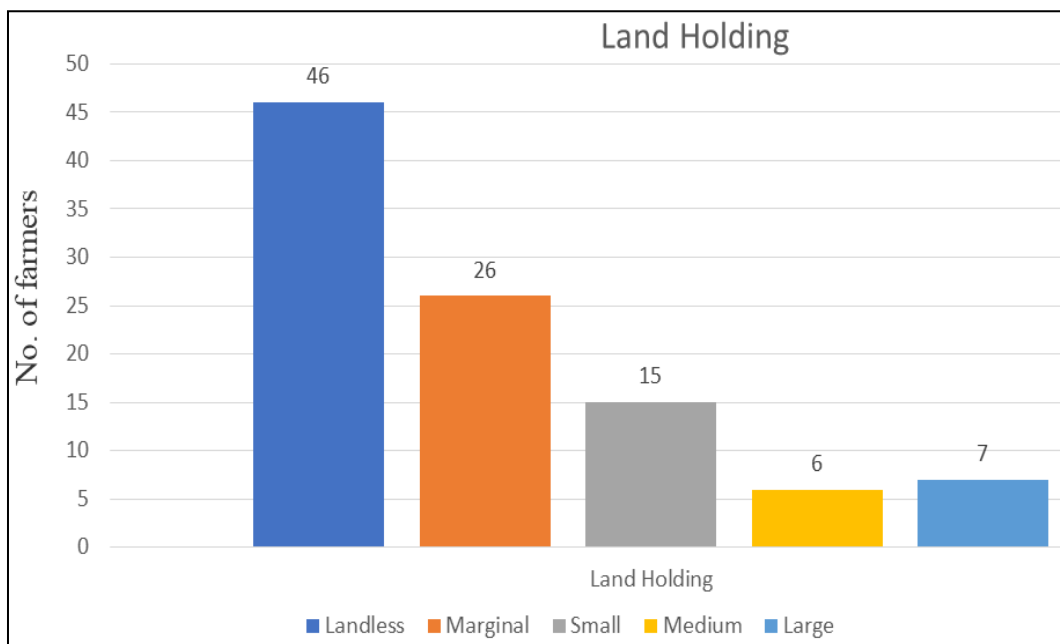

Fig 3: Distribution of respondents according to land holding

Herd size
As this variable operationalised as the total number of domesticated buffaloes maintained by respondents for milk production. They were grouped into the following categories as small, medium, big and large size of herd as shown in Table 1.
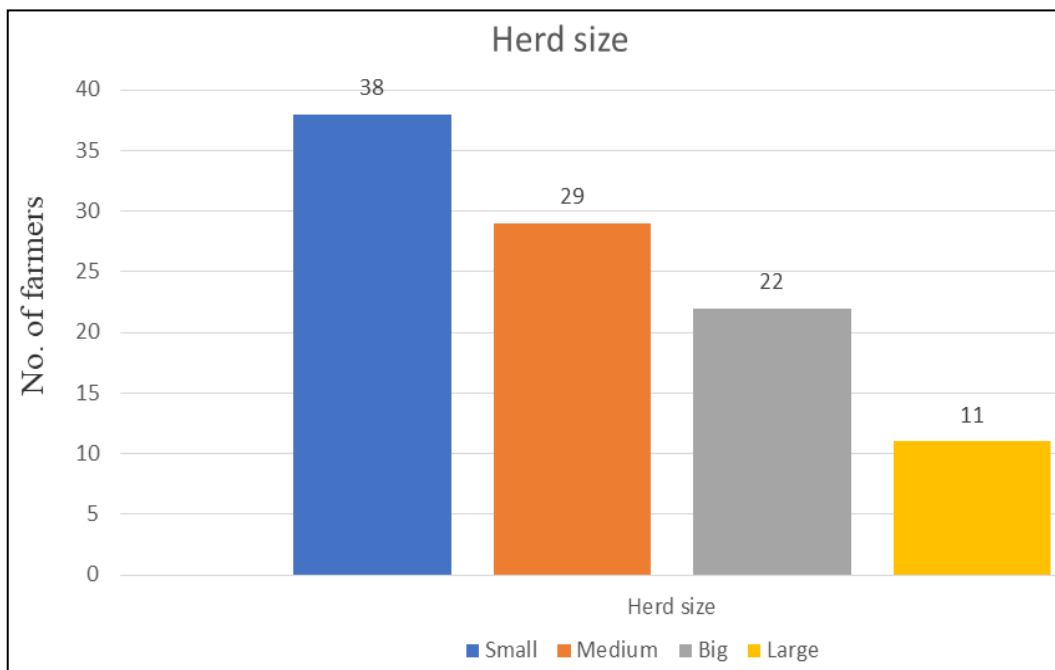
Fig 4: Distribution of respondents according to herd size

Annual income

The annual income is one of the important variables that influenced the adoption of improved dairy management practices. The respondents were grouped on the basis of income into four categories as shown in Table 2.
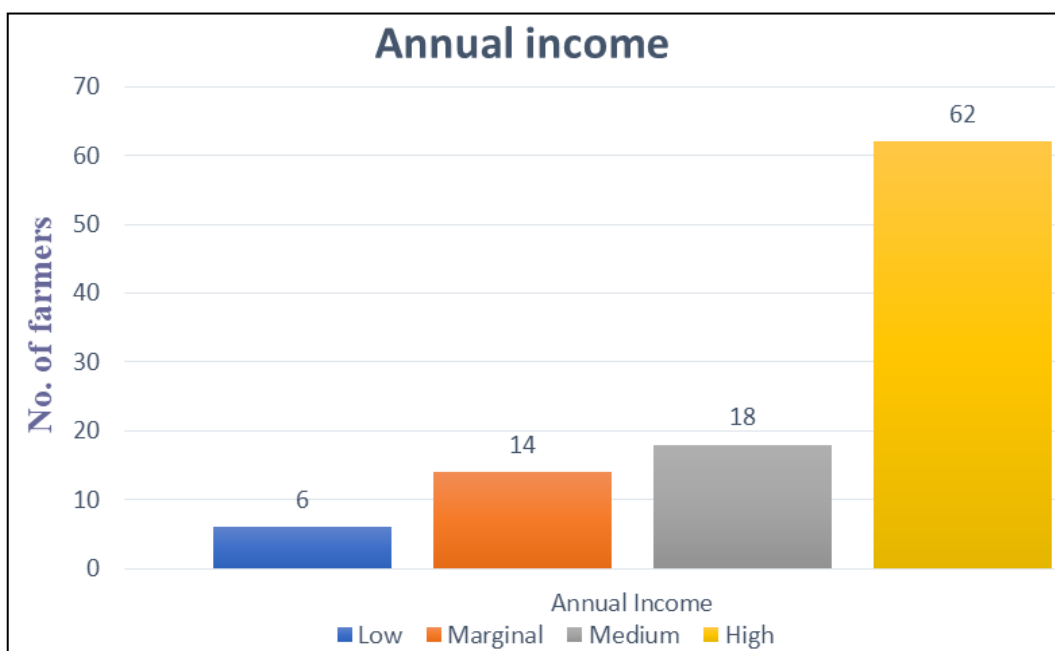

Fig 5: Distribution of respondents according to annual income

Conclusions

Majority (46.00 %) of farmers were landless, 26.00 percent farmers were marginal having land up to 1 ha. Majority (67.00 %) of buffalo owners were between age of 31 to 50 years and only 17.00 percent of buffalo owners were above 51 years of age. Among all the respondents, 24.00 percent were illiterate, 38.00 percent had completed primary education and 11.00 percent were educated up to graduation. Further, 38.00, 29.00, 22.00 and 11.00 percent respondents had small, medium and big and large size herd, respectively. About 6.00 percent farmers were having low income i.e. below 50,000 per annum and 62.00 percent respondents had high annual income i.e. over Rs. 1, 50,000.

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