Socio-Economic profile and existing flock structure of goat farmers in villages of Jabalpur District

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Abstract
The present study was conducted on socio-economic profile and existing flock structure of goat farmers in adopted villages of Jabalpur district. Data were collected through a structured interview schedule from all goat owners of adopted village (N=80) by personal interview method. The analysis of data revealed that respondents were predominantly middle age group (32-53 yrs.), had low level of education with medium sized (4-8 members), nuclear family belonging to schedule caste/schedule tribal. The main occupation of respondents was labour. They belonged to landless with medium (Rs. 24895-148492/-) annual gross income category. The Majority of respondents had utilized Information source was neighbors. Respondent had small flock size (< 5) i.e. 37.50% with less (< 5 year) experience (50%) in goat farming and reared goats in free-range system. Flock structure of goat in adopted village was found higher in village Silua (234 in Numbers).

Keywords: Adopted villages, Existing flock, Goat owners and Socio-economic status

Introduction
Goat is multifunctional animal which acts as an economic backbone of small and landless farmers of rural India to run their livelihood. It provides benefit to farmers who earn income through selling of resources from goats such as milk, meat, skin, fiber and manure to support their families. 19th livestock census revealed that India accounts 135.17 million of goat population among them rural area contributes 129.08 million goats. Goats population accounts for 22.06 per cent of total livestock population in Madhya Pradesh. Goat rearing is a widespread activity in Madhya Pradesh and is an eminent source of earning a livelihood for landless and small-scale farmers. Households cultivating less than 2.0 hectare land (marginal and small) are the custodian of more than 76 per cent of the total goats in the country (Government of India, 2006-07) [6].

Knowledge and adoption of improved scientific practices of goat rearing among the goat owners increases their income, socio-personal status and it plays an important role in elevation of socio-economic conditions of labourers, landless and marginal farmers. Goat rearing does not require any additional management compare to other livestock and mostly depends on browsing of shrubs and trees in the nearby vicinity. The previous research shows that socio-economic and socio-personal status of rearers determines the adoption of improved scientific practices in goat farming. Therefore, the present study was conducted to assess the farmer’s socio-economic profile and existing flock structure of goats in adopted villages of Jabalpur district for improvement in existing goat farming practices.

Methodology
The present study was conducted purposively in five adopted villages (namely Ghana, Chattarpur, Silua, Padaria and Deori) of Jabalpur district of M.P, Which were adopted by the Nanaji Deshmukh Veterinary Science University, Jabalpur. All goat owners were selected from each adopted village to study the respondent’s socio-economic profile and existing flock structure of goats. Village Ghana, Chattarpur, Silua, Padaria and Deori had 07, 25, 17, 12 and 19 number of respondents respectively. Thus, the final sample size of 80 goat owners are selected. The data was collected through personal interview method with the help of pretested well structured interview schedule on socio-economic status of respondents and existing flock structure of goats.
Results and discussion

1. Socio-economic profile of respondents

Age
The goat owners according to their age were categorized (mean ± SD) into three groups, i.e., young, middle and old. The data of the study reveals that majority of the goat owners (72.50%) belonged to middle age group followed by old age group (15 %) and young age group (12.50 %). Middle age group respondents will be more malleable to change. Therefore less number of young and old people might have involved in rearing of goats. The finding of this research is close with result of Bashir et al. (2011) [3] who found that majority of tribal respondents were middle aged ranging from 30-50 years of age followed by old aged (more than 50 years) and Kumar et al. (2015) [7] who found that majority of the goat keepers belonging to middle age group.

Education
Education is one of the important factors which accelerates growth and development of any enterprise. It can be observed that majority of the goat owners (57.50%) had illiterate followed by middle school (17.50%) and primary school (13.75%) level of education. Only 7.50 per cent of respondents were educated up to intermediate and mere 3.75 per cent of goat owners had education up to high school. The study also revealed that none of the respondents were educated up to graduate and above level. The result is line with findings of Kumar et al. (2015) [7], who found that majority of goat farmers belonged to illiterate (44.6%) category and Sabapara (2016) [10] revealed that majority of goat keepers (58%) were illiterate, while 42% were literate and out of literate 33.6% had only primary level of education. Therefore, in order to popularize the goat farming there is a need for making more efforts to motivate the respondents to adopt the newer technologies. The gap in the knowledge has to be bridged through providing scientific training to the respondent.

Caste
The findings that majority of the respondents (53.75%) belonged to Schedule caste/ Schedule tribe, followed by 41.50 per cent from Other backward class and only 5 per cent goat owners belonged to general category. The religious beliefs, forms of worship, objects of worship, and ceremonies of the people can influence any type of farming system. This was because usually most of the downtrodden people practice goat rearing as a source of income to meet their household requirements. These findings of study are similar to the findings of Alves and Mello (2005) [1] who reported that majority of the respondents belonged to Schedule caste/ Schedule tribe and Kumar et al. (2015) [7] who stated that majority of the poor farmers belonging to Schedule caste/ Schedule tribe and backward community mostly reared goats.

Family type
Data reveals that majority of the goat owners (55%) belonged to nuclear family, whereas 45 per cent of respondents belonged to joint family. This finding is supported by Kumar et al. (2015) [7] who conducted a study and found that goat farmers preferred to live in nuclear family (78.33 per cent) than joint family (21.67 per cent) and Sabapara (2016) [10] which reported that majority (68%) of the respondents had nuclear type family while 32% of the respondents had joint type their family.

Flock size
The rural goat owners were categorized according to their herd size into three groups, viz., small, medium and large. The findings reveals that majority of the goat owners (37.50%) had small herd size (<5), followed by medium (5-12) and large herd size (>12), i.e. 35 and 27.50 per cent respondents, respectively. Sabapara (2016) [10] found in his result that 54.80 per cent of respondents had small flock size followed by 26.80 had medium level of flock size. Mohan et al. (2012) [8] found similar result and Tanwar and Chand (2013) [12] were conducted a survey in Jaipur district of

Family size
It is clear that majority of the respondents (51.25%) had a medium family size while 37.50 per cent of goat owners had small family size and only 11.25 per cent fall in the category of large family size. The time available with the members of the household largely depends on the number of members as well as the type of family. In such circumstances, the women folk of the household can easily take up goat farming as it is an enterprise with low demand of labour. Finding of Rawat et al. (2015) [9] revealed that majority of goat keeper having medium size family and Sabapara (2016) [10] observed that 72% of the goat rearers had a medium family size of 4 to 6 members, followed by equal number of small and large family size. This is because most of the respondents had nuclear family due to social change to meet the family demands within the available sources of income.

Occupation
Data of research finding indicates that majority (55%) of the goat owners were laborers. Animal husbandry provided occupational livelihood to 28.75 per cent goat owners, whereas, 16.25 per cent respondents earned through agriculture. The present study shows that, in most of the cases, the families had more than one occupation for their source of income. The earnings from all sources of income were, however, pooled in the family. Thus, this enterprise could prove to be an excellent source of income for unemployed youth. It could provide gainful employment to the family members and utilize the barren and fallow land available with the farmers. Since, diversification is the need of the hour, thus, given in the present scenario goat farming can offer an excellent avenue of employment (Veeranna et al. 2004) [13]. The finding of Sabapara (2016) [10] is similar who stated that majority of respondent were labourers as their subsidiary occupation.

Land holding
Finding revealed that majority (73.75%) of the respondents had no ancestral land. About 25 per cent respondents belonged to small farmers' category having <2 hectares of land while 1.25 per cent of the families fall in the medium farmers' category. None of the respondents belonged to large farmers' category. Because of this scenario majority of respondent faced towards an alternative recourses for run their livelihood. The result is line with findings of Arya and Chander (2005) [2] who reported that majority of respondent had no land and Mohan et al. (2012) [8] revealed that the highest numbers of selected respondents were landless 41 (51.90 %) followed by marginal 28 (35.45%), small 8 (10.12%) and medium large 2 (2.53%) and about 87% goat farmers belong to landless and marginal categories indicate that majority of goats are reared by farmers who have no or little land.
Rajasthan and found that 42.11 per cent of farmers belonging to small flock holder category also.

**Annual Gross income**

The annual gross income (mean± SE) of the sample goat owners is clearly seen from the table that majority (65%) of the goat owners belonged to medium income group followed by low and high income group which had 17.50 and 17.50 per cent each, respectively. Poor income of farmers is one of the key constraints for poor adoption of scientific goat farming practices at grassroots level. The majority of goat owners had annual income ranging between Rs. 24895-148492/-. The finding of Sabapara (2016) [10] is similar with majority of the goat rearers (83.2%) had an annual income up to Rs. 25,000/-, 15.2 per cent had Rs. 25001 to 50,000/- and 1.6 per cent had above Rs 50001/- annual income.

**Goat farming experience**

The rural goat owners were categorized according to their goat farming experience into three groups, viz., less, medium and more. The findings reveals that majority of the goat owners (50%) had less experience i.e. less than 5 years, followed by 30 and 20 per cent respondents with medium (5-10 year) and more (> 10 year) experience, respectively. None of the goat owners had any formal training or any scientific training for rearing of goat for employment generation and sustainable livelihood. Training provides a systematic improvement of knowledge and skills which in turn helps the trainees to function effectively and efficiently in their goat rearing on completion of the training.

**Information- source utilization**

The rank given by goat owners to the different sources of information utilized is presented. The finding of study explains that majority of the respondents (56%) gave first preference to neighbors, followed by SAU/SAV (34%), Veterinary Doctors (16%), goat traders (10%), radio (8%), mobile (5%), newspaper (4%) and television (4%). The different sources of information influence the knowledge and adoption of the individual towards any farming system. The present research findings amply shows the role of various sources for popularizing the goat farming, it was seen that majority of the goat owners gave first preference to neighbours, followed by goat traders and relatives, which corresponded to the findings of Singh et al. (2006) [11].

2. **Existing flock structure of goats**

It can be observed that in the entire five adopted villages, there were 893 farm families were present at the time of study. Out of which 80 farm families were rearing goats. The highest numbers of goat keepers were observed in village Chattarpur and found to be 25 numbers where as in village Deori, Silua, Padariya and Ghana, it was 19, 17, 12, and 07 goat keepers respectively. The number of males and females in flocks and their ages are often used as an indicator of a particular traditional management system.

Goat populations in the entire five adopted villages were 761 goats. Out of them, the maximum 234 goats were observed in village Silua followed by Deori (198 goats), Chattarpur (127 goats), Ghana (116 goats) and lowest number of goats were found in village Padariya (86 goats). The average number of goats population per household was highest (16.57 goats) in village Ghana, followed by village Silua (13.76 goats), Deori (10.42 goats), Padaria (7.16 goats) and average number of goat population was lowest in Chattarpur (5.08 goats). On an average, the number of goats per household was (10.60). The average number of goats per household in adopted village was also is line with findings of Dixit and Singh (2014) [13] and Byaruhanga et al. (2015) [14] who found that average number of goat per household were 9.2 and 9 respectively.

**Conclusion**

Study was concluded that respondents were predominantly middle age group, had low level of education (72.50%) with medium sized, nuclear family belonging to schedule caste/schedule tribal. The main occupation of respondents was labour. They belonged to landless (73.75%) category with medium annual gross income category. Respondent had small flock size (37.50%) with less experience in goat farming and reared goats in free-range system. Majority of the goat owners gave first preference to neighbours, followed by goat traders and relatives to utilize the different sources of information. For enhancing the socio-economic status of farmer provide much more knowledge regarding to goat farming practices in regular interval by various extension agencies.

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