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Sheep Farming Management Practices in Raichur District of Karnataka, India

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ABSTRACT

The study highlights the socio-economic profile of sheep rearing farmers in Raichur district of Karnataka, it is evident that, 38.33 per cent of the sheep farmers belonged to young age group, followed by primary school education (39.17%), large family size (54.16 %), sheep farming experience (50.83%), small land holding(2.51-5.00,acres), (46.67%), medium annual income (43.33 %), medium flock size (45.83%,), 56.67 per cent of the sheep farmers belonged to medium exposure to mass media, among the different mass media exposure, majority of the sheep farmers possessed mobiles phones (79.16 %), sheep farmers had medium level of extension participation (56.66%), The data furnished that, more than half (50.83 %) of the sheep farmers belongs to medium level of scientific orientation, sheep farmers were belonged to high and medium risk orientation56.67 and 33.33 per cent respectively, medium level of economic orientation (41.67%), medium level of market orientation (46.67%), and 46.66 per cent of the sheep farmers were had medium level of Cosmopoliteness.

Key words: *Livestock; Profile; Sheep farming management.*

Livestock plays an important role in Indian economy. About 20.5 million people depend upon livestock for their livelihood. (*Anonymous., 2007*). Livestock contributed 16 per cent to the income of small farm households as against an average of 14 per cent for all rural households. Livestock provides livelihood to two-third of rural community. (*Anonymous., 2017*). It also provides employment to about 8.8 per cent of the population in India. India has vast livestock resources. Livestock sector contributes 4.11 per cent GDP and 25.6 per cent of total Agriculture GDP (*Ali and Neka 2011*). Together with its allied activities like livestock which provide milk and milk products, meat and meat products, it constitutes a major supplier of food and food articles, raw materials, and finished products. Agriculture, being a means of livelihood of almost two third of the population in the country represents India's most important economic sector. Even though due to increasing population pressure in India, while area under cultivation is static or even shrinking, which demands intensification of cropping and allied activities. (*Devaki, 2015*). Hence animal husbandry is also a main source of sustenance and it plays an important role in the national economy and socio-economic development. The sheep which suites to the need of marginal farmers, agricultural labourers and village system due to low initial investment, ease of rearing and high feed conversion efficiency. It is a very important component in dry land farming system as they are very well adapted to harsh climate, long migration, resistance against tropical diseases, poor nutrition and shortage of drinking water and water quality. Sheep can be reared as free range or under housing inside a shed. Penning of sheep in harvested field enhances the fertility of soil by richness of nutrients in the dung and also brings additional income to the flock owners. So, with low investments it can be made in to a profitable venture.

METHODOLOGY

The Ex-post-facto design of social research was used in the present study due to the researcher is having no control over the independent variables which have already occurred. The present study was conducted in Raichur districts of karnataka state of India. Six villages from each taluk were selected on the basis of the highest sheep population. Thus, total 12 villages were selected from two selected taluks. A list of farmers who possess sheep from each selected village were prepared with the help of veterinary officer from each selected village 10 sheep farmers were selected with the help of simple random sampling procedure to makeup total number of 120 sheep farmers for the present study.

There are five taluks in Raichur district *i.e.,* Devadurga, Lingsugur, Manvi, Raichur, and Sindhanur. In these taluks Lingsugur and Raichur taluks were purposively selected as study area based on their highest number of sheep population for the present investigation.

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RESULTS AND DISCUSSION

Age : In the present study it was observed from Table 1 that majority (38.00%) of respondents were belonged to young age category followed by middle age (37.50%) and old age (24.17). It apparently indicated that most of the young age persons having more awareness about improved sheep rearing management practices and they are as compared to middle and old sheep farmers. Similar findings were observed by *Chandrasekhar., (2017).*

Education : Education plays a key role in following scientific management practices in livelihood enterprises particularly in sheep rearing. It was evident that over one third (39.17%) of sheep farmers had primary school education, middle school (28.33%) fallowed by illiterate (20.83%) whereas, last percent (10.00%) and (1.67%) of the farmers high school and college level education. The educated peoples are also diverting towards the sheep rearing business because of the more returns in

Table 1. Profile characterises of sheep farmers (N=120)

Characteristics	No.	%
Age		
Young age	46	38.33
Middle age	45	37.50
Old age	29	24.17
Education		
Illiterate	25	20.83
Primary school	47	39.17
Middle school	34	28.33
High school	12	10.00
College education	2	1.67
Graduation	0	0.00
Family		
Small family	16	13.34
Medium family	39	32.50
Large family	65	54.16
Sheep rearing experience		
Low	22	18.33
Medium	37	30.84
High	61	50.83
Land holding		
Marginal farmers(<2.50 acres)	33	27.50
Small farmers(2.50 to 5.00 acres)	56	46.67
Big farmers(>5.00 acres)	31	25.83
Annual income		
Low income	40	33.33
Medium income	52	43.33
High income	28	23.34
Flock size		
Small	36	30.00
Medium	55	45.83
Large	29	24.17
Scientific orientation		
Low	51	42.50
Medium	61	50.83
High	8	6.67
Risk orientation		
Low	12	10.00
Medium	40	33.33
High	68	56.67
Economic motivation		
Low	31	25.83
Medium	50	41.67
High	39	32.50
Market orientation		
Low	44	36.67
Medium	56	46.67
High	20	16.66
Cosmopliteness		
Low	14	11.67
Medium	56	46.66
High	50	41.67

terms of per rupee investment and low risk. Thus, it is concluded that a majority (39.17%) of the sheep farmers had received primary school education. This may be due to their lack of interest in this job; this finding is in line with *Adhitibhanotra, et al., (2016).*

Family size : It shows that, more than half (54.16 %) of the sheep farmers had large family size (>8 members) whereas, 32.50 and 13.34 per cent of them were belonged to medium family (5-8 members) and small family size (<5 members), respectively. It was the general perception of sheep rears to prefer bigger family size which helps to share the work load and might be due to social changes and love for keeping individuality of new generation rather than to live together in joint family. Similar findings were reported by *Suresh et al. (2008).*

Sheep farming experience : In case of sheep farming experience, 50.83 per cent of the sheep farmers belonged to high sheep farming experience whereas, 30.84 and 18.33 per cent of them had medium and low sheep rearing experience respectively. Majority of the sheep farmers had high sheep farming experience. Possible reason might be that they are young aged and they involved themselves in sheep farming from their childhood as a profession. The above findings are similar with *Rajanna et al. (2012*)

Land holding : It was evident that 46.67 per cent of the sheep farmers belongs to small land holding (2.51-5.00 acres), whereas, 27.50 per cent of sheep farmers were marginal farmers (<2.5 acres) and 25.83 per cent were big land holders (>5 acres). It is concluded that maximum percentage of the sheep farmers were found to be in marginal land holding category. It is seen from this results that the people had less or marginal land holding attracted toward the allied business-like sheep rearing. Similar findings were observed by *Chaturvedi et al., (2002).*

Flock size : It is noticed that 45.83 per cent of the sheep farmers were medium flock size (65) followed by 30.00 per cent of them had small flock size (<48) and 24.17 per cent sheep farmers had high flock size (>93). The main occupation of these farmers was only sheep rearing and earn small income which they get from sheep penning. The results are being supported by *Geeta et al. (1999)*

Annual income : It is clear that 43.33 per cent of the sheep farmers belonged to medium annual income, followed by 33.33 % of the farmer's low income and 23.34 per cent of them were high annual income category. They earn an average income of Rs.85, 003.74-14,396.25 from selling of live sheep and earn a small sum of amount from penning charges which adds to their annual income. The above finding got support from the studies conducted by *Kumaravelu (2007).*

Scientific orientation : The data furnished that, little over half (50.83 %) of the sheep farmers belonged to medium level of scientific orientation whereas, 42.50 per cent of them had low and 6.67 per cent sheep farmers were have high level of scientific orientation. Medium level of scientific orientation was observed due to the reason that the awareness of sheep rearing management practices among the farmers and their attachment with the extension workers as they guide them about the management of sheep rearing. It can be concluded that, most of the sheep farmers had medium level of scientific orientation category.

Risk orientation : It was noticed that, 56.67 and 33.33 per cent sheep farmers were belonged to high and medium risk orientation and only 10.00 per cent of sheep farmers belonged to low level of risk orientation. The risk bearing capacity of individuals depend upon the personal, psychological, socio-economic characteristics. The individuals with more farming experience, better land holding and better income had high risk orientation. This is evident from the results that because of contact with extension personnel by the respondents which might have increased the perception and confidence of the respondents about new technologies and to gain more income by taking risk all these factors might have inferred the respondents to be in high risk orientation. The above findings are in accordance with the findings of *Subramanyeswari et al. (2013).*

Economic motivation : It is evident that, 41.67 per cent of the sheep farmers belonged to medium level of economic orientation whereas, 32.50 per cent and 25.83 per cent sheep farmers belonged to high and low level of economic orientation respectively. The reasons might be due to the low economic position, small and marginal land holding and lack of encouragement from family members. Other probable reason might be that in order to generate money and increase incomes from sheep enterprise, the trained sheep farmers were economically motivated in majority for their liveliness. Unless one is not economically motivated, he/she cannot make sincere efforts and create interest in the profession and earned profit out of it. The above findings are similar with *Bhagyalaxmi et al. (2003).*

Market orientation : The data revealed that, 46.67 per

cent sheep farmers belongs to medium level of market orientation, whereas, 36.67 per cent had low level and 16.66 per cent had high level of market orientation. Most medium level flock size farmer's sells their sheep to wholesaler and small sheep flock size farmers sell to village traders. Mitigating the supply as per demand is the tact of any business. During the peak period of demand of animal and fetch remunerative price due to orientation towards market. These findings are in conformity with the findings of *Chauhan et al. (2003).*

Cosmopoliteness : It was clear that, 46.66 per cent of the sheep farmers were had medium level of Cosmopoliteness followed by 41.67 per cent sheep farmers were medium level and 11.67 per cent of the sheep farmers were low level of Cosmopoliteness. Majority fall under medium cosmopoliteness due to their sound economic condition and land holding and locally available of private companies. Similar findings were observed by *Patil (2003)*.

Mass media exposure : Table 2 revealed that among the different mass media exposure, majority of the sheep farmers possessed mobiles phones (79.16 %) followed by 77.50 per cent of the farmers possessed television and radio was possessed by 33.33 per cent of the farmers. Only 10.00 per cent of the farmers subscribed to news paper. As far as the exposure of these media by the sheep farmers in day-to-day life is concerned among the news paper readers, 60.00 per cent of the farmers never read agricultural article. Whereas, 51.66 and 48.34 per cent of the farmers never read entertainment article and news article respectively.

In case of radio, majority (77.50 %) of the farmers occasionally listened to news. Whereas, 76.67 per cent of the sheep farmers occasionally listened agriculture programmes and 70.83 per cent of the farmers occasionally expose to entertainment programmes. It could also be seen that 59.17 per cent of the sheep farmers never watched agriculture programmes on television (TV), whereas majority (71.66 %) of farmers watched news programmes occasionally and 65.00 per cent of sheep farmers watched entertainment programmes occasionally.

It also indicated that a high majority (83.33 %) of sheep farmers never exposed to agricultural apps, while 80.00 per cent also never exposed to viewing news in mobiles and 55.00 per cent exposed to use mobiles regularly for entertainment purpose. Many of the farmers possessed mobiles and television followed by radio. These medias were mainly used for the purpose of entertainment and viewing and listening of news. Reasons for this might be two pronged. One could be that after tedious work, farmers might be made inclined to view/listen light entertainment programmes. Other could be to know what is going on in their surroundings. The results agreed with the findings of *Roy (2013).*

This might be due to the availability of moderate source of information about improved sheep rearing management practices. Also, may be due to the season that, majority of the sheep farmers resides in remote area. It is can be concluded that maximum percentage of

Table 2. Distribution of respondent according to mass media exposure (N= 120)

Name of the media	Subscribed/ possessed	Programmes	Frequency of exposure		
			Regular	Occasionally	Never
	No. (%)		No. (%)	No. (%)	No. (%)
News paper	12 (10.00)	Agril. Articles	0 (0.00)	48 (40.00)	72 (60.00)
		News	16 (13.34)	42 (35.00)	62 (51.66)
		Entertainment	20 (16.66)	42 (35.00)	58 (48.34)
Radio	40 (33.33)	Agril. Programmes	0 (0.00)	92 (76.67)	28 (23.33)
		News	27 (22.50)	93 (77.50)	0 (0.00)
		Entertainment	35 (29.17)	85 (70.83)	0 (0.00)
Television	93 (77.50)	Agril. Programmes	0 (0.00)	49 (40.83)	71 (59.17)
		News	34 (28.34)	86 (71.66)	0 (0.00)
		Entertainment	39 (32.50)	78 (65.00)	3 (2.50)
Mobile	95 (79.16)	Agril. Apps	0 (0.00)	20 (16.67)	100 (83.33)
		News	0 (0.00)	24 (20.00)	96 (80.00)
		Entertainment	66 (55.00)	29 (24.17)	25 (20.83)

the sheep farmers were found in medium level of use of sources of information. Similar findings were observed by *Mukesh (2014).*

Extension participation : It was clear that, 56.66 per cent sheep farmer's medium level of extension participation whereas, 33.34 % low extension participation and only 10.00 per cent of the farmers had high extension participation. The results presented in the Table 3 revealed that two-third of sheep farmers never participated in campaigns followed by, 60.00 per cent of sheep farmers never participation in training programs, 59.17 per cent of sheep farmers never participate in demonstration programmes conducted by the Animal Husbandry Department and 46.66 per cent of the sheep farmers never participate in krishimela and group meeting.

Table 3 also indicates that an equal (41.67%) percentage of sheep farmers occasionally participated in krishimela and group meeting, whereas, 58.33 per cent of the sheep farmers regularly participated in animal health campaigns. Many of them were having medium extension participation which made them to be far from the availing benefits of the government services and mainly they followed they were busy in animal grazing from morning to late evening to sustain their livelihood, which is one of the major drawbacks that they could not participate much in the extension activity. However, they have participated regularly in animal health camps as it is having a direct benefit to them. The result of the present study gets the support of finding of *Devaki et al. (2015).*

From Table 4 it indicates that the age of sheep farmers was found to be positively significant relationship with the scientific management practices of sheep this might be due to the reason that, majority of the sheep farmers were from young age group the young age group of sheep farmers is active than the old and young age groups. Education as higher education brings about the desirable changes in the sheep farmers, these findings are in line with *Wadkar (2009)* and *Chandrasekhar et al. (2017).* Annual income they could afford to spend money on the sheep rearing management practices these clearly indicate that higher the annual income, higher the management practices by the sheep farmers, these findings are in line with *Kolli and Koli (2016).*

Mass medium exposure with frequent watching/ reading mass and news paper sheep farmers get reinforcement to practices new ideas, which are essential for sheep farmers, similar findings were quoted by *Patil et al. (1999).* Extension participation, sheep farms touch with extension agents for getting information on the availability of credit and during disease outbreaks and participated in most of the extension activities such as, Krishi mela, training programmes, demonstrations, exhibitions, filed visit, etc. Similar findings were quoted by *Devaki et al. (2015)* and *Patil et al. (2003).*

Scientific orientation receptive to the latest technologies, employ scientific methods in making the decision. This ultimately reflects on higher economic profits might be due to better educational level and

Table 3. Distribution of respondent according to extension participation (N=120)

Extension activity	Extent of participation					
	Regular		Occasionally		Never	
	No.	%	No.	%	No.	%
Demonstrations	7	5.83	42	30.00	71	59.17
Training programs	3	2.50	45	37.50	72	60.00
Animal health camp	70	58.33	28	23.33	22	18.34
Krishi mela	14	11.67	50	41.67	56	46.66
Group meetings	32	26.67	50	41.67	38	31.66
Participated in campaigns	0	0.00	40	33.34	80	66.66

Table 4. Relationship between scientific sheep rearing management practices with the independent variables of the sheep farmers (N=120)

Variables	Co-efficient of correlation (r)
Age	0.227*
Education	0.210*
Family size	0.344**
Sheep rearing experiences	0.427**
Land holding	0.125^{NS}
Annual income	0.224*
Flock size	0.203*
Mass media exposure	0.217*
Extension participation	0.227*
Scientific orientation	0.237*
Risk orientation	0.313**
Economic orientation	0.254*
Cosmopoliteness	0.202*
Market orientation	0.247*

**Significant at 1 per cent level of probability
*Significant at 5 per cent level of probability

keen interest of trained sheep farmers about know-how regarding practices of improved sheep management practices, these similar trends have reported by *Kolli and Koli (2016).* Economic motivation in general, economic motivation is the basic character upon which other motives, drives and other attributes are built. It is psychological conditions an individual to orient himself to achieve higher income sheep being a highly remunerative enterprise, this finding is in line with the finding of *Reddy and Reddi (2005).*

In the Market orientation sheep farmers were more market oriented to sell the animal in nearby town or selling it in the village, other probable reason might be that trained sheep farmers were more cosmopolite as result they were more interested to know current market information, market trend, demand and supply of animal. Hence, better market orientation was the influencing factor for sheep farmers, these findings are in line with the *Patil et al. (1999).*

The cosmopolite individual has a contact with the number of other social systems this might have facilitated them to have more contact with outside agencies for gaining knowledge, these findings are in line with *Gopi et al. (2016).* These are significant at five per cent level of significance. Family size was influenced by the sheep farmers due to the fact that the family members are involved in the sheep management practices, these findings are in line with *Chandrasekhar et al. (2017).*

Sheep rearing experience is obvious that, the more experienced person can practice more than the less experienced person and risk orientation might be that sheep farmers could be a facing greater risk in managing sheep in day and night from natural calamities and from predators and in making the decision. These are significant at five per cent level of significance. The table also indicates that land holding is negatively significant with dependent variable reason may be due to many of sheep farmers belong to small and medium land holding. These farmers mainly depend on the sheep farming, these finding are line with *Pharate et al. (2013)*

CONCLUSION

The Sheep husbandry practices were one of the age, old, occupation, farmers activities and their live hood is depended on the sheep. In the study are sheep farmers facing various problems in this related is medium land holding, medium mass media exposure, medium extension contact, *etc.* It clearly indicates that need of education programmes, and creating awareness about sheep farming as an enterprise and develop capabilities to the farmers through training camps and exposure visit. Proper extension services, arranging participatory interaction with proper justification will certainly benefit them socially, culturally and economically. From the present investigation it has been concluded that the majority of people are take the field crops. So encourage the farmers towards subsidiary occupation by providing by subsides and free distribution of sheep and made arrangement of community grazing and strengthen the veterinary services and inputs.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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