KNOWLEDGE OF SAMAGRA PROJECT BENEFICIARIES ON SCIENTIFIC GOAT MANAGEMENT PRACTICES

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ABSTRACT

Goat farming is an important subsector of animal husbandry in Kerala. Goat rearing provides an additional income and employment to the small and marginal farmers of the state. Knowledge of goat farmers on scientific management practices was assessed among the Samagra beneficiaries of Thiruvananthapuram district in the study. The results of the study indicated that that 15 per cent of the goat farmers had excellent level of knowledge, 28 per cent had good, 17 per cent had fair and 40 per cent had only poor level of knowledge on scientific management practices. High cost of feed, non-availability of enough fodder, problem of repeat breeding, scarcity of water, less availability of grazing land, high cost of medicines, high cost of animals, occurrence of infectious diseases especially mastitis were the important constraints pointed out by more than half of the goat farmers. The study throws light on the prevailing conditions in the field of goat farming and can be taken as indicators for the socio-economic upliftment of the goat farmers of the state.

KEYWORDS: Kudumbashree, Self-help groups, Scientific management, Training Need Assessment, Focus Group Discussion, Goat Village Scheme

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INTRODUCTION

Goat is known as poor man's cow. Being easily digestible, goat milk is a good supplement for children and convalescent people. In addition to that they are among the main meat-producing animals in India, and goat meat (chevon) is one of the choicest meats and has huge domestic demand. Due to its good economic prospects, goat rearing under intensive and semi-intensive system for commercial production has been gaining momentum for the past couple of years. High demand for goat and its products with potential of good economic returns have been deriving many progressive farmers, businessmen, professionals, ex-servicemen and educated youths to take up the goat enterprise on a commercial scale. The emerging favourable market conditions and easy accessibility to improved goat technologies are also catching the attention of entrepreneurs. A number of commercial goat farms have been established in different regions of the country.

Goat farming is an important subsector of animal husbandry in Kerala. It plays a crucial role in the welfare of the rural population by providing livelihood support. There is possibility of finding full time employment throughout the year through goat farming. Goat farming is an important source of subsidiary income to many small and marginal farmers and also agricultural labourers.

Samagra Project is an initiative independently developed by Kudumbashree and being implemented in the State in collaboration with the three tier local governments and other agencies. It is an attempt to address the entire production – supply value chain holistically, by scaling up productive activity both qualitatively and quantitatively and seeking viable supply opportunities. The major Samagra projects that are implemented in livestock sector are Ksheera sagaram (Dairy project) and Aadugramam (Goat Village Scheme).

Goat village project has been an attempt to approach homestead based goat rearing as an enterprise through an integrated approach combining traditional knowledge and scientific rearing practices. It is a Samagra project and therefore adopted an integrated approach covering backward and forward linkages, keeping homestead level goat rearing unit at its centre. It also attempted collaboration of various agencies and institutions characteristic of Samagra projects. Samagra projects have been developed considering local situation in each region, leveraging on the strengths of traditional agriculture, industry, and markets. The portfolio of projects has been quite diverse. Samagra approach has been part of a new strategy in enterprises promotion. Samagra is about an integrated approach to enterprises. It used the knowledge of people who have been rearing goats traditionally.

Regional Research and Training Centre of Kerala Veterinary and Animal Sciences University conducts need based trainings for the animal husbandry stake holders of southern region of Kerala. Knowledge level is assessed and Training Need Assessment (TNA) was conducted employing the participatory methods like stakeholder workshops and Focus Group Discussions. Livestock sector based stakeholders like dairy and poultry farmers, entrepreneurs, veterinary officers, Kudumbashree district and block coordinators, self-help group members and Community Development Society (CDS) chairpersons were involved in the discussions. Based on the results, beneficiaries of Aadugramam scheme were given trainings on commercial goat rearing.

The goat farmers are pointing out some difficulties in rearing the animals. Some of them being non-profitability of the enterprise, unprecedented increase in feed cost, scarcity of labourers, unavailability of fodder and water and occurrence of diseases that make the animal unproductive. Increasing the profit by minimising cost of production and maximising the returns is a major challenge faced by the goat farmers. To some extent these problems could be addressed by adoption of scientific management practices.

Management of animals can be considered under the topics like selection of animals, housing, feeding, breeding and general care of animals. In goat rearing units, usually there would not be covered sheds and the animals are kept in the open. It cannot offer protection against snake bites or provide shelter against extreme environmental conditions. Earlier, the local non-descript breeds were resistant to most of the diseases and there was no financial loss to the farmer due to it. In the modern age, where the multivariant strains of micro-organisms cause new and emergent diseases to the cross-bred animals, the goat farmers should be more vigilant. According to Vidya *et al.* (2010), knowledge has an important role in bringing behavioural changes to an individual, in better decision making and forming a favourable attitude which will result in adoption of scientific management practices.

Now there are many Self Help Groups taking goat farming as the income generating activity. But being unaware of the scientific management practices, many of the units had to end up the enterprise in the forming stage itself. Hence at this context the study was undertaken in Thiruvananthapuram district with the following objectives

- To study the socio-psychological profile of goat farmers

- To study the knowledge of goat farmers on scientific management practices
- The constraints felt by the farmers in goat rearing

METHODOLOGY

Livestock farmers of Thiruvananthapuram district included in the Samagra Animal Husbandry project of Kudumbashree were the respondents of the study. The two animal husbandry projects implemented in Thiruvananthapuram district under Samagra were Ksheera Sagaram (Dairy Cattle scheme) and Aadugramam (Goat Village scheme). As a continuing capacity building programme, Kerala Veterinary and Animal Sciences University had been involved in the scheme and conducted the study.

During 2013-14 there were twenty CDS involved in these projects which served as the population. The following seven CDS were selected randomly from the district.

- Pothencode
- Malayinkeezhu
- Karakulam
- Venganoor
- Aryanad
- Athiyanoor

Livestock farmer members of those CDS were invited for the focus group discussions and personal interviews which were organised at the respective locality to suggest the training needs regarding the commercial goat farming practices. Knowledge in scientific goat management practices and Constraints in goat rearing were measured by the Schedule developed by Jacob and George (2013). The data obtained were analysed using simple statistical tools like frequency and percentage.

RESULTS

Table 1: Personal profile of goat farmers n=100

Sl. No		Category	Frequency	%
1	Age	<35 years	02	02
		35-50 yrs.	88	88
		>50 yrs.	10	10
2	Educational Status	<5 years	15	15
		5-8 years	77	77
		>8 years	08	08
3	Major Occupation	Agriculture	10	10
		Livestock rearing	42	42
		Business	3	3
		Coolie (Agricultural/ non-agri. labour)	45	45
4	Annual Income	<25000	67	67

		>25000	33	33
5	Number of goat owned	<4	34	34
		4-8	40	40
		>8	26	26
6	Land Owned	<10 cents	88	88
		>10 cents	12	12
7	Family Size	<4 members	73	72
		4-7 members	23	23
		>7 members	4	4
8	Experience in goat Farming	<5 years	68	68
		5-10 years	30	30
		>10 years	2	2
9	Experience in SHGs	<5 years	44	44
		>5 years	46	46

The profile data revealed that majority of the Samagra members were middle aged omen having 5-8 years of formal education, low income and marginal farmers. Major occupation was livestock rearing or agriculture labour. They reared 4-8 goats on an average and had only less than five years of experience in rearing goats. Had small family and had above five years of experience in SHGs. According to George (2005) majority of the livestock farmers of Kerala were low-income marginal farmers having primary education.

Knowledge on Scientific Management Practises

Table 2: Distribution of goat farmers on knowledge of scientific management n=100

Category	Percentage score	Frequency	percentage
Excellent	>86	15	15
Good	71-85	28	28
Fair	51-70	17	17
Poor	<50	40	40
Total		100	100

The data revealed that 15 per cent of the goat farmers were having excellent level of knowledge, 28 per cent had good, 17 per cent had fair and 40 per cent had only poor level of knowledge on scientific management practices. The findings of the study was supported by the findings of Shanmugam *et al.*, (2002) who reported that the dairy farmers had only fair knowledge on the vital information regarding dairy cattle breeding. According to Kavitha (2005), 16 per cent of the goat keepers had high, 75.33 per cent had medium and 8.67 per cent had low knowledge on goat management. As per Vidya *et al.* (2010), about three-fourth of the dairy farmers had only medium level of knowledge on dairy health management practices. Lahoti *et.al.* (2011) also described knowledge as one of the important components of adoption behaviour. They also reported that age, attitude towards indigenous technology, use of sources of information and level of scientific orientation were having influence on knowledge level. Tak *et al.*, (2011) showed that extension contact, mass media exposure, education and herd size were having significant positive correlation with knowledge. George and Subhadra (2002) reported that 38 per cent of the beneficiaries of calf feed subsidy scheme were highly knowledgeable, 35per cent had medium and 27per cent had only low level of knowledge on preventive vaccination.

Constraints in Goat Rearing

Constraints are the problems or difficulties faced by the goat farmer in carrying out the activities of goat farming. The constraints indicated by the farmers are presented in Table 3.

Table 3: Distribution of the goat farmers based on the constraints felt n=100

Sl. No	Constraint	Frequency	Percentage	Rank
1	High cost of feed	100	100	I
2	Non-availability of enough fodder	80	80	II
3	Problem of repeat breeding	70	70	III
4	Scarcity of water	68	68	IV
5	Less availability of grazing land	63	63	V
6	High cost of medicines	57	57	VI
7	High cost of animals	55	55	VII
8	Infectious diseases especially mastitis	53	53	VIII
9	Increased labour cost	48	48	IX
10	Difficulty in getting bank loans sanctioned	35	35	X

Constraints are the factors that act as a bottleneck and restrict the system from achieving its objectives (Jacob and George, 2011). High cost of feed is the most important constraints felt by almost all the respondents and accordingly was ranked I. Among the others non-availability of enough fodder, problem of repeat breeding, scarcity of water, less availability of grazing land, high cost of medicines, high cost of animals, occurrence of infectious diseases especially mastitis were the important constraints pointed out by more than half of the goat farmers. Related results are shown by Rani (2004). The problem of increased labour cost and non-availability of labourers was indicated by 48% of the respondents. Another constraint coming next in the rank order is the difficulty of getting bank loans sanctioned (35%). It is a new and emerging situation. Even if the Government is implementing projects to support the rural poor, they are not receiving them due to their unpaid previous loans. According to Rathod (2011) non-availability of enough dry fodder, problem of repeat breeding, scarcity of water, less availability of grazing land and high cost of medicines were the important constraints in livestock rearing. Shinde (2011) suggested that high cost of milch animals, non-adaptation of animals bought from faraway places and occurrence of infectious diseases especially mastitis were the important constraints pointed out by majority of the dairy farmers.

CONCLUSIONS

There is a gap, though not wide, existing in the dissemination of animal husbandry related knowledge to the rural farmers. Most of the research findings are not getting transferred to the actual target group, i.e. the farmers. Most of the information was transferred without being well documented in books or other extension services. Lack of proper knowledge leads to many unscientific practices being followed in the goat rearing sector leading to diseases and consequent losses to goat farmers. As a result, they will be forced to stop the enterprise. This probably causes serious impact in the population figures and hence the milk and meat production. Hence it's high time to bridge this knowledge gap through proper awareness campaigns and trainings.

For better managing the animals, the owners should be made access to right information and expertise at the right time in the needy areas. The skill required will differ between owners according to the prevailing situation. Even with an array of development initiatives in agricultural extension in India in the past decades, the quality of information provided to farmers is uneven (Glendenning et al 2010). Identifying the knowledge level and information needs of the owners will enable the extension system to serve them better with right information and skill.

Babu et al (2012) criticised that public agricultural extension systems often failed due to inadequate consultation of farmers about their information needs and poor understanding of their information search strategies. Hence, suitable training programmes are to be implemented, giving due concern to the training needs of the dairy farmers on scientific

management of cattle. Factors such as literacy or access to sources will have a large impact on information needs and use of information sources (Glendenning et al 2010).

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