



# KNOWLEDGE OF IMPROVED LIVESTOCK AND POULTRY FARMING PRACTICES AMONG TRIBAL WOMEN OF WESTERN GHAT REGION OF NEDUMANGADU TALUK IN THIRUVANANTHAPURAM DISTRICT\*

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## Abstract

This is a study on the knowledge of improved cattle, goat and poultry farming practices among the tribal women of western ghat region of Nedumangadu taluk in Thiruvananthapuram district, Kerala. Members of four Self help groups operating under Kudumbasree in the Cheruppani tribal settlement area were studied. An arbitrary knowledge test was used to measure the respondents' knowledge of cattle, goat and poultry farming. Data were collected through both questionnaire and interview methods. Half of the respondents (50%) had medium knowledge of cattle farming. More number of respondents fell in the low knowledge category (32.14%) than the high (17.86%). Majority of the respondents (69.64%) had medium knowledge of goat farming. The number of respondents in the high knowledge category (21.43%) was more than that of low (8.93%). As for knowledge of poultry farming, almost equal number of respondents belonged to the medium (39.29%) and low (41.07%) categories. Only a few had high level of knowledge (19.64%) in poultry farming.

Respondents' knowledge of scientific goat farming ranked first (0.63) followed by that of cattle farming (0.53) and poultry farming (0.48).

**Keywords:** Knowledge, livestock, poultry farming

Kerala is bounded by the Western Ghats in the east. The Western Ghats region comprises of 72.08 percent of the total geographical area of the state. The state leads with 20 biodiversity rich sites in the Western Ghats region which are included in the world heritage spots list. Animal farming assumes greater and special significance in the ecologically fragile hill farming system such as Western Ghats. Further, in the social set up here, women form the major work force in the farm and home economy.

Livestock cum poultry farming has ample scope to enhance the income and employment opportunities of the tribal women population in these areas. Due to lack of participatory mode of situational assessment, planning and implementation of development projects, such economic potentials are

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seldom exploited. The present study however, appraises the tribal women's knowledge of improved livestock and poultry farming practices in a selected tribal settlement in the Western Ghats.

### Materials and Methods

The study was confined to the Cheruppani tribal settlement of Tholicode grama panchayath under Nedumangad taluk of Thiruvananthapuram district, Kerala. This tribal settlement comprises parts of Ward 9 and 10 of Tholicode grama panchayath, comprising of 56 Kani families. All the fifty six members of the four women self help groups operating under Kudumbasree in the Cheruppani tribal settlement area constituted the respondents of the study. The data were collected mainly through questionnaire method. However, interviews were also conducted whenever necessary.

### Knowledge of improved livestock and poultry farming practices

English and English (1958) defined knowledge as "body of understood information possessed by an individual or by a culture". In the present study, knowledge was operationally defined as the body of understood information possessed by the respondents about scientific livestock and poultry farming.

An arbitrary knowledge test was developed to measure the respondents' knowledge of scientific cattle, goat and poultry farming practices.

Items for the test were framed after referring to literature and discussing with subject matter specialists. The test comprised of 40 items, 15 each under cattle and goat farming and 10 items under poultry farming which were either open type questions, or in dichotomous or multiple choice format. The scale was administered to the respondents. The summation of scores for the correct answers over all the items for a particular respondent indicated her knowledge score.

Based on the knowledge scores obtained, the respondents were arbitrarily classified into three categories viz High [Above (Mean + S.D.)], Medium [(Mean + S.D.) to (Mean - S.D.)] and Low [Below (Mean - S.D.)].

Also, the mean score of the item under each domain of farming was calculated using the formula,

$$\text{Mean score of the item} = \frac{\text{Score of the item}}{\text{No. of respondents}}$$

Further, the mean scores of the domains were worked out using the formula,

$$\text{Mean score of each domain} = \frac{\text{Sum of the scores of all the items under the domain}}{\text{No. of items in the domain}}$$

The three domains of farming were ranked based on the mean scores.

## Results and Discussion

### Knowledge of scientific farm management practices

#### A. Cattle farming practices

**Table 1.** Distribution of respondents based on knowledge of scientific cattle farming practices

Sl. No	Knowledge of cattle farming	Frequency(f)	Percentage
1	Low(Below 4.1)	18	32.14
2	Medium(4.1-9.1)	28	50.00
3	High(Above 9.1)	10	17.86
	Total	56	100.00

Mean = 6.61

S.D = 2.47

n=56

Table 1 depicts that half of the respondents (50%) had medium knowledge of cattle farming. However, more number of respondents fell in the low category (32.14%) than high (17.86%).

The predominance of medium to low knowledge level indicates respondents' insufficient awareness of scientific cattle

farming. Inadequate knowledge of cattle farming practices pertaining to scientific housing, heat detection balanced feeding and vaccination was reported as one of the problems perceived by farm women regarding minor farm operations in dairy farming (Rani, 2004). Hence it is imperative to impart training to the respondents in scientific dairy cattle management.

## B. Goat farming practices

**Table 2.** Distribution of respondents based on knowledge of scientific goat farming practices

n=56

Sl. No	Knowledge of goat farming	Frequency(f)	Percentage
1	Low(Below 4.9)	5	8.93
2	Medium(9.9-4.9)	39	69.64
3	High (Above 9.9)	12	21.43
	Total	56	100.00

Mean = 7.43

S.D = 2.49

Table 2 shows that majority of the respondents (69.64%) had medium knowledge of goat farming. However, the number of respondents in the high knowledge category (21.43%) was more than that of low (8.93%).

The results indicate a medium to high inclination in the knowledge level of the respondents. From this, it is quite evident that when compared to dairy management, more number of respondents had knowledge of

goat farming. Lack of knowledge of scientific goat farming practices was reported as one of the perceived threats to empowerment process by the women self help group members engaged in goat farming. (Kavitha and Jiji, 2007). Goat farming being comparatively less labour and input intensive, it is important to provide adequate resources and inputs including training to expand and reinforce goat farming as an income generating activity among the respondents.

## C. Poultry farming practices

**Table 3.** Distribution of respondents based on knowledge of scientific poultry farming practices

n=56

Sl. No	Knowledge of Poultry farming	Frequency(f)	Percentage
1	Low(Below 4)	23	41.07
2	Medium(9.8-4)	22	39.29
3	High(Above 9.8)	11	19.64
	Total	56	100.00

Mean = 6.89

S.D = 2.88

A perusal of Table 3 reveals that almost equal number of respondents belonged to the medium and low categories. Only a few had high level of knowledge. As communicated by the respondents, lack of awareness of scien-

tific rearing practices was the major impediment in taking up income generating ventures in poultry farming. Similar finding was reported by Durgga Rani, 2004.

**Table 4.** Knowledge of respondents in scientific cattle, goat and poultry farming practices - a comparison.

Sl. No.	Types of farming	Mean score	Rank
1	Cattle farming	0.53	I
2	Goat farming	0.63	II
3	Poultry farming	0.48	III

(P&gt;0.05)

The data in Table 4 indicate that respondents' knowledge of scientific goat farming practices scored first with a mean score of 0.63 followed by knowledge of cattle farming (0.53). The knowledge of scientific poultry farming stood behind (0.48).

Nonetheless, one way analysis of variance showed that there was no significant difference among the mean knowledge scores of the domains.

The results underline the need for organizing need based training programmes in scientific poultry management to equip the respondents to take up entrepreneurial endeavors in this sector. The findings of various studies have emphasized the importance of training in empowering women SHG members (Meera, 2001; Rani *et al.*, 2002; Siwal, 2002; Soundari, 2002 and Nirmala and Soundary, 2003).

Also, Islam *et al.* (2010), in their study on women's contribution to self-financed small-scale independent broiler farms in Mymensingh district of Bangladesh, found that participation of women in broiler farming increased their empowerment and decision-making in different family aspects. Need of poultry extension services among the rural women of Pakistan in the management of poultry boxes, diseases, watering and hatching was reported by Hassan *et al.* (2012).

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