ATTITUDE TOWARDS SCIENTIFIC DUCK FARMING: A STUDY OF FARMERS IN KUTTANAD, ALAPPUZHA IN KERALA STATE

Nija George[1], P.J. Raj Kamal[2], R.S. Jiji[3], P. Reeja George[4], G. Girish Varma[5] and K.A. Mercey[6]
College of Veterinary and Animal Sciences, Mannuthy, Thrissur-680 651

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Abstract

The present study was conducted to analyze the attitudinal disposition of the duck farmers of Kuttanad region in the Alappuzha district towards scientific duck farming. Multistage random sampling procedure was adopted for selecting the sample respondents. A total of one hundred and fifty duck farmers from six panchayaths were selected randomly from both Lower and Upper Kuttanad region. The study revealed that the favourable attitude category predominated followed by somewhat favourable and unfavourable attitude categories in that order. There was no significant difference between the attitude of farmers of Lower and Upper Kuttanad. An analysis of the attitude towards various aspects of scientific duck farming revealed that the Upper Kuttanad farmers' attitude towards land availability aspect significantly differed from that of Lower Kuttanad farmers. There was no significant difference between the farmers of Lower and Upper Kuttanad regions regarding other aspects of scientific duck farming viz. social status, value addition, awareness creation, profitability, social stigma, marketability, risk factor, low cost technology, women empowerment, housing and labour.

Key words: *Kuttanad, Scientific duck farming, Attitude, Land availability, Value addition*

Kuttanad, Kerala is one of the important wetland systems of the country in terms of its unique farming system. This wetland ecosystem is spread over three districts viz. Alappuzha, Kottayam and Pathanamthitta. Geographically Alappuzha is located in the central part of the state and covers a major area of the wetland

1. *PhD scholar , Department of Veterinary and Animal Husbandry Extension, CVAS, Mannuthy Ph:9447708029*
2. *Professor and Head(Rtd.), Department of Veterinary and Animal Husbandry Extension, CVAS, Mannuthy*
3. *Associate Professor and Head, Department of Veterinary and Animal Husbandry Extension, CVAS, Mannuthy*
4. *Assistant Professor ,Department of Veterinary and Animal Husbandry Extension, CVAS, Mannuthy*
5. *Dean, CDST, Mannuthy*
6. *Professor and Head, Department of Statistics, CVAS, Mannuthy*

E mail: nijavet05@gmail.com

ecosystem. Two agro ecological zones of Kuttanad wet land ecosystem viz. Lower and Upper Kuttanad fall in Alappuzha district. Duck farming has been the mainstay of the economy in this region because of the possibility of its integration with rice farming. However, now as in the case of any farming system, duck farming faces serious problems which could impact its sustainability. These problems are mainly related to the changes in socio-economic front in Kuttanad over time. Apart from changes in the socio-economic front, changes in the supporting environmental factors have also contributed to this phenomenon. Although duck production in Kuttanad is being commercialized, yet the traditional nomadic and foraging systems of duck farming are still preferred. Anyhow, the sustainability of duck production in Kuttanad very much depends on the attitude of duck farmers towards scientific duck farming. Keeping this in mind, the present study was designed to analyze the duck farmers' attitude towards scientific duck farming in the Kuttanad region of Alappuzha district.

Methodology

Alappuzha district of Kerala was purposively selected for the study, being the district with more than fifty per cent of duck population in the state. Further most of the duck flocks in Kerala are kept in the Kuttanad region that too in and around Vembanadu Lake. The sampling frame consisted of the panchayaths from both Lower and Upper Kuttanad regions of Alappuzha. The Grama panchayaths where duck farming was predominant were listed and three panchayaths each were selected at random from both Lower and Upper Kuttanad regions. From each panchayath twenty five duck farmers were selected at random. Thus the final sample comprised of a total of 150 duck farmers.

Attitude towards scientific duck farming was measured by developing a scale on the lines proposed by Likert (1932). As a prelude to scale construction, the statements were edited according to criteria proposed by Edwards and Kilpatrick (1946). The scale so developed consisted of 12 attitude statements each representing a distinct aspect of scientific duck farming viz. social status, value addition, awareness creation, profitability, social stigma, marketability, risk factor, low cost technology, women empowerment, housing, land availability and labour. The scale comprised of five negative and seven positive statements which were presented at random to avoid biased responses. The respondents were asked to indicate their degree of favorableness or unfavorableness towards the statements on a five point continuum. The attitude score of a respondent was obtained by summing up his/ her scores for all the 12 statements.

Result and Discussion

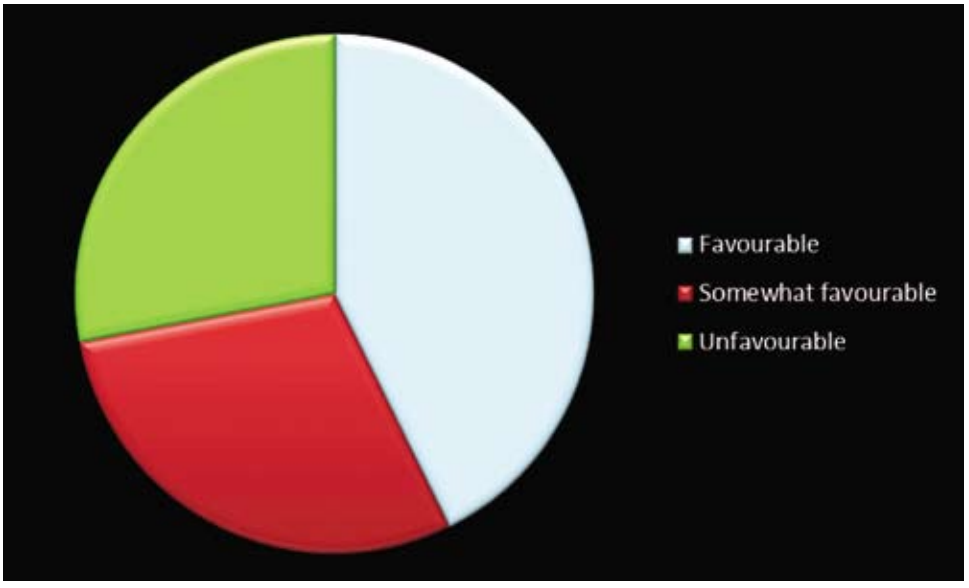
Attitude towards scientific duck farming

The attitude of farmers towards scientific duck farming was measured by administering the attitude scale developed for the purpose. The respondents were classified into three categories viz. favourable, somewhat favourable and unfavourable based on their responses (Table 1). Favourable attitude category (42.67 per cent) predominated followed by somewhat favourable (29.33 per cent) and unfavourable attitude (28.00 per cent) categories in that order. The finding of the present study was some what similar to that of Kanwat *et al.* (2012) who reported that a majority of the poultry farmers of Arunachal Pradesh had a favourable attitude towards backyard poultry rearing while above one-fourth were skeptical about the benefits of this vocation. Though in the

Table 1. Distribution of respondents based on attitude towards scientific duck farming n=150

Sl. No.	Attitude towards scientific duck farming	f	%
1	Favourable (>45)	64	42.67
2	Somewhat favourable(41 to 45)	44	29.33
3	unfavourable (<41)	42	28.00
	Total	150	100

Figure 1. Distribution of respondents based attitude towards scientific duck farming



Comparison of the attitude of farmers of Lower and Upper Kuttanad regions

present study the favourable attitude category predominated, when the somewhat favourable and unfavourable attitude categories were considered together, they formed the majority. This situation warrants special attention of planners and policy makers.

The attitude of the farmers of Lower and Upper Kuttanad were compared using Z test (Table 2). It was observed that there was no significant difference in the attitude towards scientific duck farming between the farmers of Lower and Upper Kuttanad.

Comparison of the attitude towards various aspects of scientific duck farming between Lower and Upper Kuttanad

The attitude towards various aspects of scientific duck farming between the farmers of Lower and Upper Kuttanad were compared. It was seen that the farmers of Lower Kuttanad and Upper Kuttanad regions differed significantly in their attitude towards land availability aspect of scientific duck farming (Table 3). The mean attitude value regarding land availability aspect was higher for the farmers of Lower Kuttanad. This indicated their more favourable attitude towards the land availability aspect as compared to farmers of Upper Kuttanad. The above difference in land availability aspect of scientific duck farming could be due the differences in land use pattern and the cycles of paddy cultivation. The availability of the land for foraging could be lesser for the farmers of Upper Kuttanad by virtue of the higher number of duck farmers and rotational *Puncha (*Primary rice crop cycle of Kuttanad) and *Virippu (*Additional rice crop of Kuttaand) cultivation. The differences in attitude of farmers of Lower and Upper Kuttanad on account of social status, value addition, awareness creation, profitability, social stigma, marketability, risk factor, low-cost technology, women empowerment, housing and labour aspects of scientific duck farming were not significant. This homogenity therefore is indicative of the need for equal attention and intervention in both the above regions.

Table 2. Comparison of attitude of farmers of Lower and Upper Kuttanad

Sl.No.	Variable	Mean±SE		Z value
		Lower Kuttanad	Upper Kuttanad	
1.	Attitude	44.20±0.76	43.52±0.73	0.519^{ns}

^{ns} – non significant

Table 3. Comparison of the attitude of farmers of Lower and Upper Kuttanad regions

Sl. No.	Statement	Mean±*SE*		Z value
		Lower Kuttanad	Upper Kuttanad	
1.	I think duck farming is not attractive since the scope for production of value added products is less (Value addition)	4.48±0.10	4.48±0.09	1.0^{ns}
2.	I believe that duck farmers do enjoy a social status (Social status)	3.32±0.18	3.01±0.18	0.225^{ns}
3.	It is a discouragement for me to keep ducks as neighbours are unfavourable towards it (Social stigma)	3.37±0.15	3.08±0.13	0.140^{ns}
4.	I feel awareness programmes on scientific duck farming must be intensified (Awareness creation)	3.91±0.15	3.98±0.11	0.667^{ns}
5.	I don't like duck farming since it is labour intensive (Labour)	3.27±0.17	3.57±0,13	0.150^{ns}
6.	Inconvenience in arranging shelter is a discouragement for me (Housing)	2.76±0.14	2.84±0.14	0.692^{ns}
7.	I think duck farming is a source of productive employment to women leading to their empowerment (Women empowerment)	3.77±0.14	3,99±0.12	0.251^{ns}
8.	I recommend duck farming enterprise to new entrepreneurs since duck farming is not capital intensive (Low cost technology)	3.39±0.16	3.69±0.13	0.060^{ns}
9.	I do not recommend duck farming to others as paddy fields are getting diminished in my village (Land availability)	3.24±0.17	2.65±0.12	0.006**
10.	I think if one follows scientifically recommended practices, diseases will not be a problem (Risk factor)	4.33±0.13	3.98±0.12	0.051^{ns}
11.	I think the ready market available in my area is a reason enough to rear ducks(Marketability)	4.12±0.16	4.05±0.11	0.731^{ns}
12.	I would like to rear ducks because duck products are more lucrative than other poultry products (Profitability)	4.33±0.12	4.17±0.08	0.289^{ns}

** (P< 0.01) ns – non significant

Conclusion

Since attitude is an important functional trait of behaviour, the less than favourable attitude of a majority of the duck farmers of Kuttanad needs to be viewed seriously. Further, in the light of the recent socio-economic changes causing threat to the sustainability of this traditional farming system, need based extension programmes and trainings have to be planned and implemented to convince the farmers and younger generation about the benefits of duck farming and to attract entreprenuers to this vocation.

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