

*Original Research***Constraints Faced by Native Chicken Farmers in Tamil Nadu Under Intensive Management System****P. Balamurugan¹, S. Ezhil Valavan^{2*} and N. K. Sudeep Kumar³**

Tamil Nadu Veterinary and Animal Sciences University, Chennai, Tamil Nadu, INDIA

¹Farmers Training Centre, Theni²Livestock Farm Complex, Chennai³Extension Education, Chennai***Corresponding author:** vetezhil2015@gmail.com

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Abstract

A study was conducted in the Western districts of Tamil Nadu viz, Coimbatore, Erode and Tirupur to identify various constraints faced by the farmers during native chicken production (Garret ranking technique). Selection of respondents of poultry farmers was done on the basis of Simple Random Techniques. The data were collected from each respondent through a semi-structured interview schedule as well as self-observations. Major constraints faced by farmers rearing native chicken in the descending order of importance were non-availability of exclusive feed (69.62 %) for native breeder chicken, seasonal marketing (64.02 %), higher mortality (57.38 %), non-availability of labour (54.71 %), non-availability of quality day old native chicks (54.31 %), delay in technical advice (50.33 %), price fluctuations (47.84 %), lack of transportation facility (45.87 %), non-remunerative price (33.56 %) for farm produce and other minor constraints included electricity, fly problem, low productivity of native chicken and high interest rate on loan.

Key words: Constraints, Intensive System, Native Chicken**How to cite:** Balamurugan, P., Ezhil Valavan, S., & Sudeep Kumar, N. K. (2019). Constraints Faced by Native Chicken Farmers in Tamil Nadu under Intensive Management System. International Journal of Livestock Research, 9(9). 157-160. doi: 10.5455/ijlr.20181205104951**Introduction**

Livestock and poultry sector plays a major role in Indian economy (Nath *et al.*, 2012) where majority of rural livestock farmer's rear poultry (Khandait *et al.*, 2011). Among livestock farming, poultry farming plays a significant role in improving the socio-economic status of poorest and weaker section of the society. During last few decades, the poultry farming evolved from backyard poultry to commercial farming due to integration. In poultry sector remarkable growth has been reached only in commercialized and integrated poultry farming activities like broiler and layer, but it has been restricted in desi chicken farming. India has

huge population of poultry, out of which around 25 per cent of the total poultry population is constituted by native chicken (Vetrivel and Chandrakumarmangalam, 2013) and also 11 per cent of total egg production (Kumaresan *et al.*, 2008) is from desi chicken. Several poultry development programmes have been set up by the state government to improve the economic status of poultry farmers in the state. Even then the results were limited due to various constraints perceived by the desi chicken farmers. Hence this study was undertaken with an aim to identify the critically important constraints that limits the poultry production and the factors which influences the profitability of native chicken farming.

Materials and Methods

The study was undertaken in western agro-climatic zone of Tamil Nadu which comprises of Erode, Tirupur and Coimbatore districts as these districts form the main pockets supplying native chicks and hatching eggs all over Tamil Nadu. The farms having more than 200 birds and breeder native chicken farms which have been in continuous production for at least one year were identified and selected for the study purpose. A total of 45 farms, 15 farms in each district were selected by simple random sampling and the data were collected through a semi-structured interview schedule as well as self-observation. The selected farms were classified as small, medium and large with the capacity of 200 to 1500, 1501 to 3000 and above 3000 birds. The data collected were fitted in Garret ranking technique for analysis.

Garret's Ranking Technique

Garret's ranking technique was adopted to analyze the constraints in poultry production. The poultry farmers were asked to rank the factors that were limiting native chicken production. The order of importance thus obtained from the respondents was converted into ranks by using the following formula-

$$\text{Per cent position} = \frac{100 (R_{ij} - 0.50)}{N_j}$$

Where, R_{ij} = Rank given to the i^{th} item by the j^{th} individual; N_j = Number of item ranked by j^{th} individual.

The per cent position of each rank was converted into score by referring the table given by Garret and Wood worth (1969). Then for each constraint, the scores of individual poultry farmer were added together and divided by the total number of respondents for whom the scores were added and mean score thus calculated were arranged in descending order and ranks were given. By this method the most limiting factors were identified in native breeder chicken production.

Results and Discussion

Constraints in Native Breeder Chicken Rearing

List of constraints perceived by the farmers rearing native breeder chicken intensively in the study area were ranked as per Garret and Wood worth (1969) and presented in Table 1.

Table 1: Constraints faced by the farmers rearing native breeder chicken in Western Tamil Nadu

S. No.	Nature of Constraint	Score	Rank
1	Non-availability of exclusive feed	69.62	1
2	Seasonal marketing	64.02	2
3	Higher mortality	57.38	3
4	Non-availability of labour	54.71	4
5	Non-availability of chicks	54.31	5
6	Delay in technical advice	50.33	6
7	Price fluctuations	47.84	7
8	Lack of transportation facility	45.87	8
9	Non-remunerative price for chick	33.56	9
10	Others	18	10

Non-availability of exclusive feed and higher feed cost for native breeder chicken was perceived as the most important constraint which is in agreement with Rajendran and Mohanty (2003). Similar observation were made by Sheik *et al.* (2013) who reported that among the various constraints faced high feed price was ranked (83.63 score) first and foremost constraint as perceived by the poultry farm entrepreneurs in Gujarat. Most of the desi chicken farmers in the study area are highly dependent on the commercially available broiler and layer feed to feed their native birds. The requirement of raw materials for small and medium farmers was very less, which directly influences the price of final product might be the reason for high feed price. Marketing problems are associated with all the business activities and poultry business was is not an exception to this. It might be the reason why this problem was ranked as the second important constraint. Similar observations were made by Nath *et al.* (2012) who indicated that input (82.25 per cent), economical (74.60 per cent), veterinary and health services (73.50 per cent) and market (63.5 per cent) were the serious constraints of poultry farmers in North Sikkim in India.

Mortality problem encountered in native breeder chicken was the third constraints faced by majority of the farmers in Western district of Tamil Nadu. This is in agreement with Khandait *et al.* (2011) who noted that the foremost constraints they faced while adoption of backyard poultry was higher incidence of disease mainly by Ranikhet disease, Fowl pox, diarrhea and chronic respiratory disease in Bhandara district of Maharashtra. Higher poultry population in Western district of Tamil Nadu makes the desi bird become more susceptible to the important disease. Non-availability of labour was the fourth constraint perceived by the farmers, which might be due to ever increasing labour demand and cost. A large proportion (50.33) mean score of respondents expressed concern about the delay in technical advice in the poultry sector and

47.84 mean score had problems price fluctuation of the final product; 45.87 mean score of poultry entrepreneurs faced constraints due to lack of transportation facility, because of their volume of operation was very small. This finding is in line with the findings of Bharathkumar *et al.* (2015). Other constraint includes fly problems, high interest rate on loan and electricity etc. Even though their volume of operation is very minimal, they have to get the commercialized form of electric connectivity is the reason for the same.

Conclusion

The analysis of constraints indicated that non-availability of exclusive feed for native breeder chicken, seasonal marketing, higher mortality and non-availability of labour as major constraints as ranked in the order of most important constraint faced. In order to overcome the constraints, the government or industry to keep ready to supply balanced feed for the farming community since there is no exclusive feed for native chicken. Co-operative society has to be created to provide market information which will help the farmers to get more profit by understanding the demand and supply. Government or industry has to provide quality day-old native chicken to the farmers. Veterinary institutes have to organize the awareness training for farmers about housing, feeding management and bio-security measures. These initiatives will definitely help the farmers to overcome constrains they faced.

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