



Constraint analysis of commercial poultry farming in Goa

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ABSTRACT

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A study was conducted to know the various constraints of poultry farmers and ways and means were suggested to minimize these constraints. One hundred poultry farmers were selected in two districts of Goa i.e. North and South Goa. Out of 100 farms 90 per cent were engaged in broiler production and remaining 10 per cent were layer farmers. Data were collected through specially prepared questionnaire. Analysis was done by calculating the rank based quotients (RBQ). The study revealed that main problems encountered by the farmers, in making their poultry a successful enterprise was high feed cost followed by competition with outside farmers, high labour cost, trading, high cost of electricity, high cost of chicks and non-availability of health services. The major suggestions were provision of subsidized feed, electricity and water and establishment of feed mill with subsidized equipments, remunerative price for broiler and eggs through co-operative marketings.

Keywords: Poultry farming, constraint analysis, Goa

Poultry meat and eggs are important items in the diet of an average Goan family. Besides the local consumption, the ever increasing tourist arrival in Goa also plays an important role in determining the demand for poultry products. Poultry farming has immense scope for growth in Goa. Therefore, the present study was undertaken to analyse the problems faced by the local farmers followed by suggestions to find ways and means to give boost to the growth of poultry industry in this region.

Data were collected from the broiler and layer farms by survey method during the year 2005-06 by means of a detailed questionnaire. Keeping in the view the objective of the study, a comprehensive list of all the poultry farms in Goa was prepared. Altogether there were 110 poultry farms out of which 100 were broiler farms and 10 were layer farms. Out of all the poultry farms surveyed data on various constraints were collected from 100 poultry farmers.

The constraints commonly observed by the practicing farmers were listed out. The constraints were graded on priority assigned by individual farmers i.e. the constraint which was perceived as the 1st major constraint affecting the profit from poultry farming was ranked 1st and next constraint affecting the profit as perceived by the farmers was ranked 2nd and in a similar way, the constraints were ranked up to 7. The constraints were named as high feed cost, high labour

cost, competition with outside farmers, trading, high cost of electricity, high chick cost and non-availability of health services.

Collected data were subjected to rank based quotient analysis to find out the constraint which is getting more weight age as per the rank assigned by the practicing farmers. Rank based quotient was calculated using the following formula (Sabarathnam and Vennila, 1996).

$$\text{Ranked Based Quotient} = \sum_{i=1}^n \frac{F_i (n+1-i)}{N \times n} \times 100$$

F_i = Frequency of respondents for the i th reason / options

N = Total number of respondents

n = Total no. of reasons/ options

** Options with highest Rank Based Quotient should be considered as the first reason among all others

Results on RBQ revealed that there was a great variation in the options given different RBQ (Table). Large number of farmers listed high feed cost as the major constraint. Similar finding were reported by Mane *et.al.* (2007), who observed that 85% of farmers reported high cost of feed as the major hurdle in growth of poultry. High cost of feed as the major constraint in achieving success in poultry farming was also reported by Bohite (1985), Patel and Trivedi (1985), Ayyadurai and Knight (1991) and Tamboli (1987). The next constraint was competition with outside farmers. The cost of

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Table : Rank based quotient(RBQ) of constraints listed by poultry farmers

Constraint	RBQ	Rank
High feed cost	94.28	I
Competition with outside farmers	79.43	II
High labor cost	77.43	III
Trading	52.43	IV
High cost of electricity	40.00	V
High chick cost	34.57	VI
Non-availability of health services	22.14	VII

production of broiler or egg was high for local farmers which was comparatively less for outside farmers of nearby states like Karnataka and Maharashtra because of the availability of feed and labour at low cost in these states. Therefore, the outside state farmers sale their birds at cheaper cost in Goa and local farmers do not get better profit margin. The third constraints was the high labor cost as per the views of the farmers. This is because of the high cost of living in the State. Further, well established hotel industries and large inflow of tourists attract younger generations to these industries to earn more money easily. This situation affects the labor availability for agriculture, animal and poultry operations. This type of problem is comparatively less in other state. Hence, it is suggested that more automations in feeding and watering operation in poultry farming will bring down the dependence on manual labors particularly in local situation.

Similar to these observations, researchers also reported that general problems faced by 38.38 percent poultry farmers were non-availability of skilled labors (Mane *et al.*, 2007; Superker, 1983; Singh and Singh, 1984.) The fourth constraint expressed by the farmers was trading. Trading was done by purchasing birds through wholesale market and selling in the retail market at higher prices affecting the business of poultry growers. However, this type of problem has not been reported earlier. The next constraints reported by the farmers was high cost of electricity, because poultry farming is considered by local Government as an industry instead of an agricultural operation. However, previous studies reported that frequent failure of electric supply (43.33 % of farmers) is a general problem faced by them in day to day poultry business (Mane *et al.*, 2007; Singh and Singh, 1984). High chick cost is the sixth constraint as listed by the farmers in the present study due to the availability of few hatcheries in the state. However, in previous studies majority of farmers (86.66 per cent) expressed that high chick cost is a major constraint in poultry farming (Mane *et al.*, 2007). In the present study, the farmers suggested that chicks should be supplied at reasonable rate which was supported by the observations of previous workers (Superker, 1983; Nagar Shekar *et al.*, 1988; Patil *et al.*, 1993).

Non-availability of health service as a constraint was expressed by very few farmers (RBQ=22.14) in present study. Usually the health services were taken care by the veterinarians available with the input suppliers (feed manufacturer and Hatcheries). Majority of the farmers expressed that, unavailability of veterinary aid at right time and high medicine cost affected their poultry farming operation. These farmers desired to acquire training on disease diagnosis and control measures (Lenka, 1991; Mane *et al.*, 2007).

In view of the above survey, it is inferred that the problem faced by the poultry farmers can be solved by the help of local Govt. by opening co-operative societies to sale their farm produce at uniform price, providing subsidy on feed and electricity and water charges. In addition to this, Govt. can encourage farmers to establish own feed mill by availing subsidy on feed mill equipments to prepare low cost feed for different types of poultry stock.

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REFERENCES

- Ayyadurai, G and Knight, J. 1981. Spatial distribution of poultry farmers and constraints in poultry development. *Indian Journal of Extension Education*. **15**: 103-06.
- Bhoite, R.R. 1985. Study of farm family maintaining poultry, their aspiration, constraint and training needs, M.Sc.Thesis, Konkan Krishi Vidhyapith, Dapoli (M.S.), India.
- Lenka, K.C. 1991. Poultry farming-growth-problems-solutions. *Poultry Adviser*. **24**: 43-47.
- Mane, V.S., Dhariya, S.K and Bhosale, S.S. 2007. *Indian Journal of Poultry Science*. **42**: 221-23.
- Nagasekhar, K., Raghu Ram, P. and Satyanarayana, G. 1988. Constraints in poultry farming. *Poultry Guide*. **25**: 17-24.
- Patel, A.N. and Trivedi, J.C. 1985. Constraints in adoption of poultry farming in Valsad district of Gujarat State. *Maharashtra Journal of Extension Education*. **4**: 145-46.
- Patil, E.R., Ambatkar, S.V. and Kajle, K.M. 1993. Economics of broiler raising in high rainfall areas of Konkan regions of Maharashtra. *Poultry Guide*. **30**: 65-70.
- Sabarathnam, V.E. and Vennila, S. 1996. Estimation of technological needs and identification of problems of farmers for formulation of research and extension programmes in agricultural entomology. *Experimental Agriculture*. **32**: 87-90.
- Singh, R and Singh, R.I. 1984. Poultry Enterprise in Rural Area. *Poultry Guide*. **21**: 33-35.
- Superkar, P.G. 1983. Unorganised marketing- An important impediment for the growth of the poultry industry in India. *Poultry Guide*. **20**: 19-24.
- Tamboli, M.M. 1987. Study of farmer maintaining poultry unit, their knowledge level and training need. M.Sc. Thesis, Konkan Krishi Vidhyapith, Dapoli (MS), India.