

A STUDY ON THE KNOWLEDGE LEVEL OF THE BACKYARD POULTRY FARMERS AND ITS CORRELATION WITH SOCIO – PERSONAL FACTORS

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Abstract: Poultry keeping is being practiced by majority of the poor and marginalized rural households as one of the promising subsidiary enterprise all over India. Under the existing production systems, farmers are struggling to improve their backyard poultry productivity and sustainability owing to many reasons. Hence, the present study was taken up with an objective to find out the knowledge level of the backyard poultry farmers and their determinants. The study was conducted in 240 respondents randomly selected from 8 villages of Erode district of Tamil Nadu. An ex-post facto research design was adopted and a pre tested, structured interview schedule was used for data collection. The study indicated that majority of poultry farmers (55.00 %) had medium knowledge on various aspects of poultry production, followed by low (27.50 %) and high level of knowledge in backyard poultry farming practices. Also it indicated that knowledge had positive correlation with education, and flock size at 5% level and with Information seeking behavior at 1% level. The rural poultry farmers had poor knowledge about feeding, breeding and management practice, which led to poor performance of the birds. The extension agencies, public and private organisations, NGOs etc should concentrate on these variables for bringing about overall improvement in the knowledge level of backyard poultry farmers.

Keywords: Backyard poultry, Knowledge level, Correlates, Socio-personal factors.

Introduction

With an estimated population of 14,000,000 birds, poultry constitute the largest group of livestock, mostly chicken, duck and turkey (FAO, 1999). According to the 19th livestock census, total poultry population is 729.2 million in which backyard poultry contributed 29.8 percent. Desi fowl shared 28 percent in layer population in India. Total egg production of India is around 88139 million in which backyard poultry contributed is 21 percent of total egg production. The total meat production is estimated to be about 7.4 million tones and poultry contributed 47.32 percent of total meat production.

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Poultry keeping in backyard is a good old practice in India. It is being practiced by majority of the poor and marginalized rural households all over India. Backyard poultry keeping is considered as one of the promising subsidiary enterprise for landless and poor farmers. It is an enterprise with low initial investment but higher economic returns and can easily be managed by women, children and even old aged persons of the households hence it has been considered a family backyard enterprise. Backyard poultry farming by and large is a low input or no input venture and is characterized by indigenous night shelter, scavenging system, with little supplementary feeding, natural hatching of chicks, poor productivity of birds, local marketing and no health care practice (Saha, 2003). Now-a-days, poultry meat and eggs have fetching higher price and considered as the best and cheapest sources for meeting out the per capita requirement of protein and energy for rural areas of India

Under the existing production systems, farmers are struggling to improve their backyard poultry productivity and sustainability owing to many reasons. For backyard poultry production to be effective and efficient, farmers need to be equipped with the necessary knowledge about poultry production, poultry products/ by products and their economic importance as well as information on poultry marketing. Hence, the present study was taken up with an objective to find out the knowledge level of the backyard poultry farmers and their determinants in the study area.

Methodology

1. Locale of the Study

The study was conducted in two revenue divisions *viz.*, Erode (4 Revenue Taluks) and Gobichettipalayam (6 Revenue Taluks) of Erode district of Tamil Nadu, India. Erode District lies on the extreme north of Tamil Nadu. It is bounded mostly by Karnataka State and also River Palar covers pretty long distance. To the East lies Namakkal and Karur Districts. Dindigal District is its immediate neighbor to the South and on the West, it has Coimbatore and Nilgiri Districts, as its boundaries. Thus Erode District is essentially a land-locked area having no sea-coast of its own. Erode District situated at between 10 36" and 11 58" North Latitude and between 76 49" and 77 58" East Longitude. The fertile soil and good water potential provide ample scope for livestock rearing in the district. The livestock rearing provides ample employment and income generating activities to small farmers, marginal farmers and agriculture labourers. More than hundred veterinary institutions are present in this district to take care of the health of the livestock population

2. Sampling Procedure

Erode district is consists of Two division viz., Erode (4 Revenue Taluks) and Gobichettipalayam (6 Revenue Taluks). Two revenue taluks were selected randomly from each division and from each of these selected four taluks, two villages, thus eight villages were selected randomly by adopting multi stage random sampling technique. Then from each village, 30 backyard poultry farmers were selected with the help of the local veterinarian and key informants, thus, the final sample comprised of 8 villages and 240 respondents.

3. Research design and data collection

An ex-post facto research design was adopted in the present study. A structured interview schedule was developed for the purpose of data collection. Pre – testing of the schedule was done at a place other than the locale of the present study. Necessary modifications were made based on the experience of pretesting thus the final schedule consisting of 25 knowledge items representing the various aspects of poultry production was administered to the respondents through personal interview. The data collected were compiled, tabulated and subjected to appropriate statistical methods like frequency distribution and percentage analysis.

Results and Discussion

1. Profile of Respondents

Table 1. Distribution of respondents according to profile

(N=240)

S.No	Variables	Category	No. of respondents (f)	Percentage (%)
1	Age	Young (less than 35 yrs)	47	19.58
		Middle (35 – 45 yrs)	153	63.75
		Old (more than 45 yrs)	40	16.67
2	Land holding	Landless	77	32.08
		Marginal	116	48.33
		Small	41	17.08
		Large	6	2.5
3	Primary Occupation	Labour	127	48.33
		Agriculture	54	22.92
		Animal Husbandry	35	14.58
		Govt. Service / Private	38	14.16

		job/ Business		
4	Experience in backyard poultry farming	Less than 5 years	12	5.00
		5 - 7 years	38	15.83
		7 - 10 years	84	35.00
		More than 10 years	106	44.16
5	Flock size	Small (less than 10 birds)	44	18.33
		Medium (10 – 15 birds)	134	55.83
		Large (more than 15 birds)	62	25.83

A careful look at the Table 1 showed that, majority (63.75%) of the owners belonged to middle age group, while 19.58 per cent were young and 16.67 per cent are old farmers. Majority of the respondents studied (48.33%) have less than 1 hectare of land and belongs marginal farmers' category. Next to this, 32.08 per cent of them were landless followed by 17.08 per cent of the farmers have 1 - 2 hectares of land and belongs to small farmers' category. Only 2.5 per cent of poultry farmers were having more than 2 hectare of land and are classified as large farmers' category. These findings are similar with the findings of Saha, 2003 and Kumari (2009). In the present study, most of the families have multiple occupations for their source of income. Backyard chicken production is also considered to be a good alternative occupation for the small and marginal farmers and landless labourers of rural people.

Table 1 further revealed that majority (44.16 %) of the farmers reared poultry for more than 10 years, followed by 35.00 per cent had 7 – 10 years and 15.83 of the farmers had 5-7 years of experience in backyard poultry farming. Only 5.00 per cent of poultry farmers had less than 5 years of experience. These findings are in agreement with the findings of Saha (2003) and Pathak *et al.*, (2013). Therefore, backyard system poultry farming follows a cyclic trend like the intensive system.

2. Knowledge level of the Backyard poultry farmers

Table 2. Distribution of respondents according to their knowledge in Backyard poultry farming practices

(N= 240)			
S.No	Category	No. of respondents (f)	Percentage (%)
1	Low	66	27.50
	Medium	132	55.00
	High	42	17.50
	Total	240	100.00

The knowledge level of backyard poultry farmers would help to identify appropriate technological interventions and approaches to be implemented by outreach extension organizations for augmenting the backyard poultry production. Knowledge is an important component, which significantly influences the adoption of new technology. In the study area (Table 2) majority of poultry farmers (55.00 %) had medium knowledge on various aspects of poultry production, followed by low (27.50 %) and high level of knowledge in backyard poultry farming practices. This low to high knowledge level indicated a positive trend in knowledge gain of the farmers. This may be due to the fact that the study area is potentially developed in all aspects of poultry production especially in commercial farming operations. In the study area, commercial broiler farmers were under the integrated system, where in all aspects of poultry production is taken care by the commercial firms/integrators. The backyard poultry farmers might have gained knowledge about modern scientific poultry rearing practices from the nearby commercial farmers and this might have led to the medium to high level of knowledge among poultry farmers. The findings concurred with those of Singh D. (2000) and Kanwat *et.al.*, (2012).

3. Factors affecting the knowledge level

Table 3. Correlation coefficients between Knowledge and selected independent variables

S.No	Independent variable	'r' value
1	Age (X1)	0.089
2	Education (X2)	0.244*
3	Occupation (X3)	- 0.277*
4	Poultry farming experience (X4)	0.099

5	Flock size (X5)	0.243*
6	Income (X6)	0.099
7	Information seeking behaviour (X7)	0.642**
8	Information need (X8)	0.0639
9	Risk orientation (X9)	0.165
10	Scientific orientation (X10)	0.092

* Significant at $P < 0.05$; ** Significant at $P < 0.01$.

A meticulous glance at the Table 2 indicated that knowledge had positive correlation with education, and flock size at 5% level and with Information seeking behavior at 1% level. This indicated that the higher the flock size makes an individual to acquire latest knowledge on poultry production, so as to make crucial decisions at the right time. The information seeking behavior coupled with his educational background makes an individual to acquire more knowledge on the latest trends in the management, health care; marketing etc., and ensures them to acquire latest knowledge and also to reap maximum benefits from poultry farming. Interestingly, occupation of the poultry farmers had a strong negative correlation with the knowledge level of the farmers. This may be due to that, when a farmer is having a secured job like government service, private job or business, he/she may not bother about the subsidiary enterprises and showed less interest in knowing the subjects as compared to others.

Conclusion

Backyard Poultry Farming significantly plays a role in rural development. Backyard poultry, in addition to cash income, have nutritional, cultural and social functions. From the present study it can be concluded that respondents had medium to high knowledge on different aspects of poultry production. The rural poultry farmers had poor knowledge about feeding, breeding and management practice, which led to poor performance of the birds. Efforts are to be made by the industry, agencies to make the individuals of low level to become more knowledgeable by various media/methods. Education, occupation and information seeking behavior were the significant factors contributed to the knowledge gained by the poultry farmers. Since these variables accounted for maximum variation in knowledge level, the extension agencies, public and private organisations, NGOs etc should concentrate on these variables for bringing about overall improvement in the knowledge level of backyard poultry farmers.

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