



Backyard Poultry Farming, A Source of Livelihood Support and Nutritional Security for the Tribal People of South Garo Hills

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ABSTRACT

Krishi Vigyan Kendra, South Garo Hills intervened to make backyard poultry farming as more productive and economically viable by introducing improved breeds like Vanaraja and Srinidhi etc. The farmers were trained regarding management practices such as feeding, watering and vaccination, etc. And 28 days old Vanaraja chicks were supplied to hundred individual farmers. The study was conducted to assess the knowledge gained and adoption of the technology along with the limitations faced by respondents. It was found that moderate knowledge (81%) was gained by the respondents on the improved poultry farming and adoption was satisfactory with 64 and 21 percentages in moderately good and high categories respectively. Educational status was positively correlated with the knowledge gained. In South Garo Hills district the benefit-cost ratio in Vanaraja and local breeds are recorded as 2.63 and 2.20, respectively. There is enormous scope and perspective in the improved poultry farming in the area. The farmers were very much enthusiastic to adopt the technology of improved backyard poultry farming in commercial basis. Only drawback is availability of inputs like quality chicks, feeds, and medicines etc. with less knowledge about new and improved breeds and a structured market.

Key Words: Livelihood, backyard Poultry farming, Vanaraja.

INTRODUCTION

Backyard poultry is a part of farming systems mainly run by women farmers in rural areas. Livestock and poultry provide a major contribution to India's economy (Nath *et al*, 2012). In rural economy poultry farming contributes an important role especially for the socio-economic development of the weaker section of the society in the state of Meghalaya. It generates self-employment, provides additional income and supplements protein rich diet at relatively low cost. In this part of the country, poultry rearing is traditional practice among the tribal people with local breeds. There is a huge base for poultry rearing in the rural mass which constitute about 85 percent of the total population. Poultry farming also helps in income generation for unemployed rural youth and women (Padhi, 2016). The major challenge with local birds is low egg production and less weight gain. These breeds need to be replaced by superior breeds phenotypically

similar to existing poultry population. The high yielding layers and broilers cannot survive under sub-optimal nutritional and managerial condition within stressful environment. Krishi Vigyan Kendra, South Garo Hills introduced breed Vanaraja, which is more productive, laying 120-140 egg annually and growth up to 2.5 kg in only 3 months period (Pathak and Nath, 2013). The benefit and cost ratio in Vanaraja and local breeds was recorded as 2.66 and 2.27, respectively in Assam by Islam *et al* (2015). It is a dual purpose chicken variety developed by the Project Directorate on poultry in Hyderabad which is suitable for rural communities and can be reared in backyard feeding mainly from natural scavenged food with minimal supplementation. It grows faster and produces more eggs than the available Desi variety of poultry. The additional income with less care will give economical support to farmers. Birds can be reared with less investment and less technicality. Promotion of backyard poultry farming

with new poultry varieties could help to substitute the loss due to crop failure to some extent. Hence a study was conducted.

MATERIALS AND METHODS

The present study was based on the survey conducted at three villages of Chokpot block in South Garo Hills district of Meghalaya namely Dobogre, Bibragre and Dagalgopgre on Vanaraja breed as backyard poultry. The respondents of the study were from the list of farmers involved in backyard poultry farming. One hundred farmers were selected randomly as the sample for the study involving only tribal farmers of South Garo Hills. A pre-tested interview schedule was used to elicit information from the respondents. The proclamations as specified in the interview schedule were asked methodically. The data were analysed using appropriate statistics tool.

RESULTS AND DISCUSSION

Socio-economic Profile of Respondents

It was found that most of the respondents (55.00 %) belonged to young age group (between 18- 35yr) engaged in the backyard poultry farming and female (80.00 %) were more dominant than the

male counterparts in this profession.

Table 1. Distribution of the respondents according to their age and gender.

Age	Male	Female	Total
Young (18-35 yr)	8	47	55
Middle (36-50 yr)	7	28	35
Old (more than 50 yr)	5	5	10
Total	20	80	100

From the observation it was marked that most of the respondents had very poor educational background and majority of the respondent were either illiterates (44.00 %) or up to primary level (35.00 %) followed by middle school level (16.00 %) and Matriculation and above (05.00 %). It may be due to the fact that majority of the respondents belonged to landless category (85.00 %) and an annual family income less than Rs 50000/-.

It was derived that the status of knowledge gained and adoption of improved backyard poultry farming was in the medium range by majority of the tribal poultry farmers.

To find out the relationship between the knowledge gained and adoption with the independent variable of socio-economic traits,

Table 2. Distribution of the respondents according to their Educational Status.

Sr. No.	Education Status	Number	Percentage
1	Illiterate	44	44.00
2	Primary Level	35	35.00
3	Middle school Level	16	16.00
4	Matriculation and above	5	05.00

Table 3. Distribution of the respondents according to their status of knowledge gained and adoption.

Sr. No.	Status	knowledge gained (No.)	Percentage	Adoption (No.)	Percentage
1	High (>Mean+1SD)	8	8.00	21	21.00
2	Medium (In between)	81	81.00	64	64.00
3	Low (<Mean-1SD)	11	11.00	15	15.00

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Table 4. Correlation of the independent variables with the knowledge gained and adoption of improved backyard poultry rearing.

Sr. No.	Independent variable	Correlation coefficient	
		Knowledge gained	Adoption
1	Age	0.0154	-0.0242
2	Educational status	0.1987*	0.0664
3	Land holding	-0.0414	0.0077

*significant at the 1% level of probability

Pearson's test was employed. It was observed that only educational status was positively correlated with the knowledge gained. All other variables were none significantly correlated with knowledge and adoption of backyard poultry farming. Accordingly, Ondersteijn *et al* (2003) observed that education level was one of the main factors that improved the performance of dairy production. Similarly, Andreakos *et al* (1997) and Wilson *et al* (2001) stated that the education level has a substantial effect on the financial performance of agricultural activities.

It was inferred that difficulty in availability of inputs like feeds, medicines etc. followed by less knowledge about new and improved breeds and poor availability of quality chicks are some of the critical constraints faced by the respondents.

CONCLUSION

Majority of the farmers are of young age and they are very much enthusiastic to rear Vanaraja breed of poultry as backyard farming. Only drawback is availability of inputs like quality chicks, feeds, and medicines etc. with less knowledge about new and improved breeds and a structured market.

Table 5. Constraints faced as perceived by the respondents for rearing improved backyard poultry.

Sr. No.	Constraint	Most Appropriate %	Appropriate%	Least Appropriate %	Rank
1	Difficulty in availability of inputs like feeds, medicines etc.	55	32	13	I
2	Less knowledge about new and improved breeds	52	29	19	II
3	Poor availability of quality chicks	46	38	16	III
4	Disease outbreak and mortality	30	18	52	IV
5	Not taking it commercially	36	31	33	V
6	Absence of structured market system	40	34	26	VI
7	Poor acceptability by the consumers	12	26	62	VII

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