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Status of Indigenous Chicken Rearing in Krishna District of Andhra Pradesh

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Abstract

Backyard poultry plays an important role in the livelihood of rural families in developing countries as a source of ready cash income alongwith satisfying social needs. This paper is based on a study conducted in eight villages from Nuzvid division of Krishna District of Andhra Pradesh to assess the status of backyard poultry rearing. The survey indicated the existence of *desi* birds in the study area with an average flock size of 4-9 birds per household with little or negligible supplementary feeding. High mortality, poor productivity was reported by majority of the respondents which might be due to lack of awareness about improved backyard varieties and poultry related government schemes. Appropriate institutional support in terms of provision of improved backyard varieties, disease control strategies, training and awareness programmes can promote this remunerative enterprise in the region keeping in view of raising demand for backyard egg and chicken.

Key words: Backyard Poultry, *Desi* Chicken**,** Egg Production, Economic Status

Introduction

Poultry is one of the fastest growing segments in India, with a growth rate of 8-10 per cent. However, 70 per cent of poultry products are consumed in urban and semi-urban areas and the rural consumption is quite low due to poor availability (Mehta *et al.,* 2003). Backyard poultry is indicative of the traditional domestic poultry with low input that are typically maintained by rural families in most developing countries (Akinola and Essien, 2011). Backyard poultry production under the free range and semi-intensive system is one of the viable alternative systems for improving the livelihood of rural households which provide additional income and supplement protein intake in rural and tribal folks. The meat and eggs of backyard chicken is much more highly valued and they are equivalent of 'organic' egg or chicken with prices being 50-100 per cent higher. Therefore, increased backyard poultry production would result in a positive impact on household food security. Therefore this paper aims at studying different aspects of backyard poultry farming in rural areas of Krishna district of Andhra Pradesh.

Materials and methods

The study was conducted in upland areas of Krishna district (*15^0 43' N and 17^0 10' N Latitude and*

80^0 0' and 81^0 33' of E Longitude) where farmers gained subsistence income through backyard poultry rearing. A total of 127 farmers with backyard poultry rearing were chosen randomly for the study from eight villages of Nuzivid division of Krishna district. Data were collected through a pretested structured interview schedule from these selected farmers. The statistical tools used for the data analyses were frequency and percentage.

Results and discussion

Flock structure: Local chicken flocks were dominated by the growers and chicks (58.05%), followed by cock (23.22%), whereas, hen (18.73%) were least in number. Average flock size revealed in the present study was 4-9 birds per household. Similar findings are reported by Devesh et *al.,* (2012).

Varieties of indigenous birds maintained by farmers: Majority of the respondents reared native variety of birds followed by improved variety. Chicken flock composition found in this study was similar to the reports of Ermias *et al*. (2015).

Breeding and production

Source of chicks: The study revealed that all the respondents got chicks from natural incubation at their backyard itself. Saha (2003) also reported similar findings.

Natural incubation: In the present study, desi broody hens were used as natural incubators. The family members were engaged in caring of broody hens by providing them nesting place, food and water till hatching. The nesting place was generally located in isolated dark corner of the house to avoid any disturbance with sufficient bedding material. The study depicted that a mean of 12.12 eggs (06 – 20 eggs) were set under each broody hen, and after 21 days, chicks were hatched out with an average hatchability of 72.92 per cent and average survivability of 61.86 per cent. The results are consistent with the findings of Habte *et al*., (2013) and Ermias *et al.,* (2015).

Egg production: The average age at first egg production was 6.5 months, which was lower than prescribed duration of 8-9 months (Devesh *et al*., 2012). All the respondents reported that average egg production per hen per month was 11.3.

Meat production: In the present study, the average age of the bird at the time of marketing was 7.2 months (1.6 kgs). On the contrary, Rahman (2015) reported that majority of poultry farmers (60%) sold the broiler birds at the age above 3 months or when the birds attained 3-4 kg live body weight in Aizwal District of Mizoram, India.

Utility of poultry egg and meat: Village poultry farming is an important activity of rural livestock farming, although purpose may vary depending on several factors such as agro-ecosystem and communities. The result of present study indicated that most important reason for backyard rearing in this region of the country is egg and meat production, which is used primarily for household consumption to meet their family nutritional requirements. These results are in line with the findings of Sankhyan et *al.* (2013).

Sale price of eggs and live birds: The average selling price of eggs was Rs. 7.15 per egg, whereas, in case of live birds, the average price for meat was Rs. 200.21 per kg, when the bird attained a body weight of about 1.6 kg. All the backyard poultry rearers reported that the price of eggs and birds vary according to season (Winter/Summer) and religious festivals as also reported by Saha (2003) in their respective studies. Higher prices may be due to color, flavor and taste of meat of native birds as compared to commercial birds.

Feeding: All the respondents reared the birds in backyard/ family veranda/ free range system. Under this system, the birds were let free for scavenging in the surroundings of the house, gardens, fields etc. from where they fulfill their feed requirement. During scavenging, the birds generally fed on kitchen waste, earthworms, grasshoppers, ants, green grasses, leafy vegetables, seeds etc. In

addition to scavenging, all the respondents were offering a handful of broken rice, bajra, sorghum, maize etc. to their birds. These findings are similar to the findings of Mandal *et al.,* (2006).

Housing management: Housing is important for the birds as it protects them from varying temperatures, rain, wind and predators etc. In the study area, 74.80 per cent of respondents kept their birds in the family veranda, but only 12.60 per cent of the respondents provided the chicken house separately and 7.87 per cent of the respondents kept their birds both in the family veranda and in the chicken house. Few farmers (4.72%) did not provide shelter to their birds at all and let their birds overnight on the roofs and trees. In agreement, Mekonen (2007) and Leta and Bekana (2010) reported that the majority of households chickens have no separate houses in the rural areas.

Reasons for loss of birds: Disease incidence among the backyard poultry was the major challenge at village poultry production. The poultry rearers experienced losses due to death among the flock mainly due to Ranikhet Disease (40.95%), other diseases (33.86%) and predators (25.19%).

Majority (65.35%) of the respondents followed only traditional medicaments followed by 25.65 per cent of the respondents consulted the veterinarians with regards to the preventive health care (deworming and vaccination) and very few (9%) respondents followed both the methods. The results are in line with the findings of Ermias *et al*., (2015) who reported that respondents consulted veterinarians for treatment and suggestions, while Leta and Bekana (2010) reported that respondents followed traditional methods when birds become sick.

Awareness about improved varieties of chicken: The study reported that majority of the respondents (85.83%) were not aware of the improved varieties of chicken. Few respondents (14.17%) were only aware of the improved varieties such as *Giriraja, Vanaraja, Rajasri* etc which highlighted the need of conducting awareness programme about the improved varieties for more production of egg and meat.

Awareness about poultry related government schemes: The study revealed that majority of the respondents (89.76%) were not aware of the government schemes on poultry and there were only few respondents (10.24%) who were aware and utilized the government schemes. Since majority of the poultry rearers (60%) were members of the Self Help Groups, it could be noted that training programmes and awareness campaigns can be effectively carried out through group approach.

Conclusion

Keeping in view of various contributions of backyard poultry farming in the lives of rural poor, it can be encouraged widely through promotion of improved varieties, which will be a valuable asset. Further it can act as a means of increasing rural income and also provide family nutrition for the rural masses. Backyard poultry rearing can be supported by subsidized inputs through management, feeding, housing and disease control. Preparation and implementation of plans for backyard poultry through rearing of improved varieties should be ensured for poverty reduction in developing countries like India.

Conflict of Interest: All authors declare no conflict of interest.

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