

## Research Note :

# BACKYARD POULTRY FARMING IN TRIBAL AREAS : PRESENT STATUS AND FUTURE STRATEGIES

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India is inhabited by over 53.8 million tribal people, belonging to 550 communities, consisting about 7.5 percent of the total population of country (Mukerji *et al.*, 1999). Since pre-historic periods, animal husbandry including poultry rearing has played a pivotal role in tribal society and economy. Till today, backyard poultry farming is one of the major source of income and employment among tribal communities. They prefer to keep non-descript multicolored fowls because of the small space requirement, low capital investment, quick return from outlay, simplicity in operations and not too heavy demands on resources. The FAO's (1998) special program for Food Supply (SPFS) opined the poultry farming as a crucial element in the struggle for sustained food production and poverty alleviation among weaker section of the society. In spite of the above-mentioned advantages, in the recent past, it has been observed that this age old production system is steadily decreasing day by day. It may be due to several constraints faced by the tribal people in this particular enterprise. Therefore, in order to develop some faithful strategies, the present study was conducted to find out the understand the existing status of backyard poultry farming among tribal communities.

## METHODOLOGY

The present investigation was conducted to study the existing status of backyard poultry rearing practices in four randomly selected tribal villages of Bankura district of West Bengal state. A sample of 25 tribal people was selected at random from each village. Thus, the sample for the study was 100 respondents. As most of the

respondents were illiterate therefore, a suitable interview schedule was prepared to collect the responses through personal interview. For the purpose of the present study, the existing status of backyard poultry farming means the present 'conditions' or 'situation' of poultry rearing under backyard/free-range system which includes the housing, feeding, breeding and production, health care and marketing system of this enterprise.

## RESULTS AND DISCUSSION

**Local breeds available**—Poultry keeping was originally, and still are of prime interest to the tribal people. The study showed that, all the tribal people preferred to keep native non-descript multicolored fowls. These birds were known to be hardy and did not require much attention for their management. Through, many of the respondents were aware regarding exotic breeds but they have shown a preference to maintain such type of specific colored birds for the social, cultural and religious ceremonies too. The flock size ranged from 2-10 birds per family including cocks, hens and chicks.

**Housing**—All the tribal people reared the birds under backyard/free-range system. In this system during daytime birds were allowed to scavenge by themselves in village alleys and surroundings, gardens, fields or even in the nearest jungle. The birds were protected from predators by providing night shelter only. Majority of the tribal people (95%) reported that, the birds shared the same house with owners whereas; only 5 percent of the respondents have constructed a separate small mud, stone or bamboo house for the birds. The housewives cleaned the house daily as routine work.

**Feeding**—The study revealed that, the housewives or children release the birds early in the morning for scavenging in outside or courtyard of the house from where they fulfill their requirements of feeds and water. During scavenging, the birds generally fed on kitchen waste, earthworms, grasshoppers, ants, green grasses, leafy vegetable etc. Some tribal equal gathered the kitchen waste, green vegetation in a pot and offered to the birds at a particular place from where the birds can easily eat. In addition to scavenging, all respondents offered handful of broken rice/rice bran to their birds. They supplied water during night but none of the respondent kept water during daytime. No separate feed mixture were supplied for fighting cocks, hens or growing chicks.

**Breeding and production status**—All the tribal people reported that, the main sources of chicks was natural watching, were local broody hens were used as natural incubator. Housewives were engaged for caring of the broody hens by providing nesting place, food and water till hatching. Generally, 8-10 eggs were set under each hen and most of the housewives claimed hatchability of 50-55%. Some experienced housewives do get 70-75% hatchability. After hatching, the chicks were generally removed on the second or third day from the broody hens and allowed to scavenge with their mother. During scavenging, the mother hens protect her chicks from attack of wild birds by covering the chick with here wings. The average is at first lying was 7-8 months. All the people reported that, their hens were not good layers and on an average they lay 30-40 eggs per year and had a maximum weight of about 1.5 kg. The brooding period of hen was 1-1.5 months and maximum weight of cock was about 1.5-2 kg. This indicated that although the hens were poor layers but the tribal people for natural hatching effectively utilized their broody character.

**Disease and health care status**—The study indicate, through the tribal people were not much bothered about disease aspect of the birds but all of them experienced that, high mortality rate of local chicken due to several disease was one of the main problem in rearing of birds. They reported that, Ranikhet disease is the most threatful disease that occurred in poultry followed by fowl pox,

coccidiosis etc. they did not vaccinate the birds against any disease and treated their sick birds themselves.

**Marketing**—Marketing means the disposal behaviour of poultry and poultry products (eggs, meat, live birds) followed by tribal people. The surplus birds and eggs, as reported by all the respondents' families, were sold at nearby villages, shops directly and some times to middlemen who came to the villages for purchasing birds. The average selling price was Rs. 100-120 per birds depending on the estimated weight and Rs. 2-2.25 per egg. The price of birds and eggs were varied according to season and festivals. They reported that, during festival (Holi, Makar Shankranti, Moharrum etc.) both birds and eggs were sold at higher rates. All the families remarked that, eggs and birds were easily sold and the demand was more then the production.

**Other practices**—Besides this, the study also showed that, the majority of the tribal people (70%) followed cock fighting as a cultural hobby. They sacrificed coloured (red) cocks and pullets to please the 'Vanadevata' and some time they also offered eggs and live birds to the relatives or guests as a gift.

On the basis of present status of backyard poultry rearing practices among tribal communities the following strategies can be taken into consideration for the success of this age-old enterprise.

**Disease control strategy**—The most important task of extension workers, NGOs or other developmental agencies is to reduce the heavy mortality rate of birds due to out break of poultry disease. Mass vaccination programme against most of the common poultry disease in general and Ranikhet disease in particular is essential of success of backyard poultry production.

**Supply of suitable germplasm**—Considering the unavailability of suitable germplasm, it is necessary to introduce improved birds, which are suitable to the villages' environment among the interested tribal people with manage mental trips. Regular monitoring and follow up is also necessary for solving the problems of poultry owners.

**Housing strategy**—In backyard poultry farming a large number of birds were lost due to attack of

predators. Therefore, it is suggested that, the birds should be housed in a small specially constructed mud, stone or bamboo house to protect from predatory and extreme of weather, particularly at night.

**Feeding strategy**—Under backyard system the birds did not receive any regular feeding but survived through scavenging and fulfilled their needs from locally available natural resources. Therefore, some supplementary feeding may be recommended wherever feasible, in order to alleviate the production and in turn the income.

**Training**—Short-term training for 3-4 days about housing, feeding, management and health care practices of backyard poultry farming is also necessary for interested tribal people.

**Extension strategies**—The success of backyard poultry farming is also dependent upon the use of appropriate extension strategies. This can be possible by organizing camps at village level, utilizing appropriate interpersonal channel (farm and home visit), group discussion, demonstration etc. to show the merits of the improved birds against the non-descript local birds. The message should be spread preferably in local language and through use of traditional communication media like

drama, folk song, puppet show, tom-tom etc. so that illiterate people can also understand it.

**Involvement of women**—Finally more emphasis should be given on active participation of tribal women because backyard poultry keeping was and is still being looked after by the women folk so as to get triple benefits of generation of employment, supplementary income and nutritive food.

## CONCLUSION

The above study revealed that, though the existing birds in tribal areas were slow growing and poor layers but whatever the birds produce is beneficial to the tribal people as the cost of production eggs and birds from scavenging system is almost zero. Therefore, it can be concluded that, backyard free-range poultry farming if properly developed appears to hold the prospect for sustainable poultry production among the weaker sections of the society. What is needed is to promote poultry farming in tribal village not as an occupation but as a sustainable supplement of eggs and meat for their own family consumption as the cheapest source of animal protein to combat malnutrition first and if possible then support other household activities.

## REFERENCES

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