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# Impact of Extension Activities on Farmers' Awareness, Knowledge, Skills and Attitude with Reference to Scheduled Tribes and Scheduled Castes Women towards Poultry Farming

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**Abstract**

An extensive survey carried out in randomly selected three villages of Nadia district of West Bengal revealed that the respondents (total 103), particularly tribal and SC women were rearing indigenous breeds of chicken and duck having poor production and high mortality in traditional system without scientific application. Short term training on scientific chicken and duck production utilizing indigenous breeds was imparted to 103 respondents. Vaccination (ranikhet disease-539 chicken) and deworming (chicken-662 and duck-63) programs were carried out for the birds in the three villages along with health coverage to ailing birds (total 89), distribution of leaflets and mineral mixture for birds of the respondents. The training programs helped to improve awareness and knowledge of the respondents on various aspects of poultry farming. The negative attitude of the respondents regarding vaccination and deworming before onset of the study was removed and the respondents got their birds vaccinated and dewormed subsequently. The outbreak of ranikhet disease which was highly prevalent in the study area before onset of the study, reduced drastically due to regular vaccination. Thus, awareness, knowledge, attitude and skills of ST and SC farmers especially women were improved remarkably through various extension activities provided at the farmers' doors for backyard poultry farming.

**Key words : Backyard poultry, Tribal, Scheduled caste, Women, Extension activities.**

Poultry rearing is an important livelihood for tribal and scheduled caste people in general and for women in particular in India. They are rearing indigenous breeds of poultry in traditional system for centuries and modern poultry production system has not reached to them. The modern, large scale intensive sector based on improved breeds and other costly inputs has invariably enhanced productivity but has primarily satisfied the growing needs of urbanites and contributed little to the development of rural poor particularly tribal and scheduled caste people. Even the transportation of egg and poultry meat from urban to rural areas has resulted higher price in villages than towns. Backyard poultry not only provides small cash to the family but also important from view point of family nutrition and provides social opportunity to honour guests, gift items, ritual sacrifices. Some of the important aspects of traditional poultry production system include low initial investment, better sustainability, on dependency on outside agencies and direct benefit to women (1). Besides, the indigenous birds have acquired considerable adaptability to local climatic environment and stress of feeding and management. But due to lack of scientific awareness, these indigenous breeds of poultry often have low productivity and high morality due to disease outbreaks. Hence, there is an urgent need to introduce scientific application within the backyard system of farming to improve farmers' awareness, knowledge, skills and attitude.

## Methods

An extensive survey was carried out in randomly selected three villages of Nadia district of West Bengal, namely Adibasi Palli, Harijan Para and Bibadi Palli with the help of structured interview schedule supplemented with observation techniques. The number of households having chicken and duck was constituted as sample of the study and thus 103 respondents were selected at random from the three villages. Among the total respondents (N=103), 25 were from

Adibasi Palli, 41 from Harijan Para and 37 were from Bibadi Palli and belonged to ST and SC category. Short term training on scientific chicken and duck farming systems utilizing indigenous breeds was imparted to 103 respondents of the three villages batch wise, particularly to ST and SC women. In the training programs major emphasis was given on breeds and breeding (advantage and limitations of indigenous and crossbred/hybrid poultry, selection of superior males, avoidance of inbreeding), housing and management (construction of low cost poultry sheds with local materials, scientific management with minimal investment), feeding (low cost ration utilizing local resources) and disease control (improved management, vaccination, deworming, sanitation). Vaccination was carried out against ranikhet disease (R2B strain) in chicken (539) in the three villages. Deworming program was also followed in chicken (662) and duck (63). Besides, a total of 98 birds were provided health coverage for varied ailments like enteritis, debility, ectoparasitic infections, reduced production, respiratory diseases, nutritional deficiencies. Various leaflets concerning vaccination schedule of chicken, duck and farming systems of poultry, duck, turkey and quail were distributed among the literate respondents. Mineral mixture for supplements for the birds was also distributed among the respondents in the villages.

## Results and Discussion

The average age of the respondents (total respondents 103) was found to be 48 years whereas the average male : female ratio was 1.2 : 1. So, maximum number of livestocks belonged to middle age group. The average family size was 6.0 i.e. majority of respondents had medium size family. Among 103 respondents, majority (78) were women (75.73%) and rest (25) were men (24.27%). The findings indicated that women were chiefly involved in rearing of indigenous poultry. The women were found to have direct control over the use of poultry products and income and hence, the family had better chances of benefiting from the improvement of the backyard poultry system which has thus a social value for these families. Cast wise, majority respondents (64) were ST (62.14%) followed by 39 respondents as SC (37.86%). All the respondents were Hindus in religion. With respect to education, majority (72) were illiterate (69.90%) and only 31 respondents were literate (30.10%). Most of the farmers were landless laborers (95.15%) and animal husbandry was one of their important occupations. Out of total herd size of poultry and livestock, the population of chicken was recorded as 38.34% and duck as 7.14% only.

All the respondents i.e. tribal and SC farmers especially women (75.73%) were observed to rear indigenous breeds of chicken and duck having poor production and high mortality in traditional system without scientific intervention. The findings of the study are in consonance with the reports of Das and Das (2), Mandal et al. (3) and Sethi (4). All the respondents preferred indigenous breeds of poultry due to many reasons such as higher demand and price of egg and meat, better taste, good brooding capacity and colored feathers. The training program helped to improve awareness and knowledge of the respondents especially ST and SC women on various areas of poultry farming such as vaccination, deworming, disease, feeding and management as evident from the interview schedule. Amudha and Veerabhadraiah (5) also stressed the need of training for farm women about various areas of poultry farming.

The survey revealed that the vaccination and deworming programs were not practiced by the respondents in the villages before onset of the study. In fact, they had negative attitude towards vaccination and deworming earlier. However, gradually their negative concept regarding vaccination and deworming was removed and the respondents got their birds vaccinated and dewormed subsequently. This change in attitude of the respondents might be due to improvement of their awareness for scientific poultry farming through various extension activities like training, consultancy, distribution of leaflets. The role of extension activities in improvement of backyard poultry farming was also emphasized by Conroy et al. (6).

The outbreak of ranikhet disease was highly prevalent in the area before onset of the study. But due to regular vaccination against ranikhet disease, the mortality rate of birds was reduced drastically. Besides, the over all morbidity of the birds also reduced due to regular treatment of sick birds, vaccination, deworming and mineral supplementation.

The various extension activities remarkably improved awareness, knowledge, attitude and skills of

ST and SC farmers especially women for backyard poultry farming system which is an important tool for eradication of poverty and promotion of gender equality.

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