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Short Communication

KAMRUPA Bird as Backyard Poultry: Performance Evaluation

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ABSTRACT

Raising improved and indigenous poultry birds by adopting scientific approach has the potential to bring profound change in rural economy by empowering youth and women farmers. Krishi Vigyan Kendra, Lakhimpur conducted demonstrations on rearing Kamrupa birds under backyard conditions. The birds exhibited extremely good productive performance. Average body weight gain was found to be 1950g at the end of 4m of age whereas it was 1315g for female Kamrupa chicken. On the other hand at the same age for local poultry it was 661g and 629g respectively. Similarly, age at 1st egg for Kamrupa birds was 179d whereas it was 220d for local poultry. Average egg production was found to be 127 numbers for Kamrupa and only 60 numbers for local poultry under backyard system.

Key Words: Backyard, Bird, Performance, Poultry.

INTRODUCTION

Backyard poultry rearing has been a traditional practice in villages where small numbers of native chickens are reared with minimum inputs under free-range scavenging system. The modern backyard poultry production came into practice with an objective to develop high-performing birds suitable for backyard rearing across different agroclimatic zones. Backyard poultry can very well serve as a potent tool for the upliftment of the economically weaker sections of the society owing to its minimum infrastructure setup and input cost. In addition to that, rural backyard poultry can provide nutrition in the form of valuable animal protein as well as in contributing to certain rituals in various festivals and functions in villages thereby strengthening social bonding. Therefore, a study was conducted to understand the potential and productive performance of Kamrupa chicken compared to local poultry under backyard system of rearing in Lakhimpur district of Assam.

MATERIALS AND METHODS

1000 Kamrupa chicks were distributed for rearing under backyard system. 50 farmers including farm women and rural youth were selected through participatory rural appraisal technique. Another 50 farmers rearing local chicken under backyard system made the comparative group. Day old Kamrupa and indigenous chicken were reared under intensive system with brooding up to 15d. Thereafter, the birds were released for scavenging during the day time. They were offered a mixture of grains, broken rice and kitchen waste. The birds scavenged on insects, worms, grasses etc. Little amount of Mineral mixtures was supplemented with feed. Standard vaccination protocol was followed. Parameters like body weight, age at first egg and average egg production was recorded.

RESULTS AND DISCUSSION

The average body weight gain of Kamrupa and local poultry at different ages are given in

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Table 1.Average body weight gain in Kamrupa and local poultry under backyard rearing system.

Age	Kamrupa (Avg. Body wt. in gram)		Local Poultry (Avg. Body wt in gram)	
	Male	Female	Male	Female
Day old	39	39	28	28
1 month	388	319	197	189
2 months	742	517	378	369
3 months	1266	1041	533	517
4 months	1950	1315	661	629
5 months		1408		718
6 months		1491		812
7 months		1520		902

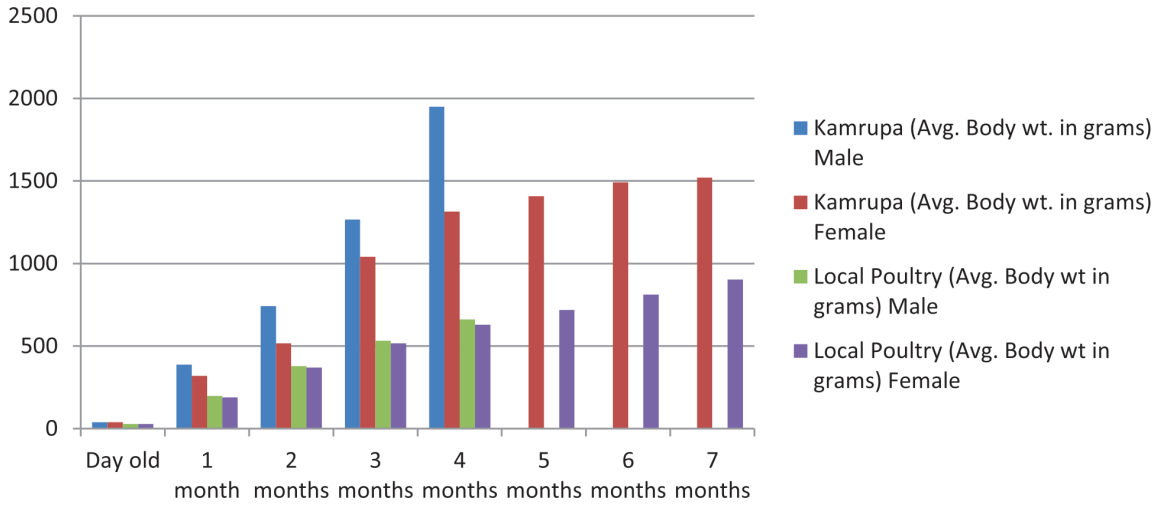

Fig. 1. Graphical representation of average body weight gain in Kamrupa and local poultry under backyard rearing system

Table 1. Both Kamrupa male and female chicken showed higher body weight gain till 4m of age, 1950g for male and 1315g for female, after which male chicken were sold in the market. On the other hand, local chicken under backyard system yielded lower body weight gain at the end of 4 m with 661 g for male and 629 g for female. The body weight of Kamrupa birds reared under semi intensive system were recorded as, day old 39.24a ±2.30, 8 weeks 525.42b±50.64 , 20 weeks 1400.45 b±95.36, 32 weeks 1670.49 b±132.56, 40 weeks 1800.57 b±136.45. (Kalita *et al*, 2016). The mean body weight gain of Vanaraja male and female at 24 weeks of age was 1991.96 ± 70.70g and 1489.57 ± 65.17 g respectively, whereas the corresponding weight of indigenous male and female were 908.48 ± 17.80g and 848.70 ± 29.47 g respectively (Deka *et al,* 2014).

The Average age at 1st lay and average egg production in Kamrupa and local poultry under backyard rearing system are presented in Table 2. For Kamrupa birds under backyard system the average age at 1st lay was 179 d compared to 220 d for local poultry. In free range system age at sexual maturity was 185.37 b±4.61 for Kamrupa chicken (Kalita *et al* 2016). Vanaraja and indigenous chicken attained sexual maturity at an average age of 178.13± 0.79d and 191.25 ± 1.46 d respectively (Deka *et al,* 2014).

Table 2. Average age at 1st lay and average egg production in Kamrupa and local poultry under backyard rearing system.

Bird	Age at 1st lay (days)	Average Egg production (Eggs/bird/year)
Kamrupa	179	127
Local poultry	220	60

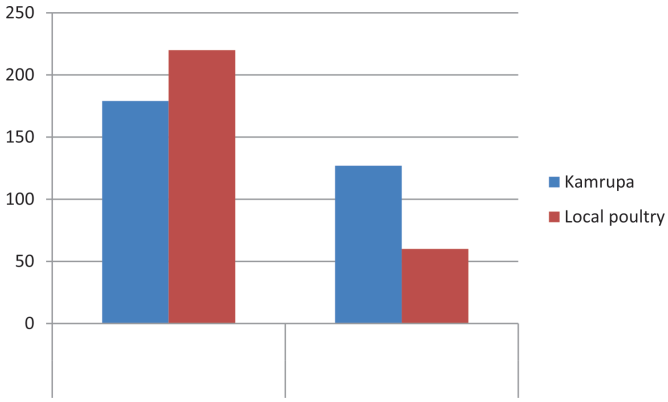

Fig.2. Graphical representation of average age at 1st lay (days) and average egg production in Kamrupa and local poultry under backyard rearing system

The average egg production in Kamrupa as well as local poultry under backyard system were found to be 127 and 60 respectively.Annual egg production of 125.47 a±3.96 was found in Kamrupa reared under semi intensive rearing system. There was significant difference in annual egg production of Vanaraja, 145.75 ± 1.44 and indigenous chicken ,54.62 ± 1.13.(Deka *et al*, 2014). Also there was annual egg production of 149.47± 4.46 numbers for Vanaraja up to 72 weeks of age. (Niranjan *et al.* 2008b).

CONCLUSION

Backyard poultry rearing with Kamrupa can be a potential game changer in fulfilling the demands of meat and egg especially in rural India alongwith economic upliftment of rural poultry farmers.

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