

## **Fertility and Hatchability of Eggs and Growth Performance of Mini-Incubator Hatched Indigenous Chicken in Rural Areas of Bangladesh**

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**ABSTRACT:** A study was conducted to investigate the performance of mini-hatchery of Indigenous chicken established in four villages of Jhenaigati upazilla of Sherpur district in Bangladesh. A total of 1070 eggs from indigenous chicken were collected in 4 batches and 628 chicks were hatched artificially. Data were recorded on fertility, hatchability, body weight of chicks from week 1 (BWVK1) to week 17 (BWVK17). Least square means were obtained using SAS GLM and mean comparisons were performed with Duncan's Multiple Range Test. Fertility (%), hatchability (%) and mortality (%) were 70.81, 77.52 and 19.63, respectively. Comparable fertility and hatchability of indigenous chicken eggs were found in this study. Body weight of male birds at third, fifth, seventh, eighth, eleventh, twelfth and thirteenth weeks were significantly higher than females as expected. The coal brooding system was superior to electric and natural brooding. The birds fed with hand mixed feed showed better growth than those fed with commercial feed and scavenging feed resources. Management system adopted by one of the farms (Farm 2) was observed to be better in terms of growth, and hence could be considered for up scaling. Batch of birds, the farm, brooding system and feeding system were found to have significant ( $P < 0.05$ ) contribution on the body weight of birds at various stages of their growth. These results indicated that standardization of management systems is required before implementation of mini hatcheries for incubation of indigenous chicken eggs in rural areas of Bangladesh.

**Keywords:** Artificial hatching, fertility and hatchability, growth performance, indigenous chicken

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