

**Seasonal Variations in Feed Conversion Ratio, Mortality Rate,
and Disease Prevalence in Broiler Chickens: A Study in
Chattogram and Narsingdi Districts, Bangladesh**



**A production report submitted in partial satisfaction of the requirement
for the Degree of Doctor of Veterinary Medicine (DVM)**

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Session: 2018-19

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October 2024

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Abbreviations

Abbreviations	Elaborations
FCR	Feed Conversion Ratio
ND	Newcastle Disease
CRD	Chronic Respiratory Disease
IBD	Infectious Bursal Disease

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Abstract

This research investigates the impact of seasonal variations on feed conversion ratio, mortality rate, and disease prevalence in broiler chickens in Narsingdi and Chattogram districts of Bangladesh. By examining the effects of winter and summer, the study seeks to understand how seasonal fluctuations, geographical differences, and vaccination practices influence the performance and health of broilers, to provide practical recommendations for poultry management. Data were obtained from 15 broiler farms using structured questionnaires, focusing on variables such as FCR, mortality rate, disease prevalence, types of litter materials, and vaccination status. The findings revealed that growth performance was superior in summer compared to winter, while disease incidence was notably higher in the winter. There was no statistically significant relationship between FCR and mortality rate ($p>0.05$), and the type of litter material used showed no significant impact on either broiler performance or disease prevalence. However, a moderate to strong correlation was observed between vaccination and a reduction in disease prevalence ($r=0.64$). These insights can assist poultry farmers in refining management practices to better accommodate seasonal changes.

Keywords: Broiler, disease prevalence, feed conversion ratio, mortality rate.