

Different Phenotypic, Production, Reproduction
parameters and Management of Hilly Chicken in Kaptai
Upazila, Rangamati



Urmi Tanchangya

Roll No. 13/27

Registration No. 0949

Intern ID: F 26

Session: 2012-2013

**A production report submitted in the partial fulfillment of the requirements for
the degree of DVM.**

Faculty of Veterinary Medicine

Chittagong Veterinary and Animal Sciences University

Chittagong-4225, Bangladesh

Authorization

I hereby declare that I am the sole author of the report. I authorize the Chittagong Veterinary and Animal Sciences University (CVASU) to lend this report to other institutions or individuals for the purpose of scholarly research. I further authorize the CVASU to reproduce the report by photocopying or by other means, in total or in part, at the request of others institutions or individuals for the purpose of scholarly research.

I undersigned, and author of this work, declare that the electronic copy of this report provided to the CVASU Library, is an accurate copy of the print report submitted, within the limit of technology available.

(Urmi Tanchangya)

Different Phenotypic, Production, Reproduction
parameters and Management of Hilly Chicken in Kaptai
Upazila, Rangamati

Urmi Tanchangya

Roll No. 13/27

Intern ID: F 26

Registration No. 0949

Session: 2012-2013

.....
(Dr. Moksedul Momin)

Supervisor

.....
Department of Genetics and Animal Breeding
Faculty of Veterinary Medicine
Chittagong Veterinary and Animal Sciences University
Chittagong-4225, Bangladesh

Table of Contents

Authorization	ii
List of Pictures	vi
List of Tables	vi
List of Figures.....	vii
Abstract.....	viii
Chapter 1: Introduction	4
Chapter 2: Materials and Methods	5-8
2.1 Study period	5
2.2 Study area.....	5
2.3 Study Population	6
2.4 Phenotypic identification of hilly chicken	6
2.5 Data collection	6
2.6 Data collection on housing,management and feeding of chicken.....	6
2.7 Data collection on phenotypic and reproductive characters of chicken	7
2.8 Collection of egg data	8
2.9 Data analysis	9
Chapter 3: Results and Discussion	9-15
3.1 Housing and feeding system of hilly chicken	9
3.2 Phenotypic characteristics of hilly chicken.....	9
3.3 Reproductive performances of hilly chicken	13
3.4 Egg parameters.....	14
Chapter-4: Conclusion a d Recommendation	16
Chapter-5:Limitations.....	17

References.....	18-21
Acknowledgements	22
Brief Biography	23

List of Pictures

SL No.	Title	Page
01	Map of Kaptai Upazila	05
02	Housing system of chicken	06
03	Collection of weight from study samples.	07
04	Checking of poultry phenotypic characteristics	07
05	Measuring the weight of egg	08
06	Measuring the egg yolk width of egg	08

List of Tables

SL No.	Title	Page
Table 1	Reproductive performance	13
Table 2	External egg parameters	14
Table 3	Internal egg parameters	14

List of Figures

SL No.	Title	Page
Figure 1	Pie chart of Plumage color variation of hilly chicken	10
Figure 2	Pie chart of comb variation in hilly chicken	10
Figure 3	Pie chart of Comb Color variation of hilly chicken	10
Figure 4	Pie chart of Ear Lobe color variation in hilly chicken	11
Figure 5	Pie chart of Eye color variation in hilly chicken	11
Figure 6	Pie chart of Beak color variation in hilly chicken	11
Figure 7	Pie chart of Shank feather presence in hilly chicken	12
Figure 8	Pie chart of Shank color variation in hilly chicken	12
Figure 9	Pie chart of Skin color variation in hilly chicken	12

Abstract

The study was conducted at Kaptai upazila of Rangamati district for a duration of one month with a total sample of 74 hilly chickens (39 male and 35 female) to know the present scenario of hilly chicken production scenario. To satisfy this objective data was collected on management status, phenotypic characteristics, productive performance, reproductive performance and different egg characteristics. Under study it was observed that the hilly chickens are reared in houses made from bamboo slit and tin roof, while they lead scavenging feeding and management systems. Reddish brown plumage color was found highest (39%) among the chickens where most of them were single type (70%) pale colored (66%) comb and reddish white ear lobe (57%). The eye color and beak color under this area was black (78% and 46%). Almost 100% chicken was free from shank feather and having whitish skin color (96%). While checking the reproductive performances of Kaptai area there was observed lowest age of sexual maturity (181) and highest number of clutches per year (4.18) area 1 than the others. For productive characteristics it was observed that 4.42 cm egg height and 36 gm average egg weight of hilly chickens in that Kaptai area while the eggs have 9.27 gm yolk weight in average. Though the sample size and duration of this study is small and short but I wish this will help the policy makers for making further decision for the improvement of present status of hilly chicken in respected area.

Keywords : Hilly chicken, Phenotype, Reproduction, production