Table of Contents

Content	Page no.
List of tables	ii
List of figures	ii
Abstract	iii
Chapter 1: Introduction	1-2
Chapter 2: Materials and Methods	3-4
Chapter 3: Results	5-11
Chapter 4: Discussion	
Conclusion	16
References	17-19
Appendix-I	20-23
Acknowledgements	24
Biography	25

List of tables

Content	Page no.
Table 1. Socio-economic condition of the broody hen owners (N=40)	05
Table 2. Overall performance of the broody hen (N=265)	06

List of figures

Content	Page no.
Figure 1. Association between flock size and annual egg production (N=265)	07
Figure 2. Association between clutch size and egg production (N=265)	08
Figure 3. Association between flock size and sale of egg/year (N=265)	08
Figure 4. Association between flock size and sale of chicken/year (N=265)	09
Figure 5. Association between flock size and egg consumption/year (N=265)	09
Figure 6. Association between flock size and chicken consumption (N=265)	09
Figure 7. Association between flock size and annual income (N=265)	10
Figure 8. Association between average pause size and annual egg production (N=265) .	10
Figure 9. Challenges of raising broody hen (N=265)	11

Abstract

The study aimed to investigate the behavior and performance of the broody hens in the rural areas of Sherpur district, Bangladesh. A cross-sectional survey was conducted in the three upazilas of Sherpur using a structured questionnaire for a period of 3 months from 15st July to 15 October, 2021. Results indicated that the mean age, land size, homestead area and annual income of the broody hen owners were 34 years, 0.33 acre, 0.04 acre and 1240 \$USD, respectively. All of them were women and housewife. The mean flock size was 10.4 and the average number of broody hen within the households was 6.6. The age at first laying ranged from 150-195 days and the average age of first laying of a hen was 177.3 day. The laying cycle per hen was 5.2 per year. The lowest clutch size (no.) was 12.0 and the highest was 15.0. The minimum pause size was 45 days and the maximum pause size was 60 days and the average pause size was 54.4 days. The study showed that the annual egg production per hen ranged from 55 to 90. The average annual egg production by a broody hen was 74.0. The brooding period was 23.5 day and the hatchability was 79.2%. The egg weight was 40.8 g and the mortality of chicken was 20%. An increased flock and clutch size was associated with increased annual egg production which ultimately increased annual egg and chicken sale and consumption. Further, an increased annual egg production concomitantly increased annual income. Interestingly, an increased pause size substantially decreased annual egg production.

Keywords: Broody hen, clutch, egg, pause, performance