**CONTENTS**

|  |
| --- |
| Titles Page no |

**List of tables……………………………………………………………………............…...iii**

**List of figures…………………………………………………………………….............…iv**

**Abstract……………………………………………………………………………..……….v**

**Chapter 1: Introduction………………………………………………………….……..01-03**

**Chapter 2: Materials and Method……………………………………………………..04-07**

2.1. Study area …………………………………………...…………………………….04

2.2. Household selection of the local community……………………………………...05

2.3. Collection of the male and female chicken …..………………………...............…05

2.4. Cross breeding…………………………...…………………………………..........05

2.5. Breed upgrading …………………………………………………………………..06

2.6. Vaccination and medication………………………………………………………06

2.7. Rearing System ……………………………………………………………….06-07

2.7.1 Scavanging……………………………………………...………………...07

2.7.2 Semi scavanging……………………………………………………..……07

2.7.3 Confinement…………………………………….………………………...07

2.8. Data Collection……………………………………………………………………07

2.8.1. Body weight measurement…………………………………………...…..07

**Chapter 3: Results……………………………..………………………………………….08-16**

3.1. Effects of genotype on growth……………………………………....….….08-12

3.2. Effect of rearing system on growth………………………………………..12-16

**Chapter 4: Discussion………………………………………………………………...……17-18**

**Conclusion……………………………………………………………………………...….…..19**

**References…………………………………………………………………………………....20-22**

**Acknowledgement……………………………………………...……………………………….23**

**Biography…………………………………………………………..…………………………………………………………….. 24**

**List of Tables**

|  |
| --- |
| Table number and title Page no |

**Table 1:** Body weight in F1 genotype ………………………………………………………08

**Table 2:** Body weight in F2 genotype ……………………………………………….……...09

**Table 3** Body weight in F3 genotype …………………………………………....…………..10

**Table 4:** Average body weight gain at 2 month of age in different genotype…………...….11

**Table 5:** Body weight in scavenging rearing system without feed supplement …………....13

**Table 6:** Body weight in semi scavenging rearing system with additional feed supplement.14

**Table 7:** Body weight in confinement rearing system with full feeding…………………….15

**Table 8:** Average body weight gain at 2 month of age in different rearing system…………15

**List of Figures:**

|  |
| --- |
| Number and title Page no |

**Figure 1:** Map of Panitala upazilla, Naogaon…………………………………………….….04

**Figure 2:** Comparison of individual highest and lowest body weight with average body weight in F1 Generation……………………………………..……………………………….09

**Figure 3:** Comparison of individual highest and lowest body weight with average body weight of F2 generation…………………………………..…………………………………..10

**Figure 4:** Comparison of individual highest and lowest body weight with average body weight in F3 generation……………………………………...……………………………….11

**Figure 5:** Comparison of average body weight in different genotype……………………....11

**Figure 6:** Average body weight in different genotype………………………...…………….12

**Figure 7:** Comparison of individual highest and lowest body weight with average body weight in scavenging rearing system…………………………………………………………13

**Figure 8:** Comparison of individual highest and lowest body weight with average body weight in semi scavenging rearing system…………………………………..……………….14

**Figure 9:** Comparison of individual highest and lowest body weight with average body weight in confinement rearing system……………………………………………………….15

**Figure 10:** Comparison of average body weight in different rearing system……….………16

**Figure 11:** Average body weight in different rearing system………………………………..16

**Abstract**

The study was conducted with three different genotypes of aseel and nacked neck cross breed chicken, these were F1 (50% aseel gene), F2 (75% aseel gene), F3 (87.5% aseel gene) and three different rearing systems included scavenging (without feed supplement), semi scavenging (with additional feed supplement), confinement (with full feeding) to assess growth performance under management of households in a village under Panitola upazilla of Naogaon district. The average body weight gain was compared within the different genotypes and rearing systems at 2 months of age. Among the genotypes the highest average body weight was obtained in the F3 generation (404±49 )gm at 2 months of age and the lowest average body weight found in F2 generation (338.38±42)gm at the same age. On the other hand within the rearing systems the highest average body weight gain was found in the confinement rearing system with full feeding (464± 89)gm at 2 months of age and the lowest average body weight was found in the scavenging rearing system without additional feed supplement (347.13± 52)gm at the same age. It reveals that upgraded chicken with aseel male in confinement rearing system with full feeding may be beneficial in terms of meat production (Body weight gain).

***Key words***: Cross breed, Aseel, Nacked neck, Genotype, Rearing system, Body weight.