PERFORMANCE OF BROILERS IN TEMPERATE CLIMATE OF GARHWAL HIMALAYA

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ABSTRACT

In the present study a total of 1850 commercial broiler chicks (One week old) from different breeds reared in 6 batches during 1996-2000 under deep litter system at high altitude (1600-1800 meters from MSL) in Garhwal region. During the study period the temperature and R.H. were recorded as 20-28 F temperature and 60-90 R.H. The chicks were fed with balanced and locally available feed during starter and growing periods. The managemental conditions were maintained as recommended. The average body weight of broilers recorded was 1.20 Kg at 56 days of age with 2.96 feed conversion ratio and 11.25% mortality.

In India commercial poultry farming has made a spectacular progress during the last three decades. At present India stands at 5th position among the leading egg producing countries in the world. Unfortunately poultry industry is still in its infancy in hill region of the country. The climate of high hills is not conducive for the rearing and some disease are highly prevalent due to high percentage of humidity especially in rainy season. Therefore, large-scale poultry farming is not a very common practice in Garhwal Himalaya, creating a gap between demand and supply to fulfill the local demand of poultry, poultry products are being brought from distance state like Haryana and Punjab.

Keeping in view all these problems hill Campus Ranichauri started a programme under the IVLP/TAR project to evolve a viable and technology, for promoting poultry farming in rural Garhwal Himalaya. The present study has thus been aimed at evaluation of the production performance of broilers under the project.

Commercially available day old broiler chicks vaccinated with F1 vaccine were purchased from different hatcheries. The chicks were reared up to a week at University farm and there after they were distributed among the selected farm families under IVLP/TAR project. At farmers field chicks were reared under the deep litter system. All farm families were suggested to take care of managerial measures as recommended. During the starter and growing period commercial available starter ration containing 23% crude protein with 2800 kol/ kg (me) from 2nd to 4th week and broiler finisher ration from 4th to market age was used by some farm families. Feed supplements were also added in drinking water or in feed at some units. The above practices were used as per economic conditions of the farmers. Adequate light, drinking water and feeding space were provided to chicks. The data pertaining to body weight, weekly feed consumption and feed conversion efficiency, mortality and weekly body weight gain were collected up to 8-weeks of age. In the present study two strain Van-cob and CARI-BRO were used and between both CARI-BRO strain was found superior.

The performance of broiler chicks reared at different farm units is presented in Table 1. The body weight of broilers averaged 1.20 kg at 56 days. The average feed conversion ratio was 2.96. The average percent mortality up to 8-weeks of age was recorded on higher side (11.25%) than that found in commercial practices.

It was observed that as the duration of rearing increased per cent mortality also
Table 1. Performance of broiler chicks reared up to 56 days of age in temperate climate conditions (Temperature range 20-28° F)

<table>
<thead>
<tr>
<th>Year</th>
<th>Batch incubated</th>
<th>No. of chicks incubated</th>
<th>Per cent mortality</th>
<th>Average body weight (kg)</th>
<th>FCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>2</td>
<td>650</td>
<td>11.50</td>
<td>1.15</td>
<td>3.40</td>
</tr>
<tr>
<td>1998</td>
<td>1</td>
<td>225</td>
<td>9.00</td>
<td>1.10</td>
<td>3.20</td>
</tr>
<tr>
<td>1999</td>
<td>1</td>
<td>350</td>
<td>12.50</td>
<td>1.30</td>
<td>2.68</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
<td>625</td>
<td>12.00</td>
<td>1.25</td>
<td>2.56</td>
</tr>
</tbody>
</table>

increased in spite of taking all measures. It was also observed that the mortality increased as the summer season was over at the end of June and the beginning of July. At some units, higher mortality was recorded due to mismanagement. Similar findings were also reported by Swain and Trupti (1996), Singh and Sharma (1997), Singh (1998, 1999) and Singh et al. (2000).

The broiler farming in hilly areas

REFERENCES