EXPERIMENT 9 CALCULATION OF PRODUCTION COST OF AN EGG AND ONE KILOGRAM LIVE BROILER

Structure

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9.1 INTRODUCTION

Profit making is the main aim in any poultry farm. Poultry farming yields marginal profits due to higher costs of feed which is the major item of expenditure. Price of eggs varies with season creating drop in egg prices during summer months. Hence, ways and means to reduce cost of production of eggs are being investigated. In any case, till now, there is hardly a permanent solution for the farmers during low egg price periods. On the other hand, broilers are making steady progress with near uniform demand and quick returns. Due to short term investment involved, many farmers are venturing into broiler farming.

Objectives

After performing this experiment, you will be able to:

● compute the cost of production of an egg in a layer farm; and

● determine the cost of production of one kilogram live broiler meat in a broiler farm.

9.2 EXPERIMENT

9.2.1 Principle

The main product out of a layer farm is egg and obviously, a farmer needs to know the expenditure involved in producing an egg so that he/she can fix selling price keeping in view the existing market price. Similarly, in a broiler farm, it is necessary to know the cost of production of one kilogram broiler meat to assess the profitability of the broiler farming.

9.2.2 Requirements

● Cost of birds

- Cost of feed and quantity of feed consumed

- Income from litter material, gunny bags, culled bird etc.

- Number of eggs produced in case of layers

- Body weight at market in case of broilers

9.2.3 Procedure

(i) Cost of production of an egg

Calculate the cost of production of eggs of the two situations given below based on the formula given under section 9.2.4.

Situation 1: Starting a farm with day old chick

A)	Cost of day old chick	= Rs. 18.00 per chick
B)	Total feed cost per bird	= Rs. 551.00
C)	Income other than eggs	= Rs. 111.00
D)	Total number of eggs produced	= 270

Situation 2: Starting a farm with pullet

A)	Cost of pullet at 21 weeks of age	= Rs. 98.00 per pullet
B)	Total feed cost per bird	= Rs. 460.00
C)	Income other than eggs	= Rs. 111.00
D)	Total number of eggs produced	= 270

(ii) Cost of production of one kilogram live broiler

Calculate the cost of production of one kilogram live broiler based on the formula given under section 9.2.4.

Assumptions

A)	Cost of broiler chick	= Rs. 16.00 per chick
B)	Cost of feed	= Rs. 10.88 per kg
C)	Quantity of feed consumed	= 2.97 kg
D)	Body weight gain	= 1.51 kg

9.2.4 Calculations

(i) Cost of production of an egg

$$\text{Cost of production of one egg} = \frac{(A + 4B/3) - C}{D}$$

Where;

A = Cost of day old chick or pullet

B = Cost of total feed consumed

C = Income other than eggs (litter materials, gunny bags, sale of culled birds etc.)

D = Total number of egg produced

(ii) Cost of production of one kilogram live broiler

a) Feed Conversion Efficiency (FCE) = $\dfrac{\text{Quality of feed consumed}}{\text{Total body weight gain}}$

b) Production cost per kilogram live broiler (Rs.) = A + B + C

Where,

A = Chick cost factor (Rs.)   = 0.6 × cost of day old chick

B = Feed cost factor (Rs.)   = FCE × cost of 1 kg feed

C = Miscellaneous expenditure (Rs.)   = 15 % of A + B

9.2.5 Results

i) The cost of production of one egg in situation 1 is ....
and in situation 2 is ....

ii) The cost of production per kilogram live broiler is Rs. ....

9.3 PRECAUTIONS

● The price of the different items should be considered as per existing market price prevailed time to time.