E-ISSN: 2582-6336

International Journal of Agriculture and Allied Sciences, 5(1); 1-3, 2020

ECONOMIC ASPECTS FOR ESTABLISHING LAYER DUCKERY FARM IN EASTERN UTTAR PRADESH

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Received January10, 2020 and Accepted February 05, 2020

ABSTRACT: The establishment cost of layer was 65.35 per cent which was more than half of the total cost. It indicate that the cost of buildings and infra-structures development was more expensive in comparison to other expenses occurred. Feeding expenses on chicks was second largest cost. The gross return obtained about 39.42 per cent per annum in first year. The total working capital was required 17.77 per cent. The production cost per egg was Rs. 0.57 which is almost same to break – even point and cost benefit ratio was 1:1.37. This study reveals that layer poultry farm may be established by poor entrepreneurs also if they have own land and buildings. There is tremendous scope for the establing a layer farm due to demand of egg is increasing day by day. It may be good supplementary enterprise for the generation of income and employment with the farming enterprise. The outlay for layering of eggs varies from place to place and season to season, hence cost never valid at any time. This is a legalistic guidance for the farmers, extension workers and those seeking an opportunity for self-employment.
KEYWORD: Economic, poultry, egg, aspect, establishing, price, income, net income.

The production of eggs and meat is insufficient in the eastern Uttar Pradesh due to increasing the day by day demand. As per the recommendation of National Institute of Nutrition per capita total consumption of 180 eggs and 11 kg meat is required but per capita availability of egg and meat is only 42 (1.8 kg) and 1.6 kg respectively. While average consumption of eggs in major cities is 170 and smaller cities are 40 only. Hence the rates of eggs and meat have been prevailing higher than the national average. The inflow of poultry products from Hyderabad Uttaranchal and Bihar is increasing and demand of poultry products are remain continue due to less production in this region.

MATERIALS AND METHODS

The basic assumption of the study was collected from local market at current prevailing price for the present financial statement. The costs and prices are assumed on the basis of average in the local area. Eggs production technique and other constants are practically feasible. The primary information was collected from different places of the local market through bench remark survey method by specially designed and pre-tested proforma. The level of input utilization and cost of laying eggs was worked out by using different cost concept. It is assumed that entrepreneur has his own land for establishing poultry farm. The main capital requires for buildings and equipment are the basic investment. Deep litter system is an economic way for the establishing layer farm than the cage system. Therefore deep litter system was adopted for the purpose using asbestos roofing, wooden structure and brick wall up to the plinth height. The cost of construction was work out Rs. 380 per bird. Although entrepreneurs require constructing poultry house in cage system, construction cost will be less by 20 per cent due to higher bird intensity is possible under cage system yet cost of cage making will be 40 per cent higher than the deep litter system. The cost of a day old chicks up to rearing and start to layering was included in working capital. Cost of chicks charged Rs.18 per bird and feeding cost up to twenty weeks was Rs.30 per bird. On the economic point of view initially three thousand chicks was purchased for the establishing of a layer farm under deep litter system. Total working capital was charged Rs.

53 per bird. The financial aspect was worked out in terms of money. The item wise assumed costs were: (1) area required for building Rs.2.5/sqft per bird; (2) construction of semi cemented wooden structure house Rs.110/sqft equipment cost Rs.15.45/bird; (3) a day old chicks (female) Rs.15.10 per bird; (4) feed consumption (chick mesh) at the age 0-8 weeks @1.5 kg per; (5) grower feed consumption at the age 9-20 weeks age @4.98 kg per bird; (6) layer feed consumption at the age 21-72 weeks age @43.42 kg per layer; (7) chick mesh rations @Rs.740 per quintal; (8) grower mesh rations @Rs.680 per quintal; (9) layer mesh rations@Rs.680 per quintal. The detailed information pertaining to variable, fixed and miscellaneous expenses and layering of eggs was collected in the year- 2010-1.

To workout of break - even – point for production of eggs the following equation was used

$$\text{B.E.P.} = \frac{\left(\frac{TFC}{EGG}\right)}{P - Vc}$$

Whereas:

B.EP. = Break - even - Point

T FC = Total fixed cost/layer

P = price per unit of egg

VC = variable cost per unit of egg.

Table -1: Cost distribution of layers under deep litter system

Sl.No.	Particulars	Quantity	Rate (Rs./unit)	Total(Rs.)
1.	Land for construction of layer house	7500sqft	110	825000.00 (65.35)
	Equipments	3000 birds	15.45	46350.00 (3.72)
2.	Cost of a old chicks with 5% mortality	3150	15	47250.00 (3.76)
3.	Feeding cost of chicks (0-8 weeks age) @1.5kg/chick for 3150 birds	47.25	740	34965.00 (2.76)
4.	Feeding cost of growers (9-20 weeks age) @4.8kg/grower for 3100 birds	15.44	680	101184.00 (8.02)
5.	Cost of labour, electricity and miscellaneous charges etc.	3100	5	15500.00 (1.23)
Operational Expenditure for 3000 layers up to 12 months of layering				
6.	Feeding cost of 3000 layers @45kg/layer	1350	680	91800.00 (7.27)
7.	Cost of litters, medicines, electricity etc.	3000	6.80	20400.00 (1.61)
8.	Human labour	360MD	150	54000.00 (4.27)
9.	Depreciation on fixed capital		5%	8713.50 (0.69)
10.	Interest on working capital		12%	17070.41 (1.35)
11.	**Total Cost**			**1262232.91**

Note: Figures in parenthesis denotes percentage of the total

Table-2: Gross Income of the layers under deep litter system.

Sl.No.	Particulars	Quantity	Rate	Total
1.	Sales of eggs	720000eggs	Rs.2.40/egg	1728000.00
2.	Sale of 50%culled birds	1500birds	Rs.70/bird	105000.00
3.	Sale of Poultry Manures	2100qt	Rs.55/q	115500.00
4.	Sale of empty gunny bags	1350bags	Rs.25/bag	33750.00
Gross Income				**1982250.00**

Table-3: Net Income and cost – benefit ratio and internal rate of return

Sl.No.	Particulars	Amount(Rs.)
1.	Gross Income	1982250.00
2.	Total Cost	1262232.91
3.	Net Income	720017.09
4.	Cost-Benefit ratio	1:1.37
5.	Internal Rate of Returns	15.71
6.	Break-even	0.53

RESULTS AND DISCUSSION

It is indicated in the table-1 that the establishment cost of layers was 65.35 per cent which was more than half of the total cost. It shows that the cost of buildings and development of infra-structure was much expensive in comparison to other expenses occurred. Although feeding expenses on chicks was second largest cost yet cost incurred on buying of chicks and equipments was almost equal (Manohar Singh 2001).

The cost – benefit ratio of egg production was worked out by dividing the present worth compounding and discounting technique. The production cost per egg was Rs. 0.57 which is almost same to break – even point. It is worked out to check the economic feasibility of egg production as depicted in table – 2 (Ramchandra, 1993).

The study revealed that cost of fixed, variable and other miscellaneous expenses has been deducted from the gross income of first year so that the cost benefit ratio is 1:1.37.The total cost may be deducted from the gross income year by year up to five year in easy installment to gain more profit. The present cost and returns to present worth compounding and discounting technique was used.

The present cost and returns to present worth compounding and discounting technique was used as stated in table -3 (Harpal Singh et.al 2005).

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