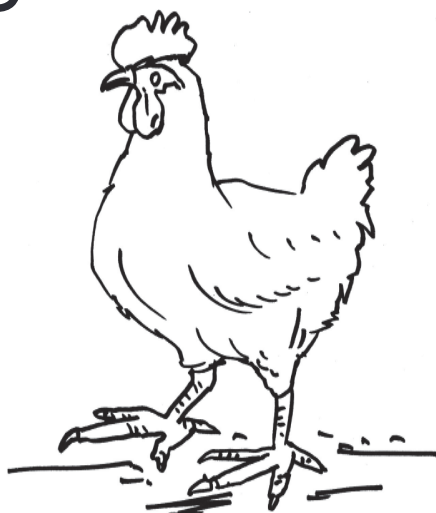


BROILER FARMING



1.0 INTRODUCTION

Poultry meat is an important source of high quality proteins, minerals and vitamins to balance the human diet. Specially developed varieties of chicken (broilers) are now available with the traits of quick growth and high feed conversion efficiency. Depending on the farm size, broiler farming can be a main source of family income or can provide subsidiary income and gainful employment to farmers throughout the year. Poultry manure is of high fertilizer value, which can be used for increasing yield of all crops.

The advantages of broiler farming are:

- Initial investment is a little lower than layer farming.
- Rearing period is 5-6 weeks only
- More number of flocks can be taken in the same shed.
- Broilers have high feed conversion efficiency i.e. the amount of feed required for unit body weight gain is lower in comparison to other livestock.

This project profile on broiler farming is based on the assumption that Day Old Chicks (DOC) will be procured in batches of 2500 at intervals of 2 weeks, i.e. two batches will be procured per month.

2.0 MARKET POTENTIAL

India has made considerable progress in broiler production in the last three decades. The broiler

production has sky rocketed at an annual growth rate of about 10% in 2012 has set a new record of broiler production i.e. 3.2 million tons. Similarly, the layer industry is showing increased growth due to increasing demand for protein with low costs.

In North East India, commercialization of poultry farming is yet to take deep roots due to problems on the inputs front. The Animal Husbandry and Veterinary Department caters to the requirement of poultry inputs and training in a limited way. It's the private sector based in the neighbouring states like West Bengal and Bihar, which is catering to the requirement of the Day- Old-Chicks (DOC) and feed in Assam. There is tremendous demand for broiler chicken in the region and a large portion of the demand is met from other states. The industry particularly the broiler sector has grown tremendously during the period. In comparison to the local chicken, broiler chicken has attained a significant rise in growth, because of quick maturity, less hen house days, easy operation and substantial economic return.

In respect of growth of poultry farming, there has been a phenomenal rise in the growth rate of improved poultry (fowls) population in the last one and half decade. As per a survey on consumption pattern of poultry products in India, in urban areas, the per capita consumption of eggs is estimated at 100 nos and 1200 gms of poultry meat per annum. With the increase in income levels, the per capita consumption is bound to increase in the years to come.

3.0 COST OF THE PROJECT

The estimated project cost is given below.

(Rs. in lacs)

Particulars	Amount (Rs)
Land & Site Development	0.00
Building & Civil Works	3.40
Equipment	1.58
Misc. Fixed Assets	0.90
Preliminary & pre-operative expenses	0.37
Contingencies & escalation @ 3%	0.18
Working capital	4.24
TOTAL	10.66

3.1 Land & Site Development: No cost has been considered for land & site development. It is assumed that the project will be set up in existing land.

3.2 Building & Civil Works: Details of expenses on building & civil works are given below.

Particulars	Area (Sqft)	Rate (Rs)	Amount (Rs)
Broiler Shed (Half brick wall, CGI roof, concrete floor; 1 sqft/bird)	3000	100	300000
Store Room (Brick wall, CGI roof, concrete floor)	100	400	40000
TOTAL			340000
Say (Rs. in lacs)			3.40

3.3 Equipment: Details of expenses on equipment are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Mini Feeder	100	125	12500
Medium Feeder	100	160	16000
Large Feeder	100	270	27000
Mini Drinker	100	70	7000
Bell Drinker	100	180	18000
Gas Brooder	5	3650	18250
Bokhari	10	3500	35000
Miscellaneous items	LS	LS	10000
Sub total			143750
Add: Transportation, installation, etc @ 10%			14375
TOTAL			158125
Say (Rs. in lacs)			1.58

3.4 Misc. Fixed Assets: Details of expenses on miscellaneous fixed assets are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Water Supply System (STW boring, 3 HP motor pump set, water tank, pipes & fittings)	1	75000	75000
Electrification	LS	LS	10000
Miscellaneous items	LS	LS	5000
TOTAL			90000
Say (Rs. in lacs)			0.90

3.5 Preliminary & Pre-operative Expenses: Details of preliminary & pre-operative expenses are given below.

Particulars	Amount (Rs)
Travelling expenses	20000
Professional & other fees	10000
Interest during implementation	1800
Miscellaneous expenses	5000
TOTAL	36800
Say (Rs. in lacs)	0.37

3.6 Contingencies & Escalation: Expenses on contingencies & escalation has been assumed at 3% of the cost of building & civil works, equipments and miscellaneous fixed assets.

3.7 Working Capital: Details of expenses on working capital are given below.

(Rs. in lacs)

Particulars	Period (Days)	Amount		
		Year 1	Year 2	Year 3
Day Old Chicks	45	1.15	1.15	1.15
Feeds	45	2.98	2.98	2.98
Power & fuel	30	0.01	0.01	0.01
Salary	30	0.09	0.09	0.09
Total		4.24	4.24	4.24
Working Capital Margin in Year 1 (100%)		4.24		

4.0 MEANS OF FINANCE

The means of finance for the project is estimated as below.

(Rs. in lacs)

Particulars	Percent	Amount (Rs)
<u>EQUITY</u>		
A. Equity from Promoters	40%	4.27
B. Subsidy from Central/State Govt.	-	
<u>DEBT</u>		
Term Loan from Banks/FIs	60%	6.40
TOTAL	100%	10.66

5.0 PROFITABILITY STATEMENT

(Rs. in lacs)

Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
<u>A. INCOME</u>					
Production capacity (kg/annum)	50160	54720	54720	54720	54720
Price of chicken (Rs/kg)	70	70	70	70	70
Income from sales/annum	35.11	38.30	38.30	38.30	38.30
<u>B. OPERATING EXPENSES</u>					
Day Old Chicks	9.36	9.36	9.36	9.36	9.36
Feeds	24.19	24.19	24.19	24.19	24.19
Power & fuel	0.17	0.17	0.17	0.17	0.17
Salary	1.08	1.09	1.10	1.11	1.12
Repair & Maintenance	0.07	0.08	0.09	0.10	0.11
Insurance	0.18	0.18	0.18	0.18	0.18
Miscellaneous Expenses	0.07	0.08	0.08	0.08	0.08
Total Operating Expenses	35.12	35.15	35.17	35.19	35.21

Less: Working expenses capitalised	4.24	0.00	0.00	0.00	0.00
Operating profit	4.23	3.16	3.14	3.12	3.10
C. FINANCIAL EXPENSES					
Depreciation	0.16	0.16	0.16	0.16	0.16
Interest on Term Loan	0.51	0.43	0.31	0.19	0.07
Net Profit	3.56	2.57	2.67	2.77	2.87
Net cash accruals	3.72	2.73	2.83	2.93	3.03
Principal Repayment	0.38	1.51	1.51	1.51	1.51

5.1 Production Capacity: Production of broiler chicken per annum is estimated as below.

No. of birds/batch	1500			
No. of batches/month	2			
Duration of a cycle (Months)	1.5			
Schedule of batches (No. of birds) & disposal of chicks	Year 1		Year 2 onwards	
	In	Out	In	Out
Month 1	3000		3000	3000
Month 2	3000	3000	3000	3000
Month 3	3000	3000	3000	3000
Month 4	3000	3000	3000	3000
Month 5	3000	3000	3000	3000
Month 6	3000	3000	3000	3000
Month 7	3000	3000	3000	3000
Month 8	3000	3000	3000	3000
Month 9	3000	3000	3000	3000
Month 10	3000	3000	3000	3000
Month 11	3000	3000	3000	3000
Month 12	3000	3000	3000	3000
No. of birds for sale per annum (Scheduled)		33000		36000
Mortality rate of chicks (5%)		1650		1800
No. of birds available for sale per annum		31350		34200
Avg. weight of birds (kg)		1.60		1.60
Total production of chicken per annum (kg)		50160		54720

5.2 Day Old Chicks: Expenses on purchase of day old chicks are estimated as below.

Particulars	Quantity	Rate (Rs)	Amount (Rs)
Expenses on purchase of day old chicks per annum	36000	26	936000

5.3 Feeds: Expenses on purchase of feeds is estimated as below.

Particulars	No. of birds	Feed (kg/bird)	Rate (Rs/kg)	Amount (Rs)
Expenses on feeds per annum	36000	3.20	21	2419200

5.4 Power & Fuel: Expenses on power & fuel is as below.

Particulars	Quantity	Power (Kw)	Total (Kw)	hrs/day	kwh/day
Pump Set (3 HP)	1	2.24	2.24	1	2.24
General Lighting	14	0.10	1.38	8	11.02
Total power requirement/ day (Kw)					13.26
Days/annum	360				
Rate per unit (Rs)	3.50				
Expenses on power per annum (Rs)	16708				

5.5 Salary: Expenses on salary in the 1st year is estimated as given below. It is assumed that expenses on salary will increase @ 1% every subsequent year.

Particulars of Employees	Numbers	Salary/Month (Rs)	Cost/annum (Rs)
Manager (Self)	-	-	-
Helpers	3	3000	108000
Expenses on salary in the 1st year (Rs)			108000

5.6 Repair & Maintenance: Expenses on repair & maintenance in the 1st year is estimated as given below. It is assumed that expenses on salary will increase @ 10% every subsequent year.

(Rs. in lacs)			
Particulars	Cost (Rs)	Rate	Amount (Rs)
Building & Civil Works	3.40	1%	0.03
Equipment	1.58	2%	0.03
Misc. Fixed Assets	0.90	1%	0.01
Expenses on repair & maintenance in year 1			0.07

5.7 Insurance: Insurance expense is estimated as below.

Particulars	No. of birds/annum	Rate (Rs/bird)	Amount (Rs)
Expenses on insurance per annum	36000	0.50	18000

5.8 Miscellaneous Expenses: Miscellaneous expenses have been assumed at 0.2% of income.

5.9 Depreciation: Depreciation has been calculated by straight line method. The details of calculation are given below.

(Rs in lacs)			
Description	Cost (Rs)	Rate	Amount/annum (Rs)
Pig Sty	3.40	3.34%	0.11
Misc. Fixed Assets	0.90	5.28%	0.05
TOTAL			0.16

5.10 Interest on Term Loan & Principal Repayment: Interest rate has been assumed at 8%. Duration of Loan repayment has been considered for a period of 5 years including moratorium period of 9 months with equal monthly instalments. The details of calculation are given below.

(Rs in lacs)						
Month	Year	1	2	3	4	5
Month 1	Opening balance	6.40	6.02	4.52	3.01	1.51
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest (8%)	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.90	4.39	2.89	1.38
Month 2	Opening balance	6.40	5.90	4.39	2.89	1.38
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.77	4.27	2.76	1.25
Month 3	Opening balance	6.40	5.77	4.27	2.76	1.25
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.65	4.14	2.63	1.13
Month 4	Opening balance	6.40	5.65	4.14	2.63	1.13
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.52	4.01	2.51	1.00

Month 5	Opening balance	6.40	5.52	4.01	2.51	1.00
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.40	3.89	2.38	0.88
Month 6	Opening balance	6.40	5.40	3.89	2.38	0.88
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.27	3.76	2.26	0.75
Month 7	Opening balance	6.40	5.27	3.76	2.26	0.75
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.04	0.03	0.02	0.01
	Closing balance	6.40	5.14	3.64	2.13	0.63
Month 8	Opening balance	6.40	5.14	3.64	2.13	0.63
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.03	0.02	0.01	0.00
	Closing balance	6.40	5.02	3.51	2.01	0.50
Month 9	Opening balance	6.40	5.02	3.51	2.01	0.50
	Repayment	0.00	0.13	0.13	0.13	0.13
	Interest	0.04	0.03	0.02	0.01	0.00
	Closing balance	6.40	4.89	3.39	1.88	0.38
Month 10	Opening balance	6.40	4.89	3.39	1.88	0.38
	Repayment	0.13	0.13	0.13	0.13	0.13
	Interest	0.04	0.03	0.02	0.01	0.00
	Closing balance	6.27	4.77	3.26	1.76	0.25
Month 11	Opening balance	6.27	4.77	3.26	1.76	0.25
	Repayment	0.13	0.13	0.13	0.13	0.13
	Interest	0.04	0.03	0.02	0.01	0.00
	Closing balance	6.15	4.64	3.14	1.63	0.13
Month 12	Opening balance	6.15	4.64	3.14	1.63	0.13
	Repayment	0.13	0.13	0.13	0.13	0.13
	Interest	0.04	0.03	0.02	0.01	0.00
	Closing balance	6.02	4.52	3.01	1.51	0.00
Principal Repayment		0.38	1.51	1.51	1.51	1.51
Interest		0.51	0.43	0.31	0.19	0.07

6.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5	TOTAL
Profit After Tax (Net Profit)	3.56	2.57	2.67	2.77	2.87	
Depreciation	0.16	0.16	0.16	0.16	0.16	
Interest	0.51	0.43	0.31	0.19	0.07	
Total	4.23	3.16	3.14	3.12	3.10	16.73
Interest	0.51	0.43	0.31	0.19	0.07	
Loan repayment	0.38	1.51	1.51	1.51	1.51	
Total	0.89	1.93	1.81	1.69	1.57	7.89
DSCR	4.77	1.63	1.73	1.84	1.97	

Average DSCR = 2.12

7.0 BREAK EVEN POINT (BEP)

		(Rs. in lacs)		
Year	1	2	3	
A. Net sales (Rs. lakh)	35.11	38.30	38.30	
B. Variable cost				
Day Old Chicks	9.36	9.36	9.36	
Feeds	24.19	24.19	24.19	
Power & fuel	0.17	0.17	0.17	
Insurance	0.18	0.18	0.18	
Miscellaneous expenses	0.07	0.08	0.08	
Total variable cost	33.97	33.98	33.98	
C. Contribution (A-B)	1.14	4.33	4.33	
D. Fixed & Semi-fixed Costs				
Salary	1.08	1.09	1.10	
Repair & maintenance	0.07	0.08	0.09	
Interest on Term Loan	0.51	0.43	0.31	
Depreciation	0.16	0.16	0.16	
Total fixed cost	1.83	1.76	1.66	
E. BREAK EVEN POINT	159.72%	40.68%	38.33%	
F. Cash Breakeven Point	145.62%	36.95%	34.61%	

8.0 INTERNAL RATE OF RETURN (IRR)

		(Rs. in lacs)					
Year	0	1	2	3	4	5	
CASH OUTFLOW							
Capital Expenditure	5.88	0.00	0.00	0.00	0.00	0.00	
Working Capital	0.00	4.24	0.00	0.00	0.00	0.00	
Total (A)	5.88	4.24	0.00	0.00	0.00	0.00	
CASH INFLOW							
Profit After Tax		3.56	2.57	2.67	2.77	2.87	
Add: Depreciation		0.16	0.16	0.16	0.16	0.16	
Add: Interest		0.51	0.43	0.31	0.19	0.07	
Add: Salvage Value (15%)						0.88	
Total (B)	0.00	4.23	3.16	3.14	3.12	3.98	
NET FLOW (B-A)	-5.88	-0.01	3.15	3.14	3.12	3.98	

IRR = 27%

MACHINERY SUPPLIERS

- (a) Mittal Enterprises Poultry
No. 13/13, Shakti Nagar, Delhi - 110 007, Delhi, India
- (b) Safe Poultries
No. 448, Shahbad Daulatpur, Bawana Road, Near Delhi Engineering College, New Delhi - 110 042, Delhi, India
- (c) White Meat Co
No. 58, Poultry Market, Ghazipur, Delhi - 110 096, Delhi, India