

**MODEL PROJECT
ON
COMMERCIAL BROILER
FARMING
(10000 Capacity)**

POULTRY FARMING

INTRODUCTION

Agriculture and allied sector is the backbone of Indian economy as this sector not only provides food and nutritional security but also creates job opportunity for two-thirds of the population. The agriculture and allied sector contribution in National GDP is about 17.32 percent with annual growth of 4.1 percent (Economic Survey, 2016-17). In agriculture and allied sector, Indian poultry sector is the major game changer with an overall growth of about 7-8% per annum (0.7% in National GDP). Among various agriculture and allied farming, poultry farming is one of the most efficient components of the farmer's economy as it provides eggs, meat, feathers and manures with small capital investment and fewer workforces.

In the last 4 decades, poultry farming in India has been transformed from a mere tool of supplementary income and nutritious food for the family to a major commercial activity generating the required revenue. From backyard activity to major commercial operation, the poultry sector has undergone a paradigm shift. A spectacular progress has been made from subsistence to sustainable production system. India has emerged as a self-reliant, technology driven country with the capability to produce every essential input for successful poultry farming including indigenous genetic resource and breeding, world class poultry vaccines and medicines, specific, pathogen free eggs (SPF), farms and hatchery automation systems, pelleted feed, egg processing, poultry processing, nationwide network of disease diagnostic laboratories and facilities for entrepreneurial development and training in both private and public sectors. Indian poultry industry has been a major contributor to the food-processing sector in the country. Changing food habits, rising income of the middle class Indian, presence of private players, rising market demand of the Indian poultry produce in the export market are some of the contributing factors to the growth of the industry.

Poultry is the most organized sector in animal agriculture, worth rupees one lakh crore. The growth is 6-8% in layers and 10-12% in broilers per year against the growth of agriculture as a whole which is around 2.5%. The Indian poultry market, consisting of broilers and eggs was worth INR 1,494 Billion in 2017. The market is further projected to reach INR 3,775 Billion by 2023. This transformation has involved a sizeable investment in breeding, hatching, rearing and processing activities. As per the reports of Indian Poultry Industry, the annual production of table eggs has gone up to 84 billion from few millions and the poultry meat production has gone up to 4.2MMT from nowhere. However, the per capita consumption of 68 eggs and 3.2 kg of chicken is much lesser than the recommendation of the Nutritional Advisory Committee, ICMR i.e. 180 eggs and 10.8 kg poultry meat per annum, which means that the Indian poultry market is laden with opportunities. Adult population in most developed countries consume over 240 eggs and 20 kg of chicken per annum.

India has 1.3 billion people and the number is growing every year. The focus is on "Development" meaning Good Food, Better Health & Living conditions to everyone. People spend more money on food when they earn more. Healthy food at attractive price will be the issue in focus. Eggs and chicken are accepted by all communities and are available at the most reasonable prices.

SUGGESTED VACCINATION SCHEDULE (BROILER)

<u>Age</u>	<u>Vaccine</u>	<u>Route of administration</u>
0 day	Marek's disease (HVT)	Subcutaneous
7 th day	B1-ND vaccine or Lasota NDV	Eye drop
10 th or 14 th day	IBD (Int) Live / IBD (Int +) Live	Eye drop
21 st day	Lasota NDV (live)	Drinking water

NOTE:

1. All vaccinations should be done in consultation with the experts.
2. Time schedule for IBD varies with the occurrence of the disease in the area. So, proper timing of vaccination should be fixed in consultation with the local Veterinarian.

A model economics for broiler farming with 10000 bird capacity is given below. This is indicative and applicable input and output costs and the parameters observed at the field level may be incorporated. An entrepreneur willing to establish a broiler farm may refer this project report and customize the same asper the local condition, since the Techno-Economic parameters may differ on a case by case basis.

Sl. No.	Parameters	UoM	Value
1	CAPITAL INVESTMENT		
I	Land	Acre	1
A	Cost of land development / acre	Rs.	15000
B	Cost of fencing / acre	Rs.	30000
II	Civil Construction		
a	Cost of shed construction / sq.ft.	Rs.	230
b	Cost of store room construction / sq.ft.	Rs.	250
c	Cost of go-down construction / sq.ft.	Rs.	250
III	Water Supply system		
a	Borewell / Tubewell	Rs.	90000
b	Pump & Pipe line	Rs.	40000
c	Sump / Over head Tank	Rs.	20000
d	Foggers @ 33 / 2000 birds	Rs.	40
e	Sprinklers @ 7 / 2000 birds	Rs.	75
IV	Electrification		
a	Cost of electrification (as % of civil cost)	%	3
B	DG Set - 15 KVA	Rs.	240000
V	Plant & Machinery		
A	Cost of equipment / bird	Rs.	30
2	RECURRING EXPENDITURE/BATCH		
a	Cost / Day Old Chick	Rs.	32
b	Cost of feed / kg	Rs.	30
C	Cost of medicine, vaccine etc. / bird / batch	Rs.	3
D	Cost of litter / bird / batch	Rs.	0.3

E	Cost of labour / bird / batch	Rs.	1.5
F	Energy Charges / bird / batch	Rs.	1
3	Birds per batch	No	10000
4	Rearing period	Week	5.5
5	Batches reared per year	No	7
6	Batches sold per year	No	7
7	Space requirement per bird	sq.ft.	1.1
8	Area of store room	sq.ft.	500
9	Mortality during rearing	%	4
10	Supply for free chicks from hatchery	%	2
11	DOC to be purchased / batch	No	10215
12	Feed requirement / bird / batch	kg	3.1
13	Average body weight / bird at sale	kg	2
14	Sale price / kg live weight	Rs.	82
15	Sale price / bird	Rs.	164
16	Sale price of manure / bird / batch	Rs.	0.7
17	Gunny bags / MT of feed	No	20
18	Sale price / gunny bag	Rs.	10

FLOCK PROJECTION CHART

Year	No. of batches reared	No. of batches sold
1	7	7
2	7	7
3	7	7
4	7	7
5	7	7
6	7	7
7	7	7

PROJECT AT A GLANCE

SI No	PARTICULARS	UNIT	PARAMETERS
1	Category of the Project		ARD
2	Type of the Project		Commercial Broiler Farming
3	Unit Size	No	10000
4	Product		Live Birds
5	Total Cost of the Project	INR	Rs. 4,793,755
6	Bank Loan	INR	Rs. 3,595,316
7	Promoter's contribution	INR	Rs. 1,198,439
8	Financial Indicators		
	BCR at 15% DF	Ratio	1.09
	NPW 15% DF (Rs)	INR	Rs. 4,584,182
	IRR (%)	%	41%
	DSCR	No	2.79
9	Interest Rate	%	11%
10	Moratorium	Months	12
11	Repayment Period	Months	72
12	Term Loan EQI (Rs.)	INR	Rs. 149,805

PROJECT COST

A	CAPITAL INVESTMENT					
	Particulars	Specifications		Unit	Unit Cost	Total cost (Rs.)
1	Land	1	Acre		Available	0
a	Land Development	1	Acre		15000	15,000
b	Fencing	1	Acre		30000	30,000
					Sub Total	45,000
2	Civil Construction					
a	Broiler Shed	1.10	sq.ft	10000	230	2,530,000
b	Office-cum-Store Room		sq. ft	500	250	125,000
					Sub Total	2,655,000
3	Water Supply system					
a	Borewell / Tubewell		LS	1	90000	90,000
b	Pump & Pipe line		LS	1	40000	40,000
c	Sump / Over head Tank		4000 Ltrs	1	20000	20,000
d	Foggers @ 33 / 2000 Birds	33	2000	165	40	6,600
e	Sprinklers @ 7 / 2000 Birds	7	2000	35	75	2,625
					Sub Total	159,225
4	Electrification					
a	Installation & Fitting	3%	of civil cost			79,650

b	DG Set		15 KVA	1	240000	240,000
					Sub Total	319,650
5	Plant & Machinery					
A	Equipment			10000	30	300,000
					Sub Total	300,000
	Total Capital Cost					3,478,875
B. RECURRING EXP./BATCH						
A	Chick cost			10215	32	326,880
B	Feed cost			31000	30	930,000
C	Medicine, vaccine cost			10000	3	30,000
D	Litter cost			10000	0.3	3,000
E	Labour cost			10000	1.5	15,000
F	Power & fuel charges			10000	1	10,000
	Total Recurring Expenditure					1,314,880
C	TOTAL PROJECT COST					4,793,755
D	MARGIN MONEY	25%				1,198,439
E	BANK LOAN	75%				3,595,316

PROFITABILITY STATEMENT

Sl. No	Particulars	1st yr.	2nd yr.	3rd yr.	4th yr.	5th yr.	6th yr.	7th yr.	TOTAL
I	COSTS								
A	Recurring costs								
a	Cost of chicks	2,288,160	2,288,160	2,288,160	2,288,160	2,288,160	2,288,160	2,288,160	16,017,120
b	Cost of Feed	6,510,000	6,510,000	6,510,000	6,510,000	6,510,000	6,510,000	6,510,000	45,570,000
c	Medicine & Vaccine Cost	210,000	210,000	210,000	210,000	210,000	210,000	210,000	1,470,000
d	Litter	21,000	21,000	21,000	21,000	21,000	21,000	21,000	147,000
e	Labour charges	105,000	105,000	105,000	105,000	105,000	105,000	105,000	735,000
f	Power bill	70,000	70,000	70,000	70,000	70,000	70,000	70,000	490,000
		9,204,160	9,204,160	9,204,160	9,204,160	9,204,160	9,204,160	9,204,160	64,429,120
II	BENEFITS								
A	Sale of birds	11,480,000	11,480,000	11,480,000	11,480,000	11,480,000	11,480,000	11,480,000	80,360,000
B	Sale of Manure	49,000	49,000	49,000	49,000	49,000	49,000	49,000	343,000
C	Sale of gunny bags	43,400	43,400	43,400	43,400	43,400	43,400	43,400	303,800
	TOTAL BENEFIT	11,572,400	11,572,400	11,572,400	11,572,400	11,572,400	11,572,400	11,572,400	81,006,800