

# **POULTRY FARM**

## **1. INTRODUCTION:**

Poultry has an important role in India as eggs and meats are the important and comparatively cheap source of protein and vitamins. Chicken is most widely accepted meat in India. Eggs have become an important ingredient of morning breakfast for a large number of families in urban areas. So overall the poultry business seems to be a good option for someone who wants to start a new business with less investment.

## **2. PRODUCT & ITS APPLICATION:**

Chicken is widely consumed meat across India. In many regions, various dishes are prepared from chicken meat. Moreover, eggs from chicken too are widely accepted because of its nutrients at cheaper rate. Morning breakfast to various other food preparations, bakery products, eggs are largely used in Indian population. Second important thing is, there is no religious taboo for chicken while it is there for beef and pork. As Chicken meat and eggs are good and cheap source of proteins, vitamins and other nutrients, they are extensively used in day to day diet of Indian people.

## **3. DESIRED QUALIFICATIONS FOR PROMOTER:**

Successful running this project does not require any specific qualification.

## **4. INDUSTRY LOOKOUT AND TRENDS**

Today India is the world's fifth largest egg producer and the eighteenth largest producer of broilers and its per capita consumption of such products are poor - 37 eggs and 1 kg of poultry meat per capita per annum. The growth of the Poultry Industry in India is marked by an increase in the size of the poultry farm. In past years broiler farms had produced on

average a few hundred birds (200-500 chicks) per cycle. Small units are probably finding themselves at problem because of high feed and transport costs, expensive vaccines, and veterinary care services and the non-availability of credit. Some small units are reported to be shifting from layer to broiler production because output in broiler units can be realized in six weeks. India is the fifth largest producer of egg and ninth largest producer of poultry meat. India was well positioned as 17th in the world poultry production. The Indian poultry production is considered to be the cheapest in the world. The main factors of rising production in country are:

- The nation is a market with Investment friendly ambience.
- Indian Poultry Industry is booming and emerging as the world's 2nd largest market.
- The growth rate is growing at the phenomenal rate of 12 to 15% every year.
- Poultry Industry in India is constantly on the rise due to the use of modern techniques and changing from live bird to fresh chilled and frozen product market.
- A new path began with the integrated poultry operations throughout the country.

With the rise of middle class and increased urbanization, major populations prefer to go for non-vegetarian. Today about 3 million farmers and 15 million agrarian farmers are employed in the poultry industry that are usually growing poultry ingredients for feed and contribute about Rs 26,000 crore to the national income.

There is a considerable variation in per capita consumption between rural and urban areas and also across the region. Per capita consumption of eggs is only 7.7 per annum in rural areas compared with 17.8 per annum in urban areas. In seven states, per capita consumption is less than 3.5 per annum. Similarly, per capita consumption of poultry meat is 0.24 kg in rural areas and 1.08 kg in urban areas. Today units with fewer than 5,000 birds are becoming rare, and units with 5,000 to 50,000 birds per week cycle are common in the poultry management. Similarly, in the layer farms, units with a flock size of 10,000 to 50,000 birds have become common.

## **5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:**

India has made tremendous progress in broiler production during the last three decades and the broiler population in the country during 2011-12 stood at 2300 million. Today India is the fifth largest producer of broiler meat in the world with an annual production of 2.47 million MT. Despite this achievement, the per capita availability of poultry meat in India is only 2.96 kg which is way below the ICMR recommendation of 11 kg meat per capita per annum. There is a huge gap and demand for these products. Owing to the considerable growth in broiler industry, high quality chicks, equipment, vaccines and medicines, technically and professionally competent guidance are available to the farmers. The management practices have improved and disease and mortality incidences are reduced to a great extent. Overall environment for poultry farming is getting better every day.

## **6. RAW MATERIAL REQUIREMENTS:**

Raw material required for this is day old chickens. Apart from these, there will be requirement of broiler starter and finisher feed, vaccines, medicines etc.

## **7. MANUFACTURING PROCESS:**

Poultry farming is the process of raising domesticated birds such as chickens, ducks, turkeys and geese for the purpose of farming meat or eggs for food. Chickens raised for eggs are usually called layers while chickens raised for meat are often called broilers. For a broiler chicken to become market size it requires 45 to 60 days and thus 4-5 cycle of business can be done during a year. Layers are raised in cage, as in furnished cage or through yarding. Broilers are raised in free range. Here an addition of organic approach can be implemented where feed and water are controlled and those inputs go which are organic and have no or little (approved) chemicals. Proper medication, water, antibiotics, feed with appropriate nutrients, vaccines on specified occasions etc. are to be maintained on daily basis as per standard defined by regulators. Health check up on regular interval has to be done as per schedule. In yarding method, predators have to be restricted to save chickens from being harmed. Laying hens are routinely beak-trimmed at 1 day of age to reduce the damaging

effects of aggression, feather pecking and cannibalism. The beak trimming process has to be done as per defined by regulators and animal health practitioners. Farming of chickens on an industrial scale relies largely on high protein feeds derived from soyabeans. Two kilograms of grain must be fed to poultry to produce one kilogram of weight gain.

## 8. MANPOWER REQUIREMENT:

The enterprise requires 2employees as detailed below:

Sr. No.	Designation of Employees	Salary Per Person	Monthly Salary ₹	Number of employees required				
				Year-1	Year-2	Year-3	Year-4	Year-5
	<b>Variable Labour: Workers</b>							
1	Un Skilled Labours	₹ 5,000.00	₹ 5,000.00	1	1	1	1	1
	<i>sub-total</i>		₹ 5,000.00	1.00	1.00	1.00	1.00	1.00
	<b>Fixed Staff:</b>							
1	Entrepreneur	₹ 5,000.00	₹ 5,000.00	1	1	1	1	1
	<i>sub-total</i>		₹ 5,000.00	1	1	1	1	1
	<b>Total</b>		₹ 10,000.00	2	2	2	2	2

## 9. IMPLEMENTATION SCHEDULE:

The project can be implemented in 1.5 – 2months' time as detailed below:

Sr. No.	Activity	Time Required (in months)
1	Acquisition of premises	0.50
2	Construction (if applicable)	0.50
3	Procurement & installation of Plant & Machinery	0.50
4	Arrangement of Finance	0.50
5	Recruitment of required manpower	0.50
	Total time required <i>(some activities shall run concurrently)</i>	1.5 – 2.00

## 10. COST OF PROJECT:

The project shall cost ₹ 3.80lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land	1.00
2	Cost of Construction of brooder shed, grower shed made out of brick, wood with cemented floor, roof covered with GCI Sheet	0.90
3	Plant & Machinery	0.84
4	Furniture, other Misc. Equipments	0.00
5	Other Assets including Preliminary / Pre-operative expenses	0.08
6	Margin for Working Capital	0.97
	<b>Total</b>	<b>3.80</b>

#### 11. MEANS OF FINANCE:

Bank term loans are assumed @ 60% of fixed assets. The proposed funding pattern is as under:

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	0.95
2	Bank Finance	2.85
	<b>Total</b>	<b>3.80</b>

#### 12. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹0.97lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	0.49	0.25	0.12	0.37
2	Receivables	0.24	0.25	0.06	0.18
3	Overheads	0.24	100%	0.24	0.00
4	Creditors	-		0.00	0.00
	<b>Total</b>	<b>0.97</b>		<b>0.43</b>	<b>0.55</b>

#### 13. LIST OF MACHINERY REQUIRED:

A detail of important machinery is given below:

Sr. No.	Particulars	UOM	Qty	Rate (₹ in Lacs)	Value (₹ in Lacs)
	<b>Plant &amp; Machinery / equipments</b>				
<b>a)</b>	<b>Main Machinery</b>				
1	Poultry Equipment - Feeder, water brooder for chicks and grower		LS	₹ 0.72	₹ 0.72
2	Miscellaneous Items		LS	₹ 0.12	₹ 0.12
	<b>Other Assets</b>				
1	preliminary and preoperative expense and installation		LS	₹ 0.08	₹ 0.08
	<b>Total</b>				<b>₹ 0.92</b>

All the machines and equipments are available from local manufacturers. The entrepreneur needs to ensure proper selection of product mix and proper type of machines and tooling to have modern and flexible designs. It may be worthwhile to look at reconditioned imported machines, dies and tooling. Some of the machinery and dies and tooling suppliers are listed here below:

1. Fry-Tech Food Equipments Private Limited  
S. No. 4, Raviraj Industrial Estate,  
Bhikhubhai Mukhi Ka Kuwa Bharwadvash,  
Ramol, Ahmedabad - 380024,  
Gujarat, India
2. Hindustan Vibrotech Pvt. Ltd.  
Office No. 2, Ground Floor,  
Vrindavan Building, Vile Parle East,  
Mumbai – 400057,  
Maharashtra, India
3. Electrons cooling systems Pvt. Ltd.

S-27, SIDCO Industrial Estate  
Kakkalur Industrial Estate  
Tiruvallur – 602003,  
Tamil Nadu, India

4. Springboard Enterprises India Ltd.

1st, 2nd & 3rd Floor,  
Plot No. 7, 8 & 9,  
Garg Shopping Mall,  
Service Centre, Rohini Sector 2  
New Delhi – 110085,  
Delhi, India

5. Flour Tech Engineers Private Limited

Plot No. 182, Sector 24,  
Faridabad - 121005,  
Haryana, India

6. P Square Technologies

3, Swami Mahal,  
Gurunanak Nagar,  
Off. Shankarsheth Road Bhavani Peth,  
Pune - 411002,  
Maharashtra, India

7. Ricon Engineers

10 To 13, Bhagwati Estate,  
Near Amraiwadi Torrent Power,  
Behind Uttam Dairy,  
Rakhial, Ahmedabad - 380023,  
Gujarat, India

8. Kamdhenu Agro Machinery

Plot No. 6, Near Power House,  
Wathoda Road Wathoda,  
Nagpur - 440035,  
Maharashtra, India

#### 14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	4.85	5.65	6.46	7.27	8.08
3	Raw Materials & Other direct inputs	₹. In Lacs	2.72	3.18	3.63	4.08	4.54
4	Gross Margin	₹. In Lacs	2.12	2.48	2.83	3.19	3.54
5	Overheads except interest	₹. In Lacs	1.00	1.06	1.19	1.23	1.25
6	Interest @ 10 %	₹. In Lacs	0.28	0.28	0.19	0.14	0.11
7	Depreciation @ 30 %	₹. In Lacs	0.25	0.18	0.13	0.10	0.08
8	<b>Net Profit before tax</b>	₹. In Lacs	<b>0.59</b>	<b>0.95</b>	<b>1.33</b>	<b>1.72</b>	<b>2.10</b>

The basis of profitability calculation:

This unit will have capacity of 5000 Chicken raising capacity and Sales of 8300 KGS of Chicken. The growth of selling capacity will be increased 10% per year. (This is assumed by various analysis and study; it can be increased according to the selling strategy.)

Energy Costs are considered at Rs 7 per Kwh and fuel cost is considered at Rs. 65 per litre. The depreciation of plant is taken at 10-12 % and Interest costs are taken at 14 -15 % depending on type of industry.

#### 15. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 38.54% of projected capacity as detailed below:



Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	8.08
2	Variable costs	₹. In Lacs	4.54
3	Fixed costs incl. interest	₹. In Lacs	1.36
4	$BEP = FC/(SR-VC) \times 100 =$	% of capacity	38.54%

## 16. STATUTORY / GOVERNMENT APPROVALS

The Ministry of Food Processing Industries has been operating several plan schemes for the development of processed food sector in the country during the 10th Plan. One of the schemes relates to the Technology Up-gradation/ Establishment/ Modernization of food processing industries.

The Indian food processing industry is regulated by several laws which govern the aspects of sanitation, licensing and other necessary permits that are required to start up and run a food business. The legislation that dealt with food safety in India was the Prevention of Food Adulteration Act, 1954 (hereinafter referred to as "**PFA**"). The PFA had been in place for over five decades and there was a need for change due to varied reasons which include the changing requirements of our food industry. The act brought into force in place of the PFA is the Food Safety and Standards Act, 2006 (hereinafter referred to as "**FSSA**") that overrides all other food related laws.

FSSA initiates harmonization of India's food regulations as per international standards. It establishes a new national regulatory body, the Food Safety and Standards Authority of India (hereinafter referred to as "**FSSAI**"), to develop science based standards for food and to regulate and monitor the manufacture, processing, storage, distribution, sale and import of food so as to ensure the availability of safe and wholesome food for human consumption. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

**All food imports will therefore be subject to the provisions of the FSSA and rules and regulations which as notified by the Government on 5th of August 2011 will be applicable.**

### **Key Regulations of FSSA**

- A. Packaging and Labelling
- B. Signage and Customer Notices
- C. Licensing Registration and Health and Sanitary Permits

## **17. BACKWARD AND FORWARD INTEGRATIONS**

The objective of the scheme is to provide effective and seamless backward and forward integration for processed food industry by plugging the gaps in supply chain in terms of availability of raw material and linkages with the market. Under the scheme, financial assistance is provided for setting up of primary processing centers/ collection centers at farm gate and modern retail outlets at the front end along with connectivity through insulated/ refrigerated transport.

The Scheme is applicable to perishable horticulture and non-horticulture produce such as, fruits, vegetables, dairy products, meat, poultry, fish, Ready to Cook Food Products, Honey, Coconut, Spices, Mushroom, Retails Shops for Perishable Food Products etc. The Scheme would enable linking of farmers to processors and the market for ensuring remunerative prices for agri produce.

The scheme is implemented by agencies/ organizations such as Govt. / PSUs/ Joint Ventures/ NGOs/ Cooperatives/ SHGs / FPOs / Private Sector / individuals etc.

### **Backward Linkage:**

- Integrated Pack-house(s) (with mechanized sorting & grading line/ packing line/ waxing line/ staging cold rooms/cold storage, etc.)
- Pre Cooling Unit(s)/ Chillers
- Reefer boats
- Machinery & equipment for minimal processing and/or value addition such as cutting, dicing, slicing, pickling, drying, pulping, canning, waxing, etc.
- Machinery & equipment for packing/ packaging.

**Forward Linkage:**

- Retail chain of outlets including facilities such as frozen storage/ deep freezers/ refrigerated display cabinets/cold room/ chillers/ packing/ packaging, etc.
- Distribution center associated with the retail chain of outlets with facilities like cold room/ cold storage/ ripening chamber.

**18. TRAINING CENTERS AND COURSES**

There are few specialized Institutes provide degree certification in Food Technology, few most famous and authenticate Institutions are as follows:

1. Indian Institute of Food Science & Technology,  
Plot No.1, Near Maa-Baap ki Dargah, Opp to Nath Seeds,  
Paithan Road Aurangabad  
Aurangabad - 431005  
Maharashtra, India
2. MIT College of Food Technology, Pune  
Gate.No.140, Raj Baugh Educational Complex,  
Pune Solapur Highway,  
Loni Kalbhor, Pune – 412201  
Maharashtra, India
3. CSIR - Central Food Technological Research Institute (CFTRI)  
Cheluvamba Mansion, Opp. Railway Museum,  
Devaraja Mohalla, CFTRI Campus, Kajjihundi, Mysuru  
Karnataka – 570020

Udyamimitra portal ( link : [www.udyamimitra.in](http://www.udyamimitra.in) ) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

**Disclaimer:**

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.