

1 POULTRY PROCESSING

1.1 Introduction

Poultry farms are increasing steadily. Many government agencies are encouraging poultry farming and even short term training courses are organised regularly. Such farms have generated considerable employment opportunities in semi urban and rural areas. Marketing of poultry birds is expensive and death of birds during transit is the main bottleneck. This compels most of the poultry farms to concentrate on nearby markets even if it means less prices. Instead, if these birds are processed after dressing and packed in tins then transportation is easier, shelf life of the product goes up and the product is more hygienic.

1.2 Objective

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of poultry processing. This model report will serve as guidance to the entrepreneurs on starting up such a new project and basic technical knowledge for setting up such a facility.

1.3 Raw Material Availability

The most critical raw material would be good quality poultry birds. Prior arrangements for regular supply are advisable. Other materials like spices and salt, citric acid, garlic, onion, tomatoes and coriander shall also be required in small quantities.

1.4 Market Opportunities

Number of non-vegetarians is steadily increasing year after year and because of changing social structure, eating non vegetarian food is no more a taboo. Even amongst the non vegetarians, various food and snack preparations made from chicken are very popular. Increase in the disposable incomes of people, changing lifestyles and preference for instant or convenience food has seen many new products becoming very popular during last few years. Likewise, number of star hotels, exclusive restaurants and other eateries are also going up year after year. Clubs, canteens, caterers and flight kitchens is yet another growing market.

Longer shelf life and hygienically packed poultry products would be preferred by many. Proper marketing network supported by publicity would be very important.

1.5 Project description

1.5.1 Applications

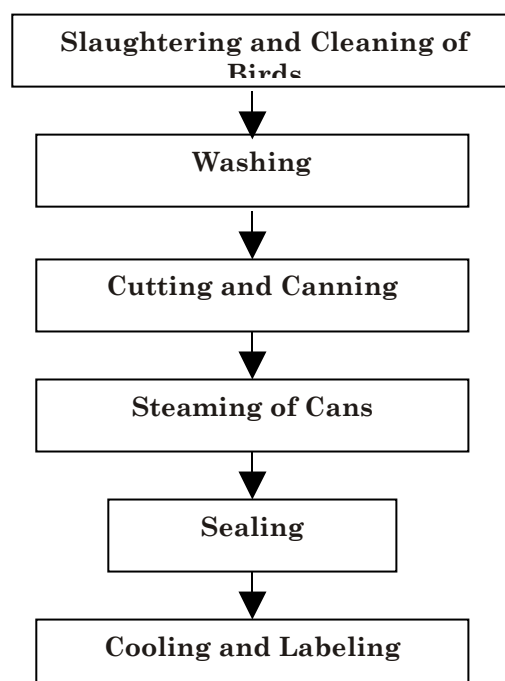
Good quality poultry birds are slaughtered and after dressing, they are cooked and packed in cans. This ensures longer shelf life and also takes care of problems associated with transportation of live birds, higher costs and loss of birds during transit. Proposed processing plant must be located in the vicinity of poultry farms.

1.5.2 Capacity of the Project

The total capacity of the unit is 153 MT per annum.

1.5.3 Manufacturing process

The process starts with slaughtering of birds and subsequently their feathers, lungs, kidneys, head and other unwanted parts are removed and balance portion is thoroughly washed in water. Then this cleaned portion is cut into required sizes and packed into sterilised tins. They are canned either with 3 to 5% brine or with curried vegetables. Then these tins are subjected to live steam in an exhaust box for around 15 minutes at a temperature of about 60-65 C. Then the cans are sealed air tight and are further processed in retort at a pressure of 10 to 15 lbs. for about 40-45 minutes. Then the cans are immediately cooled to room temperature and labelling and further packing is undertaken. The process flow chart is as under:



1.6 Project component and cost

Major components of the projects and their costs are described in the table hereunder:

Particulars	Unit	Qty	Cost/unit	Total
LAND & BUILDING				17.50
Land	SqM	500	250.00	1.25
Land Development				
Land Area		500	500.00	2.50
Building				
Production Block				
Main Production Area	SqM	200	5,000.00	10.00
Misc Handling Area	SqM	50	5,000.00	2.50
Contingencies		10%		1.25
PLANT & MACHINERY				9.36
Steam Boiler		1	150,000.00	1.50
Straight line exhaust box		1	100,000.00	1.00
Canning Retort		1	100,000.00	1.00
Can Reformer & Flanger		1	150,000.00	1.50
Can Seamer		1	100,000.00	1.00
Can Tester		1	80,000.00	0.80
Lab Equip and misc equipments	LS	1	100,000.00	1.00
Contingencies		20%		1.56
MISCELLANEOUS FIXED ASSETS				3.60
Miscellaneous assets	LS	1	300,000	3.00
Contingencies		20%		0.60
PRE-OPERATIVE EXPENSES				10.06
Establishment		1	800,000	8.00
Preoperative Interest		1	45,600	0.46
Security Deposits		1	160,000	1.60
TOTAL				40.52

1.6.1 Plant and Machinery

The cost of the required plant and machineries is Rs. 9.36 lakhs.

1.6.2 Building

The building development and construction will cost around Rs. 13.75 lakhs.

1.7 Miscellaneous Assets

A provision of Rs. 3.60 lakhs would take care of other items like furniture and fixtures, storage facilities, packing tables etc.

1.8 Preliminary & Pre-operative Expenses

There will be many pre-production expenses like registration, administrative and traveling charges, interest during implementation, trial run expenses etc. for which a provision of Rs. 10.06 lakhs is made.

1.9 Working Capital Assessment

ITEMS	Year 1	Year 3	Year 5
STOCK OF RAW MATERIAL & PACKING MATERIAL	1.96	2.61	2.61
SUNDRY DEBTORS	18.41	24.55	24.55
TOTAL	20.37	27.15	27.15
MARGIN	5.09	6.79	6.79
MPBF	15.27	20.37	20.37
INTEREST ON WC	1.68	2.24	2.24

1.10 Means of Finance

EQUITY CAPITAL			35.00%	15.96
MOFPI SUBSIDY	25%	50.00	25.00%	11.40
TERM LOAN				
FINANANCIAL INSTITUTIONS		10.00%	40.00%	18.24
<i>-Payable half yearly Installments</i>	10	1.80		
TOTAL			100%	45.61

1.11 Cash flow statement

PARTICULARS	Year 1	Year 3	Year 5	Year 7
SOURCES OF FUNDS				
EQUITY CAPITAL	-	-	-	-
SUBSIDY				
NET PROFIT	2.59	9.32	7.68	5.95
(INTEREST ADDED BACK)				
DEPRECIATION	1.74	1.74	1.74	1.74
PRELIMINARY EXP.W/O	1.44	1.44	1.44	1.44
INCREASE IN TERM LOAN	-	-	-	-
INCREASE IN BANK BORROWINGS-WC	15.27	2.04	-	-
TOTAL	21.04	14.54	10.86	9.13

1.12 Projected balance sheet

PARTICULARS	Year 1	Year 3	Year 5	Year 7
LIABILITIES				
EQUITY CAPITAL	15.96	15.96	15.96	15.96
RESERVES & SURPLUS	10.48	19.29	29.83	38.22
TERM LOAN	16.44	9.24	2.04	-
BANK BORROWINGS-WC	15.27	20.37	20.37	20.37
TOTAL	58.16	64.86	68.21	74.55

1.13 Projected profit and loss account

Particulars	Year 1	Year 3	Year 5	Year 7
INCOME	135.00	180.00	180.00	180.00
EXPENDITURE	129.23	167.50	169.14	170.87
VARIABLE	100.49	132.70	132.34	131.97
FIXED	28.74	34.79	36.81	38.90
GROSS PROFIT	5.77	12.50	10.86	9.13
PROFIT BEFORE TAX	(0.92)	5.89	4.96	3.71
RETAINED PROFIT	(0.92)	5.89	4.96	3.71

1.14 Key Indicators

NET PRESENT VALUE at current Inflation (Rs. In lakhs)	48.52
INTERNAL RATE OF RETURN %	24.83
AVERAGE DSCR	1.78
BREAK EVEN POINT %	92.27
PAY BACK PERIOD (YEARS)	4.84

1.15 Manpower Requirement

PARTICULARS	NO.
SUPERVISORY STAFF	
MANAGER	1
ADMN STAFF	3
WORKERS	
PRODUCTION SUPERVISORS	2
SKILLED WORKERS	4
SEMI - SKILLED WORKERS	4
HELPERS	6

1.16 Assumptions

Project and Financials			
Contingencies on Building			10%
Contingencies on Equipment			20%
Term Loan			40%
Rate of Interest on Term Loan			10%
Subsidy Considered	Subject to ceiling		25%
Expected time of Installation	Months		10
Moratorium	Months		6
CAPACITY			
Rated Capacity Per Annum	80% of Installed capacity	TPA	150
Number of Operational Days	DAYS		330
Working Hours Per day	Hrs		16
CAPACITY UTILIZATION			
Year I			75%
Year II			90%
Year III			100%
SALES PRICE			
W S Price			120000
OTHER EXPENSE			
Commission			5.0%
Marketing Expenses			2.5%
POWER			
Connected Load	HP		300
DEPRICIATION AS PER COMPANY'S ACT			
BUILDING			3.34%
PLANT & MACHINERY			10.34%
MISC. FIXED ASSETS			7.07%
LAND & SITE DEVELOPMENT			1.63%
MAINTENANCE			
BUILDING			1.00%
PLANT & MACHINERY			3.00%
MISC. FIXED ASSETS			2.00%
LAND & SITE DEVELOPMENT			1.00%

1.16.1 Sources of technology

- B. Sen Berry & Co, Karol Baugh, New Delhi 110 005
- Narang Corporation, Connaught Place, New Delhi 110 001
- Cowel Can Ltd, Barotiwala, Solan (HP)
- DK Barry and Compnay Pvt. Ltd., 11/35, West Punjabi Baug, New Delhi-110026., Tel No. 25160363
- Dr. Froeb (India) Pvt. Ltd., B-136, 2ND Floor, Kalkaji, New Delhi-110019.Tel No. 26463037/18528

The actual cost of project may deviate on change of any of the assumptions.