

PROJECT PROFILE FOR MANUFACTURE OF AGRICULTURAL IMPLEMENTS

NAME OF PRODUCT		Agricultural Implements
PRODUCTION CAPACITY QTY. & VALUE (PA)		1250 NOS Rs.248 LACS
MONTH & YEAR OF PREPARATION		DECEMBER,2010
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PROJECT REPORT FOR MANUFACTURE OF AGRICULTURAL IMPLEMENTS

Section I

PROJECT & ITS INTRODUCTION

The proposed project is for establishment of an industrial unit for manufacture of Tractor drawn Agricultural Implements like Tillers/cultivators & Disc harrows etc. These implements are mainly employed for the preparation of soil bed for sowing & burial of organic substances as well as loosening & aerating the soil in the agricultural fields

MARKET POTENTIAL

The proposed products –Tillers & Disc harrows are primarily the tractors drawn agricultural implements that are mainly employed for preparation of soil bed for sowing & burial of organic substances as well as loosening & aerating the soil in the agricultural fields. These are heavy duty & economical implements employed by the farmers all over the world for soil bed preparation. Since India is high in the Agriculture base there is a big demand of these implements in the entire country including Jammu & Kashmir particularly in the plain areas like districts Kathua, Jammu & Samba. Presently there is no organized manufacturer of these products in the state & there is a tremendous gap in demand & supply since most of the products are being supplied by the units in neighboring states-Punjab & Haryana. Therefore there is a very good market potential for the production of the Agricultural implements.

Section II

MANUFACTURING PROCESS, TECHNICAL ASPECTS & BASIS

The manufacturing of proposed products involve various manufacturing processes like cutting of steel sections, fabrication, welding, drilling, turning making sub assemblies, fitting & final assembly etc where steel sections & other parts/components like tynes, springs & fasteners be out sourced & purchased as per own design & specifications.

. The manufacturing also involves inspections at various stages till they are finally assembled & packed as per their Quality assurance standards/plans. The following are the presumptions made while preparing this project report.

- The establishment of unit involves an electrical connection of 60 KW*
- The viability calculations in the project are based on the 100% capacity utilization of the project.*

- While preparing the project, the following **Annual production capacity** has been considered

PROPOSED ANNUAL PRODUCTION CAPACITY

S. No.	Name of Item	Qty. in Nos	Avg Rate (Rs in thousands)	Amount (Rs. in Lacs)
1	Spring Type Tillers - 9 Tynes	100	10	10
2	Spring Type Tillers - 11 Tynes	150	12	18
3	Rigid Type Tillers – 9 Tynes	150	8	12
4	Rigid Type Tillers – 11 Tynes	100	9	9
5	Disc Harrows Plane– 12 Discs	100	24	24
6	Disc Harrows Plane – 14 Discs	100	26	26
7	Disc Harrows Plane – 16 Discs	100	28	28
8	Disc Harrows Trailed offset– 12 Discs	100	25	25
9	Disc Harrows Trailed offset –14 Discs	100	27	27
10	Disc Harrows Trailed offset –16 Discs	50	28	14
11	Mounted Offset Disc harrow -12 Discs	100	26	26
12	Mounted Offset Disc harrow -14 Discs	50	28	14
13	Mounted Offset Disc harrow -16 Discs	50	30	15
Total				248 Lacs

Section III

LAND, BUILDING & PROPOSED SECTIONS

- **Land**

Plot of 1500 Sq.Yd.(in any industrial Estate at its prevailing average price) of Rs. 1558 per Sq.Yds. = Rs 23.37 Lacs

- **Building**

Plot area to be covered for construction = 60% = 607 Sq. Mts.

Building to be constructed with following sections:

- *Incoming, outsourced & BO items Stores*
- *Incoming Inspection area*
- *Workshops for Press section, Welding section, Machining section*
- *Paints & primer application shop*
- *Sub assemblies sections for Tillers & Disc harrows*
- *Final assembly section*
- *Design & development and Quality Control Section*
- *Marketing & Purchase Sections*
- *Office block, Accounts & Administrative Section*
- *Packaging Section*
- *Finished Goods Store*
- *Parking Area and open space*
- *Chowkidar room*

The estimated amount involved for construction of the site as per above plan is as below:

S. No.	Work Involved	Area (Sq. Mts.)	Rate per Sq. Mts. (in Rs.)	Amount (Rs. in Lacs)
1	RCC Construction with Elect/Water/Sanitary fittings	150	4500.00	6.75
2	Sheds with asbestos/ other sheets roof	455.5	1800.00	8.20
3	Boundary Wall, Gates & lighting etc.	-	-	1.00
Total Rs				15.95

Grand Total=Rs. 23.37 Lacs + Rs.15.95 Lacs = Rs. 39.32 Lac

Section IV

MACHINERY, EQUIPMENTS & INFRASTRUCTURES

S. No.	Name of Machine	Quantity (in Nos.)	Cost (Rs. in Lacs) inclusive of taxes, transportation, electrical motors & accessories etc.
A Production Machines/ Equipments			
1	Power Press pillar type100 tons cap	1	17.00 lacs
2	Power Press pillar type 50 tons cap	1	
3	Lathe Machine 6 ft GOB type	2	
4	Mig Welding Set	3 sets	
5	Pillar type drilling machine 30 mm	1	
6	Pillar type drilling machine 25 mm	1	
7	Bench Grinders & Bench Drilling Machines	2 each	
8	Lathe machine light duty 4.5 ft	2no	
13	Air compressor 100 PSIG	1	
14	Paint booth cum Oven	1	
15	Tools & Dies, Hand tools, Jigs & fixtures etc	-	
16	Diesel Generator,50 KVA	1	
B. Testing Machines & QC Equipments			
1	Inspection & measuring instruments, Jigs & Gauges	-	0.30 Lacs

Other Infrastructures

Pre-Operative Expenses

<i>S. No.</i>	<i>Name of Machine</i>	<i>Quantity (in Nos.)</i>	<i>Cost (Rs. in Lacs)</i>
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1	Manpower/ Professionals	-	0.50
2	Conveyance & Communication Expenses	-	
3	Miscellaneous Expenses	-	

Installation & Electrification Expenses

S. No.	Activity	Quantity (in Nos.)	Cost (Rs. in Lacs)
1	Installation & Electrification Expenses for machines & equipments	-	0.70

Office Equipments etc.

S. No.	Equipments	Quantity (in Nos.)	Cost (Rs. in Lacs)
1	Office equipments, gadgets, computers & furniture etc.	-	1.50

Grand Total - Rs 20.00 Lac

Section V **HUMAN RESOURCE REQUIREMENT**

7.0 Staff & Personnel per Month

S. No.	Designation	Nos.	Amount/ Salary per month
1	Manager	1	Rs.1. 20 Lacs
2	Marketing / Sales Executive	2	
3	Supervisor/ Foreman	2	
4	Accountant/ Computer Operator	1	
5	Skilled Workers	9	
6	Semi-Skilled Workers/ Helpers & Peon etc.	9	
	Perks/Welfare Expenses		0.15
	Total		1.35

Section VI

OTHER RECURRING EXPENSES & WORKING CAPITAL

Raw Materials Requirement per Annum

S. No.	Item	Amount (Rs. in Lacs)
1	Steel sections, rods/bars, channels, angles, flats, forgings & CI castings etc	190.00
2	Tynes, Springs, Discs, Fasteners Hardware, Bearings	
3	Welding consumables, Chemicals, Primers, Paints etc	
4	Packaging Materials	

Utilities per annum

S. No.	Item	Amount (Rs. in Lacs)
1	Electricity expenses	2.30
2	Water expenses etc.	0.10
3	Diesel expenses	0.60
Total		3.00

Other expenses per annum

S. No.	Item	Amount (Rs. in Lacs)
1	Advertisement & Publicity	2.00
2	Repair & Maintenance	
3	Selling Expenses	
4	Telephone & Communication	
5	Stationary & Postage etc.	
6	Insurance	
7	POL & Consumables	
8	Other Misc. Expenses	
Total		

Working Capital Requirement

<i>S. No.</i>	<i>Particulars</i>	<i>Average Period</i>	<i>Amount (Rs. in Lacs)</i>
1	Raw Materials in stock	1 week	3.96
2	Salaries, Utilities & other expenses in stock	2 months	2.70
3	Finished Goods in stock	half week	2.58
4	Work in process	1 week	4.44
5	Market/ Outstanding Debtors	2 week	10.35
Total			24.03

Section VII **PROJECT COST & MEANS OF FINANCE**

Total Capital Investment

<i>S. No.</i>	<i>Item</i>	<i>Amount (Rs. in Lacs)</i>
1	Land & Building	39.32
2	Cost of Machinery, Infrastructures and Pre-operatives	20.00
3	Working Capital Requirement	24.03
Total		83.35

Means of Finance

<i>S. No.</i>	<i>Item</i>	<i>Amount (Rs. in Lacs)</i>
A) Fixed Capital		
1	Term Loan on Land, Building, Machinery, Infrastructures & Pre-Operatives @ 75% from financial corporations/ bank	44.50
2	Own share/ equity @ 25%	14.82
Total		59.32
B) Working Capital		
1	Working Capital loan in the shape of working capital limit @ 75% from bank	18.00
2	Working Capital equity/ own share @ 25%	6.03
Total		24.03

Section VIII

COST OF PRODUCTION & SALES REALIZATION

Cost of Production per annum

S. No.	Item	Amount (Rs. in Lacs)
1	Cost of Raw Materials	190.00
2	Other recurring expenses i.e. salaries, other expenses and utilities	21.20
3	Interest on working capital loan @ 10% P.A	1.80
4	Interest on fixed capital @ 10% P.A	4.45
5	Depreciation on Machinery & Equipments @ 10% P.A averagely	2.00
6	Depreciation on building @ 5% P.A	0.80
Total		220.25

Turnover & Sales Realization per annum

S. No.	Name of Item	Qty. in Nos	Avg Rate (Rs in thousands)	Amount (Rs. in Lacs)
1	Spring Type Tillers - 9 tynes	100	10	10
2	Spring Type Tillers - 11 tynes	150	12	18
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4	Rigid Type Tillers – 11 tynes	100	10	10
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12	Mounted Offset Disc harrow -14 Discs	50	28	14
13	Mounted Offset Disc harrow -16 Discs	50	30	15
Total Rs.				248 Lacs
14	Scrap 8 Tons @ Rs.25000 per Ton		Rs.	2.00 Lacs

<i>Grand Total Rs.</i>	<i>250.00 Lacs</i>
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Section IX

PROFITABILITY, FINANCIAL VIABILITY RATIOS & ANALYSIS

Profitability per annum (before tax)

<i>Particulars</i>	<i>Amount (Rs. in Lacs)</i>
<i>Sales Realization</i>	<i>250.00</i>
<i>Less (Cost of Production)</i>	<i>220.27</i>
<i>Net Profit per annum before tax Rs.</i>	<i>29.73 Lacs</i>

Rate of Return on total Capital Investment

$$\frac{29.73}{83.35} \times 100 = 35.66\%$$

Rate of Return on Sales Realization

$$\frac{29.73}{250.00} \times 100 = 11.89\%$$

Break Even Analysis at 100% Capacity Utilization

<i>Particulars</i>	<i>Amount (Rs. in Lacs)</i>
<i>Fixed Cost per annum</i>	
<i>Interests</i>	<i>6.27</i>
<i>Depreciations</i>	<i>2.80</i>
<i>Insurance</i>	<i>0.24</i>
<i>40% Salaries, Other expenses & utilities except insurance</i>	<i>8.16</i>
<i>Total</i>	<i>17.47</i>

B.E.P - 37.01 %