

PROJECT REPORT

Of

BARBED WIRE

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Barbed Wire**

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

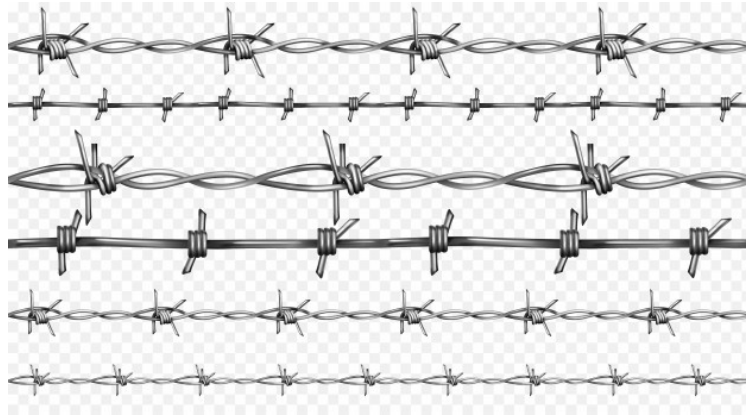


Lucknow Office: Sidhivinayak Building ,
27/1/B, Gokhlley Marg, Lucknow-226001

Delhi Office : Multi Disciplinary Training
Centre, Gandhi Darshan Rajghat,
New Delhi 110002

Email : info@udyami.org.in
Contact : +91 7526000333, 444, 555

PROJECT PROFILE ON BARBED WIRE MANUFACTURING UNIT



INTRODUCTION

Barbed wire is a useful industrial product, mainly used for fencing purposes. Barbed wire fencing prevents the unwanted entrance and intrusion of animals and persons into the fenced area. Barbed wire production business can be initiated as small and medium scale basis with a comparatively small startup capital investment. The galvanized barbed wire is classified into three categories; Classes I, II, and III. Class I has the thinnest coating and the shortest life expectancy. A wire with Class I coating will start showing general rusting in 8 to 10 years while the same wire with Class III coating will show rust in 15 to 20 years. The aluminum-coated wire is occasionally used and yields a longer life.

MARKET DEMAND

This is mainly used to safeguard houses, gardens, forests, nurseries and specified prohibited areas pertaining to defense establishment, aerodromes, railways, warehouses and other Govt. and Private properties. They are also used to make and safeguard international boundaries and are one of the cheapest materials to be used for these various purposes.

Looking to the specific but important use of the product, product has demand all over the country to protect the field / property from various external elements.

The Galvanized Wire has very good demand for its versatile use in different applications. There is a large demand for this item from the downstream industries. With the availability of appropriate technology, the activity is highly feasible in the small scale sector and marketing is generally not a problem.

PRODUCTION TARGETS

Basis of estimation: 300 Working Days in a Year
Single Shift
basis 8 hours
per shift

	Barbed Wire
Quantity (MT)	600

MANUFACTURING PROCESS

The barbed wires are made on an automatic machine. The barbed wire is made out of 12/14 SWG MS Galvanized wires. While two main line wires are fed into the machines through its axes another wire is fed across into the pair of line wires to form barbs at required intervals. The line wire twine themselves automatically the point wire after forming the desired barbs strands with the line wires automatically at the desired distance thus forming the complete barbed wire. As the machine is automatic all its feeding and wire cutting mechanism is controlled by gear movements. The machine is powered through an electric motor attached to the machine. Once the machine is set up as per the desired settings it goes on working automatically.



QUALITY CONTROL STANDARDS

Proposed concern would manufacture product according to the BIS specifications IS: 278-1978.

RAW MATERIAL (PER ANNUM at 100% Capacity utilisation)

S.N	Particulars	Quantity (MT)	Value (Rs)
1.	G.I.Wire 12/14 SWG	600	240.00lac
		Total	240.00lac

ASSUMPTIONS

1	Number of Working Days in a year	300 Days
2	Number of Shifts in a day	1 One
3	Hours in a Shift	8 hours
4	Plant Capacity	Assuming 60% capacity utilization with 10% increase in subsequent year/s
5	Raw material Estimates	Based upon product Mix
6	Raw Material Availability	All districts
7	Depreciation	Straight Line Method
8	Manpower	According to project Requirement
9	Rent estimate	On the basis of current market price of the area.
10	Moratorium Period	6- 12 months
11	Rate of Interest on loan	11.50% PA
12	Repayment Period	5years
13	Procurement price of GI wire 12/14 SWG	Rs40.00per MT
14	Selling price of barbed wire	Rs50.00 per MT

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : XXXXXXXX
- 2 Constitution (legal Status) : XXXXXXXX
- 3 Father's/Spouce's Name : XXXXXXXX
- 4 Unit Address : XXXXXXXX
- Taluk/Block: XXXXX
- District : XXXXX State:
- Pin: XXXXX
- E-Mail : XXXXX
- Mobile XXXXX
- 5 Product and By Product : **Barbed Wire**
- 6 Name of the project / business activity proposed **Barbed Wire**
- 7 Cost of Project : Rs24lac
- 8 Means of Finance
- | | |
|-------------------|------------------------------|
| Term Loan | Rs.7.11 Lacs |
| KVIC Margin Money | - As per Project Eligibility |
| Own Capital | Rs.2.4 Lacs |
| Working Capital | Rs.14.49 Lacs |
- 9 Debt Service Coverage Ratio : 5.16
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 6 Months
- 12 Break Even Point : 28%
- 13 Employment : 7 Persons
- 14 Power Requirement : 8.00 HP
- 15 Major Raw materials : **12/14 SWG GI wire**
- 16 Estimated Annual Sales Turnover : 162.45 Lacs
- 16 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work (2000 Sq Ft)	3.00
Plant & Machinery	4.00
Furniture & Fixtures	0.60
Pre-operative Expenses	0.30
Working Capital Requirement	16.10
Total	24.00

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	2.40
Term Loan	7.11
Workign Capital Finance	14.49
Total	24.00

Beneficiary's Margin Monery 10% **General** 5% **Special**
 (% of Project Cost)

PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
Automatic barbed wire making machine	1.00		
Bench Grinder			
Tensile Testing Machine			
Wrap Torsion Testing Machine			
Testing Equipments			
Other accessories like weighing balance etc			
Wrap Torsion Testing Machine			-
			400,000.00

PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Share Capital	2.40	-	-	-	-
Reserve & Surplus	8.38	10.08	12.61	15.06	17.41
Depriciation & Exp. W/off	0.93	0.84	0.73	0.63	0.55
Increase in Cash Credit	14.49	-	-	-	-
Increase In Term Loan	7.11	-	-	-	-
Increase in Creditors	3.36	0.56	0.56	0.56	0.56
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL :	37.03	11.51	13.94	16.29	18.57
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	7.60	-	-	-	-
Increase in Stock	14.04	2.34	2.34	2.34	2.34
Increase in Debtors	5.42	1.19	0.95	0.95	0.95
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	1.78	1.78	1.78	1.99
Taxation	-	1.01	2.52	3.01	3.48
TOTAL :	29.56	6.56	7.86	8.38	9.09
Opening Cash & Bank Balance	-	7.47	12.42	18.49	26.40
Add : Surplus	7.47	4.95	6.07	7.91	9.48
Closing Cash & Bank Balance	7.47	12.42	18.49	26.40	35.88

PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Capital Account	2.40	2.40	2.40	2.40	2.40
Retained Profit	8.38	17.45	27.54	39.58	53.51
Term Loan	7.11	5.33	3.56	1.78 -	0.21
Cash Credit	14.49	14.49	14.49	14.49	14.49
Sundry Creditors	3.36	3.92	4.48	5.04	5.60
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL :	36.10	43.98	52.89	63.77	76.31
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	7.60	7.60	7.60	7.60	7.60
Gross Dep.	0.93	1.77	2.49	3.13	3.68
Net Fixed Assets	6.67	5.83	5.11	4.47	3.92
Current Assets					
Sundry Debtors	5.42	6.60	7.55	8.50	9.45
Stock in Hand	14.04	16.38	18.72	21.06	23.40
Cash and Bank	7.47	12.42	18.49	26.40	35.88
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL :	36.10	43.98	52.89	63.77	76.31
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIRD YEAR	IVTH YEAR	VTH YEAR
<u>A) SALES</u>					
Gross Sale	162.45	198.08	226.58	255.08	283.58
Total (A)	162.45	198.08	226.58	255.08	283.58
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	144.00	168.00	192.00	216.00	240.00
Elecricity Expenses	0.69	0.80	0.92	1.03	1.15
Repair & Maintenance	-	1.98	2.27	2.55	2.84
Labour & Wages	4.09	4.50	4.95	5.45	5.99
Depriciation	0.93	0.84	0.73	0.63	0.55
Consumables and Other Expense	3.25	3.96	4.53	5.10	5.67
Cost of Production	152.96	180.08	205.39	230.76	256.20
Add: Opening Stock /WIP	-	6.84	7.98	9.12	10.26
Less: Closing Stock /WIP	6.84	7.98	9.12	10.26	11.40
Cost of Sales (B)	146.12	178.94	204.25	229.62	255.06
C) GROSS PROFIT (A-B)	16.33	19.13	22.32	25.45	28.52
	10%	10%	10%	10%	10%
D) Bank Interest (Term Loan)	0.61	0.74	0.54	0.33	0.12
Bank Interest (C.C. Limit)	1.45	1.45	1.45	1.45	1.45
E) Salary to Staff	2.64	2.90	3.19	3.51	3.87
F) Selling & Adm Expenses Exp.	3.25	3.96	4.53	5.10	5.67
TOTAL (D+E)	7.95	9.06	9.71	10.40	11.11
H) NET PROFIT	8.38	10.08	12.61	15.06	17.41
I) Taxation	-	1.01	2.52	3.01	3.48
J) PROFIT (After Tax)	8.38	9.07	10.09	12.04	13.93

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>Finished Goods</u>					
(15 Days requirement)	6.84	7.98	9.12	10.26	11.40
<u>Raw Material</u>					
(15 Days requirement)	7.20	8.40	9.60	10.80	12.00
Closing Stock	14.04	16.38	18.72	21.06	23.40

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars			Total
			Amount
Stock in Hand			14.04
Sundry Debtors			5.42
		Total	19.46
Sundry Creditors			3.36
Working Capital Requirement			16.10
Margin			1.61
Working Capital Finance			14.49

BREAK UP OF LABOUR

Particulars		Wages Per Month	No of Employees	Total Salary
Skilled Worker		8,000.00	2	16,000.00
Unskilled Worker		5,000.00	3	15,000.00
				31,000.00
Add: 10% Fringe Benefit				3,100.00
Total Labour Cost Per Month				34,100.00
Total Labour Cost for the year (In Rs. Lakhs)				4.09

5.00

BREAK UP OF SALARY

Particulars		Salary Per Month	No of Employees	Total Salary
Manager		12,000.00	1	12,000.00
Accountant		8,000.00	1	8,000.00
Total Salary Per Month				20,000.00
Add: 10% Fringe Benefit				2,000.00
Total Salary for the month				22,000.00
Total Salary for the year (In Rs. Lakhs)				2.64

2.00

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased	-	-	-	-
Addition	-	3.00	4.00	0.60	7.60
	-	3.00	4.00	0.60	7.60
Less : Depreciation	-	0.30	0.60	0.03	0.93
WDV at end of Ist year	-	2.70	3.40	0.57	6.67
Additions During The Year	-	-	-	-	-
	-	2.70	3.40	0.57	6.67
Less : Depreciation	-	0.27	0.51	0.06	0.84
WDV at end of IIInd Year	-	2.43	2.89	0.51	5.83
Additions During The Year	-	-	-	-	-
	-	2.43	2.89	0.51	5.83
Less : Depreciation	-	0.24	0.43	0.05	0.73
WDV at end of IIIrd year	-	2.19	2.46	0.46	5.11
Additions During The Year	-	-	-	-	-
	-	2.19	2.46	0.46	5.11
Less : Depreciation	-	0.22	0.37	0.05	0.63
WDV at end of IV year	-	1.97	2.09	0.42	4.47
Additions During The Year	-	-	-	-	-
	-	1.97	2.09	0.42	4.47
Less : Depreciation	-	0.20	0.31	0.04	0.55
WDV at end of Vth year	-	1.77	1.77	0.37	3.92

REPAYMENT SCHEDULE OF TERM LOAN

11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
IIST YEAR	Opening Balance						
	Ist Quarter	-	7.11	7.11	-	-	7.11
	Iind Quarter	7.11	-	7.11	0.20	-	7.11
	IIIrd Quarter	7.11	-	7.11	0.20	-	7.11
	Ivth Quarter	7.11	-	7.11	0.20	-	7.11
					0.61	-	
IIND YEAR	Opening Balance						
	Ist Quarter	7.11	-	7.11	0.20	0.44	6.67
	Iind Quarter	6.67	-	6.67	0.19	0.44	6.22
	IIIrd Quarter	6.22	-	6.22	0.18	0.44	5.78
	Ivth Quarter	5.78	-	5.78	0.17	0.44	5.33
					0.74	1.78	
IIRD YEAR	Opening Balance						
	Ist Quarter	5.33	-	5.33	0.15	0.44	4.89
	Iind Quarter	4.89	-	4.89	0.14	0.44	4.44
	IIIrd Quarter	4.44	-	4.44	0.13	0.44	4.00
	Ivth Quarter	4.00	-	4.00	0.11	0.44	3.56
					0.54	1.78	
IIVTH YEAR	Opening Balance						
	Ist Quarter	3.56	-	3.56	0.10	0.44	3.11
	Iind Quarter	3.11	-	3.11	0.09	0.44	2.67
	IIIrd Quarter	2.67	-	2.67	0.08	0.44	2.22
	Ivth Quarter	2.22	-	2.22	0.06	0.44	1.78
					0.33	1.78	
IIVTH YEAR	Opening Balance						
	Ist Quarter	1.78	-	1.78	0.05	0.44	1.33
	Iind Quarter	1.33	-	1.33	0.04	0.44	0.89
	IIIrd Quarter	0.89	-	0.89	0.03	0.55	0.34
	Ivth Quarter	0.34	-	0.34	0.01	0.55	0.21
					0.12	1.99	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>CASH ACCRUALS</u>	9.31	9.91	10.82	12.68	14.48
Interest on Term Loan	0.61	0.74	0.54	0.33	0.12
Total	9.92	10.65	11.35	13.01	14.60
<u>REPAYMENT</u>					
Instalment of Term Loan	1.78	1.78	1.78	1.99	1.99
Interest on Term Loan	0.61	0.74	0.54	0.33	0.12
Total	2.39	2.52	2.31	2.32	2.11
DEBT SERVICE COVERAGE R	4.15	4.23	4.91	5.61	6.91
AVERAGE D.S.C.R.			5.16		

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	18	21	24	27
Production	360	420	480	540	600
	360	438	501	564	627
Less : Closing Stock	18	21	24	27	30
Net Sale	342	417	477	537	597
Sale Price per MT	47,500.00	47,500.00	47,500.00	47,500.00	47,500.00
Sale (in Lacs)	162.45	198.08	226.58	255.08	283.58

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	8	
Load Factor			0.7460	
Electricity Charges		per unit	8.00	
Total Working Days			300	
Electricity Charges (8 Hrs Per day)				114,585.60
Add : Minimim Charges (@ 10%)				
(B) D.G. SET				
No. of Working Days			300	days
No of Working Hours			-	Hour per day
Total no of Hour			-	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				1.15
Year		Capacity		Amount (in Lacs)
IST YEAR		60%		0.69
IIND YEAR		70%		0.80
IIIRD YEAR		80%		0.92
IVTH YEAR		90%		1.03
VTH YEAR		100%		1.15

BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
Net Sales & Other Income	162.45	198.08	226.58	255.08	283.58
Less : Op. WIP Goods	-	6.84	7.98	9.12	10.26
Add : Cl. WIP Goods	6.84	7.98	9.12	10.26	11.40
Total Sales	169.29	199.22	227.72	256.22	284.72
Variable & Semi Variable Exp.					
Raw Material & Tax	144.00	168.00	192.00	216.00	240.00
Electricity Exp/Coal Consumption at 85%	0.58	0.68	0.78	0.88	0.97
Manufacturing Expenses 80%	2.60	4.75	5.44	6.12	6.81
Wages & Salary at 60%	4.04	4.44	4.89	5.38	5.91
Selling & administrative Expenses 80%	2.60	3.17	3.63	4.08	4.54
Intt. On Working Capital Loan	1.45	1.45	1.45	1.45	1.45
Total Variable & Semi Variable Exp	155.27	182.50	208.18	233.90	259.68
Contribution	14.02	16.72	19.54	22.31	25.04
Fixed & Semi Fixed Expenses					
Manufacturing Expenses 20%	0.65	1.19	1.36	1.53	1.70
Electricity Exp/Coal Consumption at 15%	0.10	0.12	0.14	0.15	0.17
Wages & Salary at 40%	2.69	2.96	3.26	3.58	3.94
Interest on Term Loan	0.61	0.74	0.54	0.33	0.12
Depreciation	0.93	0.84	0.73	0.63	0.55
Selling & administrative Expenses 20%	0.65	0.79	0.91	1.02	1.13
Total Fixed Expenses	5.64	6.64	6.93	7.26	7.63
Capacity Utilization	60%	70%	80%	90%	100%
OPERATING PROFIT	8.38	10.08	12.61	15.06	17.41
BREAK EVEN POINT	24%	28%	28%	29%	30%
BREAK EVEN SALES	68.09	79.13	80.73	83.32	86.73