

AUTOMATIC COIR YARN SPINNING

1. INTRODUCTION

Coconut consist of water and copra contained in a hard shell covered with fibrous husk protecting it from damages. Fibre is extracted from coconut husk mechanically and is used in making several products with wide applications. One of the products is 2-ply yarn made of coir fibre.

The yarn is used in rope making, mattings, mat making, geo-textiles. The applications of yarn are in agricultural activities, construction activity, packaging in geo-textiles to prevent soil erosion on embankments

2. MARKET

The yarn is produced by hand spinning, using motorized ratts, and by automatic spinning. Production of yarn is in adequate quantities. New products with export market potential such as geo-textiles require considerable quantities of coir yarn, as such there is scope for production of yarn on automatic spinning machine to produce yarn of superior variety.

3. MANUFACTURING PROCESS

The fibre is fed to willowing machine in which the fibre gets loosened and becomes flexible. Now the fibre is fed to the spinning heads of the automatic spinning machines. The fibre twined and spun into 2-ply yarn automatically in the machine. The yarn is wound on a bobbin provided in the machine. The bobbin is replaced as and when wound completely.

4. PRODUCTION CAPACITY PER ANNUM

Capacity

60 tons

Selling Price

Rs. 15000 per ton

5. PROJECT COST/CAPITAL INVESTMENT

S.No	Description	Amount Rs.
1	Fixed Capital	810000
2	Working Capital for 1 month(s)	45750
3	Preliminary & Preoperative Expns	10000
	Total Project Cost	865750

6. MEANS OF FINANCE

S.No	Description	%age	Amount Rs.
1	Promoter Contribution	15%	129863
2	Subsidy/Soft Loan	20%	173150
3	Term Loan	65%	562738
	Total		865750

7. FINANCIAL ASPECTS

A. FIXED CAPITAL

i. Land and Buildings

S.No	Description	Unit	Area	Rate	Amount Rs.
1	Land	Acres	0.10	300000	30000
2	Buildings & Civil Works		LS		150000
	Total				180000

ii. Machinery and Equipment

S.No	Description		Rate	Amount Rs.
1	Willowing machines - 5 Nos;		LS	630000
2	Automatic spinning machines,		LS	
3	Spare bobbins		LS	
4	Miscellaneous equipments		LS	
	Total			630000

B. WORKING CAPITAL

i. Salaries & Wages (per month)

S.No	Description	Nos.	Sal/mon.	Amount Rs.
1	Manager/Entrepreneur	1	2500	2500
2	Skilled Workers	5	2000	10000
3	Unskilled Workers	1	1500	1500
	Total			14000

ii. Raw Material (per month)

S.No	Description	Unit	Qty.	Rate	Amount Rs.
1	Coir fibre	Tons	5.25	5000	26250
	Total				26250

iii. Utilities (per month)

S.No	Description	Unit	Amount Rs.
1	Power	LS	2000
2	Water	LS	200
	Total		2200

iv. Other Expenses (per month)

S.No	Description	Amount Rs.
1	Postage, Telephones & Stationery Expenses	500
2	Transportation & Conveyance Expenses	1000
3	Consumable Stores	500
4	Reparis and Maintenance Expenses	1000
5	Miscellaneous Expenses	300
	Total	3300

v. Total Working Capital (per month)

S.No	Description	Amount Rs.
1	Salaries and Wages	14000
2	Raw Material	26250
3	Utilities	2200
4	Other Expenses	3300
	Total	45750

8. COST OF PRODUCTION (PER ANNUM)

S.No	Description	Amount Rs.
1	Total Working Capital	549000
2	Depreciation	
	- Depreciation on Buildings @ 5%	7500
	- Depreciation on Plant & Mach. @ 10%	63000
3	Interest on term loan @ 12%	67529
	Total	687029

9. TURNOVER (PER YEAR)

S.No	Description	Unit	Qty.	Rate Rs.	Amount Rs.
1	Sales Revenue	tons	60	15000	900000
	Total				900000

10. FIXED COST (PER YEAR)

S.No	Description	Amount Rs.
1	Depreciation	70500
2	Interest	67529
3	Salaries & Wages @ 40%	67200
4	Other Expenses incl. Utilities @ 40%	26400
	Total	231629

11. PROFIT ANALYSIS & RATIOS

1	Net Profit	Rs.	212972
2	Percentage of Profit on Sales		24%
3	Percentage of Return on Investment		25%
4	Break Even Point		52%