

कयर उद्योग के नवीकरण, आधुनिकीकरण
एवं प्रौद्योगिकी उन्नयन

**REJUVENATION, MODERNIZATION
& TECHNOLOGY UPGRADATION
OF THE COIR INDUSTRY**

IV

कयर मैट परिष्करण व संसाधन परियोजना प्रस्ताव
**COIR MAT FINISHING & PROCESSING
PROJECT PROPOSAL**



कयर बोर्ड / COIR BOARD

(सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय, भारत सरकार
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**COIR Mat Finishing & Processing PROJECT
PROPOSAL**

for Credit facilities under the

**Rejuvenation, Modernization & Technological
Upgradation of the Coir Industry**

Name of the Unit:

Address:

Submitted to: Name of the Bank:

Branch:

Project Report of the Coir Mat Finishing & Processing Unit under Rejuvenation, Modernization and Technological Up-gradation of the Coir Industry

Coir Mat Finishing and Processing unit - PROJECT

Abstract

Coir Board did conduct an intricate study to understand the dynamics of the Coir Industry. Many of the poorest people in Southern India work in the Coir Industry. Coir products are mainly agrarian in character and its basis raw material is Coconut fibre. Coconut plantations in southern India are in a state of flux, and to recover the lost ground, the Central Government in its 2008-9 budget has proposed a unique Rs 4700 Cr scheme to aid, about the Coconut replantation.

Coir Industry underwent a series of catastrophes. One sector which was badly hit by the tsunami was this sector. The dreaded Chicken Gunya, which struck by its devastating fury, took a heavy toll of the Coir worker.

Coir Board's study which explored the market dynamics that shaped the Coir Industry, both domestically and internationally, came to the conclusion that only an increased income through much-added augmented facilities, tools, and constructing a shed to enable the worker to concentrate on his work for more number of days than the pitiable 100 days in a year, would reduce the vulnerabilities. If the Coir Industry at the lower end of the pyramid has to grow, and sustain production, it needs to acquire skills, quality controls, networks and technology based machines and equipments. These series of measures would enable the industry to meet the market needs.

It is true that a large number of workmen in parts of Kerala, Tamilnadu, Andhra and Karnataka, Orissa, West Bengal, depend on the Coir Industry to earn a living. Furthermore, more than 80% of these workers are gender specific. The women: men ratio is of the order of 80:20. Most of the Coir industries are dotted in the rural areas. Coir, or coconut fibre, plays an important role in sustaining the livelihoods of a large number of people in the Southern, and North-Western provinces of India. . Coir fibre extraction, spinning, and weaving, and the processing of other coir products are a source of employment for many people – women in particular - who have few other options available to them. The coir industry is also an important source of income for women in the fishing communities along the western and southern coasts. The industry plays a unique role in expanding the national economy as well as in consolidating India's position within international markets for coir products. Furthermore, the industry has an indirect impact on the economy through its influence on the transportation, marketing, and financial businesses.

Recent research has shown that markets play an important role in livelihood development and poverty reduction. Markets and the relationships among stakeholders are therefore an important aspect of livelihood analysis, and recognition of the failure of markets to serve the interests of the poor is crucial in such an analysis. Given the significance of the coir industry to the income of the people in southern India, it is important to understand the market dynamics that shape the industry within local and global settings with a view toward bringing sustainable development to the whole sector.

REVIEW OF THE COIR INDUSTRY

In India, the coir industry is characterized by a traditional, labour-intensive, largely female, white-fibre industry in Kerala and the more modernized, mechanized, export-oriented, brown-fibre industry in the Tamilnadu and Karnataka. (Pliable white fibres are harvested from the husks of green coconuts and stiffer brown fibres are extracted from husks of mature nuts.) An estimated 40 percent of fibre comes from traditional coir areas in India, whereas much of the production and 85 percent of the fibre units are based in Kerala. There has been large concentration of coir pith manufacturing units in Tamilnadu, and Karnataka has sound Rubberized mattresses making units. The current India's annual production of coconut is around 12.4 billion nuts.

OVERVIEW OF GLOBAL COIRINDUSTRYMARKETS

Sri Lanka is the single largest supplier of brown coir fibre to the world market, and together with India accounts for almost 90 percent of global coir exports. An estimated 510,000 metric tons of coir fibre are produced each year around the world, according to the United Nations Food and Agriculture Organization (UNFAO). Global demand for coir products declined between the 1980s and 1990s, as synthetic fibres found widespread popularity as a substitute for natural coir products. Since the late 1990s, however, that trend has reversed, with coir products again finding favour among consumers.

Greater demand for woven coir mats in India in recent years has fueled a steady rise in the global coir market. Tufted Mats are also posting steady growth. Growth of the global market has also been driven by growing demand for natural fibre products from consumers in developed countries as well as in China and other emerging markets. In addition, there is growing global demand for natural geotextiles (erosion-control materials), good quality twine for

horticultural products, and coir pith as a substitute for peat. Yet synthetic fibres continue to threaten the coir industry globally, despite rising awareness of the health and environmental benefits of natural fibres. Stagnating international coir prices have also eroded the profitability of coir production

India produces four main categories of coir fibre: bristle, mat, mixed, and mattress. These fibres are either sold as raw material in the international market or processed into products such as brooms, brushes, rope, twine, matting, woven and stitched geotextiles, rubberized coir mattresses, and upholstery. Coir-related exports accounted for 10 percent of Indian agricultural exports, over 0.12 percent of all exports, and 0.001 percent of GDP in India in 2008. Total export earnings of the entire coconut and coir industry in 2008 were \$141 million in 2006-7. Fibre export earnings increased by 24 percent in 2006-7, while fibre pith exports increased by 113 percent between 2002-7. The Indian Inland market has a turnover of coir products over Rs 1300 Cr in 2006-7, a major chunk coming from the Coir mattresses industry which has been growing with an effective growth rate of 20%+. The basis raw material required is the Coir Yarn, which is supplemented by the Spinning industry.

Coir Industry's Paradigm shift:

Coir Industry underwent a paradigm shift during the third millennium. In order to understand this shift, we need to have better understanding of the existing local and global market channels for coir products at different levels of production, including small-, medium-, and relatively large-scale producers and cooperatives; further, we need to analyze the current policies pursued by the government and international agencies, including the World Trade Organization, and their effect on the coir industry, and to identify strategies that can help ensure that poor workers benefit as the coir industry increases its capacity to serve a global marketplace.

Coir Board came to the conclusion that there was a need to bring in the smaller players who were at the lower orb, and through methodic steps, these Coir workers needed financial support to first, acquire new machinery by throwing away the dilapidated, useless, worn-out ones which has served more than 80 years of life, help them construct a roof over their workplace so that rain or shine, they could carry on with their occupation undeterred, throughout the year. With the present penury situation that they are placed in, they have no way of augmenting their existing savings to buy even an ordinary tool, much less invest in buying machineries. Coir Board's present scheme, will help the vital sector, to augment his capacity, increase his production, expand his business boundary, establish market links with the help and support of Coir Board so that he is assured of a decent income.

Capital infusion is an inevitability at the lower fulcrum of the industry; skill upgradation, technological upgradation, innovative tools very necessary for Coir Industry's orderly growth; entrepreneur development a must if the spinning worker has to graduate to a producer in his own right; and, market linkages between the spinner and the intermediary manufacturer, if the industry has to achieve its higher productivity, fetching him higher income.

Rejuvenation, Modernization and Technological Up-gradation Scheme specifics:

- To modernize the Coir Mat finishing & Processing tiny/household unit by providing them with new machineries to supplement their dilapidated/old ones;
- To assist the Coir Mat finishing and Processing tiny-household unit members to acquire proficiency in the operation of modern machines through training schemes;
- To enable the Coir worker to upgrade their status to a "producer" of goods and earning wages and profits as against their earning 'wages' alone;

- To achieve higher utilization of husk from the general 40%;
- To increase utilization of Raw materials abundantly available for effective use by the processing industry;
- To beget value for the materials producer by the spinner/tiny² household sectors;
- To promote opportunities for technological innovation, development, knowledge creation, market access amongst the various stakeholders in the Coir sector;
- To create a cadre of specialized group of Coir employees, upgrading their skills, raising their standard of living;
- To provide social security to the workforce;
- To create inclusive growth for the vulnerable sections of society like SC/ST and development of the NER;
- To undertake periodic social auditing; etc.

Coir Mat Finishing & Processing Unit:

The tiny/household product manufacturing sector in the Coir Industry is the feed sector for the export oriented units. There are about 25,000 organized units functioning in the Coir sector, which include making intermediaries to be used by finishing industries; there are also more than 2 lakh un-organized units in the tiny/household sector.

The poor conditions of the machinery used by the household units have drastically affected the productivity and quality of end products which often face the threat of being rejected by the finishing units. The Export sector is facing acute shortage of quality products towards meeting the demand-supply of export, finishing units, due to the incapacity of these units to enhance their present productivity levels which is the lowest in the Industrial economy, making them uncompetitive in the international markets.

The core activities in the Coir Industry provide and generate employment for the common workers by setting up Household units. Gender employment is one of the direct results achieved by this sector. The Scheme envisages providing financial assistance and technical support leading to further empowerment of women. The wage sector in the sector is very low to the low productivity and low working hours put by the existing worker (5 hrs/ a day). They do not get work for a minimum of 100 days (they do not have roof over their working places; hence during horrid summer and inclement monsoons, they cannot work).

The new machines which would supplement the existing ones would reduce drudgery, and the sheds constructed would give them opportunity to work during monsoons, contributing to higher productivity, manufacture of quality goods, reduction of drudgery, higher value for their products, increasing the income earning capacity of these workers. This would also generate higher employment including new employment.

By acquiring machineries, and equipments, through financial assistance, the worker is enabled to become a "producer", through direct and indirect support, he is put on course to beget orders; with continuous uninterrupted raw material supply he can make quality products which fetch him a decent price. The improvements in infrastructure enable him to work for more number of days (250 days in a year).

Aside from the cost of machines, the construction of a shed is in-built into the out-lay of the Scheme.

Finishing of Mats:

The mats taken out of the loom after weaving necessitates certain finishing operations before they are being used. The usual finishing operations adopted for different type of Mat are as follows:

Rod Mat: Squaring, tying, Binding & Stitching, Preliminary clipping, Smoking, shearing, Final clipping and Beveling.

Creel Mat: Squaring, Tucking in, Smoking, Shearing and Trimming.

Stenciling: Plain mats are printed with beautiful designs in this process. Apart from the traditional coir dyes other colours like Synthetic enamel, Textile printing pigments, water based emulsions, are also used for printing. The recipe of these types of colours depends on the intensity of colours used in the design. The method of application of these colours is the same as in the case of coir dyes.

Finishing Treatments: The finishing processes are carried out to improve the natural properties or attractiveness of the fabric and to increase its serviceability. The term finishing covers all the processes the fabric undergoes after leaving the looms to the stage at which it enters the market. The term also include bleaching, dyeing, mercerizing, etc but normally, finishing is restricted to final stage in the sequence of treatment of woven fabrics after bleaching and dyeing.

Standard Cost of Coir Mat Finishing & Processing Unit

Sl.No.	Item	Cost
1.	Machinery(Shearing Machine)	Rs. 1,20,000
2.	Stenciling tables, shooting guns, stirrer & Accessories	1,65,000
3.	Compressor	75,000
4.	Work shed	1,40,000
	Total	Rs.5,00,000

Coir Mat Finishing & Processing Unit Outlay Details:

Individual Investment :	Rs 25,000.00
Term Loan:	Rs 2, 75,000.00
Government Grant	Rs 2, 00,000.00
Total Outlay:	Rs 5, 00,000.00
Periodicity of the Term Loan :	5 years
Release of subsidy by Banks:	Back ended subsidy
Term Loan:	8.5 % to 9.5%

The term loan shall be covered under the Credit Guarantee Fund Trust for Small Industries under the Office/of the Development Commissioner, Ministry Of Micro Small Medium Enterprises. The beneficiary of the loan has to pay one time guarantee fee, upfront, of Rs 2750/- to the Trust. The premium annual fee payable at the commencement of the loan shall be Rs 1375/-. This shall decrease with the diminishing returns of the loan amount. This has to be borne by the beneficiary. The Bank shall debit the beneficiary and remit the amount to the Trust, as the Bank as the lending institution needs to execute an agreement with the Trust. The subsidy retained by the Bank shall command no interest.

INTEREST PAYABLE ON DIMINSHING BALANCE

Total Loan:Rs 2.75 lakhs	Instalment Repayable	CGFSI Service Fees payable by beneficiary*	Interest Payable on diminishing Balance (Interest @ 8.5%)
I Year	Rs 55,000.00	Rs. 1375-00	Rs 23,375.00
II Year	Rs 55,000.00	Rs.1100-00	Rs 18,700.00
III Year	Rs 55,000.00	Rs 825-00	Rs 14,025.50
IV Year	Rs 55,000.00	Rs 550-00	Rs 9,350.00
V Year	Rs 55,000.00	Rs 275-00	Rs 4,675.00
Total:	Rs 2,75,000.00	Es 4175-00	Rs 70,125.00

(*) One time Guarantee fee (upfront) of Rs 2750/- to be paid

Units/ any entrepreneur/SHG/NGO/group of workers engaged in the production of traditional Coir products like Coir Mats, Mattings, Carpets, rope, rubber backed Coir products, Coir pith processing industries etc registered with Coir Board under R&L Rules, 1958/Coir Co-operatives, and new entrepreneurs are eligible for assistance. The unit members should prove that they have worked for a minimum of 3 years in any Coir manufacturing unit. They shall also satisfy to the Board that they have sufficient lands where they can put up a pucca shed. They have to obtain Invoices from reputed registered manufacturers, and these machineries shall be approved by the Technical experts in the Board and approved.

The Applicants will be selected by a Committee of the Coir Board which has expertise, along with additional members like SLBC representative, Industries Dept representative, etc. The selection will be on first-cum-first served basis.

The following documents will be produced by the beneficiary before the Bank Branch for availing the loan:

- a. A Copy of the title deed of the property on which the unit is proposed to be located/ already located
- b. The prescribed application form for Scheme assistance
- c. Proof of Coir Industry experience
- d. Any training facility availed from Coir Board
- e. Machineries proposed for purchase along with Invoice (must be endorsed by the technical experts of Coir Board)
- f. MSME acknowledgement issued by DIC
- g. Industrial Establishment Certificate issued by Coir Board
- h. Chartered Engineer's drawing with estimate for construction of shed
- i. Any other document to support the application like SC/ST/OBC certificate
- j. Any other supporting document
- k. Project profile

PROJECT ARITHMETIC

COST OF THE PROJECT	
WORKSHED	140000.00
PLANT & MACHINERY	
7 HP SHEARING MACHINE	120000.00
7HP COMPRESSOR	75000.00
STENCILING TABLES, SHOOTING GUN, STIRRER & ACCESSORIES	165000.00
WORKING CAPITAL REQUIREMENT	25000.00
TOTAL	<u>525000.00</u>
MEANS OF FINANCE	
PROMOTER'S CONTRIBUTION	30000.00
TERM LOAN FROM BANK	275000.00
GRANT FROM COIR BOARD	200000.00
WORKING CAPITAL ASSISTANCE FROM BANK	20000.00
TOTAL	<u>525000.00</u>

Note: Promoter's contribution includes Rs 25000.00 towards term loan and Rs 5000.00 for working capital assistance.

YEAR	PROJECTED BALANCE SHEET				
	1	2	3	4	5
LIABILITIES					
PROMOTER'S CAPITAL	94993.75	170442.50	254791.25	347068.55	441632.84
TERM LOAN FROM BANK	220000.00	165000.00	110000.00	55000.00	NIL
WORKING CAPITAL LOAN FROM BANK	20000.00	20000.00	20000.00	20000.00	20000.00
TOTAL	334993.75	355442.50	384791.25	422068.55	461632.84
ASSETS					
FIXED ASSETS	259200.00	224100.00	193887.00	167865.75	145441.51
CURRENT ASSETS					
SUNDRY DEBTORS	166250.00	310000.00	330000.00	393750.00	555000.00
CASH IN HAND & AT BANK	1543.75	14542.50	5804.25	12597.80	16794.93
TOTAL (A)	167793.75	324542.50	335804.25	406347.80	571794.93
CURRENT LIABILITIES					
SUNDRY CREDITORS	92000.00	193200.00	144900.00	152145.00	255603.60
TOTAL (B)	92000.00	193200.00	144900.00	152145.00	255603.60
NET WORKING CAPITAL (A) -(B)	75793.75	131342.50	190904.25	254202.80	316191.33
TOTAL	334993.75	355442.50	384791.25	422068.55	461632.84

Note:

- 1 Promoters contribution includes promoters contribution for term loan and working capital loan and profit for each year.
2. Sundry Debtors is taken to be 25 days sales for year . Thereafter the credit period is increased gradually.
- 3.Sundry creditors is taken to be 20 days purchase on an average.
- 4.Number of working days is taken to be 300.

PROJECTED PROFIT & LOSS ACCOUNT					
YEAR	1	2	3	4	5
INCOME	1995000.00	2325000.00	2475000.00	2625000.00	2775000.00
(AS PER ANNEXURE 1)					
TOTAL (A)	1995000.00	2325000.00	2475000.00	2625000.00	2775000.00
EXPENDITURE					
(AS PER ANNEXURE 2)					
RAW MATERIALS	1380000.00	1656000.00	1738800.00	1825740.00	1917027.00
WAGES	426000.00	474000.00	537000.00	594000.00	651000.00
TRANSPORTATION	15000.00	16500.00	18150.00	19965.00	21961.50
GREASE,OIL & LUBRICANTS	4200.00	4620.00	5082.00	5590.20	6149.22
LOADING & UNLOADING	10000.00	11000.00	12100.00	13310.00	14641.00
POWER CHARGES	30000.00	33000.00	34650.00	38115.00	41926.50
BANK INTEREST					
ON TERM LOAN	22206.25	17531.25	12856.25	8181.25	3506.25
ON WORKING CAPITAL					
LOAN	1800.00	1800.00	1800.00	1800.00	1800.00
DEPRECIATION	40800.00	35100.00	30213.00	26021.25	22424.24
TOTAL (B)	1930006.25	2249551.25	2390651.25	2532722.70	2680435.71
NET PROFIT FOR THE YEAR	64993.75	75448.75	84348.75	92277.30	94564.29

PROJECTED FUND FLOW STATEMENT					
YEAR	1	2	3	4	5
INFLOW OF FUND					
PROMOTERS CONTRIBUTION	30000.00	NIL	NIL	NIL	NIL
FUND FROM OPERATION	105793.75	110548.75	114561.75	118298.55	116988.53
TERM LOAN FROM BANK	275000.00	NIL	NIL	NIL	NIL
GRANT FROM COIR BOARD	200000.00	NIL	NIL	NIL	NIL
WORKING CAPITAL LOAN FROM BANK	20000.00	NIL	NIL	NIL	NIL
TOTAL	630793.75	110548.75	114561.75	118298.55	116988.53
APPLICATION OF FUND					
CONSTRUCTION OF WORK SHED	140000.00	NIL	NIL	NIL	NIL
PURCHASE OF PLANT & MACHINERY					
7HP SHEARING MACHINE	120000.00	NIL	NIL	NIL	NIL
7HP COMPRESSOR	75000.00	NIL	NIL	NIL	NIL
STENCILING TABLES,SHOOTING GUN,S					
TIRRER & ACCESSORIES	165000.00	NIL	NIL	NIL	NIL
REPAYMENT OF TERM LOAN	55000.00	55000.00	55000.00	55000.00	55000.00
INCREASE OF WORKING CAPITAL	75793.75	55548.75	59561.75	63298.55	61988.53
TOTAL	630793.75	110548.75	114561.75	118298.55	116988.53

PROJECTED DEBT SERVICE COVERAGE RATIO

YEAR	1	2	3	4	5
NET PROFIT	64993.75	75448.75	84348.75	92277.30	94564.29
DEPRECIATION ON FIXED ASSETS	40800.00	35100.00	30213.00	26021.25	22424.24
INTEREST ON TERM LOAN	22206.25	17531.25	12856.25	8181.25	3506.25
INTEREST ON WORKING CAPITAL LOAN	1800.00	1800.00	1800.00	1800.00	1800.00
TOTAL (A)	129800.00	129880.00	129218.00	128279.80	122294.78
REPAYMENT OF TERM LOAN	55000.00	55000.00	55000.00	55000.00	55000.00
INTEREST ON TERM LOAN	22206.25	17531.25	12856.25	8181.25	3506.25
INTEREST ON WORKING CAPITAL LOAN	1800.00	1800.00	1800.00	1800.00	1800.00
TOTAL (B)	79006.25	74331.25	69656.25	64981.25	60306.25
DSCR (A)/(B)	1.64	1.75	1.86	1.97	2.03
AVERAGE DSCR	1.85				

SALES	<u>1995000.00</u>
TOTAL (A)	<u>1995000.00</u>

VARIABLE COST	
RAW MATERIALS	1380000.00
WAGES	426000.00
GREASE,OIL & LUBRICANTS	4200.00
TRANSPORTATION	15000.00
LOADING & UNLOADING	10000.00
POWER CHARGES	30000.00
TOTAL (B)	<u>1865200.00</u>
CONTRIBUTION (A)-(B)	129800.00

FIXED COST	
BANK INTEREST	24006.25
DEPRECIATION	40800.00
TOTAL FIXED COST	<u>64806.25</u>
BREAK EVEN SALES	996059.08