

BANKABLE PROJECT PROPOSAL
ON
COIR BASED INDUSTRY
FOR
APICOL (Agricultural Promotion and Investment Corporation of Odisha Ltd.)

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BANKABLE PROJECT REPORT ON COIR MAT FINISHING UNIT

Introduction

The coconut palm indeed is a traditional plantation crop grown in India over the past 3000 years with longest mythological and historical record. In spite of the great antiquity attached to coconut crop in the country, organized efforts to develop the crop were made only about a century back and actual systematic efforts for development of coconut palm as a commercial crop begun in 1940s.

Coir is a unique natural fiber with diverse applications of great economic importance extracted from husks of Coconut. India is the largest coir producer in the world accounting for more than 80 per cent of the total world production of coir fiber. The coir sector in India is very diverse and involves households, co-operatives, NGOs, manufacturers and exporters. The husk yields fibers, which is converted into coir and coir products viz., coil carpets, coir geo-textile, coir composite, coir safety belts, coir boards, coir asbestos and coir pith. Coir pith a secondary by product obtained during de-fibering process is used as soil conditioner and mending all types of soils. The spongy nature of pith helps in disintegration of clay soil and allows free drainage. Its sponginess helps to retain water and oxygen and also prevents loss of vital nutrients from soil.

Coir fibers measure up to 35 cm in length and 12-25 microns in diameter. A coconut harvest occurs once in 45 days. From 1000 coconuts it would be possible to extract 10 kgs of coir. Among vegetable fibers, coir has one of the highest concentrations of lignin, making it stronger but less flexible than cotton and unsuitable for dyeing. There are two types of coir - the more commonly used brown fiber, which is obtained from mature coconuts, and finer white fiber, which is extracted from immature green coconuts after soaking for up to 10 months. Mature coir fibers contain more lignin, a complex woody chemical, and less cellulose than fibres such as flax or cotton. Indian coir industry is an important cottage industry contributing significantly to the economy of the major coconut growing States and Union Territories, *i.e.*, Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, Goa, Odisha, Assam, Andaman & Nicobar, Lakshadweep, Pondicherry, etc.

Odisha has about 54,000 hectares under coconut cultivation producing 290 million coconuts annually. As per the present status of coir industry in Odisha, Coir Board has more than 600 registered units in the State producing 6521 MTs of coir fiber a year, which are used for making various value-added coir products. The percentage of husk utilization for value addition is roughly about 30%.

Review of the Coir Industry

Coir industry is an agro based traditional industry providing means of livelihood for more than 7 lakhs of workers predominantly women. The industry is still using age old

equipments and technologies for the spinning of coir yarn and manufacture of coir products. Realizing the need for modernization of the industry, several agencies through their research and development programmes have developed different modern machineries and technologies for production and processing of coir and coir products. The Coir Board of the state has also evolved schemes for providing financial assistance to the entrepreneurs for setting up of coir units with modern machinery items. In spite of these, the entrepreneurs are not keen to acquire new technologies and install modern machinery without getting convinced on the viability of these machineries and technologies. In modern open economies, entrepreneurship is argued to be far more important than it ever was. There is a general consensus that almost all new jobs in the last couple of decades have been created by startups spearheaded by energetic entrepreneurs. The large companies, if anything, have been steadily losing jobs. The economic growth led by entrepreneurship is believed to be more comprehensive. The coir sector has also take advantage of the emerging scenario. India is a young country with about 63% population currently being in the age group of 15-59 years. Every year India adds more than 5 million people eligible for securing jobs. India's young demographic profile has placed the country favourably in terms of manpower availability. People can be turned to economic assets if they can be gainfully employed. This demographic dividend requires engaging our youth in creative pursuits through developing appropriate skills, including entrepreneurial skills in coir industry also. Added to this are the burning issues of unemployment and poverty that continue to pose serious challenges to polity and economy of the nation. The need of the hour, therefore, is to create 'job providers' in large numbers rather than 'job seekers'. Coir sector provides scope for creating 'job providers' in the modern coir projects. The myth that the entrepreneurs are born, no more holds good, rather it is well recognized now that entrepreneurs can be created and nurtured through appropriate interventions in the form of entrepreneurship development programmes.

The objective of promoting entrepreneurship development in the country can be achieved by providing handholding support to first generation entrepreneurs by helping them to set up their own micro and small enterprises. In addition, in order to inculcate entrepreneurial skills to the youth, skill development needs to be encouraged through which the youth can become employable and/ or create their own enterprise. There are several trades which can be covered to cater to the skill demands. Coir sector is one such trade which could be developed in the coconut producing states. With the concerted efforts of the Coir Board and the respective state governments, the coir industry has now proliferated to more than 14 States and Union Territories of the country. Various Ministries / Departments of Government of India are operating a number of schemes to support first generation entrepreneurs. However, most of these schemes/ departments are working in silos. There is a need for establishing a network, building a database of these efforts in order that these are easily accessible to the entrepreneurs to select and convert them into commercial ventures. This would also provide a platform for sharing best practices, technological advancements and could ultimately bring up the ground realities before the policy makers for making policy changes.

Development of the rural economy has been one of the prime concerns for Government of India. Accordingly, efforts have been made on a continuous basis for improving the economic and social well-being of people in rural areas on a sustainable basis. Despite the sincere efforts,

the problems of poverty, unemployment, drudgery and migration still exist in rural economy. There is a need to address these problems by creating employment opportunities in the rural areas and this could be done by setting up of small enterprises in the Coir- based industry sector more so as nearly 80 % of the workforce are women. There is ample scope for innovation, value addition and entrepreneurship development in this sector. This is possible only by skill up-gradation, handholding, mentoring, incubation and credit support aimed especially at rural youth and women providing them employment opportunities at their doorstep.

Demand of the product

The world-wide demand of coir products have increased tremendously. The major portion of demand is primarily met by India & Srilanka. Although Srilanka is gaining on the global coir product export share, India, who has witnessed rapid growth in coir product export since the early 1990s, still holds 80% of the global coir product market. India produces many different coir products (mats, matting, geotextiles, rugs, carpet, rubberized coir), and export them to more than 43 countries around the world. The global coir product market seems to be promising, with exports of variety of different products to many different countries. Besides, the export market, India itself is a huge consumer of coir products. Therefore, the utilization of coir husks (fiber) of North East India is the need of time for socio-economic development of this region. The Board has proposed various programmes during the 12th Five Year Plan for the development of coir industry in Odisha, and has prepared an action plan to increase the husk utilization percentage to 50%, he added. The Coir Board has launched various programmes for development of coir industry in the State The Board also takes part in exhibitions organized in various states to demonstrate lab to trade transfer of technology, which has been developed in Central Coir Research Institute (CCRI), Alleppy, Kerala and Central Institute of Coir Technology (CICT), Bangaluru.

Plant Location

For the selection of a suitable location for setting up of the loom for production of Coir mats & matting, following prerequisites are to be considered.

- (i) Availability of infrastructural facilities viz. raw materials and transport.
- (ii) Locally available raw materials (Coir fiber/coir yarn) utilization.
- (iii) Communication and transport facilities.
- (iv) Availability of necessary technical personnel, skilled & unskilled manpower.

Manufacturing Process

The coconut fibre extracted from the husk of the coconut is twisted into yarn. The yarn is then woven into matting using automatic and semi-automatic power looms.

The main process steps are:

- (i) Purchase/Fabrication and setting up of Anupam Loom
- (ii) Collection and storage of coir yarn
- (iii) Dyeing of coir yarn as and when required
- (iv) Weaving of different types of mats & matting
- (v) Marketing of finished product

Activity Schedule

The detail scheduling of each activity and effective project control systems are essential to completion of the project according to the project implementation schedule. The activity schedule for producing coirmats involves the following primary activities:

- (i) Purchase & Installation of machinery
- (ii) Engagement of Manpower like Supervisor, weaver & labour
- (iii) Training
- (iv) Purchase/collection of raw materials
- (v) Weaving/production of Coir mats/matting
- (vi) Storing & marketing of product

Standard Cost of Coir Mat Finishing & Processing Unit

Sl. No.	Item	Cost (Rs.)
1.	Machinery (Shearing Machine)	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

Financial Details

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 DIMINISHING BALANCE

Total Loan: Rs. 2.75 lakhs	Installment 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. 14,025.00
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	Rs. 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
7 HP COMPRESSOR	75000.00
STENCILING TABLES, SHOOTING GUN, STIRRER & ACCESSORIES	165000.00
WORKING CAPITAL REQUIREMENT	25000.00
TOTAL	525000.00

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	525000.00

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

PROJECTED BALANCE SHEET

YEAR	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. Contribution includes promoters. Contribution for term loan and working capital loan and profit for each year.
2. Sundry debtors are taken to be 25 days sales for year. Thereafter the credit period is increased gradually.
3. Sundry creditors are 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
TOTAL (A)	1995000.00	2325000.00	2475000.00	2625000.00	2775000.00
EXPENDITURE					
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 ON WORKING CAPITAL LOAN	22206.25	17531.25	12856.25	8181.25	3506.25
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	0.00	0.00	0.00	0.00
FUND FROM OPERATION	105793.75	110548.75	114561.75	118298.55	116988.53
TERM LOAN FROM BANK	275000.00	0.00	0.00	0.00	0.00
GRANT FROM COIR BOARD	200000.00	0.00	0.00	0.00	0.00
WORKING CAPITAL LOAN FROM BANK	20000.00	0.00	0.00	0.00	0.00
TOTAL	630793.75	110548.75	114561.75	118298.55	116988.53
APPLICATION OF FUND					
CONSTRUCTION OF WORK SHED	140000.00	0.00	0.00	0.00	0.00
7 HP SHEARING MACHINE	120000.00	0.00	0.00	0.00	0.00

7 HP COMPRESSOR	75000.00	0.00	0.00	0.00	0.00
STENCILING TABLES, SHOOTING GUN, STIRRER & ACCESSORIES	165000.00	0.00	0.00	0.00	0.00
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 RATION

YEAR	1	2	3	4	5
NET PROFIT	64993.75	75448.75	84348.75	92277.3	94564.29
DEPRECIATION ON FIXED ASSETS	40800	35100	30213	26021.25	22424.24
INTEREST ON TERM LOANS	22206.25	17531.25	12856.25	8181.25	3506.25
INTEREST ON WORKING CAPITAL LOAN	1800	1800	1800	1800	1800
TOTAL (A)	129800	129880	129218	128280	122295
REPAYMENT OF TERM LOAN	55000	55000	55000	55000	55000
INTEREST ON TERM LOANS	22206.25	17531.25	12856.25	8181.25	3506.25
INTEREST ON WORKING CAPITAL LOAN	1800	1800	1800	1800	1800
TOTAL (B)	79006.3	74331.25	69656.3	64981.3	60306.3
DSCR A/B	1.64	1.75	1.86	1.97	2.03
AVERAGE DSCR	1.85				
	SALES		1995000.00		
	TOTAL (A)		1995000.00		
	VARIABLE COST				
	RAW MATERIALS		1380000.00		
	WAGES		426000.00		
	TRANSPORTATION		15000.00		
	GREASE, OIL & LUBRICANTS		4200.00		
	LOADING & UNLOADING		10000.00		
	POWER CHARGES		30000.00		
	TOTAL (B)		1865200.00		
	CONTRIBUTION (A) - (B)		129800.00		
FIXED COST	BANK INTEREST		24006.25		
	DEPRECIATION		40800.00		
	TOTAL FIXED COST		64806.25		
	BREAK EVEN SALES		996059.08		

Conclusion

India accounts for more than two-thirds of the world production of coir and coir products. It is an important cottage industry contributing significantly to the economy of the major coconut growing States and Union Territories, *i.e.*, Kerala, Tamilnadu, Andhra Pradesh, Karnataka, Maharashtra, Goa, Odisha, Assam, Andaman & Nicobar, Lakshadweep, Pondicherry, etc. However, despite the huge potential to grow up this industry in Odisha, due to lack of awareness, scattered nature of coconut plantations, the growth of the coir industry is negligible or very poor. With appropriate planning and financial support the industry can prove to be a boon for rural youth and women in particular.