

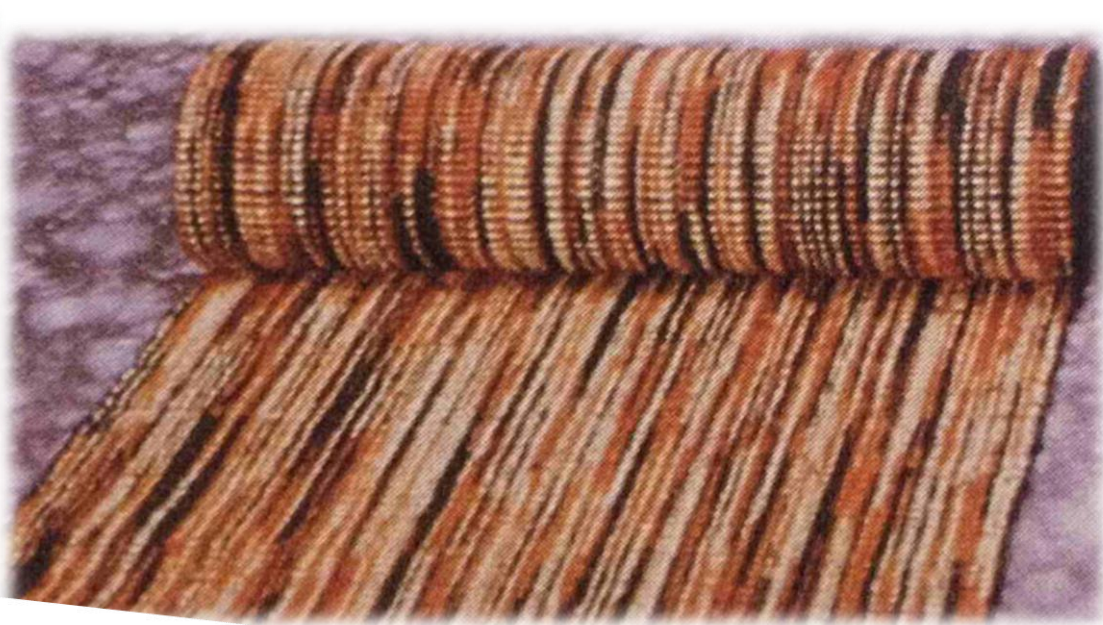
Coir Geotextiles

Coir Nettings / Geotextiles, Coir Woven Bhoovastra, Soil Fabrics, Woven Coir Erosion Control Mats, Coir Logs, Woven Coir Geotextile Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule, Working Capital Requirement, Plant Layout, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis

Introduction

Coir is a biodegradable organic fibre material which is coarse, rigid and strong. The constituents of coir have been found to be mostly cellulose and lignin. Coir fibre is weather resistant and resistant to fungal and bacterial decomposition. The rate of decomposition of coir is much less than any other natural fibre. These characteristics are attributed due to the high lignin content in the fibre.

Coir in the form of woven mesh mattings or non woven stitch bonded blankets are used in engineering applications in the geotechnical field. Geotextiles, one among geosynthetics like geogrids, geonets, geomats, geocomposites etc. used in civil engineering applications are polymeric. These products have a long life and do not undergo biological degradation, but are liable to create environmental problems in the long run.



Coir woven bhoovastra are permeable coir fabrics made from natural coir fibre. Coir woven bhoovastra control soil erosion by acting as a ground cover. As a ground cover, it reduces the flow velocity of runoff water by forming check dams with help of net structured strands of coir woven bhoovastra in firm contact with soil, which absorb the impact of water flow and resist washing down keeping the soil intact.

Coir is a 100% organic naturally occurring fiber, from a renewable source obtained from coconut husk. Naturally resistant to rot, moulds and moisture, it is not treated with any chemicals during its spinning process for converting it into a yarn. Hard and strongest among all natural fibers, it can be spun and woven into different types of mattings and mats. Geotextiles made out of coir are ideally suited for low cost applications because coir is available in abundance.

Coir fibres can be converted into fabric both by woven and non-woven process. Coir mesh matting of different mesh sizes is the most established coir geotextiles. Mesh matting having different specifications is available under quality code numbers H2M1 to H2M10. These qualities represent coir geotextiles of different mesh sizes ranging from 3.175mm to 25.4mm. Several types of non-woven geotextiles also exist.

Most of the non-woven mats are made from loose fibres, which are interlocked by needling or rubberising. Non-woven geotextiles are available in several dimensions and have a minimum thickness of 2mm.

Coir geotextiles can be used to stabilize the soil temporarily when construction roads or banks. Coir geotextiles are being used as a separation cum drainage layer in the road.

It is also intended to serve as a reinforcement material in the beginning of the project. Geosynthetics are widely used in the construction of road all over the world, whereas use of coir geotextiles is very limited in such construction.

Coir geotextiles are found to provide protection against soil erosion to the various types of slopes that has been demonstrated and documented by the Coir Board. The ability of coir fibres to absorb water and to degrade with time is its prime properties, which give it an edge over synthetic geotextiles for erosion control purposes. The present study was conducted to determine the suitability of coir geotextiles to increase the load bearing capacity of the mud wall constructed by the reinforcement of coir geotextiles.

Indian Coir Industry

- *Area under cultivation of coconut-about 5,100,000 (hectares)*
- *India is the largest producer of coconut with an annual production of 12,597 million nuts.*
- *Utilization of husk is 36%*
- *Production of coir fibre-369,400MT*
- *Employs 5,86,660 workers out of which 80% are women.*
- *Coir is exported to 80 countries. USA is the largest buyer.*
- *60% of the total export goes to countries in the West Europe*
- *There are 200 exporters.*

Different Verities of Coir Geotextiles

- MESH MATTINGS
- LOOP MATTINGS
- COCOLOGS
- NON WOVENS
- DRAINAGE FILTERS

Benefits

Coir geo textiles are best for controlling soil erosion and conditioning soil. Made from coir fiber, they are naturally resistant to rot and moulds and is cheaper than synthetic geo-textiles. They hold soil in place and prevent erosion, dissipating the force of heavy rains and run of water. It provides good soil support for years, allowing natural vegetation to become established.

- *Low cost*
- *Long lasting separation of the base and sub grade material.*

- *Preservation of load-bearing capacity*
- *Ability to extend the life of paved roads*
- *100% Natural fibre, extracted from coconut husk.*
- *Adds organic material to soil.*
- *Promotes vegetative growth.*
- *100% Bio-degradable and environmentally friendly.*
- *Tough, durable, versatile and resilient.*
- *High tear-strength resistance.*
- *Easy to install/maintain/ patch-up.*

Few Indian Major Players are as under

- **Amco Industries Ltd.**
- **Amichand Textiles Ltd.**
- **Aspinwall & Co. (Travancore) Ltd.**
- **Delight Handicrafts Palace Ltd.**
- **Dunlop Comforts Pvt. Ltd.**
- **Duroflex Pvt. Ltd.**
- **Eco Wood Ltd.**
- **Karnataka Consumer Products Ltd.**

- **Karnataka State Coir Devp. Corpn. Ltd.**
- **Kerala State Coir Corpn. Ltd.**
- **Kontak Comforts Pvt. Ltd.**
- **Kozylon Coir Products Ltd.**
- **Wires & Fabriks (S.A.) Ltd.**

Project at a Glance

PROJECT AT A GLANCE				(` in lacs)			
COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	55.00	55.00	Capital	0.00	287.26	287.26
Buildings	0.00	227.60	227.60	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	654.98	654.98	Other Type Share Capital	0.00	0.00	0.00
Motor Vehicles	0.00	8.00	8.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	66.20	66.20	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	40.00	40.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	861.78	861.78
Preliminary& Pre-operative Exp	0.00	3.00	3.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	65.00	65.00	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money – Working Capital	0.00	29.26	29.26				
TOTAL	0.00	1149.04	1149.04	TOTAL	0.00	1149.04	1149.04

Project at a Glance

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/ Book Value
	EPS	CEPS	Per Share		Per Share	Per Share				No.of Times	
	`	`	`	`	`	%	`	%	`		%
1-2	4.79	9.72	14.79	24.00	0.00	100.00	4.79	0.00	4.79	1.00	0.00
2-3	7.41	11.68	22.20	18.00	0.00	100.00	7.41	0.00	7.41	1.00	0.00
3-4	10.01	13.71	32.21	12.00	0.00	100.00	10.01	0.00	10.01	1.00	0.00
4-5	12.55	15.76	44.77	6.00	0.00	100.00	12.55	0.00	12.55	1.00	0.00
5-6	15.02	17.80	59.78	0.00	0.00	100.00	15.02	0.00	15.02	1.00	0.00

Project at a Glance

Year	D. S. C. R.			Debt / – Deposits Debt	Equity as– Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individual	Cumulative	Overall					GPM	PBT	PAT	Net Contrib ution	P/V Ratio		
	(Number of times)			(Number of times)		%	%	%	%	%		%		
Initial				3.00	3.00									
1–2	1.40	1.40		1.62	1.62	1.79		32.53%	16.75%	13.07%	825.98	78.44%	0.92	0.85
2–3	1.66	1.52		0.81	0.81	0.94		37.81%	25.38%	17.33%	963.65	78.44%	1.02	1.50
3–4	1.98	1.66	1.98	0.37	0.37	0.47		41.37%	31.44%	20.48%	1101.31	78.44%	1.05	2.32
4–5	2.36	1.81		0.13	0.13	0.21		43.79%	35.75%	22.83%	1238.98	78.44%	1.03	3.29
5–6	2.83	1.98		0.00	0.00	0.07		45.41%	38.84%	24.58%	1376.64	78.44%	0.97	11.10

Project at a Glance

BEP

BEP – Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	44.67%
Total BEP (% of Installed Capacity)	50.48%

IRR, PAYBACK and FACR

Internal Rate of Return .. (In %age)	25.93%
Payback Period of the Project is (In Years)	2 Years 3 Months
Fixed Assets Coverage Ratio (No. of times)	2.948

Major Queries/Questions Answered in the Report?

- 1. What is Coir Geotextiles industry ?**
- 2. How has the Coir Geotextiles industry performed so far and how will it perform in the coming years ?**
- 3. What is the Project Feasibility of a Coir Geotextiles Plant ?**
- 4. What are the requirements of Working Capital for setting up a Coir Geotextiles plant ?**

- 5. What is the structure of the Coir Geotextiles Business and who are the key/major players ?**
- 6. What is the total project cost for setting up Coir Geotextiles plant ?**
- 7. What are the operating costs for setting up a Coir Geotextiles plant ?**
- 8. What are the machinery and equipment requirements for setting up a Coir Geotextiles plant ?**

- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up a Coir Geotextiles plant ?**
- 10. What are the requirements of raw material for setting up a Coir Geotextiles plant ?**
- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up a Coir Geotextiles plant ?**
- 12. What is the Manufacturing Process and Formulations of a Coir Geotextiles plant ?**

- 13. What is the total size of land required for setting up a Coir Geotextiles plant ?**
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- 17. What is the Built up Area Requirement and cost for setting up a Coir Geotextiles Business?**

18. What are the Personnel (Manpower) Requirements for setting up a Coir Geotextiles Business?

19. What are Statistics of Import & Export for Coir Geotextiles ?

20. What is the time required to break-even?

21. What is the Break-Even Analysis of a Coir Geotextiles plant?

22. What are the Project financials of a Single Coir Geotextiles plant?

- 23. What are the Profitability Ratios of a Coir Geotextiles plant?**
- 24. What is the Sensitivity Analysis-Price/Volume of a Coir Geotextiles plant?**
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Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*

What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Technology Books and Directory*
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- *Entrepreneur India (An Industrial Monthly Journal)*

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- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*

Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

Sectors We Cover *Cont...*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

Sectors We Cover *Cont...*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

Sectors We Cover *Cont...*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

Sectors We Cover *Cont...*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

Sectors We Cover *Cont...*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

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- *Township & Residential Complex*
- *Textiles And Readymade Garments*
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- *Wire & Cable*

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