

कटार बोर्ड (सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय, भारत सरकार) COIR BOARD

MINISTRY OF MSME, GOVT. OF INDIA AN ISO 9001: 2008 CERTIFIED ORGANIZATION

#### THIS DOCUMENT CONTAINS STRATEGIC INTEVENTIONS FOR THE SHORLISTED COIR PRODUCTS FOR EVOLVING THE DOMESTIC MARKET

Final Report Developed towards "Study on evolving strategies and implementing them for expanding domestic market for coir products including brand building" For Coir Board

Ma Foi Strategic Consultants Pvt Ltd







## PREFACE

The study on "Evolving Strategies and implementing them for Expanding Domestic Market for Coir Products including Brand Building" for select coir products was conducted with the intention of identifying the domestic market for coir products and evolving strategies to boost the domestic coir industry via value addition, product innovation, alternate uses while keeping the ecofriendly nature of the product in mind.

The study initiated by Coir Board was executed by Ma Foi Strategic Consultants Private limited.

The mission of this initiative is to strengthen the Coir Board's understanding of the market potential, product prioritization for the domestic market, the challenges faced, thrust areas of the sector, and arriving at the strategies for GO-To- Market and Brand building/ Promotion.

To arrive at the potential of the products we took a methodological approach -

- Creating an exhaustive pool of products made of coir
- Conducting analysis and discussion with SMEs to arrive at potentially stronger products
- Shortlisting the 15 products in consultation with the Coir Board
- Arriving at a methodology to project the potential of the product by carefully analyzing product application, usage, substitute, price points
- The methodology and the potential was further vetted by conducting manufacturer and industry expert visits pertaining to the product category
- Market potential arrived was further drilled to project incremental and replacement market potential.

As part of this study an All-India market survey of coir products was done with Primary survey focused towards the South Indian market.

The population of the study was Coir Board senior executives, Scientists and Research Bodies, Manufacturers, Consumers, retailers and wholesalers for various coir and the substitute products. The study was focused on to find out the potential of various coir products and awareness level of the same in various parts of the country.

The study was conducted across 9 representative locations covering various regions of the country. Total of 175 sample size was taken with a mix of 50 consumers, 89 retailers and wholesalers and 25 manufactures, research scientists, and SMEs.

Whereas, the potential survey was a result of exhaustive secondary research, SME interaction, and manufacturing plant visits, this was enumerated into structured and methodological logical analysis to arrive at the potential. The results of analysis are presented in the form of tables and charts. Findings and recommendations are presented separately, product wise.

We believe that the study is a reflection of the potential in the domestic industry, challenges faced and the strategies to boost the industry for a successful market intervention.





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# 1. Background of the Study

The promotion of the sales of coir products in India and abroad is one of the major functions of the Coir Board. The Domestic Market Promotion includes efforts for enhanced sale of coir products through Board's showrooms and sales outlets, and also popularizing coir and coir products through publicity, organizing exhibitions in different parts of the country, using audio and visual media, carrying out sales campaign, press advertisement and distribution of pamphlets, installing hoardings etc. Coir Board has been participating in the exhibition for popularization of coir and coir products in the domestic market including North Eastern Region (NER).

With a view to boost up the sales in the domestic market for coir and coir products, it was felt necessary to create a brand based on the USPs of coir and coir products. Branding is the name attached to a product or service and it represents many more intangible aspects of a product or service. It also creates in the mind of customers and prospects the perception that it offers the customer a guarantee and then delivers on it.

# 1.1. Objectives of the Study

*General objective of this study* is to assess the market of coir and coir products, consumption in domestic market by different manufacturers, traditional producers.

The specific objectives are as follows -

- To assess the status of government and non-governmental organizations and trading houses related to the Coir and products and value addition.
- To list out the major requirements of user organizations, source of supply, price and quantity of consumption of coir products.
- To identify the present networking links, if any, between supplier and the buyers in the Country.
- To identify and recommend possible link development between supplier and producers in the concerned state and based companies for the sustainable supply chain development.
- To identify target customer segments for coir and coir products in each of the state.
- To study and assess the state wise demand for coir and coir related products.
- To study and assess the present consumption pattern and supply sources.
- To study and assess the present trade practices like pricing and channel of distribution.
- To study and assess the logistics on pricing and consumption trend.
- To study and assess the scope for market expansion
- To study and assess the strategy for market development.
- To study competitiveness of coir products, handloom products in comparison with other competitive products such as jute, sisal, hemp, synthetic floor covering materials and next generation floor coverings in market.





#### The Specific objectives for building the brand are as follows -

- To study the competitors' products and how are they positioning their brand.
- To determine market segmentation and buying pattern.
- To get details on registration of trademarks for products or services, if any
- To determine requirement of advertising support for promotion of the brand.

## 1.2 Scope of the Assignment

The domestic market in India, although very vast with good potential, still remains unexploited. At present organized marketing of coir in the country is being undertaken by the Coir Board, Coir Marketing federations, State Coir corporations and State Coir Development agencies besides the manufacturers in the private sector. It is a fact that organized selling channels of coir products in the country at present are not sufficient to tap the unexploited household sector in India.

The private sector efforts in this field are to be given a boost to expand the market network in the country. Programs like organizing coir expo in important cities, assistance to entrepreneurs in private and co-operative sectors to setup sales outlets, providing marketing development assistance to intensify marketing efforts and to adopt IT oriented services, strengthening of publicity efforts, participation in exhibitions and trade fairs etc. by the Board are not enough to substitute private sector involvement in organized marketing of coir products.





## 2. Executive Summary

India is the largest producer and exporter of coir and coir products in the world. India along with Srilanka accounts for 90% of the coir production.

76 countries import coir products from India ranging from raw fibre to coir mats, mattings, geotextiles etc.

Though country has progressed in making an international mark in the traditional product, innovative value added coir products are yet to create that effect. As per the statistics published by coir board "India's coir exports had brought foreign exchange worth Rs 1,630 crore last year (2014-15), the main uplift to the figure has been due to the bulk supply of raw fibre to China in the last 3 years (increase in 26% growth in quantity).

Coir board, as a promotional body for coir and coir related products in India is looking for holistic development of the industry by providing aids, marketing, and export support to the industry player. It is seen that the domestic visibility of Coir products in India is very low due to numerous factors including lack of awareness, supply, market linkage etc.

In order to assess the market of coir and coir products, consumption in domestic market by different manufacturers, traditional producers the present assignment on "Evolving Strategies and implementing them for Expanding Domestic Market for Coir Products including Brand Building was assigned to the Ma Foi Strategic Consultants Private limited.

The assignment was commissioned to assess the potential of various value added coir product in domestic market and later getting a market feedback on the prevalence and acceptance of such products. The study included potential assessment, discussion and meetings with various stakeholders of the industry including Coir board officials, exporters, traders, manufactures, research agencies, consumers and competitors.

The following top 15 products manufactured using coir were shortlisted in consultation with Coir Board for market potential analysis, coir pith, coir composted manure, coir home and roof garden, coir vertical garden, coir geotextiles, coir mat, coir mattress, coir rope/ commercial yarn, bristle fibre brush, coir acoustic barrier, coir furniture, coir door, coir partition wall and false roofing, and coir handicrafts.

Domestic potential was analyzed for the respective product by using detailed methodology by adopting industry assumptions vetted by SMEs. The Total market potential, replacement market potential and incremental market potential was arrived for each product.

#### Total Market Potential (TMP)

- Market Potential assessment under the study is limited by the entire size of the market for a product at a specific time, considering the product nature/characteristics.
- It represents the upper limits of the market for a product assumption.
- It is a theoretical market achieved, considering whole of the market is realized by the same product and has no substitutes.
- Has no constraint of supply, reachability, accessibility, affordability





#### Incremental Market Potential (IMP)

Incremental Market Potential for a particular year is arrived by calculating the differential new opportunity compared to the previous year or the base year

#### Replacement Market Potential (RMP)

Calculated based on the life of the product.
 RMP = TMP/Life of the product

After arriving the market potential various field visits (manufacturer and consumer) and analysis was done to validate the same, along with the identification of the gaps and SWOT of the product. Given the market understanding and the challenges key GO-TO-MARKET strategies were formulated product wise for market expansion.

To get the understanding from marketer (retailer/ wholesaler) view point a brief survey cum observational study was done to assess the demand of the market if any.

Given at the end of the section are the Findings and strategic recommendations for the industry, while the detailed product profiling is part of the study in the upcoming sections.

The research draws attention to the fact that the industry has been skewed to the export market due to the returns that it earns on the supply of the coir fibre to the importing countries along with the supply of the traditional carpet, rugs and matting solutions.

Industry needs better processes and infrastructure that can suit the expansion and penetration of coir products in the domestic market.

Product potential summary and related findings and strategies (product life cycle wise, prioritization wise) are mentioned below along with market survey cum observational study findings.





# 2.1 Market Potential Summary

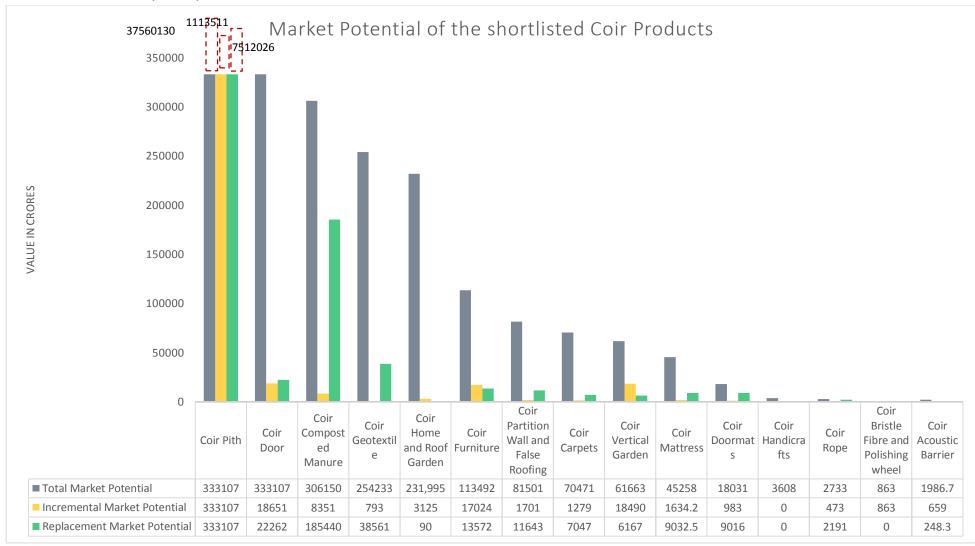
Market Potential - Summary			
	Total Market Potential		
Type of Products	Value (in	<b>A</b> man	
	crores)	Area	
Coir Vertical Garden	61663	5137 lakh sqft	
Coir Geotextile	254233	50846 mn sq m	
Coir Composted Manure	306150	1231 lakh metric tonnes	
Coir Pith	37560130	93900 lakh metric tonnes	
Coir Home and Roof Garden	231,995	1160 lakh metric tonnes	
Coir Mattress	45258	10988 lakh cubic ft	
Coir Carpets	70471	7112 mn sq feet	
Coir Doormats	18031	331931956 units	
Coir Door	333107	5487 mn sqft	
Coir Furniture	113492	NA	
Coir Partition Wall and False Roofing	81501	8150 mn sq feet	
Coir Handicrafts	3608	NA	
Coir Rope	2733	NA	
Coir Bristle Fibre and Polishing wheel	863	10 Cr units	
Coir Acoustic Barrier	1986.7	1216 lakh sq meter	
	Incromont	tal Market Potential Per year	
Type of Products	increment	a Market Polential Per year	
Type of Products	Value(in crores)	Area	
Type of Products Coir Vertical Garden			
	Value(in crores)	Area	
Coir Vertical Garden	Value(in crores) 18490	Area 1541 lakh sqft	
Coir Vertical Garden Coir Geotextile	Value(in crores) 18490 793	Area 1541 lakh sqft 159 mn sq m	
Coir Vertical Garden Coir Geotextile Coir Composted Manure	Value(in crores) 18490 793 8351	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith	Value(in crores) 18490 793 8351 1113511	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden	Value(in crores) 18490 793 8351 1113511 3125	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes 16 lakh metric tonnes	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress	Value(in crores) 18490 793 8351 1113511 3125 1634.2	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes 16 lakh metric tonnes 116.7 lakh cubic ft	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets	Value(in crores) 18490 793 8351 1113511 3125 1634.2 1279	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes 16 lakh metric tonnes 116.7 lakh cubic ft 151 mn sq ft	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets Coir Doormats	Value(in crores) 18490 793 8351 1113511 3125 1634.2 1279 983	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes 16 lakh metric tonnes 116.7 lakh cubic ft 151 mn sq ft 16995783 units	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets Coir Doormats Coir Door	Value(in crores) 18490 793 8351 1113511 3125 1634.2 1279 983 18651	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes 16 lakh metric tonnes 116.7 lakh cubic ft 151 mn sq ft 16995783 units 299 mn sq ft	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets Coir Doormats Coir Door Coir Furniture	Value(in crores) 18490 793 8351 1113511 3125 1634.2 1279 983 18651 17024	Area 1541 lakh sqft 159 mn sq m 42 lakh metric tonnes 2784 lakh metric tonnes 16 lakh metric tonnes 116.7 lakh cubic ft 151 mn sq ft 16995783 units 299 mn sq ft NA	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets Coir Corpets Coir Doormats Coir Door Coir Furniture Coir Partition Wall and False Roofing	Value(in crores) 18490 793 8351 1113511 3125 1634.2 1279 983 18651 17024 1701	Area1541 lakh sqft159 mn sq m42 lakh metric tonnes2784 lakh metric tonnes16 lakh metric tonnes16.7 lakh cubic ft151 mn sq ft16995783 units299 mn sq ftNA170 mn sq feet	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets Coir Carpets Coir Doormats Coir Door Coir Furniture Coir Partition Wall and False Roofing Coir Handicrafts	Value(in crores)           18490           793           8351           1113511           3125           1634.2           1279           983           18651           17024           1701           NA	Area1541 lakh sqft159 mn sq m42 lakh metric tonnes2784 lakh metric tonnes16 lakh metric tonnes16.7 lakh cubic ft151 mn sq ft16995783 units299 mn sq ftNA170 mn sq feetNA	
Coir Vertical Garden Coir Geotextile Coir Composted Manure Coir Pith Coir Home and Roof Garden Coir Mattress Coir Carpets Coir Carpets Coir Doormats Coir Door Coir Furniture Coir Furniture Coir Partition Wall and False Roofing Coir Handicrafts Coir Rope	Value(in crores)           18490           793           8351           1113511           3125           1634.2           1279           983           18651           17024           1701           NA           473	Area1541 lakh sqft159 mn sq m42 lakh metric tonnes2784 lakh metric tonnes16 lakh metric tonnes16.7 lakh cubic ft151 mn sq ft16995783 units299 mn sq ftNA170 mn sq feetNA15267 million tonnes	





Market Potential - Summary				
	Value(in crores)	Area		
Coir Vertical Garden	6167	513 lakh sqft		
Coir Geotextile	38561	NA		
Coir Composted Manure	185440	927 lakh metric tonnes		
Coir Pith	7512026	18780 lakh metric tonnes		
Coir Home and Roof Garden	90	0.45 lakh metric tonnes		
Coir Mattress	9032.5	1991.8 lakh cubic ft		
Coir Carpets	7047	-		
Coir Doormats	9016	-		
Coir Door	22262	367 mn sqft		
Coir Furniture	13572	NA		
Coir Partition Wall and False Roofing	11643	NA		
Coir Handicrafts	NA	NA		
Coir Rope	2191	-		
Coir Bristle Fibre and Polishing wheel	NA	NA		
Coir Acoustic Barrier	248.3	126.19 lakh sqmt		

Figure 1 – Market Potential Summary



## 2.2 Summary Graph for Market Potential

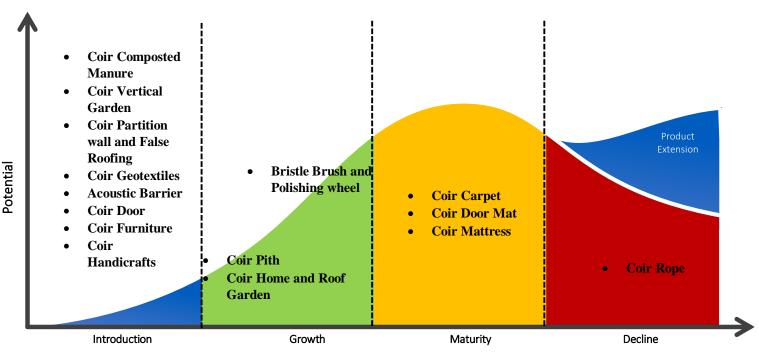
#### Figure 2 – Market Potential Summary Graph

Coir Pith, Composted manure, Coir Home and Roof garden and Coir Vertical Garden shows are the most promising products; while Coir geotextiles, Coir Door, Furniture and partition wall are among the new product that shows great market potential. The product effectiveness study for the later product group will require high gestation period for piloting, commercializing and Launching considering the potential details.













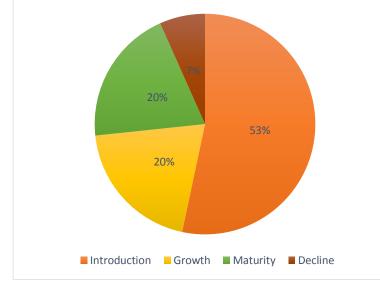


Figure 4 PLC depiction in pie

Position of the product in life cycle determines the type of intervention required.

Most of the coir products fall in the Introduction and Growth category thus offering a wider scope for strategic intervention.

Appropriate product strategy for launch and campaigning supported with adequate set of promotional tools alongside continuous innovation and improvisation will facilitate in acquiring and developing significant market size for products

(Note – The above statement holds incorrect in case of path breaking inventions and disruptive technology





## 2.4 Product Prioritization

Post potential analysis and market feedback survey, shortlisted products were prioritized and segregated in four categories as mentioned below based on following parameters –

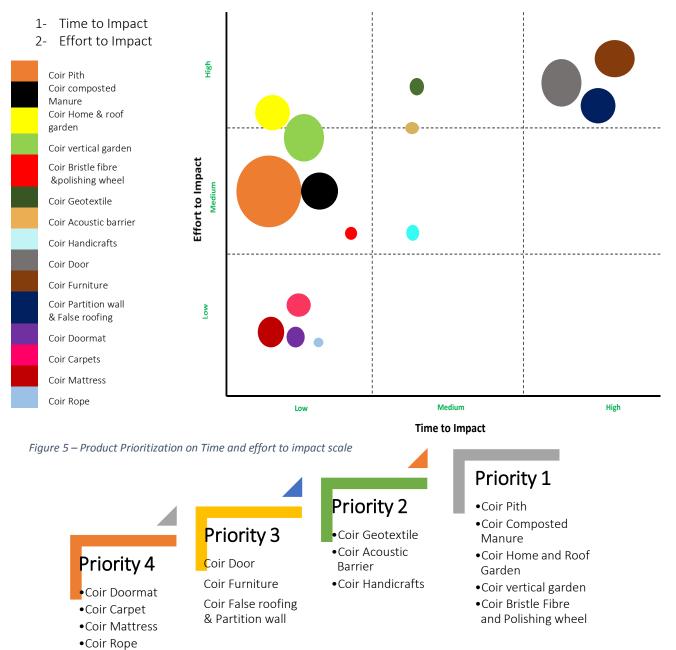


Figure 6 – List of shortlisted coir products based on Priority segregation



Strategy Formulation and Implementation for Expanding Domestic Market for Coir Products



# Product Wise Strategic Interventions





# 2.5 Strategic Interventions and Recommendation (Product and Priority Based)

	Priority 1					
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention		
Coir Pith	<ol> <li>Develop technology to increase yield of pith given the impending short supply in the market</li> <li>Develop product with EC neutrality that not many mfg. are doing</li> <li>Develop product differentiation based on crop and application as a complete package of practice</li> <li>Robust product development by ensuring the technological advancement in the salinity prone areas</li> </ol>	<ol> <li>Involve state and central government organizations for widespread adoption through their programmes</li> <li>Promote ICE activities through KVKs and Agri Universities</li> <li>Channelizing and incentivizing the schemes to reach out more number of stakeholders for setting up units</li> <li>Decreasing the raw export of pith from country to ensure increased availability for domestic market and value addition to fetch better revenue</li> <li>Develop the standards and ensure certifications for meeting global requirement and quality parameters</li> </ol>	<ol> <li>Extension activities for technology transfer and adoption</li> <li>Streamline demand supply through institutionalized methods</li> <li>Develop a robust dealer network across all market</li> <li>Increase availability in modern retail formats by ensuring consistent supply</li> <li>Increase presence across e-commerce platform for product supply</li> <li>Backward integration should be done to avoid shortfall of the quality raw material</li> </ol>	<ol> <li>Coir Board can brand the products and application based on features - eco friendliness, high productivity</li> <li>Create variants in the product line and position as         <ul> <li>a. High value customized pith</li> <li>b. Premium product – Highly nutritional</li> <li>c. DIY pith</li> <li>d. low cost raw pith</li> </ul> </li> <li>Continuous extension activities to acclimatize with the pith as a product and its benefits to the colleges, institutions and farmers through regular connect in as part of the course, seminars, farmer meetings</li> </ol>		





		Priority 1		
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
Coir Composted	1. Develop technology to	1. Involve state and central	1. Extension activities for	<ul> <li>4. Investing in branding by proliferating coir mark/ Eco mark as a tool for differentiation and quality standardization</li> <li>1. Efforts need to be taken in</li> </ul>
Manure	<ol> <li>Develop technology to increase yield and time taken to compost the manure given the impending short supply in the market</li> <li>Develop product differentiation based on crop and application as a complete package of practice</li> </ol>	<ol> <li>Involve state and central government organizations for widespread adoption through their programmes</li> <li>Promote ICE activities through KVKs and Agri Universities</li> <li>Develop the standards and ensure certifications for meeting global requirement and quality parameters</li> </ol>	<ol> <li>Extension activities for technology transfer and adoption</li> <li>Streamline demand supply through institutionalized methods</li> <li>Develop a robust dealer network across all market</li> <li>Increase availability in modern retail formats by ensuring consistent supply</li> <li>Increase presence across e-commerce platform for product supply</li> </ol>	<ol> <li>Enorts need to be taken in further upgradation, innovation and bringing appeal to the product.</li> <li>Investing in branding by proliferating coir mark/ Eco mark as a tool for differentiation and quality standardization</li> </ol>
Coir Home & Roof Garden	<ol> <li>Better the technology of making liners and planters (needle felt) for mass scale production &amp; continuous market led innovation.</li> <li>Roof gardening requires the composite base to be</li> </ol>	<ol> <li>Involve state and central government organizations for widespread adoption through their programmes</li> <li>Promote ICE activities through KVKs and Agri Universities</li> </ol>	<ol> <li>Developing a seamless supply chain infrastructure from procurement of raw material to the final consumption</li> <li>Partnering and promotions of the product</li> </ol>	<ol> <li>Investing in branding by proliferating coir mark/ Eco mark as a tool for differentiation and quality standardization</li> <li>Creating continuous awareness through exhibitions, campaigns,</li> </ol>





		Priority 1		
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
	developed and mass produced to be used by the calibrators, landscapers & consumers	3. Involving the developers associations and landscape artist to reach the consumers for awareness and adoption	<ul> <li>with the central bodies, agencies and institutions for increased penetration from a top – Bottom approach</li> <li>Promoting the product, by highlighting the features in various forums and conferences</li> </ul>	advertisements, hoardings via partnering bodies
Coir Vertical Garden	1. Coir vertical garden is market ready product that requires package of practice for various crops to be developed for ease for consumer usage	<ol> <li>In the tone of coir pith providing coir pith to various nurseries, a program should be run to have sqft of vertical garden in a household for widespread adoption and reach.</li> <li>Involving the developers associations and landscape artist to reach the consumers for awareness and adoption</li> </ol>	<ol> <li>vertical gardens could be manufactured from coir products, thus focus should be on domestic availability of coir pith to the manufacturers in sufficient quantities</li> <li>Spread awareness among end users about advantages of vertical gardens – eco-friendly and limited space requirements</li> <li>Associate with industry organizations in targeted sectors to increase awareness about vertical gardens</li> </ol>	<ol> <li>Differential pricing by customer segments like for example hospitality and residential segment</li> <li>Investing in branding by proliferating coir mark/ Eco mark as a tool for differentiation and quality standardization</li> <li>Creating continuous awareness through exhibitions, campaigns, advertisements, hoardings via partnering bodies</li> </ol>





		Priority 1		
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
Coir Bristle fibre polishing wheel	<ol> <li>Focus on R&amp;D to develop a robust technology which can be used to manufacture high quality bristle coir fibre</li> <li>Improvisation in the technology which could surpass the limitation restricted to manual retting in key production areas will increase the availability of the product</li> <li>Focus on developing product variants</li> </ol>	<ol> <li>Create clusters and promote product innovation using bristle fibre. E.g. Kanyakumari – Tirunelveli, Pollachi</li> <li>Quality standards for bristle coir fiber should be developed and standardized to ensure consistency in quality of bristle coir fibre</li> </ol>	4. Arrange seminars and guest lecturers in civil engineering colleges and interior designing institutes to spread awareness about advantages of coir pith and coir fiber among architects, landscape developers, fashion designers, builders and horticulturalists.	<ol> <li>Create premium and low cost product pricing with different bands</li> <li>Retain pricing equity in the distribution channel where you opt to go with distributors</li> </ol>

Figure 7 – Intervention for product in Priority 1





		Priority 2		
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
Coir Geo textile	<ol> <li>Promote intensive primary research and patenting of products</li> <li>Develop innovative products application and technology for mass manufacturing and economies of scale</li> <li>Product improvement to make it more durable and increase longevity like other competitive synthetic substitutes available</li> <li>Develop technology for nonwoven to compete with the imported products</li> </ol>	<ol> <li>Promote product as green alternate to tone/concrete/ HDPE canal lining</li> <li>Include the product in PWD procurement list; make it a standard product in erosion/flood control</li> <li>Support to geotextile manufacturers by initiating tie-ups with various government department to generate orders for Coir Geotextile and help the manufacturers</li> </ol>	<ol> <li>Integrated channel to be developed for reaching out in order to meet the potential demand</li> <li>Ensure availability of products and supply in the domestic market through COIR board outlets and other relevant distribution medium</li> <li>Ensuring consistent supply of raw material for developing coir geotextile thus avoiding inflation</li> </ol>	<ol> <li>This is not a commercial product, hence branding by Coirboard is not necessary</li> <li>Increase awareness amongst the target segment through various awareness building exercise, exhibitions and performance case study</li> <li>Investing in branding by proliferating coir mark/ Eco mark as a tool for differentiation and quality standardization</li> </ol>
Coir Acoustic Barrier	<ol> <li>Efforts should be taken in bringing the technological upgradation to improvise quality and achieving economies of scale and thus the competitive pricing</li> </ol>	<ol> <li>Ensuring technological, research funding investment for bringing high pace in developing the product.</li> <li>Partnering with private research agencies in PPP model will help fasten process of commercialization</li> </ol>	<ol> <li>Ensure product availability in all the application areas with consistency, quality and the competitive or premium pricing based on the product positioning</li> </ol>	<ol> <li>Product should be commercialized with appropriate grading as per the industry standards (acoustic barrier) for wide scale adoption in industrial application</li> </ol>





		Priority 2		
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
	<ol> <li>Develop a commercial grade proven product that could be accepted by market</li> <li>Patenting products and techniques</li> </ol>		<ol> <li>Develop ecommerce trade for market reach</li> <li>Retain pricing equity in the distribution channel</li> <li>Market awareness should be created routed through the target group of population like interior designer, acoustic specialist, builders and existing bodies that use acoustic products</li> </ol>	
4. Coir Handicraft	<ol> <li>Hybrid product development where coir can be mixed with other material to develop a more sophisticated product</li> <li>Skill development of the artisans on variety of coir handicrafts for increased product line and efficiency</li> </ol>	<ol> <li>Ensuring training and market support for artisans</li> <li>Development of production clusters for coir handicrafts in lines with other natural fibres so that raw material purchase could be centralized , thus ensuring cheap and regular availability of raw material</li> <li>Availability of soft capital to handicrafts manufacturers for purchase of raw materials</li> </ol>	<ol> <li>Market linkages to be strengthened for promoting existing coir handicrafts</li> <li>Welfare measures to be taken for artisans to promote the trade</li> <li>Tie up with premium retailers for distribution</li> <li>Develop ecommerce trade for market reach</li> <li>Consistent supply to market to ensure product availability</li> <li>Measures to create awareness about the</li> </ol>	<ol> <li>Branding as a ECO MARK/ COCO LABEL should be done for quality</li> <li>Artisanary work should be highlighted as part of branding exercise</li> </ol>





	Priority 2						
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention			
			product should be taken				
			on wide scale by				
			campaigns, seminars,				
			exhibitions in the entire				
			value chain				

Figure 81- Intervention for product in Priority 2





		Priority 3		
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
Coir Door	<ol> <li>Current level of product maturity unviable when compared to competition/substitutes</li> <li>Market and competition to decide on product development</li> </ol>	<ol> <li>The product should be part of the list of materials to be used for furnishing purposes as per the requisite product features.</li> <li>Interagency partnership thus utilizing the experiences of</li> </ol>	<ol> <li>Product awareness and campaigning through various trade partners</li> <li>Develop customized marketing and promotion activity focusing key customer segments like</li> </ol>	<ol> <li>Branding initiatives to be done by manufacturers themselves</li> <li>Product grading and classification to be done based on application and price range</li> </ol>
	<ol> <li>Promote development of refined product with better aesthetic appeal, variants and quality</li> <li>Develop product that ensure the ecofriendly nature of the product</li> <li>Develop hybrid products with other natural fibers</li> <li>Technological advancement for large scale development of the product to ensure economies of scale</li> </ol>	<ul> <li>the other natural fibre industry and develop product with better features</li> <li>Could tie into PPP model for research &amp; development, commercialization and launch in a big way</li> <li>Invest in exclusive coir furnishing showrooms across</li> <li>Financial aid for incentivizing setting of manufacturing units</li> <li>Importing technology and know how</li> </ul>	<ul> <li>builders/Architect/Civil Engineers/Mason</li> <li>Create pull for the stakeholders in the product by ensuring Partner identification for product placement and reach out physically and ecommerce</li> <li>Develop units of products and exhibit alongside substitute product availability in the premium outlets for test marketing</li> </ul>	<ol> <li>Reach out through branded show rooms, home stop, decors, luxury furniture's</li> <li>Quality standards to be developed &amp; standardized by proliferating coir mark/ Eco mark</li> <li>Create market driven benchmarking on pricing plus premium for natural fibre label</li> <li>Promote as WOOD FREE- GREEN Furniture/ door/ Composites</li> </ol>
Coir Furniture	1. Current level of product maturity unviable when compared to competition/substitutes	1. The product should be part of the list of materials to be used for furnishing purposes as per	<ol> <li>Product awareness and campaigning through various trade partners</li> </ol>	<ol> <li>Branding initiatives to be done by manufacturers themselves</li> </ol>





Priority 3				
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
	<ol> <li>Market and competition to decide on product development</li> <li>Promote development of refined product with better aesthetic appeal, variants and quality</li> <li>Develop product that ensure the ecofriendly nature of the product</li> <li>Develop hybrid products with other natural fibers</li> <li>Technological advancement for large</li> </ol>	<ul> <li>the requisite product features.</li> <li>2. Interagency partnership thus utilizing the experiences of the other natural fibre industry and develop product with better features</li> <li>3. Could tie into PPP model for research &amp; development, commercialization and launch in a big way (NID etc)</li> <li>4. Invest in exclusive coir furnishing showrooms across</li> <li>5. Financial aid for incentivizing</li> </ul>	<ol> <li>Develop customized marketing and promotion activity focusing key customer segments like builders/Architect/Civil Engineers/Mason</li> <li>Create pull for the stakeholders in the product by ensuring Partner identification for product placement and reach out physically and ecommerce</li> <li>Develop units of products</li> </ol>	<ol> <li>Product grading and classification to be done based on application and price range</li> <li>Reach out through branded show rooms, home stop, decors, luxury furniture's</li> <li>Quality standards to be developed &amp; standardized by proliferating coir mark/ Eco mark</li> <li>Create market driven benchmarking on pricing</li> </ol>
	scale development of the product to ensure economies of scale	setting of manufacturing units. 6. Importing technology and know how	and exhibit alongside substitute product availability in the premium outlets for test marketing	plus premium for natural fibre label 6. Promote as WOOD FREE- GREEN Furniture/ door/ Composites
Coir False roofing & Partition wall	<ol> <li>Current level of product maturity unviable when compared to competition/substitutes</li> <li>Market and competition to decide on product development</li> <li>Promote development of refined product with</li> </ol>	<ol> <li>The product should be part of the list of materials to be used for furnishing purposes as per the requisite product features.</li> <li>Interagency partnership thus utilizing the experiences of the other natural fibre</li> </ol>	<ol> <li>Product awareness and campaigning through various trade partners</li> <li>Develop customized marketing and promotion activity focusing key customer segments like builders/Architect/Civil Engineers/Mason</li> </ol>	<ol> <li>Branding initiatives to be done by manufacturers themselves</li> <li>Product grading and classification to be done based on application and price range</li> <li>Reach out through branded show rooms,</li> </ol>





Priority 3				
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
	<ul> <li>better aesthetic appeal, variants and quality</li> <li>4. Develop product that ensure the ecofriendly nature of the product</li> <li>5. Develop hybrid products with other natural fibers</li> <li>6. Technological advancement for large scale development of the product to ensure economies of scale</li> </ul>	<ul> <li>industry and develop product with better features</li> <li>3. Could tie into PPP model for research &amp; development, commercialization and launch in a big way</li> <li>4. Invest in exclusive coir furnishing showrooms across</li> <li>5. Financial aid for incentivizing setting of manufacturing units</li> <li>6. Importing technology and know how</li> </ul>	<ol> <li>Create pull for the stakeholders in the product by ensuring Partner identification for product placement and reach out physically and ecommerce</li> <li>Develop units of products and exhibit alongside substitute product availability in the premium outlets for test marketing</li> </ol>	<ul> <li>home stop, decors, luxury furniture's</li> <li>4. Quality standards to be developed &amp; standardized by proliferating coir mark/ Eco mark</li> <li>5. Quality standards to be developed &amp; standardized</li> <li>6. Create market driven benchmarking on pricing plus premium for natural fibre label</li> </ul>

Figure 9 Intervention for product in Priority 3





	Priority 4			
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention
Coir Doormat	<ol> <li>Promote development of products with better feel and design by integrating with other natural fibers</li> <li>Technology upgradation for developing finer quality product with better appeal, aesthetic and cost optimization</li> </ol>	<ol> <li>Policy intervention in facilitating inter agency support from other natural fibre research and promotion bodies like jute, sisal, banana fibre to develop better product and market reach.</li> <li>Importing technology and know how</li> </ol>	<ol> <li>Create industry linkages for high value product promotion</li> <li>Ensuring the quality of raw material getting procured and distributed to the manufacturers</li> </ol>	<ol> <li>Branding initiatives to be done by manufacturers themselves and/or GI of Indian coir</li> </ol>
Coir Carpet	<ol> <li>Technology upgradation for developing finer quality product with better appeal, aesthetic and cost optimization</li> <li>Hybrid product development where coir can be mixed with other material to develop a more sophisticated product</li> </ol>	<ol> <li>Policy intervention in facilitating inter agency support from other natural fibre research and promotion bodies like jute, sisal, banana fibre to develop better product and market reach.</li> <li>Importing technology and know how</li> <li>Allowing the product for alternate uses in country (extreme cold areas as ice matting) and government bodies to promote it</li> </ol>	<ol> <li>Create industry linkages for high value product promotion</li> <li>Ensuring the quality of raw material getting procured and distributed to the manufacturers</li> <li>Campaigns and exhibitions for product availability and awareness of new product</li> <li>Leverage on ecommerce channels for marketing</li> </ol>	<ol> <li>Branding initiatives to be done by manufacturers themselves and /or GI of Indian coir</li> </ol>





	Priority 4				
Product Name	Technology Intervention	Policy Intervention	Value Chain Intervention	Branding Intervention	
Coir Mattress	<ol> <li>Improvisation of the manufacturing process to ensure high quality and durability of the product</li> </ol>	<ol> <li>Government to promote use of coir mattress in certain segments (Hospitals, Hostels)</li> </ol>	<ol> <li>Market linkages to be strengthened for ensuring quality raw material supply for making curled coir and needle felt.</li> </ol>	<ol> <li>Branding initiatives to be done by manufacturers themselves</li> </ol>	
Coir Rope	<ol> <li>Develop innovative product that have better finish, decreased roughness, plastic coated, decreased shedding of fibre for increased applicability and wider usage</li> <li>Identify newer applications for coir rope, viz., mussels and shells cultivation etc</li> <li>Improve aesthetics of the product (dying of the product for household requirements)</li> </ol>	<ol> <li>Partnering with other research bodies for product improvisation.</li> <li>Investing in technology (fully automated) for increased produce, better quality, less labor and high economies of scale for competitive pricing</li> </ol>	2. Market linkages to be strengthened for ensuring quality raw material supply for making commercial yarn and rope.	1. Brand as GI of Indian coir	

Figure 10- Intervention for product in Priority 4





## Product Awareness, Availability and promotion

- 1. Lack of Product awareness and product availability in most of the coir product selling outlets
- 2. Lack of supply of raw material (Power shortage in major producing states is also adding to it and inadequate collection mechanism)
- 3. Product not being part of government registered list of materials

## Demand, Supply and Quality

- 4. Declining demand of traditional coir products
- 5. Deteriorating quality of coir fibre (the fibre length is short which results in excessive shedding in the products) to compete with the standards demonstrated by substitute products
- 6. Lack of skill development in categories like handicrafts

## Pricing and Supply chain

- 7. Inconsistent and inflated pricing due to higher cost of operations resulting from old to technology and decentralization of various processing units
- 8. Sourcing and marketing linkage is very weak and not institutionalized

## Innovation, Research and Technology Modernization

- 9. Lack of product improvisation and innovation
- 10. Technological obsolescence and lack of timely technology upgradation
- 11. Research efforts for new product development has high gestation period
- 12. Gap in the Technology transfer stage for mass manufacturing and commercialization





# 2.7 Overall Recommendations

#### Product Awareness, Availability and Promotion

- 1. Investing in branding by proliferating coir mark/ Eco mark as a tool for differentiation and quality standardization
- 2. Making the products available online through ecommerce
- Reaching out to the local bodies that acts as marketing and promotion agonies by facilitating use of the related coir products should be done for entry in the system in a top-down approach (For e.g. Tieing up with universities for promoting coir pith and manure as part of their extension and RAWE program and arranging seminars and conferences early stage adoption)
- 4. Making the sector lucrative for increasing the youth influx that bring implementation of the desired strategies for the market expansion and reach
- 5. Setting up of exclusive showrooms that acts as a demo center in a franchisee based model with marketing wing conjoint for raising awareness of the product.
- 6. Incentivizing the stakeholders in the system to reach out to the domestic market

## Demand, Supply and Quality

- 7. Investment in setting up manufacturing facility at the supply centers of raw material
- 8. Market should be able to provide uninterrupted guaranteed supplies of high quality products as per customer need and demand.
- 9. Export of low value fibre or raw pith should be decreased so that the product is available for domestic market as raw material which can be further developed via value addition and get better returns

## Pricing and Supply chain

- 10. Developing a seamless supply chain infrastructure from procurement of raw material to the final consumption
- 11. Efforts should be taken in bringing the technological upgradation to continuously improvise the quality and bring down the cost of production
- 12. Channelizing and incentivizing the schemes to reach out more number of stakeholders for setting up units

#### Innovation, Research and Technology Modernization

- 13. Develop innovative, appealing and product with wider application
- 14. Partnering & promotions of the product with the central bodies, agencies and institutions for increased penetration from a top Investment in technology upgradation and modernization.
- 15. Working closely with other boards & national level institutions like jute, sisal, textile for research purposes; CDB for improving the yield, productivity and quality of the coconut for better raw material quality; National institute of design and packaging institutes for improving appeal, aesthetics and design of the value added coir products.





## 3 About Coir Industry

Coir Industry had its beginning in the country in the later half of the 19th Century. The first coir factory was established in the ancient port town of Alleppey in the year 1859. Later, the coir industry has spread over to other coconut growing States like Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, and West Bengal, UT of Lakshadweep etc. Coir is primarily a traditional, labor intensive, export oriented, and agro based cottage industry. The industry employs about 7 lakhs of coir workers and majority of them are from rural areas belonging to economically weaker sections of the Society. Women constitute 80% of the work force in the industry.

Coir Products are natural and biodegradable in nature. Traditionally, the use of coir was limited to the manufacture of floor coverings, cushions, mattresses etc which off late has moved to other products like Coir Geo-textiles, Coir ply, Coir pith Organic Manure, Coir Garden Articles, etc.

The coir industry has developed only in a handful of coconut producing countries viz.India, Srilanka, Thailand, Indonesia, Philippines, Malaysia, and Vietnam etc. Out of them India and Sri Lanka together contribute almost 90% of the global coir production. The traditional coir products like, coir mats mattings, rugs, carpets still dominate the market of exports. Very limited focus is given so far to boost the domestic market. India is the largest producer and exporter of coir and coir products. Sri Lanka, Indonesia, Malaysia, Philippines, Thailand and Vietnam are the other primary producers of coir with varying levels of production capabilities.

Some of the major challenge faced by industry include the shortage of coir fibre, coir yarn for the industry. The shortage of coir yarn and its fluctuating price is becoming a survival problem for the industries. The level of mechanization is very low in the coir industry and is required at each and every stage of production to create competitiveness.





# 4 Approach and Methodology

The study is conducted using participatory approaches throughout. The approach to study is to complete the assignment in two phases covering five distinct stages of work as explained below:

- 1. Market Potential and Competitor Study
- 2. Market Feedback Study

The five stages covering the two phases of the assignment and the activities to be taken up during each stage are given below:



Figure 11 – Approach and methodology

#### 1. Inception

- Finalization of Approach and Methodology (The detail methodology is covered as a part of product profiling).
- Identification of data requirements and mode of data collection
- Preparation of study tools
- Preparation and Submission of Inception Report
- Data Collection from Secondary Sources

## 2. Field Surveys

- Field Surveys in research units, marketer, exporter, manufacturing and consumer areas
- Discussions with above mentioned stakeholders
- Data collection from secondary sources

## 3. Analysis and Assessment

- Preliminary assessment of potential, based on secondary sources of information, field surveys and consultations
- Analysis of baseline product features, substitute products, SWOT
- Firming up recommendations for improving the domestic market of value added coir products, evaluation strategies and institutional responsibilities

## 4. Draft Reporting

- Presentation of the methodology to the coir board
- Getting approval on the direction
- Submission of Draft Report

#### 5. Final Reporting

- Comments from Coir Board
- Incorporation of comments
- Submission of Updated Final Report





## 4.1. Market Feedback Survey cum Observational study

Data Collection on the market survey was primarily done to get the retailer and wholesaler understanding about the product and also to know the current market scenario and the substitute products.

A sample of 89 traders were taken for the purpose of this study. Sampling was done by a random sampling method. The questionnaire was divided by the areas of – Awareness, Demand, Supply, Price Factors, Challenges, Competitive product.

The study was a mix of the following tools:

- Primary Research
  - o Telephonic discussion
  - o Face to face meeting
  - o Mystery visit
  - o Referrals
- Secondary Research
  - o Desk research
  - o Blogs and Newsletter
  - o Article and Publication

*Of the identified 15 base products market response was taken and the following observations were made Sample was taken from various trades within the mentioned product categories* 







Figure 12 – Product Awareness

- The product portfolio above reflects the awareness level of the products from the market view point. The market reflects complete awareness for products like Bristle coir polishing wheel, coir geotextiles, coir carpet, coir mattress, coir vertical garden, coir rope, coir pith, coir manure and home garden however, to increase penetration and acceptability a comprehensive work is required to improve quality of the product, availability of the product and pricing of the product as these are the key parameters which will help this product portfolio to stay competitive with the cheaper and better substitutes
- Market has limited or no awareness for Coir furniture, coir door, coir false roofing and partition
  wall, coir acoustic barriers, coir handicraft products and to bring these products to the level of
  commercialization deep distribution, market penetration and awareness building exercises are
  prerequisite before acceptability of the product is developed





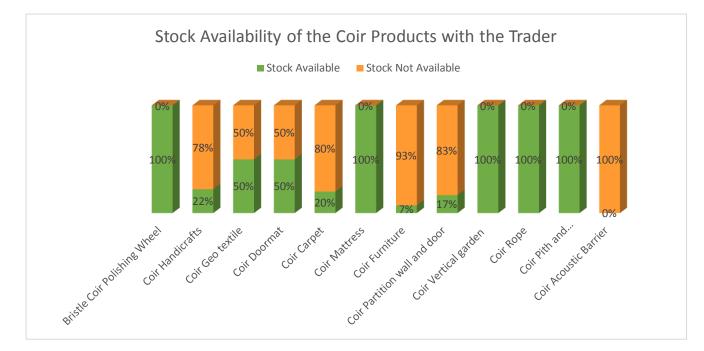


Figure 13 -Product Availability

- The product portfolio above reflects the stock availability level of the products from the market view point. The market reflects availability of coir mattress, coir vertical garden, and coir pith, coir rope with 100% of the sample for the respective products.
- Coir handicrafts, coir carpet, Coir doormat, Coir geotextiles have less availability whereas coir furniture, door, false roofing, acoustic barrier, has negligible availability with the trading agencies.
- For the product with less and negligible availability the trend across the traders has been lack of lack of demand due to better substitutes, product availability and product awareness.
- New products (composites, acoustic) are yet to see product launch.
- For New products viz. coir furniture, Coir door, coir partition wall, acoustic barrier traders want to have the product for understanding product capability and market acceptance.
- Most of the sample population met for the above mentioned categories has shown interest in seeing sample of such products



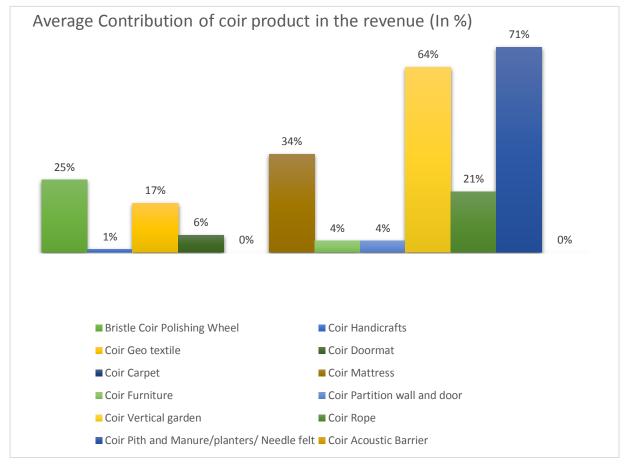


Figure 14 – Average contribution to the revenue (Product wise)

- Among the widely known coir products a very small quantum of the product are getting sold as a part of marketer's portfolio. Few of the responses for this shared by the sample surveyed includes lack of quality, higher prices, inconsistent supply, limited variants better substitutes and decreased utility of the product.
- Product innovation to bring the desired features as per the market response is require for continued product presence and better revenue realization.
- Of the shortlisted product groups' maximum movement is seen among the nursery products/ agriculture products viz. coir pith, composted manure, planters, and vertical garden, the reason for such data is partially because of state government and university efforts to create awareness of these product and making the product available at affordable or free of cost t coupled with technical knowhow.
- Traditional products like door mat, carpet, mattress, rope has seen recent decline due to competitive, durable and better quality substitutes. Product innovation and branding exercises are required to further develop the industry as a whole.