

# **A STUDY ON EXPORT OF COIR PRODUCTS FROM INDIA**

*submitted to the School of Maritime Management,  
Indian Maritime University, in partial fulfilment of the requirements  
for the award of degree of*

**Master of Business Administration**

in

International Transportation and Logistics Management

by

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SCHOOL OF MARITIME MANAGEMENT  
INDIAN MARITIME UNIVERSITY, KOCHI  
(A Central University, Government of India)



# INDIAN MARITIME UNIVERSITY

SCHOOL OF MARITIME MANAGEMENT

KOCHI CAMPUS

## CERTIFICATE

This is to certify that the MBA Project Report entitled “**A Study on Export of Coir Products from India**” done by **Mr. S Nandakishore Menon** and is submitted in fourth semester of **MBA International Transportation and Logistics Management**. It is also certified that the above work has not previously formed the basis for the award of any degree, diploma association ship, fellowship or other similar titles, and it is an independent work done by the candidate.

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Dr. Jayan P.A.  
(Internship Guide)

Internal Examiner

External Examiner

## DECLARATION

I, **S Nandakishore Menon**, declare that this project report titled “**A Study on Export of Coir Products from India**”, is submitted to Indian Maritime University, Cochin in partial fulfilment of the requirement for the award of **Master of Business Administration in International Transportation and Logistics Management** during the academic year 2020-2022.

All the information in this document has been obtained to use only for academic purpose and is presented in accordance with academic rule and conduct under the guidance of **Dr. Jayan P.A.**

I also declare that this report has not been submitted in full or part thereof, to any other university or institution for the award of any degree or diploma.

**Place : KOCHI**

**S. NANDAKISHORE MENON**

**Date :**

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## GLOSSARY

- **Coir**

Coir is the fibrous material found between the hard, internal shell and the outer coat of a coconut.

- **Husk**

A usually dry or membranous outer covering such as a pod or one composed of bracts of various seeds and fruits like coconut.

- **Retting**

Retting is a process employing the action of micro-organisms and moisture on plants to dissolve or rot away much of the cellular tissues and pectins surrounding bast-fibre bundles, and so facilitating separation of the fibre from the stem. It is used in the production of linen from flax stalks and coir from coconut husks.

- **Defibering**

Process of removing fibres from coconut for the production of coir.

- **Cordage**

Cordage is a series of intertwined fibres, strands, strings, or fabric that are joined by twisting or braiding to form a larger more formidable whole.

- **Soil conditioner**

Soil conditioner is a product which is added to soil to improve the soil's physical qualities, usually its fertility.

- **Tapestry**

Tapestry is a form of textile art, traditionally woven by hand on a loom.

The name has been used for almost any heavy material, handwoven, machine woven, or even embroidered, used to cover furniture, walls, or floors or for the decoration of clothing.

- **Multishaft matting**

A matting generally woven on looms mounted with Dobby or Jacquard shedding mechanisms. This matting incorporates more elaborate patterns and designs which require more than four-shaft.

## TABLE OF CONTENT

<b>CHAPTER</b>	<b>PARTICULARS</b>	<b>PAGE</b>
	ABSTRACT	1
1	INTRODUCTION	3
	1.1. Objectives of the Study	5
	1.2. Methodology	5
	1.3. Scope of the Study	6
	1.4. Limitations of the Study	6
2	REVIEW OF LITERATURE	8
3	INDUSTRY PROFILE	16
	3.1. Coir Board of India	20
	3.2. Coir Products Exported from India	24
4	DATA ANALYSIS AND INTERPRETATION	30
	4.1. Composition of Export of Coir Products (2019-20)	30
	4.2. Composition of Export of Coir Products (2020-21)	32
	4.3. Comparative Analysis on the Export of Coir Products (2020-21 and 2019-20)	34
	4.4. Trends in Export	35
	4.5. Commodity-Wise Analysis of Exports	36
	4.6. Export Destinations	38
5	FINDINGS, SUGGESTIONS AND CONCLUSION	47
	5.1. Findings	47
	5.2. Suggestions	48
	5.3. Conclusion	49
	BIBLIOGRAPHY	50

## **TABLE OF GRAPHS AND FIGURES**

<b>SL NO</b>	<b>PARTICULARS</b>	<b>PAGE</b>
1	Figure - Composition of Export of Coir Products in 2019-20	30
2	Graph - Export Composition of Coir Products in 2019-20	31
3	Figure - Composition of Export of Coir Products in 2020-21	32
4	Graph - Export Composition of Coir Products in 2020-21	33
5	Comparative Analysis on The Export of Coir Products in 2020-21 and 2019-20	34
6	Commodity-Wise Analysis - Decrease in Quantity and Value	36
7	Commodity-Wise Analysis - Increase in Quantity and Value	37
8	Export Destinations - Coir Pith	38
9	Export Destinations - Coir Tufted Mats	39
10	Export Destinations - Coir Fibre	39
11	Export Destinations - Handloom Mats	40
12	Export Destinations - Coir Geo-Textiles	40
13	Export Destinations - Curled Coir	41
14	Export Destinations - Coir Yarn	41
15	Export Destinations - Handloom Matting	42
16	Export Destinations - Rubberized Coir	42
17	Export Destinations - Coir Rugs & Carpets	43
18	Export Destinations - Coir Other Sorts	43
19	Export Destinations - Coir Rope	44
20	Export Destinations - Powerloom Mats	44

## **ABSTRACT**

Coir, also called coconut fibre, is a natural fibre extracted from the outer husk of coconut and used in products such as floor mats, doormats, brushes and mattresses. Coir is the fibrous material found between the hard, internal shell and the outer coat of a coconut.

Coir industry is one of the traditional cottage industries of India. India is the world's largest producer of coir. The coir industry started and flourished in Kerala which has a long coast line, lakes, lagoons and backwaters providing natural conditions required for retting. However, as coconut production has expanded, the coir industry has grown in Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, West Bengal, Assam, Tripura, Pondicherry and the Union Territories of Lakshadweep and Andaman & Nicobar Islands through the efforts of Coir Board.

This study was conducted to analyse the export of coir products, comparing the exports of coir products with specific year by year statistics and the export destination of coir products from India

# **CHAPTER 1**

## 1. INTRODUCTION

Rural or traditional industry, one of the sub-sectors of small-scale industry, has a direct and important influence on sustainable economic development. It is a matter of common knowledge that India is a land of villages and two-thirds of its population lives in rural areas. The future of India lies in these teeming rural million. It is only from a progressive, growing and dynamic rural society that India could put herself on the desired developmental path. Rural small-scale industries play an important role under the peculiar Indian conditions. Coir Industry, one of the few rural or traditional industries converting the coconut husk, a waste, into wealth. This industry is the largest producer of coir, accounting for more than 80 per cent of the world's production of coir fibre. Coir Industry has to its credit a tradition and heritage of centuries. It is one of the few rural or traditional industries' converting the coconut husk, a waste, into wealth. This industry is the largest producer of coir, accounting for more than 80 per cent of the world's production of coir fibre.

Coir industry is one of the traditional cottage industries of India. The industry thrived in India primarily because of the traditional craftsmanship of the rural artisans. The world's largest producer of coir is India. Coir industry is of great importance to coconut producing states in India as it contributes significantly to the economy of these states. This is because coconut husk, the raw material for coir

industry is available in abundance as a by-product of coconut industry in regions of concentrated cultivation. Coir industry in India provides source of income to about 5 Lakhs artisans in rural areas. The Coir Industry is a labour intensive and export-oriented industry employing more than seven lakh workers predominantly women. The decentralized operations in the coir industry without adequate training of spinners, weavers and artisans engaged in value added product manufacturing have been posing problems particularly for ensuring the desired level of quality in the ultimate products. Historically, the coir industry started and flourished in Kerala which has a long coast line, lakes, lagoons and backwaters providing natural conditions required for retting. However, with the expansion of coconut cultivation, coir industry has also picked up in Tamil Nadu, Karnataka, Andhra Pradesh, Orissa, West Bengal, Assam, Tripura, Pondicherry and the Union Territories of Lakshadweep and Andaman & Nicobar Islands through the efforts of Coir Board.

Government of India set up Coir Board in 1954 under an Act of Parliament viz, Coir Industry Act, 1953 (45 of 1953) for the development of coir industry in India and for the promotion of domestic as well as export markets of coir and coir products. Headquartered at Coir House, Kochi in Kerala, the Board runs 48 establishments set up in various parts of India, the Board envisions to promote growth and development of coir industry by providing support to existing enterprises and encourage creation of new enterprises and in turn generating employment and income with the support of all stakeholders.

## **1.1. OBJECTIVES OF THE STUDY**

- To analyse the export of coir products
- To get a stronger insight of coir export trends
- To compare the exports of coir and coir products with 2019-20. and 2020-21. year data
- To gain a better understanding of the export destination of coir products from India

## **1.2. METHODOLOGY**

The study is based on the secondary data. The information is retrieved from various publications, official reports, research papers, articles, newsletters, websites and so on. The data sources mainly include reports of Coir Board of India; Ministry of Micro, Small & Medium Enterprises, Kerala State Coir Corporation Ltd.

### **1.3. SCOPE OF THE STUDY**

The study was undertaken to get a clear idea regarding the export of coir and coir product in India and analyse the trend of these product for a specific period. This study helps to find out the type of coir products exported from the country, their trend in exports and helps in forecasting the future prospect and identify the new opportunities for coir export to other countries.

### **1.4. LIMITATIONS OF THE STUDY**

This study, like any academic research, has limitations. Below are the details:

- Collecting primary data was difficult due to confidentiality concerns.
- Time was a major constraint so a very detailed study was not possible.
- The data collection sources were extremely limited.

# **CHAPTER 2**

## **2. REVIEW OF LITERATURE**

**Bhaskaran Unnithan, K, (1970) "Coir Industry in India with Special Reference to Marketing and Trade";**

In his study, "Coir Industry in India with special reference to Marketing and Trade" analysed the cost of production of different varieties of coir and coir products in detail. He stated that Mechanization was the key to cost reduction. He also studied in detail the marketing of coir and stated that marketing of coir could be studied by adopting two approaches namely the institutional approach and the functional approach. He further stated that both approaches could be used simultaneously to understand the problems of marketing of coir.

**Varkey V.O. (1981), "Development and Working of Coir Co-operatives in Kerala;**

Doctoral thesis was a detailed study of the coir Cooperatives with special reference to primary coir Vyavasaya Co-operatives. The study has made an attempt to analyse the organization and development of coir cooperatives, the working of coir co-operatives operating at different stages, the role played by different developmental agencies, besides studying in particular the problems and prospects of primary coir Vyavasaya Co-operatives. Along with these the socio-economic profile of the coir workers- both co-operatives and private sectors were also analysed by the author.

**Badar Alam Iqbal (1983), "Coir Goods Diminishing Role in Economic Development";**

It explained the development of coir goods. The main object must be to make improvement in the working as well as the economic condition of the labour force. Alam suggested the strengthening of coir co-operative because co-operatives assure the optimum flow of workers. If co-operatives work properly and efficiently, they will prove to be highly beneficial to entire labour force engaged in the manufacture of coir products.

**Gopala Krishna Asari V. (1984), "A Profile of Village Coir Co-operatives";**

It gave a clear account of rural coir, cooperatives that have been introduced with a view to add to the production of coir and coir products and to take care of the welfare of the people employed in the coir industry. Asari detailed the structure and functioning of coir co-operatives in Kerala. The coir co-operatives should prove themselves to be the pivots for trade union activities while performing functions such as increasing the marketing facilities for coir products, purchase and sales of husks and enabling the member for getting cheap loans, bonus and subsidies. According to him, illiteracy among the employees in the coir industry and some political problems. had been responsible for the slow and steady growth of coir co-operatives.

**Government of Kerala (1984), State Planning Board, Report of the High-Level Committee on Industry, "Trade and Power-Report on Large and Medium Traditional Industries";**

Government of Kerala analysed the coir industry as a part of studying various traditional industries in Kerala. It went through the structure of coir industry and made an all-India view about employment in coir industry, production of coir products, out-lay and expenditure in coir industry during the five-year plans, progress of co-operatives in coir sector, various government regulations in coir industry including prohibiting the use of defibering machinery etc. It also gave an account of the export statistics of various coir products from 1960-61 to 1982-83. The committee put forward some major recommendations for the upliftment of the coir Industry. The most important recommendation of the committee related to prohibition of women working in defibering and retting operations and standardization of coir yarn produced in different localities into three or four groups.

**K. N. Nair, Paul van Stuijvenberg, and Thomas Isaac (1992), "Modernization and Employment: The Coir Industry in Kerala", Indo-Dutch Studies on Development Alternatives;**

In their book, "Modernization and Employment" explain the crisis in Kerala's coir industry. This book draws the features of the industry during the fifties.

Traditional process of coir production, the relevance of coir industry in the economy of Kerala, the pitiable condition of coir workers and improvement in the conditions of the workers through the leadership of militant trade unionism. It reviews the socio political, economic and technological factors that affect trends in the coir industry in Kerala. To impart relevance of the industry it states the value of shipments of coir from Malabar Coast from 1889-1950. It mentions the untapped husk potential in Kerala and suggests that through appropriate measures, the industrial Utilization of husk can be increased. This book expresses the view that the policy of unfettered mechanization is not socially acceptable since coir production is the major source of employment after agriculture in the coastal areas. However, at the same time it suggests technology choice for reducing the period of retting, mechanization of fibre extraction and spinning process.

**Kumarasamy Pillai B. (1995), "Product Diversification in Coir Industry";**

He has pointed out on the product diversification in coir industry in Kerala. The coir production was produced in the coastal belt of Kerala early in the eleventh century over the centuries, the same old equipment and production process were used in the industry without any significant changes.

**Rajesh (2007), "Fibre Family", Agriculture and Industry Survey;**

In his study concluded that, coir fibre has unfavourable climatic conditions due to which production has been affected. He also found that the shortage is due to increased demand for fibre in the domestic market for making coir yarn. Different fibres like brown fibre, unretted green and retted fibre are used to make products like rubberized coir sheets for various uses. Russia and China are the main markets for coir fibre. The new fund allotted by the government to promote coir industry remains in the paper and never actually reaches the beneficiary.

**Satya Sundaram I. (2006), "Coir Products in Demand";**

In the study, "Coir Products in Demand" suggested that the coir products are mostly consumed domestically, with domestic consumption accounting for 92 per cent and only 8 per cent of products exported. Kerala is famous for coir and coir products. In recent years, non-traditional areas like Tamil Nadu, Karnataka and Andhra Pradesh have also started paying special attention to the growth of coir units. Indian coir products are known for their quality. They are facing a tough competition in the global market. The major problems are inadequate knowledge of the product and its end uses, non-availability of local skill and lack of accessibility to technology have led to sub-optimal Utilization of abundantly available coir fibre. The product rate is

highest in Tamil Nadu, followed by Kerala. The coir industry is facing an acute shortage of coir fibre. It is also shortage of curled coir for undertaking production of rubberized coir. Lack of innovation is another problem. Proper channels of distribution are not available for coir products. There is continuous drain of skilled laborers. The wages paid to laborers are very low. Coir products are not properly advertised through media. Many potential buyers are lost. By introducing novel methods in production process, European countries have become stiff competitors for Indian coir units.

**Beena K.S. and Anil K.R. (2011), "Effectiveness of Coir Geo-textiles in Soil Moisture Conservation";**

"Effectiveness of coir geotextiles in soil moisture conservation" they conclude their study among the diversified use of coir geotextiles, its use as a protective covering to improve crop productivity and to reduce weed problem assumes to be much significant. The study reveals that with behind crop growth parameters like plant height, leaf number and lateral spread were increased by mulching with rubberized coir and transparent polythene. Observations also reveal that weeds were not grown in plots mulched with black polythene, transparent polythene and rubberized coir. Rubberized coir as mulch enhanced the fruit yield in the case of pineapple, which is followed by natural needled felt and transparent polythene. Black polythene resisted

weed growth up to 7MAP, whereas rubberized coir and transparent polythene suppressed weeds up to 8MAP. Though the weeds were grown in other treatments the weeds count was significantly lower than that of control plot. More over all mulched treatments had a favourable influence in increasing soil moisture. Observing the biodegradability and eco-friendly nature of coir it could be inferred that rubberized coir can serve as good mulch for behind and pineapple with minimum weed problem.

**Vijayaraghavan V.S. (2011), "Coir Industry Opportunities and Challenges";**

In his article focused, "The Promotion of Coir Industry in India" the coir industry in the state of Kerala was reeling under accurate raw materials like coir fibre and yarn. To add to the mystery, there is a shortage of labour force especially in the spinning sector which has resulted in the low outflow of coir yam to the manufacturing sector. The coir fraternity has been clamouring for development of a versatile spinning machine for quite long so that that bulk quantities of coir yarn can be used with single machine with multiple heads in their own praises. These types of units need only minimum labour force and will be advantageous to the PVC tufted units have been established. CCRI is pursuing the global Development of a versatile spinning machine which is a long-standing demand from the industry.

# **CHAPTER 3**

### **3. INDUSTRY PROFILE**

#### **Coir Industry**

Coir, also called coconut fibre, is a natural fibre extracted from the outer husk of coconut and used in products such as floor mats, doormats, brushes and mattresses.

Coir is the fibrous material found between the hard, internal shell and the outer coat of a coconut.

The two varieties of coir are brown and white. Brown coir harvested from fully ripened coconuts is thick, strong and has high abrasion resistance. It is typically used in mats, brushes and sacking. Mature brown coir fibres contain more lignin and less cellulose than fibres such as flax and cotton, so are stronger but less flexible. White coir fibres harvested from coconuts before they are ripe are white or light brown in color and are smoother and finer, but also weaker. They are generally spun to make yarn used in mats or rope. The coir fibre is relatively waterproof, and is one of the few natural fibres resistant to damage by saltwater. Fresh water is used to process brown coir, while seawater and fresh water are both used in the production of white coir.

The Wonders of Coir:

- Moth-proof; resistant to fungi and rot.
- Provides excellent insulation against temperature and sound.
- Not easily combustible.

- Flame-retardant.
- Unaffected by moisture and dampness.
- Tough and durable.
- Resilient; springs back to shape even after constant use.
- Totally static free.
- Easy to clean.

### **History of Coir**

The history explains different stories on the birth of the golden fibre.

The first recorded history of coconut in the country dates back to Ramayana period. In the Valmiki Ramayana there are references of coconut in the Kishkindha Kanda and Aranya Kanda. It is reported that Ramayana was written by Valmiki sometimes in 3rd Century BC. Generally, it is believed that coconut was introduced in India during the post-Vedic period.

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References have been made on coconut in Raghuvamsa of Kalidasa and Sangam literatures, which proves the antiquity of the coconut in India. But its origin in India remains disputed. But Marco Polo, the famous Arab traveller who visited India in the 13th Century called coconut “Indian Nut” and the logic for such a reference needs investigation by historians. Shri. P. K. Balakrishnan, a Kerala historian argues that organised coconut cultivation started in Kerala only after the arrival of the Portuguese.

Ropes and cordage, made out of coconut fibre have been in use from ancient times. Indian navigators, who sailed the seas to Malaya, Java, China and to the Gulf of Arabia centuries ago, had been using coir as their ship’s cables. Arab writers of the 11th Century AD referred to the extensive use of coir as ship’s cables, fenders and for rigging. Facts record that there was coir industry in UK before the second half of the 19th Century. During the year 1840, Captain Widely, in co-operation with Captain Logan and Mr. Thomas Treloar, founded the well-known carpet firms of Treloar and Sons in Ludgate Hill, England for the manufacture of coir into various fabrics suitable for floor coverings.

The coir manufacturing industry producing coir mats, matting and other floor coverings, was started in India on a factory basis, over a hundred years ago when the first factory was set up in Alleppey in 1859 by the Late Mr. James Darragh, an

adventurous Irish born American national. Enterprising Indians followed the trail blazed by this foreigner.

### **Kerala and the Coir Industry**

The history of Coir and its association with the state of Kerala dates back to the 19th Century. Sandwiched between the Western Ghats on the east and the Arabian Sea on the west, Kerala is one of the most beautiful States in India. A tropical paradise of waving coconut palms and wide sandy beaches, this thin strip of coastal territory slopes down from the mountain ghats in a cascade of lush green vegetation and varied fauna. One of the most commonly seen tropical trees in Kerala is the Coconut tree. In fact, even the name Kerala (Kerlam in Malayalam) is derived from this tree (“Kera” in Malayalam language means Coconut and “Alam” means Land, thus Keralam = Land of Coconut). Everything from Kerala’s culture to its dishes is evolved around the Coconut tree.

Alleppey (Alappuzha in Malayalam) is the nerve centre of Kerala’s famous Coir industry. Here, one can see coconut husks being beaten into fibre for making beautiful mats and other coir products. Both men and women are actively involved in the production of Coir. The women are mainly involved in the yarn spinning sector and the men in the product-weaving sector. Coir Industry enjoys the status as the largest Cottage Industry in the State of Kerala, giving employment to over a million people. Kerala also has a very fine natural harbour located at Cochin

(Kochi). From the ancient times itself Cochin had found a place in the minds of Europeans as a trading centre because of its port and spices.

### **3.1. COIR BOARD OF INDIA**

The Coir Board is a statutory body established under the Coir Board Industry Act, 1953 (NO. 45 of 1953) for promoting overall development of the coir industry and improving the living conditions of the workers engaged in this traditional industry. Section (4) of the Coir Industry Act 1953 empowers Central Government to constitute Coir Board. The Sub Rule 4 of the Coir Industry Rules, 1954 provides the number of persons to be appointed as members of the Board. The Coir Board consists of a full-time Chairman and 39 part- time Members. The activities of the Board for development of coir industries, inter-alia include undertaking scientific, technological and economic research and development activities; collecting statistics relating to exports and internal consumption of coir and coir products; developing new products and designs; organizing publicity for promotion of exports and internal sales; marketing of coir and coir products in India and abroad; preventing unfair competition between producers and exporters; assisting the establishment of units for manufacture of the products; promoting co-operative organization among producers of husks, coir fibre, coir yarn and manufactures of coir products; ensuring remunerative returns to producers and manufacturers, etc.

The Board has promoted two research institutes namely, Central Coir Research Institute (CCRI), Kalavoor, Alleppey, and Central Institute of Coir Technology (CICT), Bengaluru for under taking research activities on different aspects of coir industry which is one of the major agro-based rural industries in the country. The two major strengths of the coir industry are it being export oriented and generating wealth out of the waste (coconut husk).

### **Functions of Coir Board**

The main functions of the Board as laid down in Section-10 of the Coir Industry Act are given below:

- It shall be the duty of the Board to promote by such measures as it thinks fit the development, under the control of the Central Government, of the Coir Industry.
- Without prejudice to the generality of the provisions of Sub Section (1) the measures referred to therein may relate to:
  - a) Promoting exports of coir yarn and coir products and carrying on propaganda for that purpose;
  - b) Regulating under the supervision of the Central Government the production of husks, coir yarn and coir products by registering coir spindles and looms for manufacturing coir products as also manufacturers of coir products, licensing

exporters of coir yarn and coir products and taking such other appropriate steps as may be prescribed;

- c) Undertaking, assisting or encouraging scientific, technological and economic research and maintaining and assisting in the maintenance of one or more research institutes;
- d) Collecting statistics from manufacturers of, and dealers in, coir products and from such other persons as may be prescribed, on any matter relating to the coir industry, the publication of statistics so collected or portions thereof or extracts therefrom;
- e) Fixing grade standards and arranging when necessary for inspection of coir fibre, coir yarn and coir products;
- f) Improving the marketing of coconut husk, coir fibre, coir yarn and coir products in India and elsewhere and preventing unfair competition;
- g) Setting up or assisting in the setting up of factories for the producers of coir products with the aid of power;
- h) Promoting cooperative organisation among producers of husks, coir fibre and coir yarn and manufacturers of coir products;
- i) Ensuring remunerative returns to producers of husks, coir fibre and coir yarn and manufacturers of coir products;
- j) Licensing of retting places and warehouses and otherwise regulating the stocking and sale of coir fibre, coir yarn and coir products both for the internal market and for exports;

k) Advising on all matters relating to the development of the coir industry;

l) Such other matters as may be prescribed.

- The Board shall perform its functions under this section in accordance with, and subject to such rules as may be made by the Central Government.

### **Act, Rules, Bye-Laws in Coir Industry**

- Coir Industry Act 1953
- Coir Industry Rules, 1954
- Coir Industry (Registration) Rules 2008
- Coir Board Bye Laws, 1955
- Coir board services (classification, control and appeal) bye-laws, 1969
- Service bye-laws 1983

### **Coir Beneficiary Schemes**

#### **I. Coir Vikas Yojana**

- i. Export Market Promotion Scheme.
- ii. Domestic Market Promotion Scheme.
- iii. Coir Industry Technology Upgradation Scheme
- iv. Mahila Coir Yojana

- v. Development of Production Infrastructure Scheme.
  - vi. Skill Upgradation and Quality Improvement Scheme.
- II. Scheme of Fund for Regeneration of Traditional Industries (SFURTI).
- III. Coir Udyami Yojana (CUY).

### **3.2. COIR PRODUCTS EXPORTED FROM INDIA**

#### **i. Coir Pith**

A spongy material that binds the coconut fibre in the husk, coir pith is finding new applications. It is an excellent soil conditioner and is being extensively used as a soil-less medium for Agri-horticultural purposes. With its moisture retention qualities, coir pith is ideal for growing anthuriums and orchids.

#### **ii. Coir Fibre**

Coir Fibre is extracted from the fibrous outer cover of the fruit of the Coconut palm, with or without retting. Coir Fibre is graded based on its nature of extraction, colour, presence of long and short fibres, impurities etc.

### **iii. Coir Yarn**

Coir Yarn is generally of 2 ply, spun from coir fibre by hand as well as with the help of traditional ratts, fully automatic spinning machines etc. The Coir yarn is of different qualities/grades based on the quality of fibre used, the nature of twist, presence of impurities etc. Available in different forms like hydraulically pressed bales, spools, bobbins, dholls, balls etc. cut length for various industrial and agricultural purposes.

### **iv. Coir Geotextiles**

Coir geotextiles are made from coconut fibre extracted from the husk of coconut. They are developed for specific application in civil engineering like erosion control, ground improvement, filtration, drainage, river bank protection, road pavements, slope stability etc. This biodegradable and environment friendly material is virtually irreplaceable by any of the modern synthetic substitutes.

### **v. Coir Mats**

- **Coir Mats & Creel Mats**

Creel mats are manufactured both on handlooms and powerlooms. They are specially noted for their low pile height. The yarn for the pile structure is released from the beam in the course of the weaving process. The pile

structure is obtained by suitable positioning of the coir yarn in the fabric structure with the use of grooved rods and cutting the yarn passing over the rods with a sharp knife

These are available in solid shades, stripes, mottled, stenciled and also tile patterns. 2-chain creel mats and 3-chain creel mats are available in this category. 3-chain creel mats have a firmer structure than 2-chain creel mats.

- **Coir Mats-Fibre Mats**

Coir Mats are made on handlooms, power looms or frames and with or without brush. Creel Mats is known for its thin brush. Rod Mats for thick brush and Fibre Mats for compact brush. Latex/rubber backing makes the mats non-slip. Available with woven or stenciled designs and beveled patterns for use in interior or exterior door fronts.

- **Coir Mats- Rod Mats, Corridor Mats, Carnatic Mats**

Coir Mats are made on handlooms, power looms or frames and with or without brush. Creel Mats is known for its thin brush. Rod Mats for thick brush and Fibre Mats for compact brush. Latex/rubber backing makes the mats non-slip. Available with woven or stenciled designs and beveled patterns for use in interior or exterior door fronts.

## **vi. Coir Matting**

- **Coir Mattings – Four Treadle Weave, Basket Weave**

Made on traditional handlooms or powerlooms. Available in natural beach, solid colours and a multitude of designs/patterns made by weave and colour combinations and with or without latex backing. Quality of the matting is determined by the type of yarn and weave used. Mainly used as floor coverings and floor runners for furnishing stairs/corridors. Also used for wall paneling, ceiling, lining and echo-control.

- **Coir Mattings – Ribbed Matting, Multishaft matting, Cricket Pitch matting**

Made on traditional handlooms or powerlooms. Available in natural beach, solid colours and a multitude of designs/patterns made by weave and colour combinations and with or without latex backing. Quality of the matting is determined by the type of yarn and weave used. Mainly used as floor coverings and floor runners for furnishing stairs/corridors. Also used for wall paneling, ceiling, lining and echo-control.

## **vii. Coir Mattress**

Coir mattresses are made up of natural coir i.e., coconut coir or fibers. They are not entirely made up of coir that is procured from coconut husk. Instead, the coir is used

as padding and layered with polyurethane foam and stitched with cotton fabric at the top. Coir mattresses are temperature-friendly, environment-friendly, allergy-resistance, hygroscopic in nature which means that they absorb body moisture efficiently during the humid weather.

#### **viii. Coir Rugs**

Coir Mattings are cut to rug size, ends bound, tucked in, fringed or rubber sealed for use as area rugs. Also available with cotton/tapestry bound and with or without latex backing.

#### **ix. Garden Articles**

Products made out of Coir fibre. From poles to plant pots to hanging baskets, coir makes just about every accessory that is essential for modern day gardening. Coconut husk chips also are widely used in horticultural applications.

# **CHAPTER 4**

## 4. DATA ANALYSIS AND INTERPRETATION

### 4.1. COMPOSITION OF EXPORT OF COIR PRODUCTS IN 2019-20

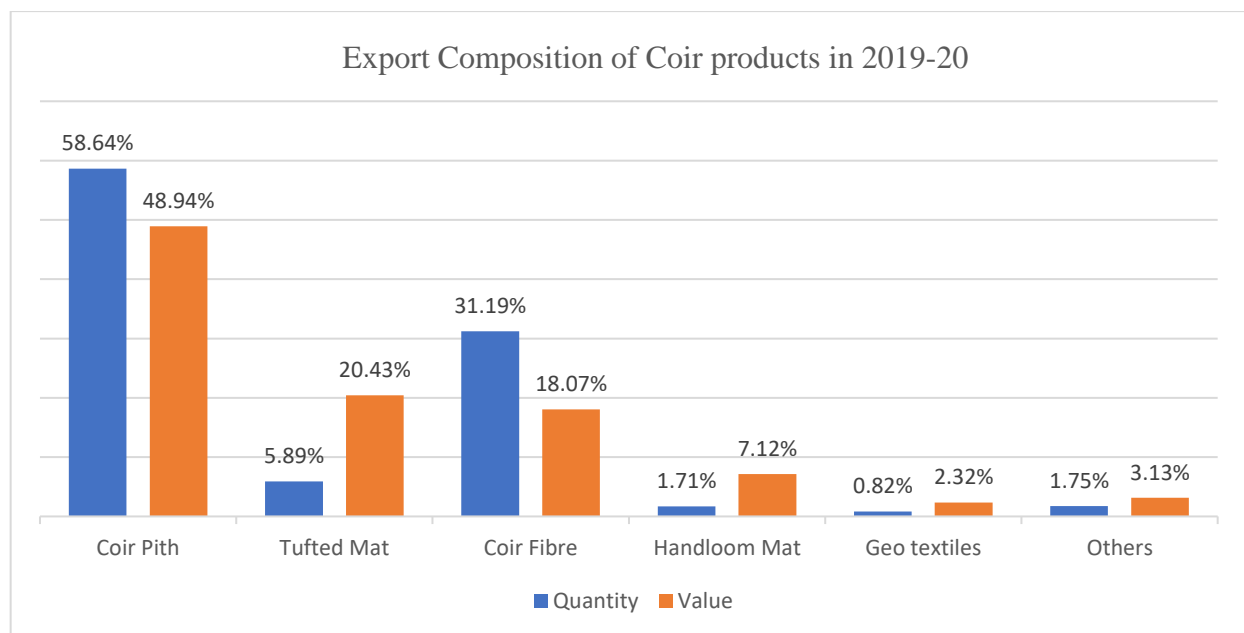
The table showing the item-wise composition of export of coir products during 2019-20 in terms of quantity and value is given below:

Q=Quantity in MT	V=Value in Rs.Lakhs			
	2019-20		Qty%	Val%
Item	Q	V		
Coir Pith	579980	134962.94	58.64	48.94
Tufted Mat	58300	56344.14	5.89	20.43
Coir Fibre	308457	49842.56	31.19	18.07
Handloom Mat	16910	19630.08	1.71	7.12
Geo textiles	8068	6389.45	0.82	2.32
Curled Coir	11290	2681.57	1.14	0.97
Coir Yarn	3028	2301.22	0.31	0.83
Handloom Mattings	1177	1366.41	0.12	0.50
Rubberized Coir	578	786.82	0.06	0.29
Coir Rugs & Carpet	367	483.82	0.04	0.18
Coir Other Sorts	298	476.93	0.03	0.17
Coir Rope	512	466.03	0.05	0.17
Powerloom Mat	26	49.65	0.00	0.02
Powerloom Matting	5	8.53	0.00	0.00
<b>Total</b>	<b>988996</b>	<b>275790.15</b>		

Source: Coir Board of India

Coir Pith constituted 58.64% in terms of quantity and 48.94% in terms of value of the total export of coir and coir products during the period under report. Tufted Mats constituted 5.89% in quantity and 20.43% in terms of value and it is one of the major items of coir products exported from India. Coir fibre constituted 31.19% in quantity and 18.07% in value. Handloom Mat constituted 1.71% in quantity and 7.12% in

value. Geo textiles constituted 0.82% in quantity and 2.32% in value. Curled Coir constituted 1.14% in quantity and 0.97% in value. Coir Yarn constituted 0.31% in quantity and 0.83% in value. Handloom Mattings constituted 0.12% in quantity and 0.50% in value. Rubberized Coir constituted 0.06% in quantity and 0.29% in value. Coir Rugs & Carpet constituted 0.04% in quantity and 0.18% in value. Coir Other Sorts constituted 0.03% in quantity and 0.17% in value. Coir Rope, Powerloom Mat & Powerloom Matting combined constituted 0.05% in quantity and 0.19% in value.



#### 4.2. COMPOSITION OF EXPORT OF COIR PRODUCTS IN 2020-21

The table showing the item-wise composition of export of coir products during 2020-21 in terms of quantity and value is given below:

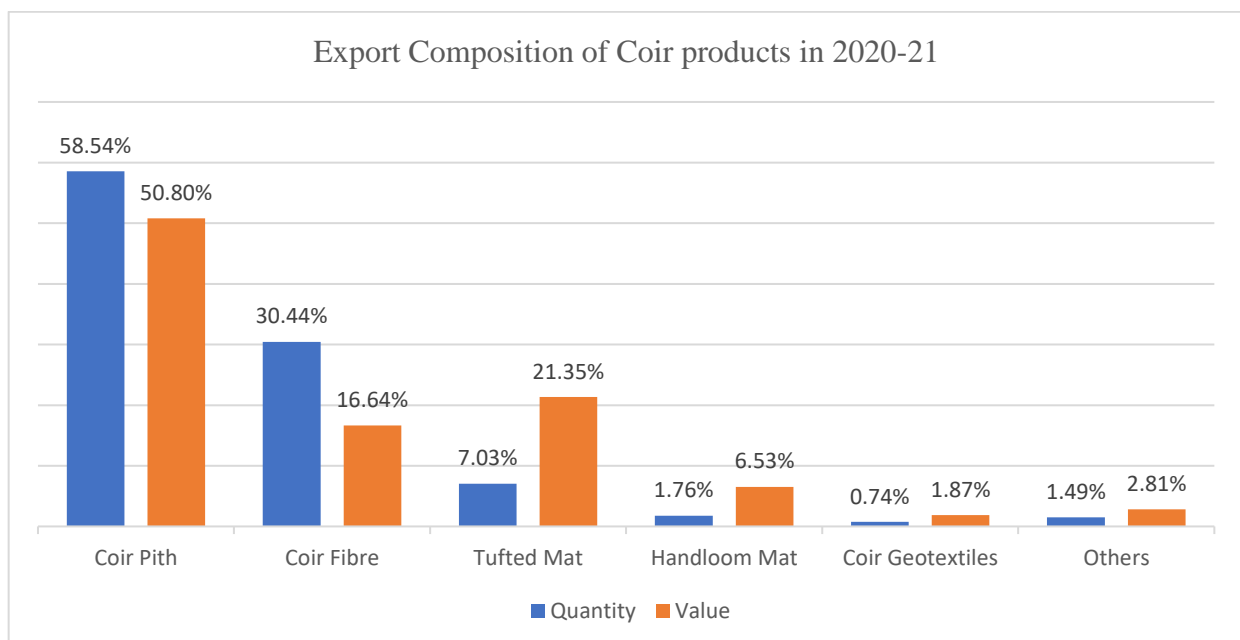
Item	Q=Quantity in MT		V=Value in Rs.Lakhs	
	2020-21		Composition %	
	Q	V	Q	V
Coir Pith	680898	191974.07	58.54	50.80
Tufted Mat	81799	80690.82	7.03	21.35
Coir Fibre	354123	62890.57	30.44	16.64
Handloom Mat	20527	24662.10	1.76	6.53
Coir Geotextiles	8583	7059.05	0.74	1.87
Coir Yarn	3849	2919.30	0.33	0.77
Curled Coir	9381	2422.22	0.81	0.64
Handloom Matting	1418	1712.00	0.12	0.45
Rubberised Coir	982	1321.41	0.08	0.35
Coir Other Sorts**	744	1200.96	0.06	0.32
Coir Rope	505	491.76	0.04	0.13
Coir Rugs & Carpets	327	427.90	0.03	0.11
Poweloom Mat	65	106.51	0.01	0.03
Powerloom Matting	11	19.24	0.001	0.01
<b>Total</b>	<b>1163213</b>	<b>377897.91</b>	<b>100.00</b>	<b>100.00</b>

\*\* Coir Braids, Scrubbers, Poles, Fenders & Coir Fancy Items.

Source: Coir Board of India

Coir Pith constituted 58.54% in terms of quantity and 50.80% in terms of value of the total export of coir and coir products during the period under report. Tufted Mats constituted 7.03% in quantity and 21.35% in terms of value and it is one of the major items of coir products exported from India. Coir fibre constituted

30.44% in quantity and 16.64% in value. Handloom Mat constituted 1.76% in quantity and 6.53% in value. Coir Geotextiles constituted 0.74% in quantity and 1.87% in value. Coir Yarn constituted 0.33% in quantity and 0.77% in value. Curled Coir constituted 0.81% in quantity and 0.64% in value. Handloom Matting constituted 0.12% in quantity and 0.45% in value. Rubberized Coir constituted 0.08% in quantity and 0.35% in value. Coir Other Sorts constituted 0.06% in quantity and 0.32% in value. Coir Rope constituted 0.04% in quantity and 0.13% in value. Coir Rugs & Carpet constituted 0.03% in quantity and 0.11% in value. Powerloom Mat & Powerloom Matting combined constituted 0.02% in quantity and 0.04% in value.



### 4.3. COMPARATIVE ANALYSIS ON THE EXPORT OF COIR PRODUCTS IN 2020-21 and 2019-20

Item	Q=Quantity in MT		V=Value in Rs.Lakhs			
	2020-21		2019-20		% Growth	
	Q	V	Q	V	Q	V
Coir Fibre	354123	62890.57	308457	49842.56	14.8	26.2
Coir Yarn	3849	2919.30	3028	2301.22	27.1	26.9
Handloom Mat	20527	24662.10	16910	19630.08	21.4	25.6
Poweloom Mat	65	106.51	26	49.65	144.4	114.5
Tufted Mat	81799	80690.82	58300	56344.14	40.3	43.2
Handloom Matting	1418	1712.00	1177	1366.41	20.5	25.3
Powerloom Matting	11	19.24	5	8.53	103.9	125.6
Coir Geotextiles	8583	7059.05	8068	6389.45	6.4	10.5
Coir Rugs & Carpets	327	427.90	367	483.82	-10.9	-11.6
Coir Rope	505	491.76	512	466.03	-1.4	5.5
Curled Coir	9381	2422.22	11290	2681.57	-16.9	-9.7
Rubberised Coir	982	1321.41	578	786.82	70.0	67.9
Coir Pith	680898	191974.07	579980	134962.94	17.4	42.2
Coir Other Sorts**	744	1200.96	298	476.93	150.0	151.8
<b>Total</b>	<b>1163213</b>	<b>377897.91</b>	<b>988996</b>	<b>275790.15</b>	<b>17.6</b>	<b>37.0</b>

Source: Coir Board of India

The export of coir and coir products set an all-time high record during the year 2020-21. A total quantity of 1163213 MT of coir and coir products valued at Rs.3778.98 crores were exported from the country during the year 2020-21 as against the export of 988996 MT valued at Rs.2757.90 crores during the previous year. There is an increase of 17.6% in terms of quantity and an increase of 37% in terms of value over the export achieved during the previous year. The growth rate of 37% in terms of value is the ever-highest growth rate that the export of coir products has seen. The export target fixed for coir and coir products by the Ministry of MSME,

Government of India for the year 2020-21 was Rs.3500 crores. The achievement during the reporting period, which works out to 108% of the target fixed by the Govt. of India. Despite the COVID-19 pandemic and its restrictions the export of coir and coir products grown up than else before.

#### **4.4. TRENDS IN EXPORT**

During the year 2020-21, while exports of coir pith, coir fibre, tufted mats, handloom mats, powerloom mats, coir yarn, handloom matting, powerloom matting, coir geotextiles, rubberized coir and coir other sorts have registered growth both in terms of quantity and value, whereas coir rugs & carpets and curled coir shown decline in terms of quantity and value. The item coir rope shown a decline in terms of quantity and growth in terms of value. Coir pith with export earnings of Rs.1919.74 crores constituted 51% of the total export of coir products from the country. The value-added items put together constituted 31% of the total exports. Tufted Mats topped among the value-added products. Tuticorin port accounts for more than 50% of coir exported from India. Cochin Port with a share of 36% comes second and Chennai port with a share of 13% comes third with respect to the export earnings. Nominal quantities were exported from Vishakhapatnam, Kolkata, Mumbai, Coimbatore, Bengaluru etc.

#### 4.5. COMMODITY-WISE ANALYSIS OF EXPORTS

Among the items of export, the items which recorded major increases and decreases in terms of quantity and value are detailed in the tables below:

##### **Decrease in Quantity and Value**

The item such as coir rugs and carpets and curled coir has shown a negative trend both in terms of quantity and value.

Sl. No.	Item	2020-21		2019-20		% Growth	
		Quantity	Value	Quantity	Value	Quantity	Value
		(MT)	(Rs.Lacs)	(MT)	(Rs.Lacs)		
1	Curled Coir	9381	2422.22	11290	2681.57	-16.9	-9.7
2	Coir Rugs & Carpets	327	427.90	367	483.82	-10.9	-11.6

Source: Coir Board of India

##### **Decrease in Quantity but increase in Value**

Even though Coir Rope has shown a decrease of 1.4% in terms of quantity, it has shown an increase of 5.5% in terms of value. This may be due to increase in the unit price of Coir rope.

## Increase in Quantity and Value

The item such as Coir Pith, Tufted Mats, Coir Fibre, Handloom Mat, Coir Geotextiles, Coir Yarn, Handloom Matting, Rubberised Coir, Coir Other Sorts, Powerloom Mat and Powerloom Matting has shown a positive trend both in terms of quantity and value.

	Item	2020-21		2019-20		% Growth	
		Quantity (MT)	Value (Rs.Lacs)	Quantity (MT)	Value (Rs.Lacs)	Quantity	Value
1	Coir Pith	680898	191974.07	579980	134962.94	17.4	42.2
2	Tufted Mat	81799	80690.82	58300	56344.14	40.3	43.2
3	Coir Fibre	354123	62890.57	308457	49842.56	14.8	26.2
4	Handloom Mat	20527	24662.10	16910	19630.08	21.4	25.6
5	Coir Geotextiles	8583	7059.05	8068	6389.45	6.4	10.5
6	Coir Yarn	3849	2919.30	3028	2301.22	27.1	26.9
7	Handloom Matting	1418	1712.00	1177	1366.41	20.5	25.3
8	Rubberised Coir	982	1321.41	578	786.82	70.0	67.9
9	Coir Other Sorts	744	1200.96	298	476.93	150.0	151.8
10	Poweloom Mat	65	106.51	26	49.65	144.4	114.5
11	Powerloom Matting	11	19.24	5	8.53	103.9	125.6

Source: Coir Board of India

#### 4.6. EXPORT DESTINATIONS

During the year April 2020-21, 106 countries imported coir and coir products from India. USA topped the importing countries with 31.1% in value and 19.1% in quantity. China is the second largest importer of coir products from India with a share of 20.7% in value and 34.8% in quantity. The other countries, which imported substantial quantities of coir and coir products during the year under report, were Netherlands, South Korea, UK, Spain, Australia, Italy, Germany, and Canada.

The top destinations of the major items exported during the year 2020-21 are furnished under:

#### Coir Pith

94 countries imported coir pith from India during the year 2020-21. The important markets for Coir Pith and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	155986	48111.26	22.91	25.06
2	NETHERLANDS	101955	28105.21	14.97	14.64
3	SOUTH KOREA	82025	21327.60	12.05	11.11
4	REPUBLIC OF CHINA	58226	16355.74	8.55	8.52
5	SPAIN	51000	12576.04	7.49	6.55

Source: Coir Board of India

## Coir Tufted Mats

77 countries have imported Tufted Mats from India during the year 2020-21. The important markets for Tufted Mats and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	48793.87	49490.05	59.65	61.33
2	UK	7931.85	7267.07	9.70	9.01
3	GERMANY	3322.08	3330.29	4.06	4.13
4	ITALY	2777.30	2610.13	3.40	3.23
5	NETHERLANDS	2633.38	2540.37	3.22	3.15

Source: Coir Board of India

## Coir Fibre

27 countries have imported Coir Fibre from India during the year 2020-21. The important markets for coir fibre and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	REPUBLIC OF CHINA	341603	59760.98	96.46	95.02
2	RUSSIA	3204	736.44	0.90	1.17
3	NETHERLANDS	1555	545.57	0.44	0.87
4	LATIVIA	2149	526.77	0.61	0.84
5	USA	1256	315.23	0.35	0.50

Source: Coir Board of India

## Handloom Mats

77 countries have imported Handloom Mats from India during the year 2020-21.

The important markets for Handloom Mats and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	10478.15	14007.50	51.05	56.80
2	UK	1940.50	2010.31	9.45	8.15
3	AUSTRALIA	959.44	1056.60	4.67	4.28
4	NETHERLANDS	769.62	844.99	3.75	3.43
5	GERMANY	745.27	830.89	3.63	3.37

Source: Coir Board of India

## Coir Geo-Textiles

27 countries have imported Coir Geotextiles from India during the year 2020- 21.

The important markets for coir geo textiles and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	3896.68	3169.39	45.40	44.90
2	AUSTRALIA	1955.71	1315.67	22.79	18.64
3	FRANCE	835.93	764.88	9.74	10.84
4	GERMANY	684.24	701.93	7.97	9.94
5	ITALY	228.03	206.74	2.66	2.93

Source: Coir Board of India

## Curled Coir

13 countries have imported Curled Coir from India during the year 2020-21. The important markets for curled coir and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	RUSSIA	5195	1341.75	55.38	55.39
2	REPUBLIC OF CHINA	3278	815.52	34.94	33.67
3	POLAND	424	110.33	4.52	4.56
4	LITHUANIA	253	61.41	2.69	2.54
5	NETHERLANDS	61	29.52	0.65	1.22

Source: Coir Board of India

## Coir Yarn

24 countries have imported Coir Yarn from India during the year 2020-21. The important markets for coir yarn and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	NETHERLANDS	1185.54	996.62	30.80	34.14
2	ITALY	1006.63	622.68	26.15	21.33
3	GERMANY	276.76	249.23	7.19	8.54
4	BELGIUM	165.16	239.53	4.29	8.20
5	UAE	230.93	136.79	6.00	4.69

Source: Coir Board of India

## Handloom Matting

18 countries have imported Handloom Matting from India during the year 2020-21.

The important markets for handloom mattings and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	1067.49	1052.53	75.27	61.48
2	UK	127.10	203.12	8.96	11.86
3	GERMANY	56.86	139.61	4.01	8.15
4	BELGIUM	50.60	94.24	3.57	5.50
5	CANADA	43.14	83.13	3.04	4.86

Source: Coir Board of India

## Rubberized Coir

19 countries have imported Rubberized coir from India during the year 2020-21.

The important markets for rubberized coir and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	ESTONIA	427.35	468.76	43.51	35.47
2	RUSSIA	155.27	178.58	15.81	13.51
3	USA	84.53	154.59	8.61	11.70
4	GERMANY	62.43	115.49	6.36	8.74
5	LITHUANIA	54.15	83.38	5.51	6.31

Source: Coir Board of India

## Coir Rugs & Carpets

13 countries have imported Coir Rugs & Carpets from India during the year 2020-21. The important markets for coir rugs & carpets and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	145	190.96	44.38	44.63
2	MEXICO	40	45.38	12.16	10.61
3	GERMANY	30	39.77	9.17	9.29
4	IRISH REPUBLIC	16	37.71	4.82	8.81
5	UK	23	28.93	6.92	6.76

Source: Coir Board of India

## Coir Other Sorts (Garden Articles, Fenders, Braids, Scrubbers etc.)

30 countries have imported Coir Other Sorts from India during the year 2020-21. The important markets for coir other sorts and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	561.07	737.03	75.36	61.37
2	UK	50.82	142.04	6.83	11.83
3	AUSTRALIA	46.84	109.84	6.29	9.15
4	NETHERLANDS	33.60	61.95	4.51	5.16
5	GERMANY	26.08	37.22	3.50	3.10

Source: Coir Board of India

## Coir Rope

13 countries have imported Coir Rope from India during the year 2020-21. The important markets for coir rope and their market share in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	FRANCE	406	403.81	80.39	82.11
2	NEW ZEALAND	14	28.41	2.81	5.78
3	SPAIN	16	15.42	3.10	3.14
4	UAE	35	14.95	6.95	3.04
5	THAILAND	13	8.62	2.52	1.75

Source: Coir Board of India

## Powerloom Mats

7 countries have imported Powerloom Mats from India during the year 2020-21. The details in terms of quantity and value are as detailed below;

Sl. No	Country	Quantity (MT)	Value (Rs. Lakhs)	Qty %	Val %
1	USA	48.90	93.03	75.72	87.35
2	GERMANY	8.90	5.28	13.78	4.96
3	BELGIUM	1.65	3.35	2.55	3.14
4	SOUTH AFRICA	1.66	2.43	2.58	2.29
5	NETHERLANDS	1.48	1.13	2.30	1.06

Source: Coir Board of India

## **Powerloom Matting**

Only USA has imported Powerloom Matting from India during the year 2020-21.

# **CHAPTER 5**

## **5. FINDINGS, SUGGESTIONS AND CONCLUSION**

### **5.1. FINDINGS**

- There has been a consistent growth in exports of coir products from India.
- There is an increasing trend in Imports of raw materials throughout the years.
- 106 nations imported coir and coir products from India in the fiscal year April 2020-21.
- USA topped the importing countries with 31.1% in value and 19.1% in quantity.
- During the years 2020-21, coir and coir products exports reached an all-time high. The country exported a total of 1163213 MT of coir and coir products worth Rs.3778.98 crores.
- There is a 17.6% rise in quantity and a 37% increase in value over the previous year's export of 2019-20.
- Only products like coir rugs and carpets, curled coir showed a negative trend

## **5.2. SUGGESTIONS**

- The area of Coconut farming can be increased in potential states to improve the Coir output.
- Widen the export of coir products for the untapped foreign and domestic markets which can be traced
- The industrial units which are marketing coir products can be encouraged to participate in Consumer Exhibitions
- Coir board and relevant bodies have to conduct research on production of value-added products to make it more globally competitive
- The industrial Units which are manufacturing coir products in collaboration with Coir Board can design innovative and attractive products to offer more choices to consumers in order to improve the sales and profit.

### **5.3. CONCLUSION**

Coir industry is as an agro-based labour-intensive cottage/small scale industry. The Coir Industry has been significantly export-oriented. India is one among the leading exports of coir in the world. It is estimated that more than 90 percent of Indian Coir export revenue comes from value added products. The coir industry was chosen for study because of its social and economic importance to the area. Coir and coir products make good progress in the domestic as well as international market because of their unique qualities of durability, bio-degradability and eco-friendliness. At present, the industry gets a phenomenal share in the global market for the value-added coir products.

India has very rich source of coir in various states as growing coconut trees is the long-time agricultural activity in the country. There has been a consistent growth in exports of coir products from India. During the years 2020-21, coir and coir products exports reached an all-time high. The country exported a total of 1163213 MT of coir and coir products worth Rs.3778.98 crores. There has also been a 17.6% rise in quantity and a 37% increase in value over the previous year's export of 2019-20.

Considering all these positive aspects we can expect the Coir Industry in India will have good prospects in the future years as well.

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## **WEB RESOURCES**

- [coirboard.gov.in/](http://coirboard.gov.in/)
- [msme.gov.in/coir-board](http://msme.gov.in/coir-board)
- [www.coirservices.gov.in/](http://www.coirservices.gov.in/)
- [coir.kerala.gov.in/](http://coir.kerala.gov.in/)