# **Export Performance And Developmental Perspectives Of Small Scale Enterprises With Special Reference To Coir Industry In India**

# Mr. EZHIL MARAN. K. P<sup>1</sup> & Dr. M. JEEVARATHINAM<sup>2</sup>

<sup>1</sup>Research Scholar (FT), Department of Commerce, CSH, SRMIST, ezhilmarankp@gmail.com.

#### **Abstract**

Coir and Coir products is one of the desirable products to maintain our environment as clean and green. More than 80% of global coir consumption comes from India and Kerala witnessed for top producer of coir and coir products in India followed by Tamil Nadu. Coir is an agro based industry functioning mostly in rural areas and nurturing employment opportunities to both men and women. Coir board is the statutory body which works under the Ministry of MSME to regulate and develop coir industry. Coir products are started using from 19<sup>th</sup> century and now more than fourteen commodities are producing from coir. There is a stiff competition between coir products and other natural products in the production and usage for various purposes. Hence the present study is attempted to analyze the growth and export performance of selected coir products namely coir pith, coir fiber, curled coir, coir rugs and coir other sorts. Quantity in Metric Ton and sales value in lakhs has been taken for analysis and interpretation. Secondary data has been collected from thirteen years annual reports of coir board and applied CAGR, Trend values, Growth and Growth percentages. This study concludes that among the selected coir products coir pith is highly attracted product and also highlighted the growth and performance of other selected coir products.

**Keywords:** Coir Board, SME, Developmental Perspectives, Performance and Export

#### I. Introduction

The small scale and cottage industries play a significant role in nation's economic development in the matter of providing employment opportunities for more than 5.5 lakhs persons working mostly on part time basis in back ward areas thus it's a tool for removing imbalances and other one is exports from the coir industry are Rs. 270 crores annually thus were generating income through foreign exchange (coir board.in). Coir industry is one of the traditional cottage industries of India export to more than 110 countries worldwide. Women accounts for 80% of the labour force in this

industry. At present the coir industry utilizes only 35% of the coconut husk in the country for producing various coir products and there is the opportunity to utilize atleast 50% for business purposes (Dr. Sudhansu Sekhar Nayak & Dr. Bhabasish Mahapatra, 2016).

Indian coir industry is the imperative small scale enterprises regulated by MSME which contributes significant to the economy of the major coconut harvesting states and union Territories, i.e., Kerala, Tamil Nadu, Andhra, Telangana, Karnataka, Maharashtra, Orissa, Assam, Goa, Andaman & Nicobar,

<sup>&</sup>lt;sup>2</sup>Assistant Professor and Research Supervisor, Department of Commerce, CSH, SRMIST, jeevaram@srmist.edu.in

Lakshadweep, Pondicherry etc., The coir and coir products are mainly produced and export activities are held in Cochin, Allepy, Kollam, Pollachi and Bangalore. (Dr. R. Padmanaban & Dr. P.K. Uma Maheswari, 2018).

Tamil Nadu is leading in producing coir fiber in India. It is observed that more than 70% of total production of coir fibre is being generated from the Tamil Nadu. Around 30-35% of coir fibre is being exported to the other countries from Tamil Nadu and remaining 65-70% is being used for domestic purposes. Kerala is completely depending on coir fiber from Tamil Nadu. Only 10% is produced in Kerala remaining 90% of coir fiber is purchased from Tamil Nadu for consumption and exports. Coir industry categorized as Small scale industries accounts for 76.6% followed by medium scale 18.1% industries and large industries 5.3% industries. In India approximately 94.7% industries are registered as MSME units. More number of large scale industries is functional in Kerala, Karnataka, Tamil Nadu and Odisha. (Executive summary, Status of coir industries in India).

# 2. LITERATURE REVIEW

In order to get more information on Coir Industry the various literature reviews was performed. Literature review in the present study is divided in to three dimensions namely Development interms of Production, Export Performance and Employment Opportunities.

# 2.1 Development in-terms of production

The comparative analysis conducted between cooperatively owned units and privately owned coir units. The average production and sale in cooperatively owned units are high due to monetary support from government in the name of subsidies so they have more possibilities to increase their production. The percentage of sale to total production is high in private owned units as they involved very effective in marketing their products. (Dr. Sudhansu Sekhar Nayak & Dr. Bhabasish Mahapatra, 2016). The study reveals that the coir fiber production shows steady increase in 2013-14 to 2016-17 and in 2017-18 the number were produced decline by 60%. (Sambasivan & Vennilaashree, 2018). The

production status of coir products were observed that there is continuous improvement in the financial year 2015-16 to 2018-19 and noted significant improvement in 2018-19 compared to 2017-18. Furthermore the coir fiber shows steady increase among the coir products. (Sitrarasu, n.d.). The quantity of coir products produced increased at steady growth especially highest production recorded in the year 2018-19 is 749600 metric ton. (Tanwani, n.d.). Dr. Manjusmitha Dash & Prof Bidhu Bhusan Mishra (2021) reveals that the production of coir fibre in India has been continuously increasing during the 6 years period from 2015-16 to 2020-21 also author revealed the production estimation of coir and coir products for the year 2020-21.

# 2.2 Export Performance

Coir is one of the rural-based and traditional industries which renovate the coir waste into coir as wealth. It is recently noted as the exportoriented industry that helps to enhance the exports by its innovative products, modification and technical usage makes high demand for Indian coir and coir products in the world market. After globalization, it paves the way to enlarge the industry by exporting the coir products to various countries through that the industry brought in foreign exchange source of income for the country. The study also indicated major importers namely china 37.34% of exports followed by USA (17.37%) and Netherlands by (8.48%). They conclude that the coir and coir products continuously record an upswing trend both in terms of quantity and value of export. (Dr. Manjusmitha Dash & Prof Bidhu Bhusan Mishra 2021). The percentage of coir products exports were shown constantly increasing as 20 percent in values and 27.3 percent in quantity produced during the period 2015-16 and 2016-17. This increase in value and quantity produced shows the market stability and growth of coir products. In product wise distribution coir pith and coir fiber are the top two products of coir with the percentage of 51 and 39% respectively. (K. Praveen Kumar & Dr. G. Vinayagamoorthi, 2017). Another study relating to export performance. Due to globalization there is steady increase export of various products produced in coir. Handloom mats, Power loom mats, Rubbberized coir, Tuffet mats shows rising

pattern during the period 2006-07 to 2016-17 and falling pattern in curled coir product. (Dr. R. Venkatesh & Dr. K. Kumaran, 2019)

# 2.3 Employment Opportunities

The comparative analysis conducted from 7 privately owned units and 2 cooperatively owned coir units. The study consists of ninety five workers in private owned units and seventy four workers in cooperatively owned units. Among the sample units 80 female workers and 15 male workers were drawn from private units and 65 female workers and 9 male workers were from cooperative units. Totally Female workers represent 88 percent and only 12 percent represent male category in the study. Thus a female worker dominates and represents mass work force in their study. (Dr. Sudhansu Sekhar Nayak & Dr. Bhabasish Mahapatra, 2016). Another study reveals that Kerala played a major role in providing employment opportunities trailed by Karnataka, Tamil Nadu and Andhra during the period 2013 to 2018. (Sambasivan & Vennilaashree, 2018). Kerala and Tamil Nadu are the hub for the development of coir and coir units and it registered high employment opportunities provided in the states and it is comparatively less in the Karnataka, Odisha and Andhra, (Tanwani, n.d.). Another study revealed that employment opportunities generated and number of working enterprises has registered rising trend during the period 2006-07 to 2015-16. (Shelly et al., 2020).

# 3. Research Methodology

# 3.1 Statement of the Problem

With the remarkable growth in the year 2020-21 coir products export fetches revenue of Rs 3778.98 Crores by the source of foreign exchanges. Revenue achieved only by 8% coir and coir products are exported and remaining 92% consumed domestically (Banuprakash. K.A, 2019). Coir industry stretches its hands for empowerment of economically and socially weaker sections by providing 7 lakhs and more employment to women workforce 80% especially. (Coir Board, MSME, 2019). More than 61% of coir industries facing problems in finance labour, marketing (Executive summary, Status of coir industries in India). Hence the

present study is to attempt to address the above significant highlights and problems to government to take initiative to release more funds to support weaker coir units and also to invent more coir products to diversify this industry to greater heights.

# 3.2 Objectives of the study

- 1. To explore export growth and current status of coir industry in India.
- 2. To assess the export performance of coir products in terms of sales and turnover.

# 3.3 Methodology

#### 3.3.1 Sources of Data

The study is completely based on secondary data relating to exports of coir products like coir pith, coir sorts, coir fiber, curled coir and coir rugs and carpets. Data for analysis were downloaded from various websites of Coir board of India, Annual reports of coir board and MSME.

#### 3.3.2 Period of the study

The period selected for the study is between 2008-09 and 2020-2021. The study covers a total of 13 years.

#### 3.3.3 Tools used

For analysis various statistical tools applied such as Trend values, CAGR, Growth percentage, Average and Standard Deviation.

# 3.3.4 Limitations of the study

- 1. The study covers the period of only 13 years.
- 2. The study used only secondary data for analysis.
- 3. The analysis is carried out for five selected coir products only

#### 4. Results and Discussion

The following analysis part is divided into Sales value (in Rs.) and Quantity (in Metric Ton)

# Table – I Performance and Development of Coir and other sorts (Rs. In Crores)

			Growth Rate		
Year	Sales Value	Trend Value	Growth over previous year	Growth Percentage	
2008- 09	19.03	-85.5700	-	-	
2009- 10	28.52	-15.8658	9.49	49.87%	
2010- 11	35.84	53.8385	7.32	25.67%	
2011- 12	68.75	123.5427	32.91	91.82%	
2012- 13	39.33	193.2469	-29.42	-42.79%	
2013- 14	390.17	262.9512	350.84	892.04%	
2014- 15	391.92	332.6554	1.75	0.45%	
2015- 16	396.61	402.3596	4.69	1.20%	
2016- 17	416.59	472.0638	19.98	5.04%	
2017- 18	498.29	541.7681	81.7	19.61%	
2018- 19	361.58	611.4723	-136.71	-27.44%	
2019- 20	476.93	681.1765	115.35	31.90%	
2020- 21	1201.00	750.8808	724.03	151.81%	
Total		4324.52			
Average		332.6153846			
SD		323.4758346			
CAGR		41%			

#### Source: Coir board.gov.in

Table 1 shows the sales value of coir and other sorts for the period 2008-09 to 2020-21. It is clear from the above table that the export performance in terms of sales value shows an increasing trend from 2008-09 to 2020-21 except in the year 2012-13 and 2018-19 it shows declining trend due to economic slowdown and recession all over the world. During the period 2008-09 to 2020-21 the highest sales value of Rs. 1201 crores and highest growth percentage were registered in the year 2020-21 is 151.81%. CAGR is accounted for 41% shows the product is highly desirable. Hence it is inferred that performance of coir and other sorts increased gradually during the period 2008-09 to 2020-21.

Table - 2 Performance and Development of Coir Rugs and Carpets (Rs. In Crores)

			Growth Rate		
Year	Year Sales Value Value		Growth over previous year	Growth Percentage	
2008- 09	67.63	171.82846	-	-	
2009- 10	45.38	185.48577	-22.25	-32.90%	
2010- 11	826.22	199.14308	780.84	1720.69%	
2011- 12	185.55	212.80038	-640.67	-77.54%	
2012- 13	133.37	226.45769	-52.18	-28.13%	
2013- 14	163.13	240.115	29.76	22.34%	
2014- 15	85.79	253.77231	-77.34	-47.41%	
2015- 16	94.79	267.42962	9.00	10.49%	
2016- 17	271.92	281.08692	177.13	186.87%	
2017- 18	269.58	294.74423	-2.34	-0.8605%	
2018- 19	243.96	308.40154	-25.62	-9.51%	
2019- 20	483.82	322.05885	239.86	98.32%	
2020-	427.9	335.71615	-55.92	-11.60%	
To	Total		3299.04		
	erage		253.7723077	1	
SD		218.050267			
CA	GR	17%			

Source: Coir board.gov.in

Table 2 shows the sales value of coir rugs and carpets for the period 2008-09 to 2020-21. It is clear from the above table that the export performance in terms of sales value shows both an increasing trend due to rise in exports to china and decreasing trend due to economic slowdown and recession all over the world. During the period 2008-09 to 2020-21 highest sales value of Rs. 826.22 crores and highest growth percentage were registered during the year 2010-11. CAGR accounted for 17% which the product is more achievable. Hence it is inferred that performance

of coir rugs and carpets increased gradually during the period 2008-09 to 2020-21.

Sales		Trend	Growth Rate		
Year	Sales Value	Value	<b>Growth over</b>	Growth	
	, 4,24,0	, 4246	previous year	Percentage	
2008	223.85	1299.16			
-09		98	-	-	
2009	668.33	1459.54			
-10		96	444.48	198.56%	
2010	1056.5	1619.92			
-11		93	388.19	58.08%	
2011	3171.3	1780.30			
-12		91	2114.78	200.16%	
2012	2112.5	1940.68			
-13		89	-1058.84	-33.39%	
2013	2947.9	2101.06			
-14		87	835.47	39.55%	
2014	3732	2261.44			
-15		85	784.07	26.60%	
2015	2510.1	2421.82			
-16		82	-1221.93	-32.74%	
2016	2419.3	2582.20			
-17		8	90.77	3.62%	
2017	2316.3	2742.58			
-18		78	-103.04	-4.26%	
2018	3137	2902.96			
-19		76	820.76	35.43%	
2019	2681.6	3063.34			
-20		74	-455.45	-14.52%	
2020	2422.2	3223.72	250.25	0.670/	
-21		71	-259.35	-9.67%	
Т	Total		29398.83		
Av	erage		2261.448462		
SD		1028.113233			
C	AGR		22%		

# Table - 3 Performance and Development of Curled Coir (Rs. In Crores)

# Source: Coir board.gov.in

Table 3 shows the sales value of curled coir for the period 2008-09 to 2020-21. It is clear from the above table that the export performance in terms of sales value shows both an increasing trend due to rise in exports to china and decreasing trend due to economic slowdown and recession all over the world. During the period 2008-09 to 2020-21 highest sales value of Rs. 3171.3 crores and highest growth percentage were registered during the year 2011-12. CAGR accounted for 22% which the product is more viable. Hence it is inferred that performance of curled coir increased gradually during the period 2008-09 to 2020-21.

Table – 4 Performance and Development of Curled Fibre (Rs. In Crores)

	Sales	Trend	Growth Rate		able –	5 Perfo	rmance ai	nd Develop	ment
Year	Value	Value	Growth over		f Coir	Pith (R	s. In Crore	s)	
		, 61262	previous year	Percentage					
2008-	2390.9					Γ		I	
09	07.10	5435.3069	-	-	Ħ			Growth Rate	
2009-	9742	10707 274	7251 14	207.460/		Sales	Trend	Growth	
10 2010-	12149	10787.374	7351.14	307.46%	Year	Value	Value	over	Growth
11	12149	16139.442	2406.52	24.70%		, , , , , ,		previous	Percentage
2011-	20324	10139.442	2400.32	24.7070	1			year	
12	20324	21491.509	8175.43	67.30%	2008-	8462.3	171100		
2012-	20708		0170710	0110070	09	10047	17140.3	-	-
13		26843.576	383.68	1.89%	2009- 10	12347	-3112.75	3884.76	45.91%
2013-	41776				2010-	14829	-3112.73	3664.70	43.91%
14		32195.643	21068.73	101.74%	11	14029	10914.8	2481.96	20.10%
2014-	39726				2011-	22151	10714.0	2401.70	20.1070
15		37547.711	-2050.43	-4.91%	12	22131	24942.35	7321.68	49.37%
2015-	44316				2012-	24728		7521100	1,710,770
16		42899.778	4590.07	11.55%	13		38969.9	2576.91	11.63%
2016-	53914	49251 945	0507.06	21.660/	2013-	34173			
2017-	70178	48251.845	9597.96	21.66%	14		52997.45	9445.62	38.20%
18	/01/8	53603.913	16264.25	30.17%	2014-	43295			
2018-	60164	33003.913	10204.23	30.1770	15		67025	9122.01	26.69%
19	00104	58955.98	-10013.77	-14.27%	2015-	68809			
2019-	49843	20,23.70	10013.77	11.2770	16	00.500	81052.55	25513.32	58.93%
20	., 0.0	64308.047	-10321.55	-17.16%	2016-	90539	05000 1	21720 55	21.500/
2020-	62891				17 2017-	101847	95080.1	21730.55	31.58%
21		69660.115	13048.01	26.18%	18	101647	109107.65	11307.71	12.49%
To	otal		488120.24		2018-	123208	109107.03	11307.71	12.49/0
	erage		37547.71077		19	123200	123135.2	21361.66	20.97%
					2019-	134963	120100.2	21001100	20.5770
	D		22249.44335		20		137162.75	11754.46	9.54%
	GR		31%		2020-	191974			
Source:	Coir b	oard.gov.in	1		21		151190.3	57011.13	42.24%
Table 4				T	Total 871325.14				
	Table 4 shows the sales value of coir fibre for the period 2008-09 to 2020-21. It is clear from the			Ave	Average 67025.01077		7		
	above table that the export performance in terms				SD 57548.43641				
of color value charge on increasing trand from					37370.73071				

Table 4 shows the sales value of coir fibre for the period 2008-09 to 2020-21. It is clear from the above table that the export performance in terms of sales value shows an increasing trend from 2008-09 to 2020-21 due to adoption of latest technology and improvement in working conditions but except in the year 2014-15, 2018-19 and 2019-20 it was slightly declined. During the period 2008-09 to 2020-21 highest sales value of Rs. 70178 crores and highest growth percentage were registered during the year 2009-10. CAGR is accounted for 31% shows the product is highly desirable. Hence it is inferred that performance of coir fibre increased gradually during the period 2008-09 to 2020-21.

Source: Coir board.gov.in

**CAGR** 

Table 5 shows the sales value of curled pith for the period 2008-09 to 2020-21. It is clear from the above table that the export performance in terms of sales value shows an increasing trend from 2008-09 to 2020-21 due to more exports to USA, China and Netherlands but except in the year 2009-10 it was slightly declined. During the period 2008-09 to 2020-21 highest sales value of Rs. 191974 crores and highest growth percentage

30%

were registered during the year 2015-16. CAGR accounted for 30% which is more achievable. Hence it is inferred that performance of coir pith increased gradually during the period 2008-09 to 2020-21.

Table – 6 Performance and Development of Coir and Other Sorts (Rs. In Crores)

			Growth Rate			
			Growth over			
	Quantity	Trend	previous	Growth		
Year	in MT	Value	year (MT)	Percentage		
2008-						
09	50.5	45.9391	-	-		
2009-						
10	55.04	85.1552	4.54	8.99%		
2010-						
11	45.96	124.3712	-9.08	-16.50%		
2011-						
12	58.36	163.5873	12.40	26.98%		
2012-						
13	30.36	202.8033	-28.00	-47.98%		
2013-						
14	497.84	242.0193	467.48	1539.79%		
2014-						
15	614	281.2354	116.16	23.33%		
2015-	-1-	220 1711	07.00	4.7.0004		
16	517	320.4514	-97.00	-15.80%		
2016-	256	250 6675	261.00	50.400/		
17	256	359.6675	-261.00	-50.48%		
2017-	206	200 0025	<b>5</b> 0.00	10.520/		
18 2018-	306	398.8835	50.00	19.53%		
19	183	438.0996	-123.00	-40.20%		
2019-	103	430.0330	-123.00	-40.2070		
2019-	298	477.3156	115.00	62.84%		
2020-	270	7/1.3130	113.00	02.07/0		
21	744	516.5316	446.00	149.66%		
Total	3656.06					
Mean	281.2353846					
SD	243.4024133					
CAGR	18%					

# Source: Coir board.gov.in

Table 6 shows the quantity in metric ton of coir and other sorts for the period 2008-09 to 2020-21. The coir and other sorts had increased production each year from 50.50 metric ton in 2008-09 to 744 metric ton in 2020. During the period 2008-09 to 2020-21 highest quantity produced of 497.84 metric ton and highest growth percentage were

registered during the year 2013-14. CAGR accounted for 18% which is highly achievable. Hence it is inferred that performance of coir and other sorts gradually increased production during the period 2008-09 to 2020-21.

Table - 7 Performance and Development of Coir Rugs and Carpets (Rs. In Crores)

Coir R	ugs and C	arpets	(Rs. In Crores)			
			<b>Growth Rate</b>			
	Quantity	Trend	Growth over previous	Growth		
Year	in MT	Value	year (MT)	Percentage		
2008- 09	63.83	246.65	-	-		
2009- 10	46.17	245.23	-17.66	-27.67		
2010- 11	1146.81	243.82	1100.64	2383.89		
2011- 12	191	242.40	-955.64	-83.33		
2012- 13	94.83	240.98	-96.17	-50.35		
2013- 14	88.86	239.57	-5.97	-6.30		
2014- 15	71	238.15	-17.86	-20.10		
2015- 16	46	236.74	-25	-35.21		
2016- 17	205	235.32	159	345.65		
2017- 18	254	233.91	49	23.90		
2018- 19	195	232.49	-59	-23.23		
2019- 20	367	231.08	172	88.21		
2020- 21	327	229.66	-40	-10.90		
Total			3096.5			
Mean	238.1923077					
SD	293.0482699					
CAGR	27%					

## Source: Coir board.gov.in

Table 7 shows the quantity in metric ton of coir rugs and carpets for the period 2008-09 to 2020-21. The coir rugs and carpets had increased production each year from 63.83 metric ton in 2008-09 to 327 metric ton in 2020-21. During the period 2008-09 to 2020-21 highest quantity

produced of 1146.81 metric ton and highest growth percentage of 2383.89% were registered during the year 2010-11. CAGR accounted for 27% is more achievable. Hence it is inferred that performance of coir rugs and carpets gradually increased production during the period 2008-09 to 2020-21.

Table – 8 Performance and Development of Curled Coir (Rs. In Crores)

			Growth Rate			
			Growth			
			over			
	Quantity	Trend	previous	Growth		
YEAR	in MT	Value	year (MT)	Percentage		
2008-	1438.38		_			
09		5543.45		-		
2009-	3365.7		1927.32			
10		6094.15		133.99%		
2010-	5527.08		2161.38	54.0004		
11	11055.05	6644.84		64.22%		
2011-	11855.97	7105 52	6328.92	114510/		
12 2012-	8883.14	7195.53		114.51%		
13	8883.14	7746.22	-2972.86	-25.07%		
2013-	11262.66	7740.22		-23.0770		
14	11202.00	8296.92	2379.56	26.79%		
2014-	12621	0270.72		20.7770		
15	12021	8847.61	1358.30	12.06%		
2015-	9470		2151.00			
16		9398.30	3151.00	24.97%		
2016-	10356		997.00			
17		9949.00	886.00	9.36%		
2017-	8800		-1556.00			
18		10499.69	-1330.00	-15.03%		
2018-	10768		1968.00			
19		11050.38	1700.00	22.36%		
2019-	11290	44 604 05	522.00	4.0504		
20	0201	11601.07		4.85%		
2020-	9381	10151 77	-1909.00	16.010/		
21	12151.77   1909.00   -16.91%					
Total	115018.93					
Mean	8847.61					
SD	3387.463711					
CAGR	17%					

Source: Coir board.gov.in

Table 8 shows the quantity in metric ton of curled coir for the period 2008-09 to 2020-21. The

curled coir had increased production each year from 1438.38 metric ton in 2008-09 to 9381 metric ton in 2020-21. During the period 2008-09 to 2020-21 highest quantity produced of 11855.97 metric ton registered in the year 2009-10 and highest growth percentage of 133.99% were registered during the year 2009-10. CAGR accounted for 17% is more achievable. Hence it is inferred that performance of curled coir gradually increased production during the period 2008-09 to 2020-21.

Table- 9 Performance and Development of Coir Fibre (Rs. In Crores)

			Growth Rate		
YEAR	Quantity		Growth		
1 Lill	in MT	Trend	over previous	Growth	
		Value	year (MT)	Percentage	
2008-	19443.54	7 65265	J 0412 (1:12)	1 01 00110mg0	
09		1033.67	-	-	
2009-	73074.93				
10		30010.50	53631.40	275.83%	
2010-	83393.01				
11		58987.34	10318.10	14.12%	
2011-	119684.54				
12		87964.17	36292.00	43.52%	
2012-	140692.93				
13		116941.00	21008.00	17.55%	
2013-	43751.79				
14		145917.84	-96941.20	-68.90%	
2014-	41284	17,400,4.67	2467.00	~ < 40 <i>′</i>	
15	45770	174894.67	-2467.80	-5.64%	
2015-	45770	202071 51	4406.00	10.070/	
16 2016-	370357	203871.51	4486.00	10.87%	
	3/035/	222040 24	224597.00	700 170/	
2017-	374320	232848.34	324587.00	709.17%	
18	374320	261825.17	3963.00	1.07%	
2018-	299279	201023.17	3703.00	1.0770	
19	277217	290802.01	-75041.00	-20.05%	
2019-	308457	2,0002.01	75011.00	20.0570	
20		319778.84	9178.00	3.07%	
2020-	354123				
21		348755.68	45666.00	14.80%	
Total	2273630.74				
Mean	174894.6723				
SD	142084.2964				
CAGR	15%				

# Source: Coir board.gov.in

Table 9 shows the quantity in metric ton of coir fibre for the period 2008-09 to 2020-21. The coir fibre had increased production each year from 19443.54 metric ton in 2008-09 to 354123 metric ton in 2020-21. During the period 2008-09 to 2020-21 highest quantity produced of 374320 metric ton registered in the year 2017-18 and highest growth percentage of 709% were registered during the year 2016-17. CAGR accounted for 15% is more achievable. Hence it is inferred that performance of coir fibre gradually increased production during the period 2008-09 to 2020-21.

Table- 10 Performance and Development of Coir Pith (Rs. In Crores)

or Coir Fich (NS. III Crores)						
			<b>Growth Rate</b>			
			Growth			
			over			
			previous			
	Quantity	Trend	year	Growth		
YEAR	in MT	Value	(MT)	Percentage		
2008-	96996.32	<b>5</b> 0.610.62				
09	121016 67	58619.63	-	-		
2009-	131916.67	100657 11	24020.25	26.000/		
10	157054 02	108657.11	34920.35	36.00%		
2010- 11	157854.93	158694.59	25029.26	10.660/		
2011-	206424.57	138094.39	25938.26	19.66%		
12	200424.37	208732.07	48569.64	30.77%		
2012-	208399.28	200732.07	46309.04	30.7770		
13	200377.20	258769.55	1974.71	0.96%		
2013-	271494.76	230703.33	15771	0.5070		
14		308807.02	63095.48	30.28%		
2014-	316425.00					
15		358844.50	44930.24	16.55%		
2015-	408897.00					
16		408881.98	92472.00	29.22%		
2016-	490552.00					
17		458919.46	81655.00	19.97%		
2017-	548479.00					
18		508956.94	57927.00	11.81%		
2018-	566661.00					
19		558994.41	18182.00	3.31%		
2019-	579980.00	600021 00	12210.00	2.250/		
20	<b>600000 00</b>	609031.89	13319.00	2.35%		
2020-	680898.00	650060 27	100019 00	17 400/		
21		659069.37	100918.00	17.40%		
Total	4664978.53					
Mean	358844.5023					
SD	197351.829					
CAGR	25%					

#### Source: Coir board.gov.in

Table 10 shows the quantity in metric ton of curled pith for the period 2008-09 to 2020-21. The coir pith had increased production each year from 96996.32 metric ton in 2008-09 to 680898 metric ton in 2020-21. During the period 2008-09 to 2020-21 highest quantity produced of 680898 metric ton registered in the year 2020-21 and highest growth percentage of 36% were registered during the year 2009-10. CAGR

accounted for 25% is more achievable. Hence it is inferred that performance of coir pith gradually increased production during the period 2008-09 to 2020-21.

#### 5. Conclusion

Coir products will be witnessed as a highly acceptable product in the future due to its environment-friendly image. This industry renovates the wastes of coconut husks into valuable coir products like coir fibre, coir pith and other products. Due to increase in the usage of coir products in railways and mining industries to protect the environment and to minimize the soil erosion it urges the coir units and Small scale industries to adopt latest technology and it paves the way for increase in productivity. During Covid19 pandemic the kerala state coir corporation has launched coir mats with sanitizing solutions to control the spread of Corona virus. Export promotion council of India and coir board officials to take more and more initiatives in spreading the awareness of using coir products and also aid to remove their problems and bottlenecks in finance and other facilities. Ministry of Commerce and Industry also to introduce new schemes and opportunities for young entrepreneurs in establishing more coir units all over India to take competitive advantage.

#### **Bibliography**

- Dr. Sudhansu Sekhar Nayak & Dr. Bhabasish Mahapatra. (2016). Growth and Performance of Coir Industry in Odisha. International Educational Scientific Research Journal [IESRJ], 2(April 2016), 26–28.
- 2. Sambasivan, E., & Vennilaashree, S. (2018). Article ID: IJMET\_09\_13\_012
  Production Recital of Coir Industry.
  International Journal of Mechanical
  Engineering and Technology
  (IJMET),9(13),102—
  108http://iaeme.com/Home/issue/IJMET?
  Volume=9&Issue=13http://iaeme.com
- 3. Shelly, R., Sharma, T., & Bawa, S. S. (2020). Role of Micro, Small and Medium Enterprises in Indian Economy. International Journal of Economics and

- Financial Issues, 10(5), 84–91. https://doi.org/10.32479/ijefi.10459
- 4. Sitrarasu, S. (n.d.). "an Analysis of Performance of Coir Industry in India." XII(0886), 428–441.
- 5. Tanwani, R. M. (n.d.). GAP GYAN A GLOBAL JOURNAL OF SOCIAL SCIENCES PERFORMANCE OF COIR INDUSTRY OF INDIA. https://www.gapgyan.org/
- 6. Dr. R. Padmanaban & Dr. P.K. Uma Maheswari, A study on the export performance of coir products in India: INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS, volume6, Issue 2, April 2018.
- 7. Dr. R. Venkatesh and Dr.K. Kumaran, Export Performance of Coir Industry in India: SURAJ PUNJ JOURNAL FOR MULTIDISCIPLINARY RESEARCH, Volume 9, Issue 2, ISSN No 2394-2886, 2019.
- 8. Dr. Manjusmitha Dash and Bidhu Bhusan Mishra, "Coir Industry in India: An overview of Performance, Problems and Prospectus, GE- INTERNATIONAL JOURNAL OF MANAGEMENT RESEARCH, Vol 9, Issue 6, June 2021.
- K. Praveen Kumar and Dr. G. Vinayagamoorthi, A study on export performance of coir Industry in India, SHANLEX INTERNATIONAL JOURNAL OF COMMERCE, Vol 5, Issue 4, 2017.
- Banuprakash K. A, An Economic analysis of prospects and challenges of Coir Industry, INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS, Volume 7, Issue 4 December 2019 |ISSN: 2320-2882.
- 11. Coir board.gov.in
- 12. Executive summary, Status of coir industries in India.