DETAILED PROJECT REPORT

Location: Ethamozhy, Kanyakumari District

Submitted to

Coir Board, Kochi

Prepared by

ITCOT Consultancy and Services Ltd.
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ETHAMOZHY COIR CLUSTER

EXECUTIVE SUMMARY

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<tr><td>02.</td><td>Type of Cluster</td><td>Mini Cluster</td></tr>
<tr><td>03.</td><td>Location & Spread of the cluster</td><td>The cluster area is located in Agastheswaram taluk, Kanniyakumari District. The cluster spread includes 21 revenue villages of 3 blocks (Rajakkamangalam, Kuruthengode & Agastheeswaram) in the district. The Geographical spread of the cluster measures about 12-15 Km radius.</td></tr>
<tr><td>04.</td><td>Product range</td><td>The existing range of coir products produced in the cluster are:
Coir Fibre
Coir Yarn
Coir Pith block</td></tr>
<tr><td>05.</td><td>Size of cluster & Type of units</td><td>The total number of coir units available in the cluster area is around 212 units of which 56 Nos. are engaged in Fibre Extraction, 150 Nos. engaged in Coir 2Ply Yarn Spinning and 06 Nos. engaged in Coir Pith Block. The total number of beneficiaries estimated to be around 1960 members which also include the labor force in the cluster.</td></tr>
<tr><td>06.</td><td>Production & Turnover of Coir products in the cluster</td><td>
<table>
<tr><th>Activity</th><th>No. of Units</th><th>Production (in MTs)</th><th>Annual Turnover (in Lakhs)</th></tr>
<tr><td>Fibre Extraction</td><td>56</td><td>12600</td><td>1890</td></tr>
<tr><td>Yarn Spinning</td><td>150</td><td>2250</td><td>720</td></tr>
<tr><td>Coir Pith Block</td><td>06</td><td>9000</td><td>895</td></tr>
<tr><td>Total</td><td>212</td><td></td><td>3505</td></tr>
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</td></tr>
<tr><td>07.</td><td>Employment & Income level</td><td>
<table>
<tr><th>Activity</th><th>Male</th><th>Female</th><th>Total</th></tr>
<tr><td>Fibre Extraction</td><td>220</td><td>900</td><td>1120</td></tr>
<tr><td>Yarn Spinning</td><td>70</td><td>380</td><td>450</td></tr>
<tr><td>Coir Pith Block</td><td>30</td><td>150</td><td>180</td></tr>
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		<table><tr><td>Total</td><td>320</td><td>1430</td><td>1750</td></tr></table> The income level for the labors in the cluster is Rs.350/- to 450/- per day for male workers and Rs.300/- per day for female workers.
08.	**Key Concern areas of the cluster**	• Unlike other districts in Tamil Nadu, Kanyakumari district has a rainfall both during the South West and the North East monsoons. The South West monsoon period starts from the month of June and ends in September, While the North East monsoon period starts from October and ends in the middle of December. • Both the south-west and north-east monsoon winds, the proximity of the sea and the dwindling heights of Western Ghats greatly influence the climate. On the whole this district gets an average annual rainfall of 1369.5 mm with 79.7 rainy days. • Due to the high literacy levels (District literacy rate: 91.96% as per 2011 census) in the district, it is difficult to get unskilled manpower needed to carry out basic activities like Coir fibre drying. • Lack of awareness on Value added bristle coir products • Utilization of husks for Coir utility is partial. Husks are found wasted at Farm level.
09.	**Proposed Strategic Interventions**	**Soft Interventions:** • Capacity Building • Market Promotion **Hard Interventions** (Common facility creation): • Building for Common facility • Common facilities proposed: ➢ **Coir Fibre Brooms & Brushes** (used in industrial, municipal and domestic applications) ➢ **Coir Buffing wheels** (used for surface polishing in SS utensils & rough polishing of industrial products) **Thematic Interventions:** Participation in activities such as national and international trade fairs, Online Shopping Web portal and E-commerce initiatives, as detailed in SFURTI guidelines.

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>10.</td><td>Budget for Soft interventions</td><td>Rs. 10.00 Lakhs</td></tr>
<tr><td>11.</td><td>Budget for Hard interventions</td><td>Rs. 146.00 Lakhs</td></tr>
<tr><td>12.</td><td>Total Project cost (including Agencies cost)</td><td>Rs. 199.60 Lakhs</td></tr>
<tr><td>13.</td><td>Means of Finance</td><td>SFURTI Grant : Rs.149.06 Lakhs

SPV Contribution : Rs. 50.50 Lakhs (incl. working capital)</td></tr>
<tr><td>14.</td><td>Post Intervention Scenario (Expected Impact)</td><td>
<table>
<tr><th>S.No.</th><th>Parameter</th><th>Pre-intervention</th><th>Post-intervention</th></tr>
<tr><td>1</td><td>Cluster Turnover p.a. (Rs. Lakhs)</td><td>3505</td><td>3775</td></tr>
<tr><td>2</td><td>Investment (Rs. Lakhs)</td><td>2330</td><td>2550</td></tr>
<tr><td>3</td><td>Employment (Nos.)</td><td>1750</td><td>1950</td></tr>
<tr><td>4</td><td>Wages per day (Rs.)</td><td>Rs.400/-</td><td>Rs.450/- to Rs.460/-</td></tr>
<tr><td>5</td><td>Profitability (%)</td><td>8%</td><td>14 to 15%</td></tr>
</table>

Emergence of specialized support service providers and their active involvement in the development process
Establishment of new units by converging various schemes of State and Central Governments (such as Coir Udyami Yojana, NEEDS, PMEGP etc.) resulting in additional investments and employment in Coir sector by the cluster members
Improved skill level of labours and enhanced quality of final products
Improved access to financial capital for cluster members
100% Coverage of cluster artisans under social security schemes

</td></tr>
</table>

15.	**Cluster Management**	The cluster is proposed to be developed under SFURTI (Scheme of Fund for Regeneration of Traditional Industries). The Coir Board is the Nodal agency (NA) and ITCOT Consultancy and Services Limited is the Technical Agency (TA) appointed by Coir Board. 'Gandhi Kamaraj Educational and Rural Development Trust (GKERD), Nagercoil' is proposed as the Implementing Agency for this cluster. The SPV has been registered as Private Limited Company under Companies Act 2013 in the name of 'ETHAMOZHY COIR CLUSTER PRIVATE LIMITED' as per the Certificate of Incorporation issued by Registrar of Companies, Chennai dated 28.10.2015. The CIN of the company is U74120TN2015PTC102723. The SPV comprises of 22 members. The SPV will be strengthened to manage the Cluster activities in sustainable nature after the project implementation is over.

PREAMBLE

The Coir industry has to its credit a tradition and heritage of centuries. But development of Coir industry in India has begun in an organized way only in 1959. Ever since this humble beginning, Coir products have been improving in quality, quantity and variety. For historical reasons, cultivation of coconuts and extraction of Coir fibre and its further processing have taken deep roots in the state of Kerala. The rapid expansion of coconut cultivation in non-traditional areas increased the production of coconut and the industry has also developed gradually in the states of Tamil Nadu, Karnataka, Andhra Pradesh and Orissa. Coir industry in India is one of the important rural industries. It provides source of income to about 5 lakhs artisans in rural areas. In which, Women constitute about 80% of the work force in the coir industry.

Coir has come a long way from the ancient uses. It is still used for agricultural and domestic purposes. It has also become an article of use in modern life either as garden article, as bags for the tea leaves, for training hops, as brush mats at the door steps, as long-wearing carpets in the corridors of the bungalow veranda, as tastefully planned floor coverings in the drawing room or as the runner on the staircase, as geo-fabric for controlling landslide or soil erosion, for protection of embankments of roads, railway and canals.

With a view to making the traditional coir industries more productive and competitive and facilitating their sustainable development, the Central government has announced Scheme of Fund for Regeneration of Traditional Industries (SFURTI). ITCOT Consultancy and Services Ltd. (ITCOT) has been appointed as Technical Agency by Coir Board for SFURTI Coir clusters in Tamilnadu. Subsequently, Coir Board has entrusted the task of preparation of Detailed Project Report for the Ethamozhy Coir Cluster located at Kanyakumari district to M/s. ITCOT Consultancy and Services Limited, Chennai. Accordingly, ITCOT has prepared the Detailed Project Report (DPR) for submitting the same for seeking approval from the Scheme Steering Committee (SSC).

This report is prepared based on interaction with coir industrialists in the clusters, coir industry workers, industry association members, NGO's and support institutions in the district, Informal interviews with industry participants, machinery suppliers and experienced entrepreneurs, collection of secondary information etc.

The Chapter scheme of the diagnostic study report is as follows:
Cluster Profile is given in Chapter 1. Cluster Value Chain Mapping is given in Chapter 2. Market assessment and Demand Analysis is given in Chapter 3. SWOT and Need Gap Analysis is given in Chapter 4. Profile of the Implementing Agency in Chapter 5. Project Concept and Strategy Framework are detailed in Chapter 6. Core SFURTI Project Interventions are given in Chapter 7. Detailed analysis of Soft Interventions is given in Chapter 8 and analysis of Hard Interventions is given in Chapter 9. Project Cost and Means of Finance (Core SFURTI) is given in Chapter 10. Plan for Convergence Initiatives are given in Chapter 11. Enhanced Project Cost and Means of Finance are given in Chapter 12. Project Timeline is illustrated in Chapter 13. Detailed Business Plan is given in Chapter 14. Proposed Implementation Framework is given in Chapter 15. Expected Impact is detailed in Chapter 16.

1 CLUSTER PROFILE

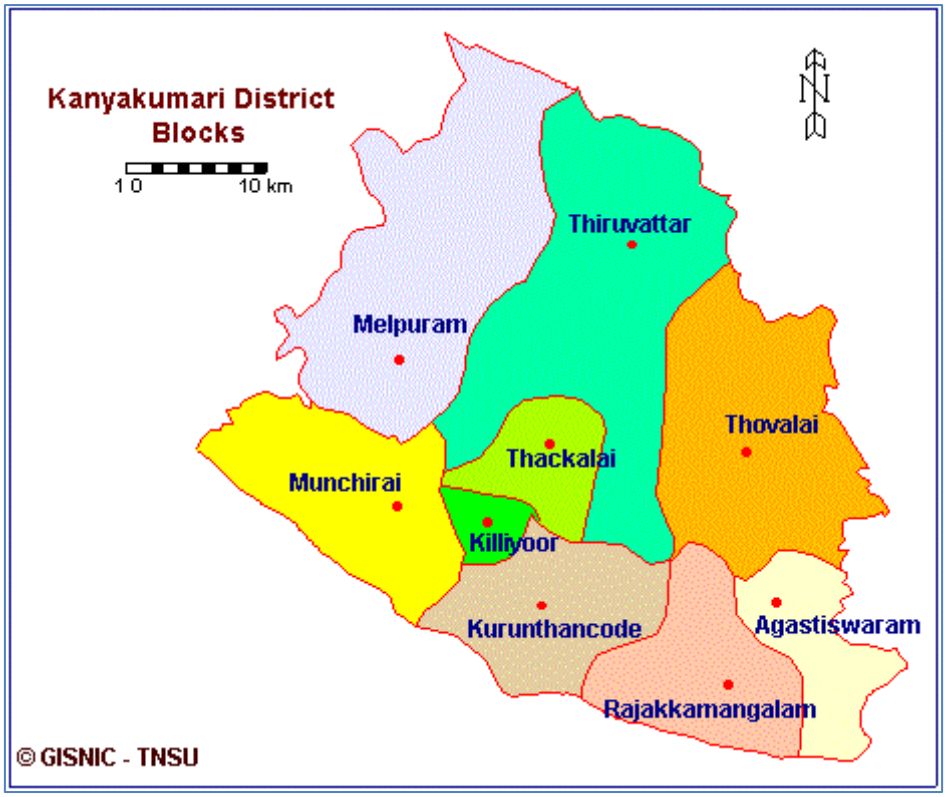
1.1 BACKGROUND

Nagercoil, the capital city of Kanniyakumari district, is the south most tip of the Indian peninsula, where the confluence of Indian Ocean, Arabian Sea and Bay of Bengal occurs. It is a smallest district in tamilnadu with the total geographical area of 17672 Sq. Km. The area comprising the present Kanyakumari district was a part of the erstwhile Travancore state. In 1835, when the state was divided in to Northern and Southern divisions, this area formed part of Southern division and was placed in the charge of Dewan Peishkar, Kottayam. In July 1949, when the United States of Travancore and Cochin was inaugurated, the present Kanyakumari area continued to be a part of Trivandrum district of Kerala State.

The people of Agasteeswarem, Thovalai, Kalkulam and Vilavancode Taluks, which form the southern divisions of the former Trivandrum District, were predominantly Tamil speaking. They agitated for the merger of this area with Madras State. The States Reorganization Commission also recommended this. Accordingly, the States Reorganization Act, 1956 was passed and the Kanyakumari District was formed on 1st November 1956, with the four Taluks, viz., Agasteeswarem, Thovalai, Kalkulam and Vilavancode and merged with Tamil Nadu.

1.2 Regional setting of the Cluster

The Kanniyakumari district is bound by Tirunelveli District on the North and the east. The South Eastern boundary is the Gulf of Mannar. On the South and the South West, the boundaries are the Indian Ocean and the Arabian Sea. On the West and North West it is bound by Kerala. The proposed cluster is located at Eathamozhi as most of the coir and allied industries are situated in and around Rajakkamangalam, Kurunthancode and Agastheeswaram blocks of Kanniyakumari district. The block wise map of Kanyakumari district is given below:



1.3 Location

Kanniyakumari District consists of two Revenue Divisions (viz., Nagercoil and Padmanabhapuram, each headed by a Revenue Divisional Officer. The Nagercoil Revenue Division consists of two taluks (i.e) Agasteeswaram with its headquarters at Nagercoil and Thovalai with its headquarters at Boothapandi. The Padmanabhapuram Revenue Division consists of two Taluks (i.e) Kalkulam with its headquarters at Thuckalay and Vilavancode with its Headquarters at Kuzhithurai. The Geographical spread of the cluster measures about 12-15 Km radius. It includes the below rural regions in Kanniyakumari district.

Rajakkamangalam	Puthalam
	Thengamputhoor
	Ganapathipuram
Kurunthencode	Alloor
	Thingal Nager
	Eraniel
	Kallukoottam

	Mandaikadu
	Manavalakurichi
	Neyyoor
	Reethapuram
	Vellimalai
Agasteeswaram	Agateeswaram
	Azhagappapuram
	Kottaram
	Marungoor
	Mylaudy
	South Thamarai Kulam
	Suchindram
	Theroor
	Kanniyakumari

1.4 Evolution of the Cluster

In Kanyakumari District, the Coir industry is being undertaken traditionally with similar to traditional skills of Kerala Coir workers. The Nagercoil town plays an important role in the development of coir industry in the district. Based on the number of coir units concentrated and the distribution of coir workers, the cluster development is identified in Kanyakumari District by the Government of Tamil Nadu. The coconut is cultivated in 24232 hectares through which 5625 lakh nuts are produced, with the productivity of 23214 nuts per hectare. In Tamilnadu state, the bristle fiber production is carried out only in Kanyakumari District due to the advantage of climatic conditions. Nearly about 90 de-fibering units are producing bristle fiber in the district. The fiber is mostly transported to Kerala for making fine variety of yarn besides sizable quantity of yarn is also produced in the district itself. But to make the fiber as a value added product, it has been proposed to set up a Common Facility Centre (CFC) for the manufacture of Coir bristle brushes and Coir fibre buffing wheels. Having such vast scope for further development of coir sector, this district has been selected for coir cluster under SFURTI in the state.

1.5 Demography and Growth trends

According to 2011 census, Kanniyakumari district has a population of 1,870,374 with a sex-ratio of 1,019 females for every 1,000 males, much above the national average of 929. A total of 182,350 were under the age of six, constituting 92,835 males and 89,515 females. Scheduled Castes and Scheduled Tribes accounted for 3.97% and .39% of the population respectively. The district had a total of 483,539 households. There were a total of 679,620 workers, comprising 12,229 cultivators, 51,350 main agricultural laborers, 21,078 in house hold industries, 468,001 other workers, 126,962 marginal workers, 3,381 marginal cultivators, 21,517 marginal agricultural labourers, 14,711 marginal workers in household industries and 87,353 other marginal workers. Both Malayalam and Tamil Still exist as Educational Medium in most of the Schools in Kanyakumari District. 30% People in the district still have Malayalam as their Mother Tongue. The Language Spoken here Comprise both Mixture of Tamil and Malayalam. Predominantly Ruled by Travancore Kingdom, More Malayalam Speaking Communities can be seen in vilavancode and kalkulam taluks. Culture and Food here is Predominantly of Travancore Style. Average literacy rate of Kanyakumari in 2011 were 91.75 compared to 87.55 of 2001. If things are looked out at gender wise, male and female literacy are 93.65 and 89.90 respectively. For 2001 census, same figures stood at 90.37 and 84.79 in Kanyakumari District. Total literate in Kanyakumari District were 1,548,738 of which male and female were 780,541 and 768,197 respectively. In 2001, Kanyakumari District had 1,308,322 in its district. Still Both Malayalam and Tamil Exist as Spoken Languages of the District.

The statistical data of Kanniyakumari district as per Census 2011 and the growth aspects with respect to Census 2001 is given below:

Description	2011	2001
Actual Population	1,870,374	1,676,034
Male	926,345	832,269
Female	944,029	843,765

Description	2011	2001
Population Growth	11.60%	4.73%
Area Sq. Km	1,684	1,684
Density/km2	1,111	995
Proportion to Tamil Nadu	2.59%	2.69%
Average Literacy	91.75	87.55
Male Literacy	93.65	90.37
Female Literacy	89.90	84.79

1.6 Socio-economic aspects

The significance of coir industry arises primarily from the fact that a large a number of people from the economically weaker sections of the society depend on this industry. At the current level of production of coir, the industry utilizes about 40% of the annual yield of coconut husk in the country. There is possibility to increase the utilization to at least 60% of husk production. Therefore, there exists vast potential for stepping up of production of coir in India. The increased utilization of coconut husk which are abundantly available in the coconut growing states of India provides scope for development of fiber processing sector and thereby augmenting rural employment and women empowerment. The number of Coir units and the annual turnover in the cluster is given below:

Activity	**No. of Units**	**Production (in MTs)**	**Annual Turnover (in Lakhs)**
Fibre Extraction	56	12600	1890
Yarn Spinning	150	2250	720
Coir Pith Block	06	9000	895
Total	**212**		**3505**

1.7 Human Development Aspects

The total number of direct workers engaged in coir activity is given below:

Activity	Male	Female	Total
Fibre Extraction	220	900	1120
Yarn Spinning	70	380	450
Coir Pith Block	30	150	180
Total	320	1430	1750

The existing income level of the coir labor force in the district is given below:

Activity	Wages per day	
	Male	Female
Fibre Extraction	450	300
Yarn Spinning	350	300
Coir Pith Block	350	300

It is observed that the income level for all activities is same for male as well as for female workers. Among these workers, 80% belongs to OBC category, 10% SC category and remaining 10% belongs to other categories.

1.8 Industrial Scenario of Kanyakumari District

The present industrial scenario of Kanyakumari district is given below:

Registered Industrial unit	17871
Total industrial unit	17871
Registered medium & large unit	03
No. of industrial area	03
Turnover of small scale industries	186000 (in lakhs)
Turnover of medium & large scale industries	186000 (in lakhs)

1.9 Infrastructure Details

The details of units, investment and employment category wise is given below:

Type of Industry	**Number of units**	**Investment (Rs. Lakhs)**	**Employment (in Nos.)**
Agro based	285	1470	6402
Soda water	25	35	260
Ready-made garments & Embroidery	401	1618	3996
Wood/wooden based furniture	644	1862	3311
Paper & Paper products	24	29	166
Leather based	07	08	81
Chemical/Chemical based	55	255	536
Rubber, Plastic & petro based	45	165	728
Mineral based	142	558	2051
Engineering units	261	3615	1853
Electrical machinery and transport equipment	23	401	200
Repairing & servicing	345	1388	2503
Others	15612	3304	22376

2 CLUSTER VALUE CHAIN MAPPING

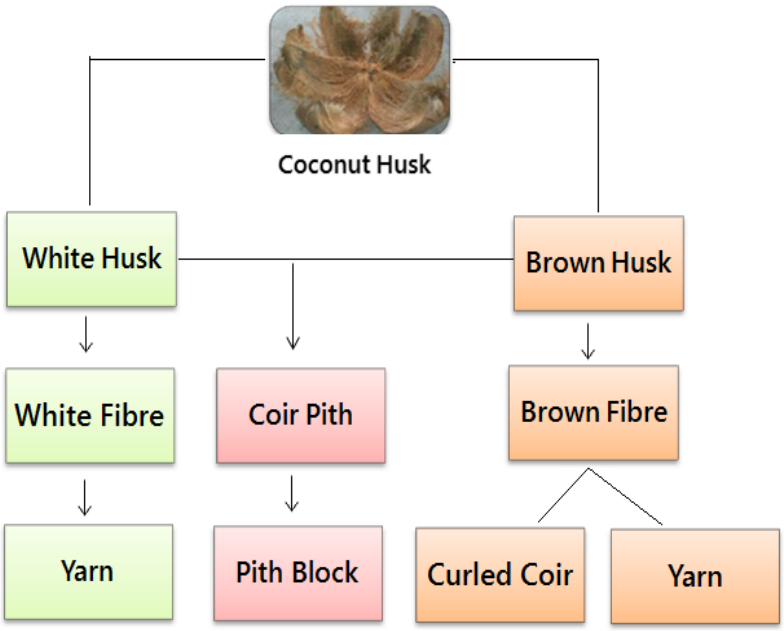
2.1 Product Profile

The following products are produced in the cluster presently.

- Coir Yarn
- Coir Fibre Extraction
- Coir Pith Block

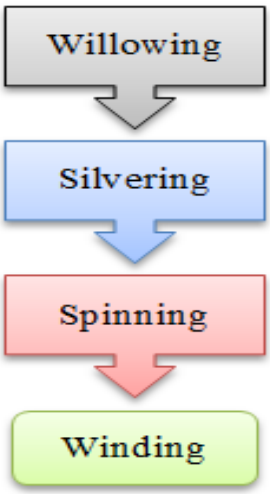
2.2 Production Process

The Product flow from the raw material is depicted in the chart below:



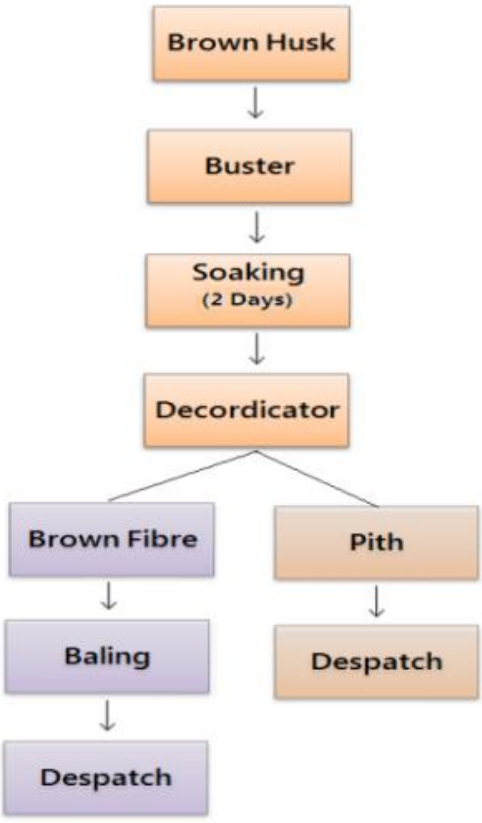
Coir Yarn

Coir fibre obtained from fibre extraction units and is wetted by spraying water. After 2-3 hours, the wetted fibre is passed through the willowing machine to remove the impurities and the place the fibre and parallel to each other. The fibre is then fed in to slivering machine wherein it is converted in to sliver form. The slivers are spun into yarn as per specifications in the spinning machine. The yarn is then cleaned and wound in to rolls and is now ready for the market. Coir yarn spinning is similar to cotton yarn spinning. The processes involved are depicted hereunder:



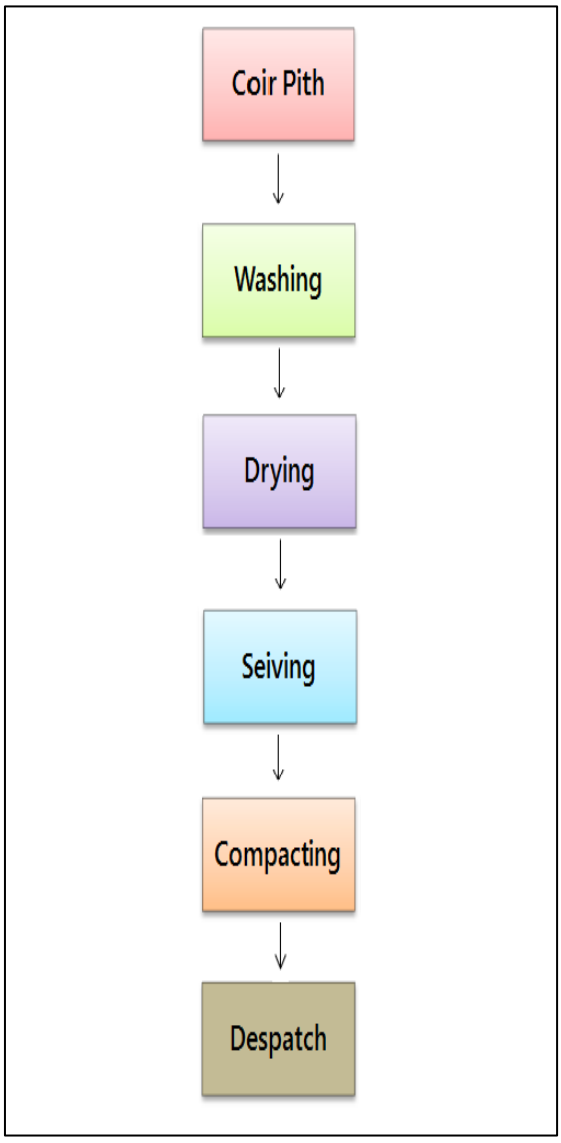
Coir Fibre

The coconut husk (raw material) is collected from the farms and stored. The collected husk is soaked in water. Then soaked material is fed into the decorticator wherein the fibre and pith are separated. The fibre is dried in the sunlight and is pressed in the form of 35-Kg bundles by using balling press and dispatched for sales. The process flow of fibre extraction from Brown husk is given below:



Coir Pith Block

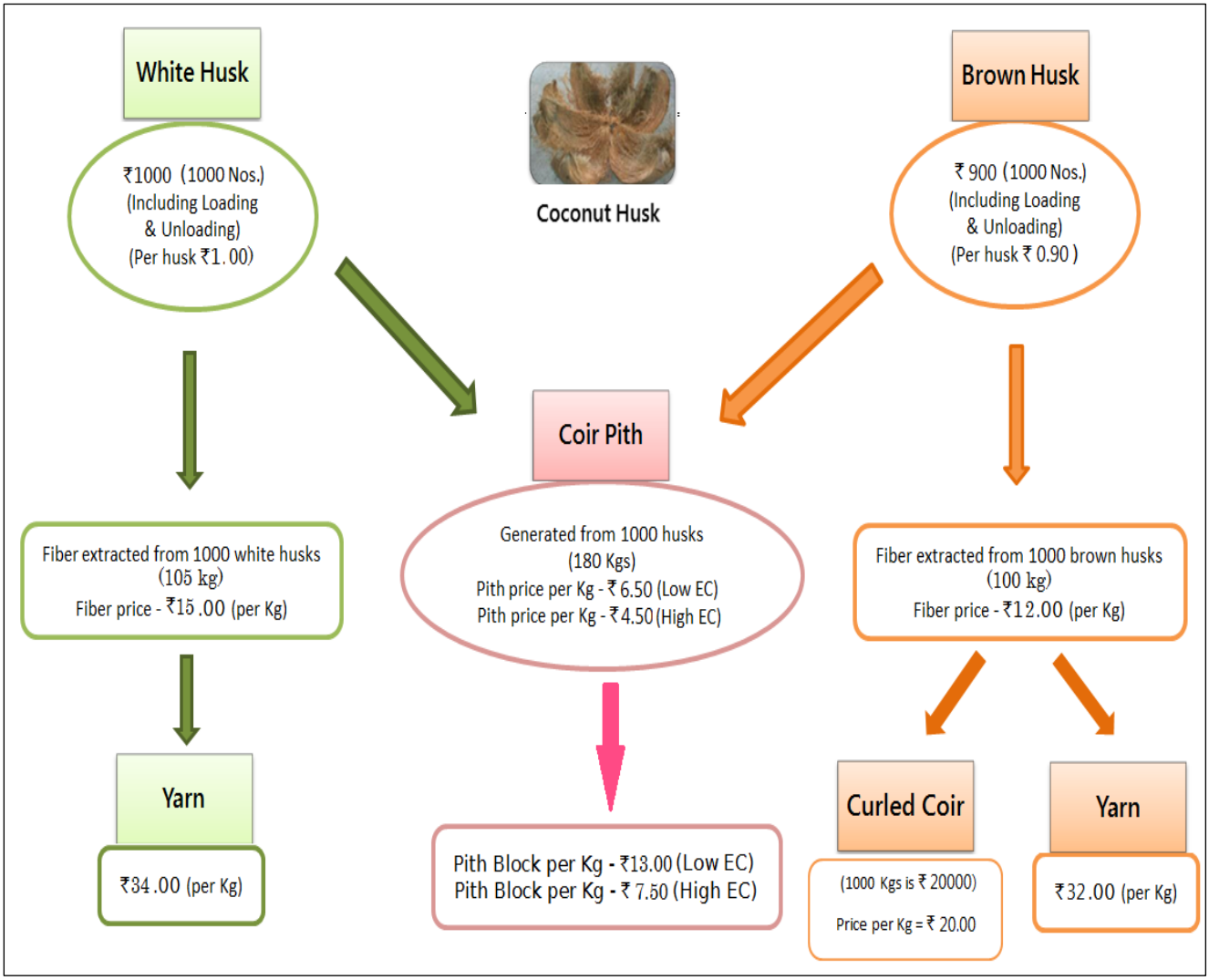
The by-product obtained during the process of Coir Fibre Extraction is Coir Pith. The raw coir pith (high EC) is received and washed in the soft water to reduce the EC. The low EC pith is dried in the yard and the dried pith is subjected to sieving / mixing process. The resultant pith is fed into the compacting machine in which the pith is converted into blocks. Then the blocks are packed and then dispatched to sales. The process flow chart for the Coir pith block making is given below:



High electrical conductivity (EC) of coir pith is the major constraint in using it as growing medium. The higher level of EC in pith is rectified by washing it with good quality fresh water. Hence washing is the significant stage in the process.

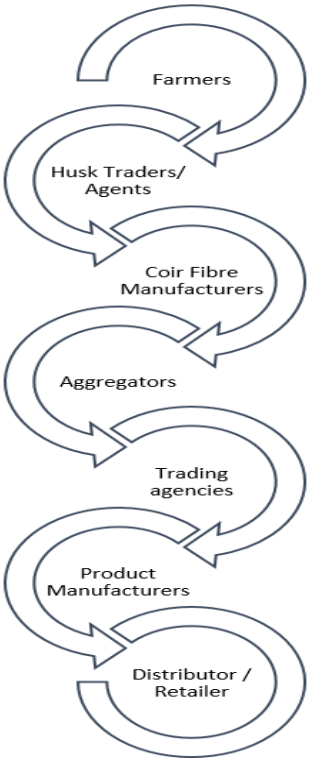
2.3 Value Chain Analysis

The incremental value of the cluster products from the basic raw material to the final product manufactured in the cluster is given below:



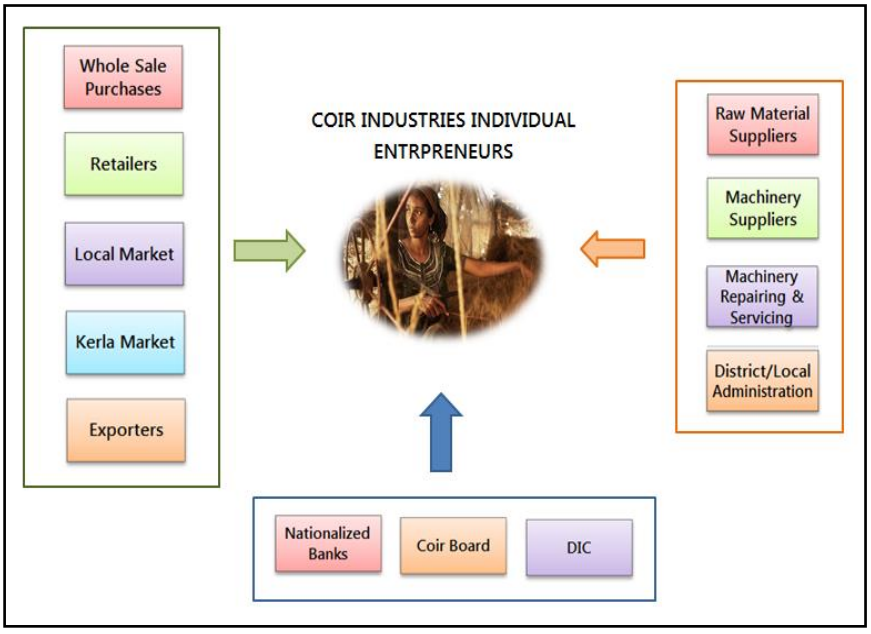
It is observed that the value addition in the cluster is limited to intermediate product level and the need and scope for value addition for coir sector in the cluster is considered significant. The cost of Green husk including loading and unloading is valued at Rs.1.00, which is incremented to Rs.15.00 per Kg. of fibre, which is further incremented to Rs.34.00 per Kg. of yarn. Similarly the cost of Brown husk including loading and unloading is valued at Rs.0.90, which is incremented to Rs.12.00 per Kg. of fibre, which is further incremented to Rs.32.00 per Kg. of yarn. The cost of raw coir pith including loading and unloading is valued at Rs.4.50 per kg., which is further incremented to Low EC Rs.13.00 per Kg. High EC –7.50 Kg. Pith block.

The product flow scheme in Kanyakumari District is given below:

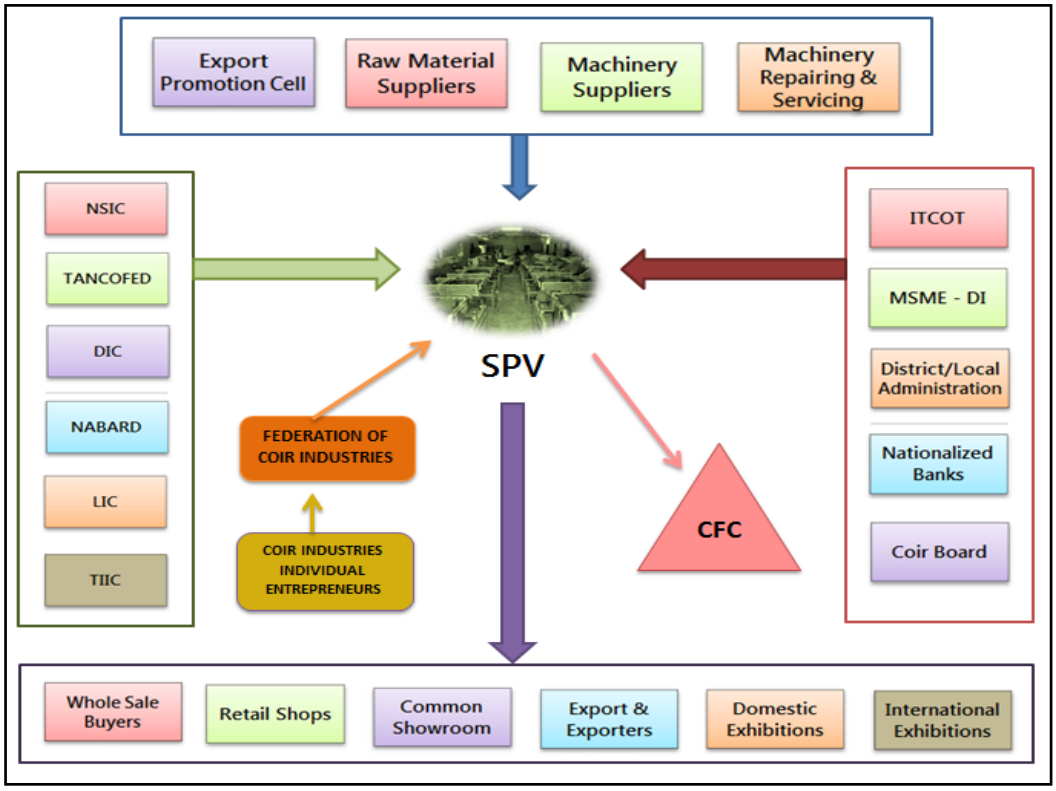


2.4 Cluster Map

The **Pre-intervention Cluster map** depicting the existing linkages of the cluster is given below:



The **Post-interventions Cluster map** depicting the linkages after the implementation of cluster development initiatives is given below:



2.5 Principal Stakeholders

COIR BOARD

Coir Board is the Nodal Agency for the SFURTI scheme. The coir Board set up by the Government of India under an act of parliament the coir Industry act 1953. Coir Board provides financial, market development, skill training assistance for the development of coir Industry and also extends the technical guidance and advice for setting up of new units as well as for renewal/modernization of existing units for development and increasing productivity, quality up-gradation etc.

DISTRICT INDUSTRIES CENTRE (DIC)

The District Industries Centre, located in all district headquarters, is the State government body functioning under the aegis of department of industries and commerce. DIC implements various schemes (UYEGP, NEEDS, PMEGP etc.,) to promote MSME sector.

NABARD

NABARD is the financial institution focusing on Agriculture and Rural Development activities. Presently, they are also focusing on artisan cluster development.

LEAD BANK

Indian Overseas Bank (IOB) is the lead bank in Kanyakumari district. The Lead bank will coordinate the credit activities of banks in the district in addition to performing leading role in schemes launched by State/Central governments.

ITCOT Consultancy and Services Limited (ITCOT)

ITCOT Consultancy and Services Limited, popularly known as ITCOT, is the state technical consultancy organization, promoted by all India financial institutions, State Development Corporations and Commercial Banks. ITCOT has wide experience in providing support services to micro and small enterprises under various government schemes. ITCOT, having its head office at Chennai, has project offices at Erode and Salem involved in enterprise promotion and development. ITCOT has been empanelled as Technical Agency under SFURTI scheme by KVIC and Coir Board.

Commercial & Cooperative Banks

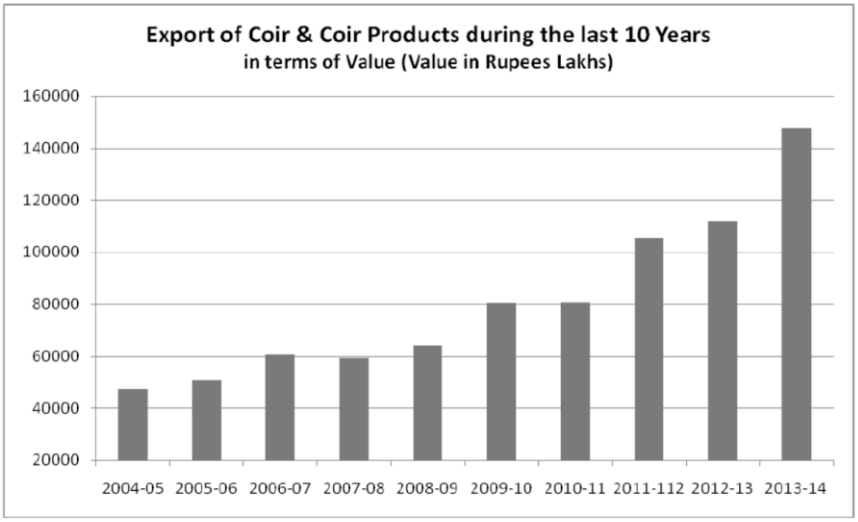
There is a good network of commercial Cooperative Banks in the cluster. They offer both cash credit and term loan facilities to the coir industry. However, institutional finance for coir industry is limited and there is a large gap between the need for the credit and its availability.

3 MARKET ASSESSMENT AND DEMAND ANALYSIS

Coir industry is of great importance to the coconut producing states in India, as it contributes significantly to the economy of rural areas. Kerala is the largest producer of coconut, contributing as much as 45% of country's total production, whereas Tamilnadu stands second in cultivation of coconut and first in production of brown Coir Fibre in the country. The State wise potential for production of Coir Fibre is given below:

S. No	State	Area (1000 Ha)	Production (in million nuts)	Coir fiber potential @ 60% husk utilization (MT)
1	Kerala	766.00	7057.88	338778
2	Tamilnadu	430.70	6211.21	298138
3	Karnataka	511.00	5915.33	283936
4	Andhra Pradesh	142.00	1985.00	95280
5	Orissa	53.90	403.25	19356
6	West Bengal	29.10	395.28	18973
7	Gujarat	20.90	340.58	16348
8	Assam	20.80	304.47	14615
9	Other States/UTs	96.30	738.20	35403
	Total	2070.70	23351.20	1120827

The export of coir products are in the increasing trend during the last 10 years as illustrated in the graph below:



The major products that are exported are Coir fibre, Coir pith and Mats. It has been observed that the percentage growth in value of export of Coir fibre has been 58.77% in 2013-14 compared to the previous year. Also the percentage growth in value of export of Coir pith has been 38.20% in 2013-14 compared to the previous year. The Product wise export details of coir products in 2013-14 is given below:

Q=Quantity in M.T						V= Value in Rs.Lakhs
	April -2013 - March 2014		April-2012 - March- 2013		%Growth Cumulative	
Item	Q	V	Q	V	Q	V
Coir Fibre	173902	32878.11	140693	20707.66	23.60	58.77
Coir Yarn	4247	2848.26	4202	2387.22	1.07	19.31
Handloom mat	22609	23623.82	24151	22810.10	-6.38	3.57
Powerloom mat	234	278.36	2	3.15	11600.00	8736.83
Tufted mat	43752	41776.39	37289	33572.91	17.33	24.43
Handloom matting	3425	3353.91	1418	1702.77	141.54	96.97
Powerloom matting	0	0	0	0	0.00	0.00
Geo textiles	4468	3503.78	3597	2628.74	24.21	33.29
Coir rugs & Carpet	93	105.99	95	133.38	-2.11	-20.54
Coir rope	498	390.17	420	282.41	18.57	38.16
Curled Coir	11263	2947.93	8883	2112.46	26.79	39.55
Rubberised Coir	965	1560.76	322	495.01	199.69	215.30
Coir pith	271495	34173.23	208399	24727.61	30.28	38.20
Coir other sorts	89	163.13	30	39.33	196.67	314.77
Total	**537040**	**147603.84**	**429501**	**111602.75**	**25.04**	**32.26**

 # Quantities Rounded

The percentage of share of each product with respect to total exports, both in Quantity and Value for the year 2013-14 is given below:

Composition of Export (Share in %)

Name of the item	Apri2013-March 2014		Apri2012-March 2013	
	Qty %	Value%	Qty %	Value %.
Tufted Mat	8.15	28.30	8.68	30.08
Coir Pith	50.55	23.15	48.52	22.16
Handloom Mats	4.21	16.00	5.62	20.44
Coir Fibre	32.38	22.27	32.76	18.55
Geo Textile	0.83	2.37	0.84	2.36
Coir Yarn	0.79	1.93	0.98	2.14
Curled Coir	2.10	2.00	2.07	1.89
Handloom Matting	0.64	2.27	0.33	1.53
Rubberised Coir	0.18	1.06	0.07	0.44
Coir Rope	0.09	0.26	0.10	0.25
Coir Rugs & Carpet	0.02	0.07	0.02	0.12
Coir Other Sorts	0.02	0.11	0.01	0.04
Powerloom Mat	0.04	0.19	0.00	0.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

The Top five County wise Exports of Coir and Coir products in the year 2013-14

S. No	Country	Quantity (in MTs)	Value (Rs.Lakhs)	Quantity (%)	Value (%)
1	China	192110.62	36050.66	35.77	24.42
2	USA	55091.03	30026.05	10.26	20.34
3	Netherlands	53786.54	10870.04	10.02	7.36
4	UK	11987.01	8600.98	2.23	5.83
5	South Korea	67042.97	7020.54	12.48	4.76

CLUSTER MARKETING PLAN :

The brushes and brooms finds its application in industrial, municipal and domestic areas, for cleaning purpose. The fibre brushes are used in industrial floor cleaning & cleaning chemical and oil wastes in machinery. Also fibre brushes are utilized in construction sector for raw cleaning and also for cleaning the painted surface.

The following buyers are identified for supply of brushed and brooms.

- Standard Fire works, Sivakasi
- Crown brush, Chennai
- Vikki brush, Chennai

The brushes have wide export market in European countries, which are at present dominated by M/s.Hayleys, Srilanka and M/s.Charles Fibres, their Indian counterpart. Also, M/s.Hillbrush in UK, the prominent bristle supplier is identified to be a potential buyer. Hence prospective export market exists for the proposed bristle fibre products.

Municipal cleaning brushes/ brooms will be marketed to larger firms and agencies involved in public cleaning contract, which be handled thro' a separate sales channel.

Buffing wheels using coir fibre are used across the country for buffing of stainless steel utensils and industrial parts. Will be marketed through the established network of dealers in Chennai, Mumbai and Yamuna nagar, Haryana. Presently buffing wheels are produced in cottage industry model through the dealers.

4 SWOT AND NEED GAP ANALYSIS

STRENGTHS:

- Kanyakumari district, being the source of bristle fibre of length and quality, offers immense scope for value addition.
- Sufficient availability of coconut husk from the cluster region.
- Easy to adopt technology to manufacture value added/diversified products.
- Existence of engineering infrastructure such as workshops and lathes.
- Readiness of the new generation entrepreneurs to enter into this trade
- Well established physical infrastructure such as road, rail, port, power etc.
- Excellent network of commercial and co-operative banks in the cluster.
- Limited competition from big players as the trade is labor intensive.
- Presence of Support institutions such as DIC, Commercial banks, ITCOT etc.

WEAKNESSES:

- Lack of awareness on Value added Bristle fibre products.
- Absence of collective/collaborative efforts to address the common problems.
- As coconut palm does not withstand prolonged spells of extreme weather/ climatic variations, the uninterrupted availability of Coconut husk (basic raw material for coir sector) depends on weather conditions, which results in the scarcity of raw material due to hot/dry summer.
- Limited availability of technically skilled labor force.
- Limited usage of technological tools like ICT applications.
- Lack of formal networks for marketing and input procurement
- Limited contact with BDS providers and Technical Institutions.

OPPORTUNITIES:

- Increasing Domestic & Export market prospects for Coir bristle brushes & coir fibre buffing wheels.
- Potential for product diversification and value addition from existing products.
- Good scope for manufacturing of value added products if there is drying unit.
- Implementation of SFURTI Scheme for focused development of the cluster.

CHALLENGES:

- Increasing production of products such as Tender coconut, Neera etc., which utilize pre-mature nuts may result in basic raw material (husk) scarcity for Coir sector, as Coir sector depends on husk from fully mature nuts as raw material.
- Competition from coconut growing country viz.: Sri Lanka, Indonesia & Philippines etc.
- Utilization of husk for Bio-fuel purposes.

NEED GAP ANALYSIS:

The key concern areas of the cluster are identified to be

- Unlike other districts in Tamil Nadu, KK district has a rainfall both during the South West and the North East monsoons. The South West monsoon period starts from the month of June and ends in September, While the North East monsoon period starts from October and ends in the middle of December.

- Both the south-west and north-east monsoon winds, the proximity of the sea and the dwindling heights of Western ghats greatly influence the climate. On the whole this district gets an average annual rainfall of 1369.5 mm with 79.7 rainy days.

- Due to the high literacy levels (District literacy rate: 91.96% as per 2011 census) in the district, it is difficult to get unskilled manpower needed to carry out basic activities

- Lack of awareness on Value added bristle fibre products among the entrepreneurs in the district

- Utilization of husks for Coir utility is partial. Husks are found wasted at Farm level.

5 PROFILE OF THE IMPLEMENTING AGENCY

I	**Institutional Structure / Registration Details**	
#	Name of the Agency	**GANDHI KAMARAJ EDUCATIONAL AND RURAL DEVELOPMENT TRUST (GKERD)**
B.1	Legal Status	Registered Trust
B.2	Date of Incorporation / Registration	20-05-1999
B.3	Registered Address	75-A, Puthukudy Street, NAGERCOIL – 629001 Kanyakumari District, Tamilnadu
B.4	Office Address / Locations	(opp) Anna Bus Stand, (upstairs) Indian Bank NAGERCOIL - 629001
B.5	Affiliated to Coir Board	-

II	**Governance Structure**			**Approval No**	
B.6	Composition of the Executive Board / Trustees / Governing Body/ Managing committee and Background of Member	#	**Name of Member**	**Designation**	**Background / profile**
		1	Er. S. RETNAM, B.E.,MBA	CHIEF EXECUTIVE	Joint Director of Industries (Rtd)
		2	S. JANE JAYA BAI, M.A.,M.Ed	SECRETARY	Rt. P.G. School Teacher
		3	Er. R. SUJITH, M.E	EDP TRAINEER	Programme Officer
		4	Dr. R. SUNIL, M.D	Medical Practitioner	Secretary
		5	Er. R. PRAVIN, M.Tech	Programme Co-Ordinator	Technical Background

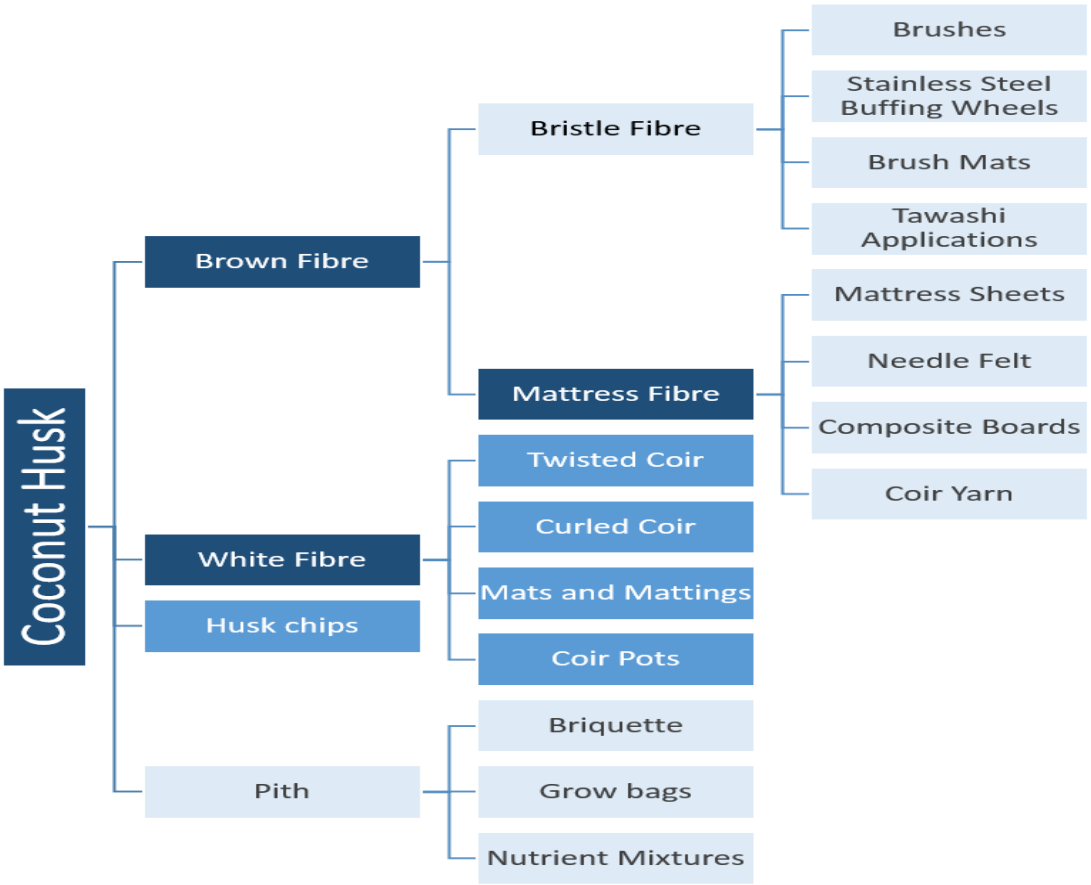
III	**Operational Profile**	
B.7	Major objectives – Vision, Mission, Goal of the organization	1. To prepare project reports to start Industries – EDP Training and conducting University Courses 2. Conducting EDP & Skill Development trainings to the Departments of Government of Tamilnadu 3. To do the service to the IE Code, ISO, ISI, Trademark Registration etc. to the Industries

B.8	What are focus areas of operation	• Micro and Small Enterprise Development • Skill development	
B.9	Provide key project / activities being undertaken by the IA – Brief description including the project scope, size and duration (*mention specific experience in the area/ sector of the proposed project)*	1. Projects for setting up Industries 2. Projects Implemented agency of Awareness and implementation of waste 3. Project service for the implementation of Ferry Service from Kanyakumari ToRameshwaram though sea. 4. EDP Training project implementing for the / PMRY / PMEGP / NEEDS Schemes.	
B.10	Mention key partnership / alliances (if any)	Partner Institute of EDI, CED, RGUMY 1. Our Institute is the Partner Institute of EDI Chennai (Government of Tamilnadu) 2. Training Institute approved by K.V.IC Department of Science & Technology, Government of India. 3. PMKVY Training Scheme (Government of India) 4. Udyami Mitra of RGUMY (Hand holding supporting centre) scheme to provide support services to Micro & Small industries.	
IV	**Management Profile**		
B.13	Background of key Personnel (Professionals and others) with brief profile of the senior management personnel)	Er.S.RETNAM, B.E., M.B.A., Joint Director of Industries (Rtd.) Wide experience in Micro/Small Enterprise formation and highly knowledgeable to offer consulting services to MSMEs	
V	**Financial Position**		
B.14	Key financials of the organization	Fixed Assets	6,83,460
		Current Assets	9,83,365
		Current Liabilities	NIL
		Revenue for last three years	43,93,229
VI	**Bank Account Details**		
B.15	Name of Bank	Indian Bank	
B.16	Branch Name	Meenakshipuram	
B.17	Bank Account Number	460439612 – IFSC Code: IDIB000N076	
VII	**Contact Details**		
B.18	Name of Contact Person	Er. S. RETNAM, B.E.,MBA	
B.19	Designation of Contact Person	CHIEF EXECUTIVE	
B.20	Correspondence Address	(opp) Anna Bus Stand, (upstairs) Indian Bank NAGERCOIL - 629001	
B.21	Contact Number	9345041515. 046542-230194	
B.22	Email Address	sretnam@hotmail.com	

6 PROJECT CONCEPT AND STRATEGY FRAMEWORK

6.1 Project Rationale

Kanyakumari district is a district with an average rainfall of around 1400 mm per annum and on an average has over 80 days of rainfall. Also land is scarce. The district has a high concentration of coconut palms and is one of the oldest coir fibre and coir productions areas in the country. Also, due to the high literacy levels in the district, it is difficult to get unskilled manpower needed to carry out basic activities like coir bristle fibre extraction. The objective of the project is to overcome these limitations and enable cluster stakeholders to move up the value chain by setting up a common facility centre for bristle fibre brush and buffing wheel manufacturing unit. So that coir bristle fibre produced by mills in the vicinity of the cluster can continue year round operations, better prices for their materials during off season and better cash flows. The Common facility centre would address the difficulty of all the fibre mills in the cluster area and facilitate them opt for value added products.

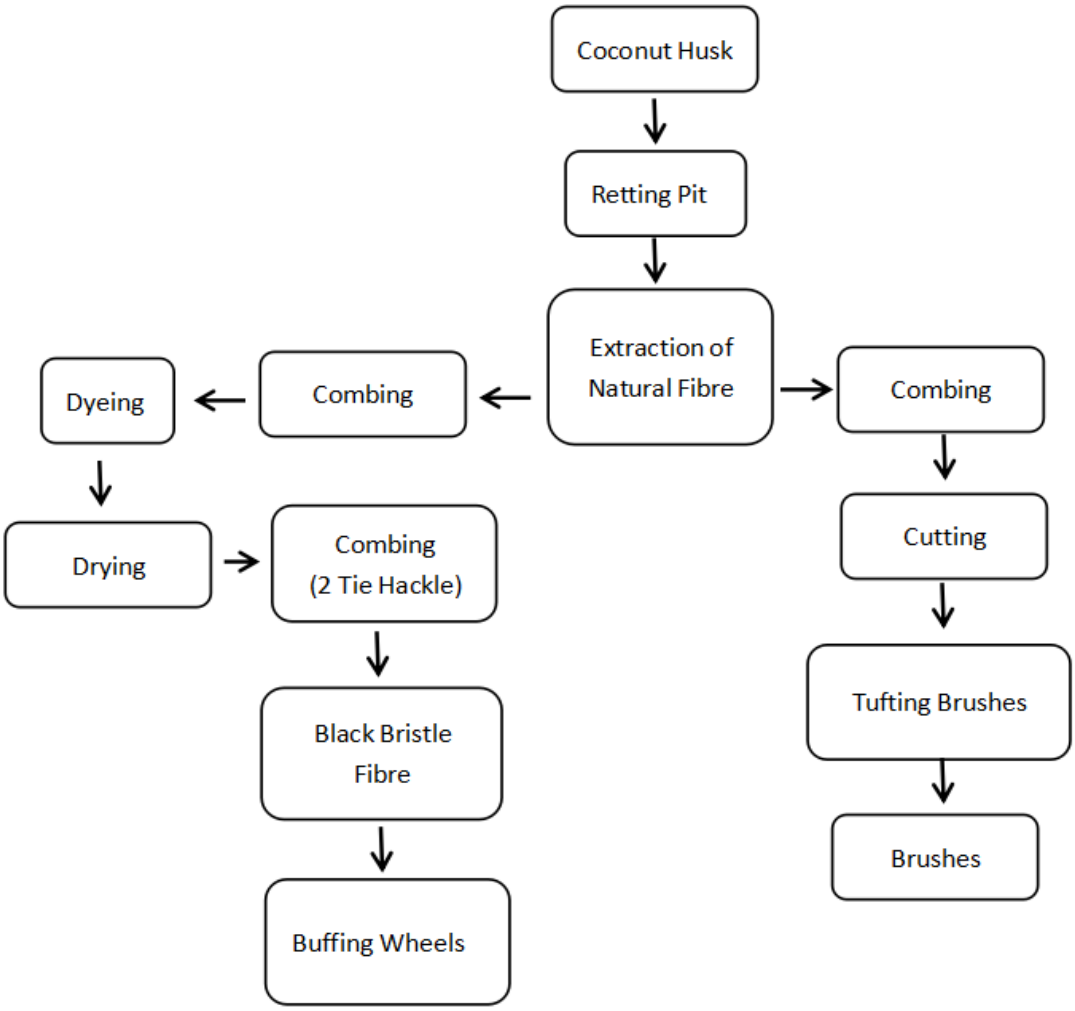


6.2 Project Objective

- Facilitate the manufacturing of coir brushes and brooms using bristle fibre.
- To produce industrial brushes and buffing tools using bristle fibre.
- To offer training to entrepreneurs from brush manufacturing sector.
- To facilitate machine drying of coir fibre as a service for mills in the cluster area where land is scarce and expensive, unskilled labourers are in demand and rains affect the drying process for most part of the year.
- To address the issues of quality variations in fibre collected from mills by additional cleaning and blending to fetch better prices and better usage of fibre.
- To enhance the skill level of labour force and to enhance the quality of the product output.

6.3 Conceptual Framework / Project Strategy

The process flow envisaged for the proposed CFC is given below:



Bristle coir fibre obtained during the defibring process goes through different stages of combing and cleaning to improve the cleanliness, remove dust and to arrange them in forms suitable for cutting them to sizes for making brushes. Bristles used for brushes are either supplied in their natural form after washing or in treated forms by either bleaching or dyeing in different colours. Skilled personnel then arrange them and tie them in ties of 300 to 400 gram each to make them suitable for processing in cutting machines. The collected bristles are then cut in the desired sizes using cutting machines and taken for manufacturing brushes.

Brush/ broom manufacturing is done by tufting them in brush blocks either made of wood or plastic. The coir fibre cut to size is loaded in the tufting machines which are programmed to make different types of brushes according to customer demand. During tufting, the fibres are fixed to the brush blocks by metal pins to ensure that they are locked in.

Buffing wheels are manufactured either by glueing the fibres together around wooden bobbins or by stitching them together with cotton plys in a circular form. The facility will have the jigs and fixtures to manufacture both types of buffing wheels, stitching machines, cutting machines, etc.

6.4 Focus Products/Service

- Coir Fibre Washing and Cleaning Facility
- Coir Bristle Brushes & Brooms Manufacturing Unit
- Coir Bristle Buffing Wheel Manufacturing Unit

7 PROJECT INTERVENTIONS (CORE SFURTI)

The Core SFURTI project interventions include Soft Interventions (as detailed in Chapter 8) and Hard Interventions (as detailed in Chapter 9), in addition to Cross-cutting thematic interventions.

The **Soft Interventions** proposed are categorized into Capacity building and Market promotion activities as given below:

Capacity Building

- Trust Building: For strong association among cluster members to address common problems.
- Awareness Programme: To provide awareness about SFURTI scheme benefits, Cluster development initiatives and the prospects for value added products in Coir sector
- Entrepreneurship Development Programme: To foster entrepreneurship among cluster members.
- Skill Upgradation Programme: To increase the skilled labour force in the cluster to address the problem of limited skilled labour availability.

Market Promotional Activities

- Market Study Tour: To enable the cluster members to gain a deeper understanding of the business environment and market dynamics in Coir sector.
- Participation in Trade Fairs: To conduct business, cultivate cluster's image and to examine the market. The main objectives of participation of trade fairs are:
    - Increased Sales
    - Product showcasing for enhanced product visibility
    - Establish qualified leads

In addition, trade fairs are the ideal place for surveying the market, comparing prices and sales terms etc.

Hard Interventions

The Hard interventions proposed for the development of the cluster is given below:

- Coir Fibre Washing and Cleaning Facility
- **Coir Fibre Brooms & Brushes** (used in industrial, municipal and domestic applications)
- **Coir Buffing wheels** (used for surface polishing in SS utensils & rough polishing of industrial products)

Thematic Interventions

Cluster's active involvement and participation in activities such as National and International level Brand promotion campaigns, New Media marketing, Online Shopping Web Portal and E-Commerce initiatives etc. as proposed under the SFURTI implementation guidelines is projected as part of thematic interventions.

8 SOFT INTERVENTIONS

CAPACITY BUILDING

S. No	Particulars	
1	Proposed Programme / Intervention	*Trust Building and motivational programme*
2	Target group	Lead Cluster Members
3	No. of Batches	2
4	Batch size	25 nos
5	Training content	Self & Group motivation
6	Trainer / Training Institution	ITCOT Consultancy and Services Limited
7	Cost of Training programme	Rs. 1,00,000/-

S. No	Particulars	
1	Proposed Programme / Intervention	*Awareness Programme*
2	Target group	Coir Entrepreneurs, workers & Raw material suppliers
3	No. of Batches	2
4	Batch size	40 nos
5	Training content	About Cluster concept, SFURTI scheme, and linkage with social security schemes
6	Trainer / Training Institution	ITCOT Consultancy and Services Limited
7	Cost of Training programme	Rs. 1,00,000/-

S. No	Particulars	
1	Proposed Programme / Intervention	*Entrepreneurship Development Programme*
2	Target group	Coir Entrepreneurs
3	No. of Batches	1
4	Batch size	25 nos
5	Training content	Motivation, Govt Subsidy Schemes, Banker role in Industries, Government Approvals
6	Trainer / Training Institution	ITCOT Consultancy and Services Limited
7	Cost of Training programme	Rs. 1,00,000/-

S. No	Particulars	
1	Proposed Programme / Intervention	*Skill upgradation Programme*
2	Target group	Coir workers
3	No. of Batches	2
4	Batch size	20 nos
5	Training content	Skill Training to artisans
6	Trainer / Training Institution	Coir Board (at CCRI, Alleppey)
7	Cost of Training programme	Rs. 2,00,000/-

MARKET PROMOTION

S. No	Particulars	
1	Proposed Programme / Intervention	*Market study tours*
2	Target group	Coir Entrepreneurs
3	No. of Batches	As per requirement
4	Batch size	5 nos
5	Training content	To understand market dynamics, To interact with market intermediaries to understand the product wise market potential in potential market centers
6	Coordinating institution	Coir Board / Technical Agency
7	Cost of Training programme	Rs. 2,00,000/-

S. No	Particulars	
1	Proposed Programme / Intervention	*Participation in Trade fairs*
2	Target group	SPV members
3	No. of Batches	As per requirement
4	Batch size	5 nos
5	Training content	Disseminating Cluster Facility
6	Coordinating institution	Coir Board / Technical Agency
7	Cost of Training programme	Rs. 3,00,000/-

9 HARD INTERVENTIONS

Creation of Common Facility Centre

Land

Land to an extent of 68 cents have been identified for lease for the establishment of proposed Common Facility Centre (CFC). The location of the land is at RS No. 135/3, Neendakarai A Village, Rajakkamangalam Road, Anandanadarkudy PO, Kanyakumari District 629201. An affidavit has been provided by the SPV to register the land on getting the final approval of the project.

Location

The location of the CFC unit is near Ethamozhy on Rajakkamangalam Road, 5 km from Nagercoil town. It is situated between Nagercoil town and the proposed Colachel Port on SH46. The location will be in the heart of the coir fibre production area. It is of particular importance due to the unique retting process for which retting areas and traditional manpower are available in the region. The state highway would enable easy access to transportation including container movement. The proposed Colachel port would be around 12 km from the location identified for the cluster. The labour force will be sourced from the nearby villages like Anandanadarkudy, Vairakudy, Ethamozhy, Adaravillai, Elluvillai, Pazhavillai, Thoppur, and Bhakthankadu etc.

Cost & Area of Building Works

CFC Activities	Built up Area (in Sq.ft)	Cost of Building (Rs. Lakhs)
Coir Fibre Washing & Cleaning facility	1250	10.00
Bristle brush making facility	1000	8.00
Buffing wheel manufacturing facility	1250	10.00
Total	3250	26.00

9.1 Bristle Coir Fibre Products Manufacturing

9.1.1 Project Description

Retted husks when processed in defibring mills have bristle coir fibre, mattress fibre and coir pith as output. Coir fibre obtained during the defibring process is a combination of both mattress coir fibre and bristle coir fibre. For every 1000 husks processed, approximately 50 kg of bristle coir fibre is produced. The mattress or short fibres are separated out and are used for manufacturing mattresses. The remaining long, strong, stiff bristle coir fibres are suitable for use as bristles for brushes. The CFC proposes to make brushes and buffing wheels.

Preparation of Bristle Coir Fibre for Brush/ Buffing Wheel Manufacture:

The long fibres extracted go through different stages of combing and cleaning to improve the cleanliness, remove dust and to arrange them in forms suitable for cutting them to sizes for making brushes. Bristles used for brushes are either supplied in their natural form after washing or in treated forms by either bleaching or dyeing in different colours. Skilled personnel then arrange them and tie them in ties of 300 to 400 gram each to make them suitable for cutting into uniform sizes in desirable lengths. The collected bristles are then cut in the desired sizes using cutting machines and taken for manufacturing brushes.

Brush or Broom Manufacturing

The machine to be employed is suitable for manufacturing several different sizes and shapes of brushes and brooms. Both wooden and plastic brush blocks can be used to hold the bristles together. Brush/ broom manufacturing is done by tufting them in brush blocks. The coir fibre cut to size is loaded in the tufting machines which are programmed to make different types of brushes according to customer requirements. During tufting, the fibres are fixed to the brush blocks by metal pins to ensure that they are locked in.

Buffing Wheel Manufacturing

Buffing wheels of coir fibre are preferred in different diameters of 3 inch to 14 inch. Buffing wheels are manufactured either by glueing the fibres together around wooden bobbins or by stitching them together with cotton plys in a circular form. The facility will have the jigs and fixtures to manufacture both types of buffing wheels, stitching machines, cutting machines, etc.

9.1.2 Plant and machinery

The Plant and machinery required for the proposed CFC is listed below:

S No.	Machinery Description	Qty	Unit Rate (Rs.Lakhs)	Amount (Rs.Lakhs)
1	5 Axis Brush Tufting Machine(with Fibre sorting, cutting, 2 head Filling, 2 head Trimming and Trimming & Flagging machine)	1	93.00	93.00
2	Buffing Wheel Stitching Machine	2	5.00	10.00
3	Jigs, Dies, Fixtures and Other Accessories	1	12.00	12.00
4	Electricals & accessories		5.00	5.00
Grand Total				**120.00**

9.1.3 Details of the Project Operation and Maintenance model

The IA is responsible for the operation and maintenance of the CFC assets until scheme period and the SPV has to manage the entire operation on its own after project implementation period is over. The operation and maintenance cost is proposed to be managed with the income from the operations of the Common facilities through sales realization.

9.1.3 Marketing approach

The brushes and brooms finds its application in industrial, municipal and domestic areas, for cleaning purpose. The fibre brushes are used in cleaning chemical and oil

wastes in machinery in addition to industrial floor cleaning. Also fibre brushes are utilised in construction sector for cleaning and also for cleaning the painted surface.

The following buyers are identified for supply of brushed and brooms.

- Standard Fire works, Sivakasi
- Crown brush, Chennai
- Vikki brush, Chennai

The brushes have wide export market in European countries, which are at present dominated by M/s.Hayleys, Srilanka and M/s.Charles Fibres, their Indian counterpart. Also, M/s.Hillbrush in UK, the prominent bristle supplier is identified to be a potential buyer for the product. Hence export market can also be focussed for the proposed bristle fibre products.

Municipal cleaning brushes/ brooms will be marketed to larger firms and agencies involved in the contract of public cleaning. This could be handled through a separate sales channel.

Buffing wheels using coir fibre are used across the country for buffing of stainless steel utensils and industrial parts. Will be marketed through the established network of dealers in Chennai, Mumbai and Yamuna nagar, Haryana. Presently buffing wheels are produced in cottage industry model through the dealers.

9.1.5 Project Implementation Time Line

The total project is scheduled to be completed in one operational year (Project timeline is given in Chapter 13)

10 PROJECT COST & MEANS OF FINANCE (Core SFURTI)

S.No.	Proposed Interventions	Project Cost (Rs.Lakhs)	GOI Share (in lakhs)	SPV Share (in lakhs)
1	**SOFT INTERVENTIONS**			
1.1	**Capacity Building**			
1.1.1	Trust building and motivational programme	1.00	1.00	-
1.1.2	Awareness Programme	1.10	1.10	-
1.1.3	Entrepreneurship Development Programme	1.00	1.00	-
1.1.4	Skill Upgradation Programme	2.00	2.00	-
	Total Capacity Building cost	5.00	5.00	
1.2	**Market Promotion**			
1.2.1	Market Study Tour	2.00	2.00	-
1.2.2	Participation in Trade fairs	3.00	3.00	-
	Total Market Promotion cost	5.00	5.00	-
	Total Soft Interventions Cost	**10.00**	**10.00**	**-**
				CONTD…

2	**HARD INTERVENTIONS**			
2.1	**Building for CFC**	**26.00**	**19.50**	**6.50**
2.2	**Machinery & Other infra for Common Facility Proposed**			
2.2.1	5 Axis Brush Tufting Machine (with Fibre sorting, cutting, 2 head Filling, 2 head Trimming and Trimming & Flagging machine)	93.00	69.75	23.25
2.2.2	Buffing Wheel Stitching Machine – 2 Nos.	10.00	7.50	2.50
2.2.3	Jigs, Dies, Fixtures for Tufting & Buffing Wheel	12.00	9.00	3.00
2.2.4	Electricals and accessories	5.00	3.75	1.25
	Total Machinery & Other Infra Cost	**120.00**	**90.00**	**30.00**
	TOTAL HARD INTERVENTIONS COST	**146.00**	**109.50**	**36.50**
	TOTAL INTERVENTIONS COST (SOFT & HARD)	**156.00**	**119.50**	**36.50**
3	**Other Project Components**			
3.1	Contingencies	1.80	-	1.80
3.2	Deposits	2.20	-	2.20
3.3	Working Capital	10.00	-	10.00
	Total Other Project Components	**14.00**	**-**	**14.00**
3	**Cost of TA (8% of Interventions)**	**9.56**	**9.56**	**-**
4	**Cost of IA/SPV including CDE cost**	**20.00**	**20.00**	**-**
	TOTAL PROJECT COST	**199.56**	**149.06**	**50.50**

11 PLAN FOR CONVERGENCE OF INITIATIVES

The initiatives for convergence of schemes and leveraging of resources from various sources are under exploration viz.

- Dovetailing the benefits of other Coir Board schemes such as Coir Udyami Yojana, Export market promotion scheme etc. and also from other MSME schemes such as NEEDS, PMEGP subsidy scheme etc. to cluster members
- Exploring the opportunities for private sector participation in the cluster development project
- Exploring Corporate Social Responsibility (CSR) foundations with proven track record for additional funding.
- Exploring the possibilities to dovetail funds from various state and central government schemes over and above the funds sanctioned for SFURTI scheme (without duplication of funding for a specific project component).

The above initiatives would be undertaken with the participation of stakeholders on approval of the project. Notwithstanding the above initiatives, it is expected that the benefits of various other schemes such as NEEDS, PMEGP etc. for individual cluster members are foreseen as below:

Scheme	**No. of beneficiaries/ Activity**	**Cost of project**	**Scheme Funding**	**Bank Loan**	**Promoter Contribution**
NEEDS	5 (Coir Fibre Extraction units)	5 members x Rs.40.00 lakhs = Rs.200.00 lakhs	Rs.50.00 Lakhs	Rs.130.00 Lakhs	Rs.20.00 Lakhs
	TOTAL	Rs.200.00 lakhs	50.00	130.00	20.00

The additional investment estimated in the cluster is Rs.200.00 Lakhs with the scheme funding of Rs.50.00 lakhs, bank credit of Rs130.00 lakhs and the promoter's contribution of Rs.20.00 lakhs.

12 ENHANCED PROJECT COST & MEANS OF FINANCE

The Project cost and Means of Finance of CORE SFURTI project is illustrated in **Chapter 10**. Convergence of initiatives such as Dovetailing the benefits of other Coir Board schemes such as Coir Udyami Yojana, Export market promotion scheme etc. and also from other MSME schemes such as NEEDS, Capital subsidy scheme etc. to cluster members, would be undertaken to improve the viability of projects, strengthening the value chains and market linkages and to enable the overall improvement of the level of human development in the area.

Considering the convergence of other scheme benefits for individual cluster members, as foreseen in Chapter 11, the enhanced project cost and means of finance is given below:

(Rs.Lakhs)

S.No.	Component	Total Cost	Grant Component	Promoter's Contribution & Bank Loan
01.	Core SFURTI	199.56	149.06	50.50
02.	Convergence initiatives (Establishment of individual units under various schemes)	200.00	50.00	150.00
	TOTAL	**399.56**	**199.06**	**200.50**

The enhanced project cost including the Core SFURTI and other convergence initiatives works out to Rs.399.56 lakhs, whereas the corresponding Grant component is Rs.199.06 lakhs and that of Contribution and bank loan is Rs.200.50 lakhs.

13 PROJECT TIMELINE

The project implementation schedule with details of the activities to be undertaken and the expected time frame (quarter wise) for each activity is given below:

S. No	Proposed Interventions	Period	
		Year	Quarter
1	**SOFT INTERVENTIONS**		
1.1	**Capacity Building**		
1.1.1	Trust building and motivational programme	I	Q1
1.1.2	Awareness Programme	I	Q2
1.1.3	Entrepreneurship Development Programme	I	Q3
1.1.4	Skill Upgradation Programme	I	Q3, Q4
1.2	**Market Promotion**		
1.2.2	Market Study Tour	I	Q3, Q4
1.2.3	Participation in Trade fairs	I	Q4
2	**HARD INTERVENTIONS**		
2.1	**Building Construction for CFC**	I	Q2
2.2	**Machinery Establishment for Common Facility Proposed**		
	Machinery – Coir Bristle brushes	I	Q3,Q4
	Machinery – Buffing wheel	I	Q4

Project activity	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SOFT INTERVENTIONS								
Capacity Building								
Trust building and motivational programme								
Awareness Programme								
Entrepreneurship Development Programme								
Skill Upgradation Programme								
Market Study Tour								
Participation in Trade fairs								
HARD INTERVENTIONS								
Building for CFC								
Machinery – Coir Bristle brushes								
Machinery – Buffing wheel								

14 DETAILED BUSINESS PLAN

The cost of production and profitability projection are presented in Statement-3. The assumptions for working the cost of production & profitability are given below:

Annual Sales Realisation @ 100% Capacity		
- Coir Bristle Brushes & Brooms	Rs.80	lakhs per annum
- Coir Fibre Buffing Wheels	Rs.50	lakhs per annum
Average Working days per annum	300	days
Capacity Utilisation		
- *First year*	*80%*	
- *Second year*	*85%*	
-*Third year onwards*	*90%*	
Avg. Cost of Raw Material	25%	of Sales realisation
Avg. Cost of Consumables	5%	of Sales realisation
Lease Rental for CFC land	Rs.5,000	per month in the first year and 10% increase every subsequent years
Connected Load	80 HP	
Power Cost	Rs.6.50	per KWH
Repairs & Maintenance	1.50%	of plant and machinery cost in the first year of operation and 10% increase in every subsequent years
Admin & Markeing Expenses	2.00%	Of Sales realization

Project Financial Indicators

	Year I	Year 2	Year 3	Year 4	Year 5
Annual Sales Realization	104.00	110.50	117.00	117.00	117.00
Profit Bef. Tax	38.99	42.12	45.20	44.16	43.05
Prov. for taxation	5.53	9.38	12.54	13.75	14.55
Profit after Tax	33.46	32.74	32.66	30.41	28.50
BREAK EVEN POINT	37%	36%	35%	37%	38%

Net Present Value : Rs.32.01 Lakhs

Internal Rate of Return : 15.18 %

The project financials comprises the following statements, which are enclosed in the Annexure separately:

Statement 1: Cost of Project and Means of Finance
Statement 2: Assessment of Working Capital
Statement 3: Cost of Production & Profitability
Statement 4: Assumptions for Cost of Production and Profitability
Statement 5: Estimation of Power Cost
Statement 6: Manpower Requirement and Estimation of Cost
Statement 7: Calculation of Income Tax
Statement 8: Estimation of Depreciation
Statement 9: Projected Cash-Flow Statement
Statement 10: Projected Balance Sheet
Statement 11: Estimation of Break-Even Point
Statement 12: Estimation of Net Present Value and Internal Rate of Return

15 PROPOSED IMPLEMENTATION FRAMEWORK

15.1 Role of Implementing Agency

The role and responsibility of the IA includes the following:

i. Recruit a full time CDE preferably one amongst the stakeholders who has the desired knowledge and capability in order to ensure efficient implementation of the project
ii. The IA would implement various interventions as outlined in the approved DPR
iii. Undertake procurement and appointment of contractors, when required, in a fair and transparent manner
iv. The IA will enter into an agreement with the Nodal Agency for timely completion on cluster intervention and proper utilization of Government Grants
v. Operation & Maintenance (O&M) of assets created under the project by way of user-fee based model
vi. Responsible for furnishing Utilization Certificates (UCs) and regular Progress reports to Nodal Agency in the prescribed formats.

15.2 Details of Strategic Partners

The cluster is proposed to be developed under SFURTI (Scheme of Fund for Regeneration of Traditional Industries). The Coir Board is the Nodal agency (NA) and ITCOT Consultancy and Services Limited is the Technical Agency (TA) appointed by Coir Board. The Implementing agency is Gandhi Kamaraj Educational and Rural Development Trust (GKERD), Nagercoil. The above agencies work in tandem towards the successful implementation of the project in a sustainable manner.

15.3 Structure of the SPV

The SPV is formed and registered as Private Limited Company under Companies Act 2013 in the name of 'ETHAMOZHY COIR CLUSTER PRIVATE LIMITED' as per the Certificate of Incorporation issued by Registrar of Companies, Coimbatore dated 28.10.2015. The CIN of the company is U74120TN2015PTC102723.

15.4 Composition of the SPV

An SPV is formed with 2 directors in the private limited company initially and subsequently 20 members have been included. The list of members and office bearers are given below:

S. NO.	Full Name	Occupation
1	V N Shiju	Coir Fibre Mfg & Trading
2	V N Reju	Coir Fibre Manufacturing
3	Kalaimaran	Coir Fibre Manufacturing
4	N Vethamuthu	Coir Fibre Manufacturing
5	T Rajan	Farm owner
6	N Thangaraja	Farm owner
7	Selvi Balan	Entrepreneur
8	Dharanyaa Balan	Entrepreneur
9	Manju Saranya	Entrepreneur
10	K Balan	Entrepreneur
11	A Susheela	Coir Fibre Manufacturing
12	G Radhakrishnan	Entrepreneur
13	V N Manju	Engineer
14	A Godwin David	Entrepreneur
15	A Robinson David	Entrepreneur
16	Elamparithi	Farm Owner
17	Jeeva	Entrepreneur
18	Paulselvan	Entrepreneur
19	Deepa	Entrepreneur
20	Muthammal	Entrepreneur
21	Latha	Entrepreneur
22	S Poncy	Farm Owner

16 EXPECTED IMPACT

S.No.	Parameter	Pre-intervention	Post-intervention
1	Cluster Turnover p.a. (Rs. Lakhs)	3505	3775
2	Investment (Rs. Lakhs)	2330	2550
3	Employment (Nos.)	1750	1950
4	Wages per day (Rs.)	Rs.400/-	Rs.450/- to Rs.460/-
5	Profitability (%)	8%	14 to 15%

The Common Facility Center (CFC) will capitalize on the unique position of the area to produce bristle coir fibre. Presently the fibre that is being sold as raw material will be enriched to value added products. Thus, it will help the manufacturers to climb up the value chain. Some of the other impacts are:

- Strong linkages among the Cluster members and actors in all levels of the value chain and an established Collaborative setup in place to undertake development initiatives & address common issues.
- Emergence of specialized support service providers and their active involvement in the development process
- Establishment of new units by converging various schemes of State and Central Governments (such as Coir Udyami Yojana, NEEDS, PMEGP etc.) resulting in additional investments and employment in Coir sector by the cluster members
- Improved access to financial capital for cluster members
- 100% Coverage of cluster artisans under social security schemes