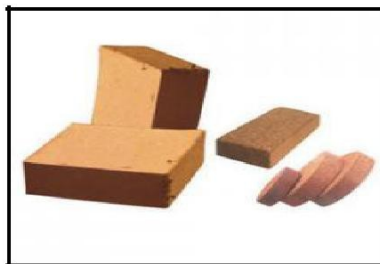




DETAILED PROJECT REPORT

Cluster Location: DINDIGUL
(Dindigul Coir Consortium Private Limited)



Submitted to
Coir Board, Kochi

Prepared by:

ITCOT Consultancy and Services Ltd.

(Joint venture of ICICI, IDBI, IFCI, SIPCOT, TIIC, SIDCO and BANKS)
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EXECUTIVE SUMMARY

01.	Name of the cluster	Dindigul Coir Consortium Private Limited, Dindigul																		
02.	Type of Cluster	Major Cluster																		
03.	Location & Spread of the cluster	The cluster area is located in Dindigul district, extends over 3 Blocks viz. Dindigul, Natham & Batlagundu. The cluster spread includes 60 Village Panchayats in Dindigul District.. The Geographical spread of the cluster measures about 20-25 Km radius.																		
04.	Product range	The existing range of coir products produced in the cluster are: <ul style="list-style-type: none"> • Coir Fibre • Curled Coir • Coir Yarn • Coir Pith • Block 																		
05.	Size of cluster & Type of units	The total number of coir units available in the cluster area is around 200 units of which 87 Nos. are engaged in Fibre Extraction, 42 Nos. engaged in Curled Coir rope making, 56 Nos. engaged in Yarn Spinning and 15 Nos. engaged in manufacturing of Pith Blocks. The total number of beneficiaries estimated to be around 1750 members which includes the labor force in the cluster. Based on the number of cluster beneficiaries, the cluster is typified as Major Cluster.																		
06.	Production & Turnover of Coir products in the cluster	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Product</th> <th style="width: 12.5%;">No.of units</th> <th style="width: 25%;">Production (MT)</th> <th style="width: 37.5%;">Turnover (Crores)</th> </tr> </thead> <tbody> <tr> <td>Coir Fibre</td> <td style="text-align: center;">87</td> <td style="text-align: center;">39150</td> <td style="text-align: center;">98.00</td> </tr> <tr> <td>Coir Yarn</td> <td style="text-align: center;">56</td> <td style="text-align: center;">4200</td> <td style="text-align: center;">13.50</td> </tr> <tr> <td>Curled Coir Rope</td> <td style="text-align: center;">42</td> <td style="text-align: center;">9450</td> <td style="text-align: center;">23.00</td> </tr> </tbody> </table>			Product	No.of units	Production (MT)	Turnover (Crores)	Coir Fibre	87	39150	98.00	Coir Yarn	56	4200	13.50	Curled Coir Rope	42	9450	23.00
Product	No.of units	Production (MT)	Turnover (Crores)																	
Coir Fibre	87	39150	98.00																	
Coir Yarn	56	4200	13.50																	
Curled Coir Rope	42	9450	23.00																	

		Coir Pith block	15	15000	13.50
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07. Employment & Income level		Activity	Male	Female	Total
		Fibre Extraction	220	650	870
		Yarn Spinning	56	224	280
		Curled Coir	84	336	420
		Pith Block Making	30	120	150
		The income level for the labours in the cluster is Rs.250/- for male workers and Rs.150/- for female workers.			
08.	Key Concern areas of the cluster	<ul style="list-style-type: none"> • Most of the fibre extraction units in the cluster and also in nearby districts are engaged in direct fibre export, for which baling of fibre (120 Kgs.) is a necessity. But there is no baling facility in the cluster area, for which the fibre is being transported to Rajapalayam or Theni, which incurs high transportation cost. This result in increased cost of fibre which actually affects the competitiveness of the product in the global market. • Cluster's present production is limited to intermediate products such as fibre, yarn etc., which fetches reduced margin only. • Coir Pith, generated g fibre production (2 Tons of Coir pith generated in 1 Ton production of Coir fibre), is not being exploited by the Cluster, eventhough scope for value addition of Coir pith is enormous and excellent market potential exists for value added coir pith products. 			
09.	Proposed Strategic Interventions	<p>Soft Interventions:</p> <ul style="list-style-type: none"> • Capacity Building • Market Promotion <p>Hard Interventions:</p> <p>Common facilities proposed:</p> <ul style="list-style-type: none"> • Baling Press (120 Kg.) • Grow Bag manufacturing • 5 kg. Pith Block making • 650 gm. Pith briquette making • CoCo peat disc making 			

	Thematic Interventions: Participation in activities such as national and international level brand promotion campaigns, New Media marketing, E-
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		commerce initiatives etc., as detailed in the SFURTI implementation guidelines
10.	Budget for Soft interventions	Rs. 25.00 Lakhs
11.	Budget for Hard interventions	Rs.302.00 Lakhs
12.	Total Project cost (including Agencies cost)	Rs.389.62 Lakhs
13.	Means of Finance	Grant under SFURTI scheme : Rs. 291.62 lakhs IA/SPV share : Rs. 98.00 lakhs
14.	Post Intervention Scenario > Unique space in global fibre market, (Expected Impact)	<p>because of price competitiveness due to the establishment of 120 Kg. fibre baling facility.</p> <ul style="list-style-type: none"> ➤ Effective utilization of pith generated from fibre extraction units, resulting in increased cluster earnings by 20 – 25%. ➤ Post interventions, the Cluster’s export earnings will be increased by 15-20% ➤ Expansion of activities by existing fibre extraction units to value added pith based activities, as no additional fixed investment is required for the same, due to the common facility created for manufacture of value added pith based products to operate on User fee charge basis ➤ Emergence of more number first generation new entrepreneurs utilizing the CFC, with minimum investment, who purchase the pith, get it converted to value added product on User fee basis in the CFC, and market it globally. ➤ 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, UYEGP, etc.) resulting in additional investments in Coir sector by the cluster members ➤ Improved access to financial capital for cluster members
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. The proposed implementing agency is Small Industries Product Promotion Organisation (SIPPO), Madurai. The above agencies work in tandem towards the successful implementation of the project in a sustainable manner.

The SPV is formed and registered as Private Limited Company under Companies Act 2013 in the name of 'DINDIGUL COIR

CONSORTIUM PRIVATE LIMITED as per the Certificate of Incorporation issued by Registrar of Companies, Coimbatore dated 22.05.2015. The CIN of the company is U37100TZ2015PTC021408. Currently the SPV has 22 members and 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. Women constitute about 80% of the work force in 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 Coir Cluster located at Dindigul 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 Detailed Project 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

11 BACKGROUND

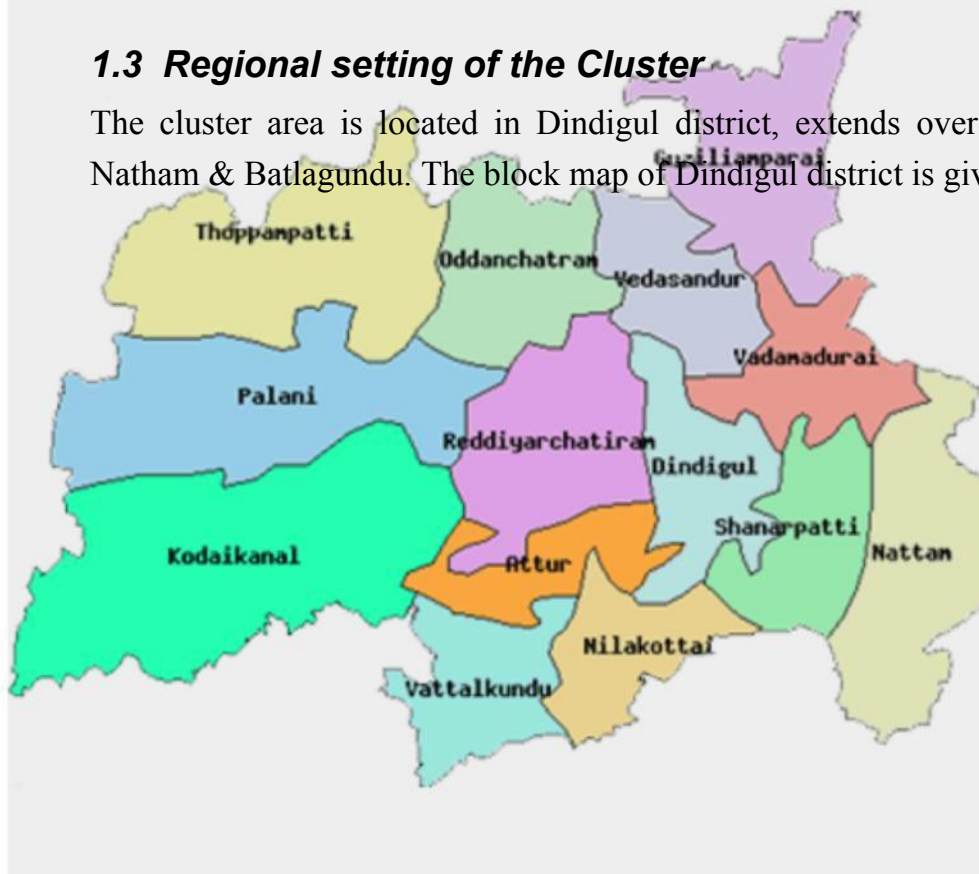
12 Key Economic Activities in the region

Dindigul district was carved out of the composite Madurai District on 15.9.85. Dindigul, which was under the way of the famous Muslim Monarch, Tippusultan, has a hoary past. The Historical Rock Fort of this district was constructed by the famous King Muthukrishnappa Nayakker. Dindigul district is bound by Erode, Tirupur, Karur and Trichy districts on the North, by Sivaganga and Trichy District on the East, by Madurai district on the South and by Theni and Coimbatore Districts and Kerala State on the West. It is spread over an area of 6266.64 Sq. Km. It comprises 3 Revenue Divisions, 8 Taluks and 14 Panchayat Unions. According to 2011 census, the total population is 21,61,367.

Dindigul is known for its leather tanning Industry. Besides tanning, the city is home to a major textile spinning industry, which ranks second next to Coimbatore in spindle capacity. Chinnalapatti, which is located 11 kilometres from Dindigul, is known for its flourishing hand loom industry. Silk art, known as Sarees, and sungudi produced in Chinnalapatti are famous throughout India. More than 1000 families are engaged in this industry. Dindigul city is an important wholesale market for onions and groundnuts (peanuts).

1.3 Regional setting of the Cluster

The cluster area is located in Dindigul district, extends over 3 Blocks viz. Dindigul, Natham & Batlagundu. The block map of Dindigul district is given below:



1.4 Location

The cluster spread includes 60 Village Panchayats in Dindigul District. The Geographical spread of the cluster measures about 20-25 Km radius.

1.5 Evolution of the Cluster

The Cluster is naturally evolved one. The total coconut cultivation area of Dindigul district is 24123 hectares mainly in Dindigul, Natham, Batlagundu, Athoor, Nilakottai, Vadasendur & Palani blocks of Dindigul district. The total production of nuts in the district is 422.15 million nuts.

Coir, being the natural fibre extracted from the husk of Coconut, Coir industries started flourishing in the district owing to the local availability of raw material and naturally the cluster evolved.

1.6 Demography and Growth trends

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

Description	2011	2001
Actual Population	2,159,775	1,923,014
Male	1,080,938	968,137
Female	1,078,837	954,877
Population Growth	12.31%	9.22%
Area Sq. Km	6,036	6,036
Density/km ²	358	317
Proportion to Tamil Nadu Population	2.99%	3.08%

1.7 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 depends 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 abundantly available in the coconut growing states of India provides scope for development of fibre processing sector and thereby augmenting rural employment.

1.8 Human Development Aspects

The total number of workers engaged in the Coir activity gender wise is given below:

Activity	Male	Female	Total
Fibre Extraction	220	650	870
Yarn Spinning	56	224	280
Curled Coir rope	84	336	420
Pith Block Making	30	120	150

The existing income level of the labour force in the Coir sector of the district is given below:

Activity	Wages per day	
	Male	Female
Fibre Extraction	250	150
Yarn Spinning	250	150
Pith Block Making	250	150

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.

Dindigul town has been associated with iron products like Iron Hundial, Iron safe boxes. Another industry for which Dindigul is noted is Leather Tanning. The widely known “Roja Supari” are produced in this town and are being sent to various places in our State and outside. It is a flourishing industry gives employment to wide section of people. This district is having a flourishing handloom industry at Chinnalapatti, which is located at 11 Kms away from Dindigul on the Madurai-Dindigul road. Art –Silk sarees and sungudiSarees produced in Chinnalapatti are famous through out India. More than 1000 families are engaged in this Industry. Dindigul city which is an important wholesale market for Onion and Groundnut.It has the network of inter-district roads connecting Coimbatore, Tirupur, Trichy, Karur, Madurai and Sivagangai District.

Apart from these activities, Coir Fibre extraction, Curled Coir rope making, Yarn spinning and Coir pith block making are the major activities undertaken in the district. In the cluster, there are about 87 units engaged in coir fibre extraction. The current output of coir fibre is estimated at 39150 MT per annum. The annual turnover out of coir fibre production in the cluster is estimated at 98.00 Crores. There are about 56 units engaged in coir yarn spinning in the cluster. The current output of coir yarn is estimated at 4200 MT per annum. The Annual turnover out of coir yarn spinning in the cluster is estimated at 13.50 Crores. There are about 42 units engaged in curled

coir rope making in the cluster. The current output of curled coir rope is estimated at 9450 MT per annum. The Annual turnover out of curled coir rope making in the cluster is estimated at 23.00 Crores. There are about 15 units engaged in coir pith block making in the cluster. The current output of coir pith block is estimated at 15000 MT per annum. The Annual turnover out of coir pith block making in the cluster is estimated at 13.50 Crores.

19 Infrastructure – social, physical, financial and production related

The infrastructure details of Dindigul district is tabulated as below:

DISTRICT PROFILE GLANCE

GEOGRAPHICAL POSITION

North Latitude	Between 10 ⁰ 05' and 10 ⁰ 09'
----------------	---

East Longitude	Between 77 ⁰ 30' and 78 ⁰ 20'
----------------	---

AREA AND POPULATION	1991 Census	2001 Census
----------------------------	--------------------	--------------------

Area (Sq.Km)	6266.64	6266.64
--------------	---------	---------

Population	17,60,601	19,23,014
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Density	281	306
---------	-----	-----

Main Workers		
--------------	--	--

Total Workers	832493	973332
---------------	--------	--------

Male Workers	529891	585146
--------------	--------	--------

Female Workers	302602	388186
----------------	--------	--------

Rural Workers	707218	699276
Urban Workers	125275	274056
Cultivators	216559	183218
Agricultural Labourers	366338	313195
Household Industry	18655	25180
Other Workers	230941	320300
Marginal Workers	32277	131439

Non-Workers	895831	949682	
TEMPERATURE (in Celsius)	Maximum	Minimum	
Plains	34.3	22.5	
Hill Stations	22.0	8.0	
RAINFALL (in mm)	Normal	Actual	
North East Monsoon	399.2	741.2	
South West Monsoon	251.4	247.5	
AGRICULTURE			
Total Cultivated Area (Hec.)	2,61,758		
Net Area Sown (Hec.)	253505		
Area Sown more than once (Hec.)	8253		
Area and Production of Principal Crops	Area (Hec.)	Production (Tonnes)	
Paddy	23735	8378	
Millets and Other Cereals	81610	11011	
Pulses	27135	37310	
Sugarcane (Gur)	7014	8136	
Groundnut	22070	580441	
Gingelly	1459	655091	
Cotton (BL)	1999	5657	
Agricultural Land Holdings	Holdings	Area	Average Size of Holdings
	302711	334835	1.11.0

DETAILS OF INDUSTRIAL CO-OPERATIVE UNITS IN DINDIGUL DISTRICT

Sl. No.	Name of the Industrial Co-Operative Society	Line of Activity	Date of Registration
1.	Dindigul Lock Workers Industrial Co-Operative Society Limited. Dindigul	Production of Locks	05.09.1957
2.		Dindigul Ladies Polythene workers Industrial Co-Operative Society Limited. Dindigul	Dindigul Auto driver s
3.		Kurumpapatti metal workers Industrial Co-Operative Society Ltd. Dindigul.	Industrial Co-Operatives Societ y
4.			Production of Polythene bags
5.		Dindigul Printers service Industrial Co-Operative Society Limited. Dindigul	Limited Dindigul
6.			Manufacturing of
7.		Small Industries service Industrial Co-Operative Society Limited . Dindigul	Shapat hihal and temple Industri al Co-
8.		Nilapatti coir workers Industrial Co-Operative Society Limited. Dindigul.	Operative Society Limited
9.		Nilapatti District Dindigul	Dindigul
		Dindigul Minorities auto drivers Industrial Co-operative Society Limited. Dindigul	Service Society
			Service

	Society

Production of Coir	18.11.1959	13.08.2006	02.04.2008
Service Society	06.03.1957	02.04.2008	
Dormant	16.10.2006	07.11.1996	
New Society	06.09.1994		

The Industrial Estates located in Dindigul District are:

1. SIDCO Industrial Estate, Dindigul.
2. SIPCOT Industrial Complex, Nilakottai.

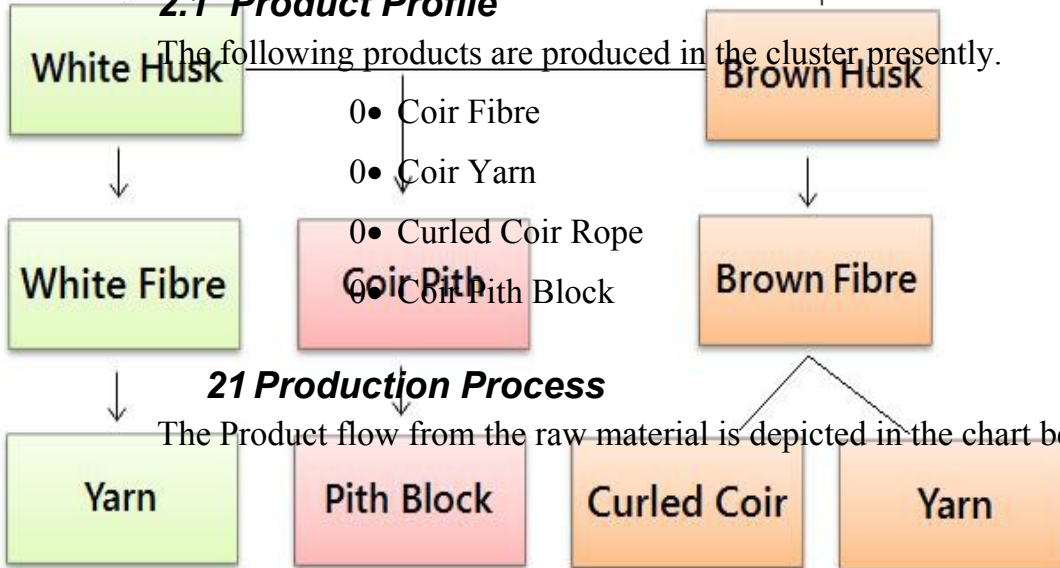


2 CLUSTER VALUE CHAIN MAPPING

Coconut Husk

2.1 Product Profile

The following products are produced in the cluster presently.



2.1 Production Process

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

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.



Coir Yarn:

Coir yarn spinning is similar to cotton yarn spinning. The processes involved given here under:

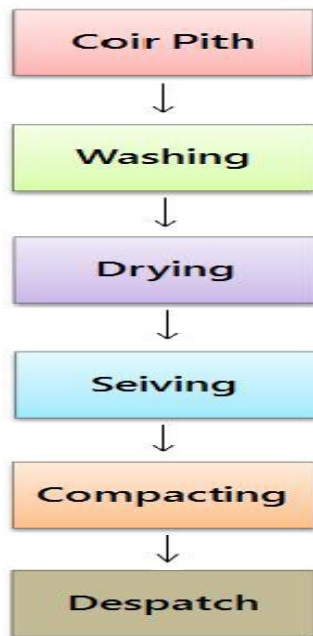
1. Willowing
2. Slivering
3. Spinning
4. Winding

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 fibres are placed parallel to each other. The fibre is then fed into the slivering machine wherein it is converted into sliver form. The slivers are spun into yarn as per specifications in the spinning machine. The yarn is then cleaned and wound into rolls and is now ready for the market.



Curled Coir Rope:

The clean fibre is fed to the hackling machine in which the fibre is loosened, opened out and teased to facilitate easy curling. Then the hackled fibre is fed to the curling machine in which the fibre is straightened passing through the rollers and curled in the spinning head. The curled rope is wound on bobbins and the bobbin head. The hopper feeder is provided for feeding uniform weight from the quantity of fibre to the curling machine. The ropes of different diameters can be produced on the curling machine.

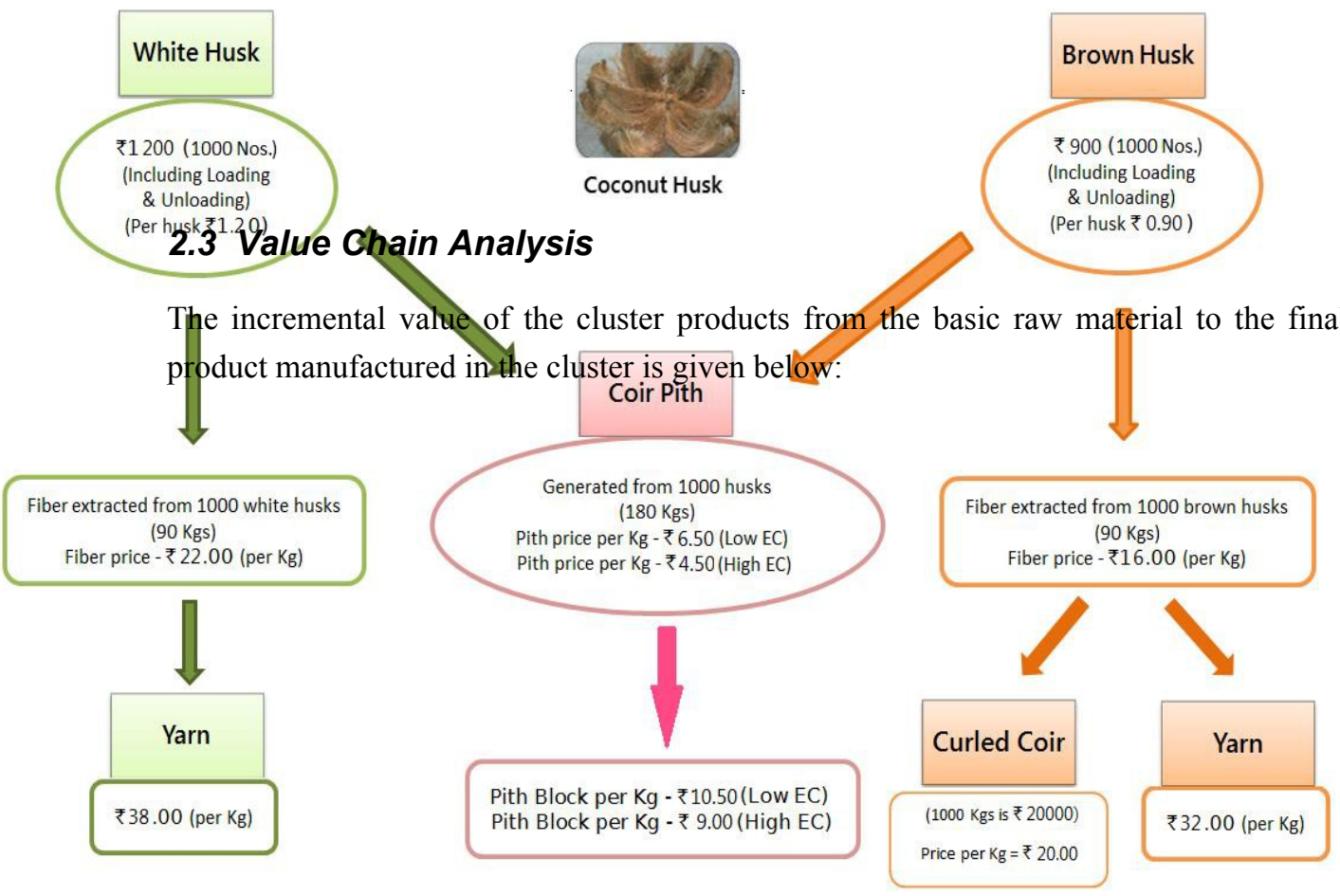


Coir Pith Block:

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.

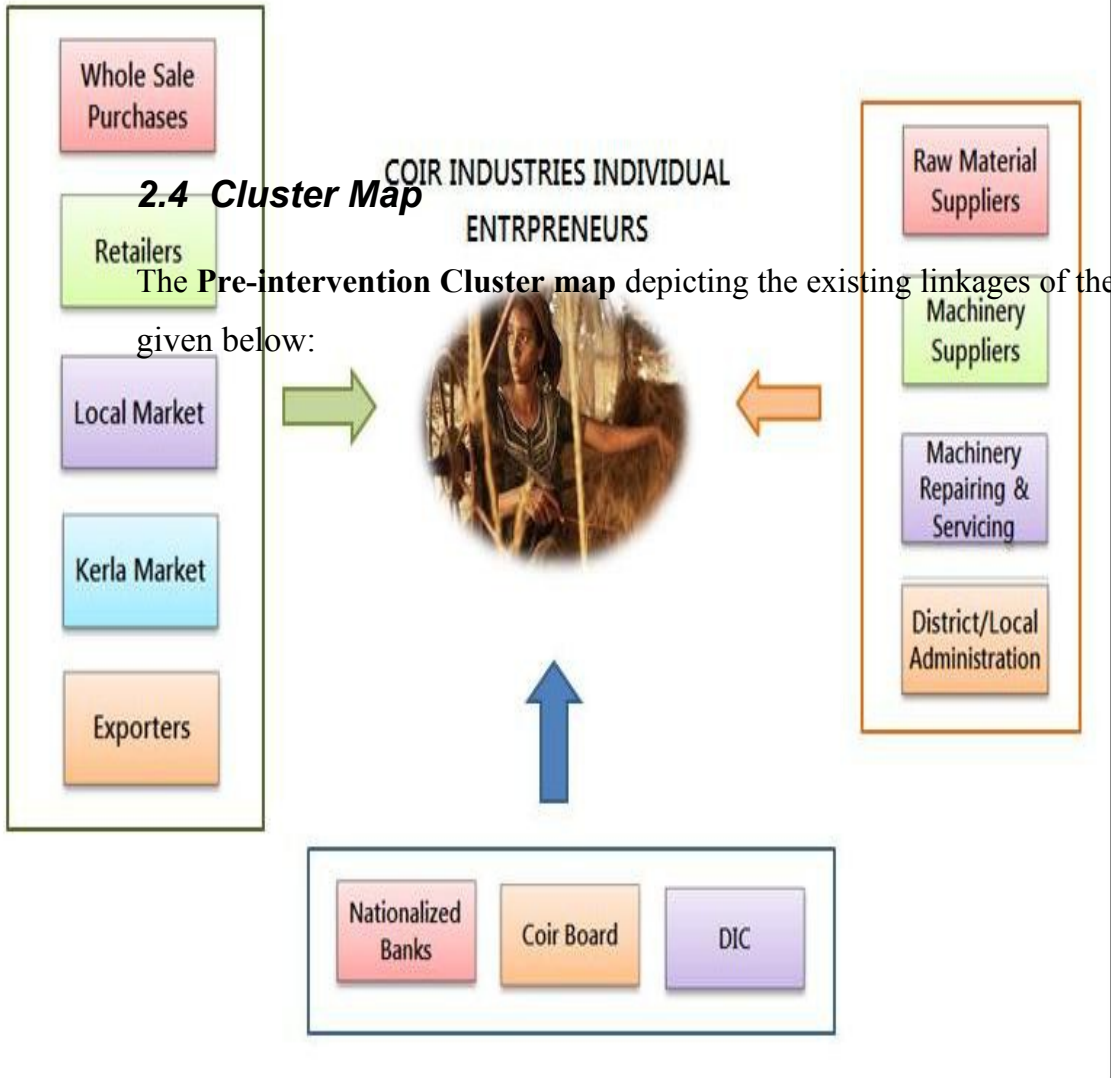


It is observed that the value addition in the cluster is limited to intermediate product level and the need and scope for value addition for coir sector in the cluster is considered significant. The cost of Green husk including loading and unloading is valued at Rs.1.20, which is incremented to Rs.22.00 per Kg. of fibre, which is further incremented to Rs.38.00 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.20.00 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 Rs.10.50 per kg. of low EC – 5 kg.pith block.

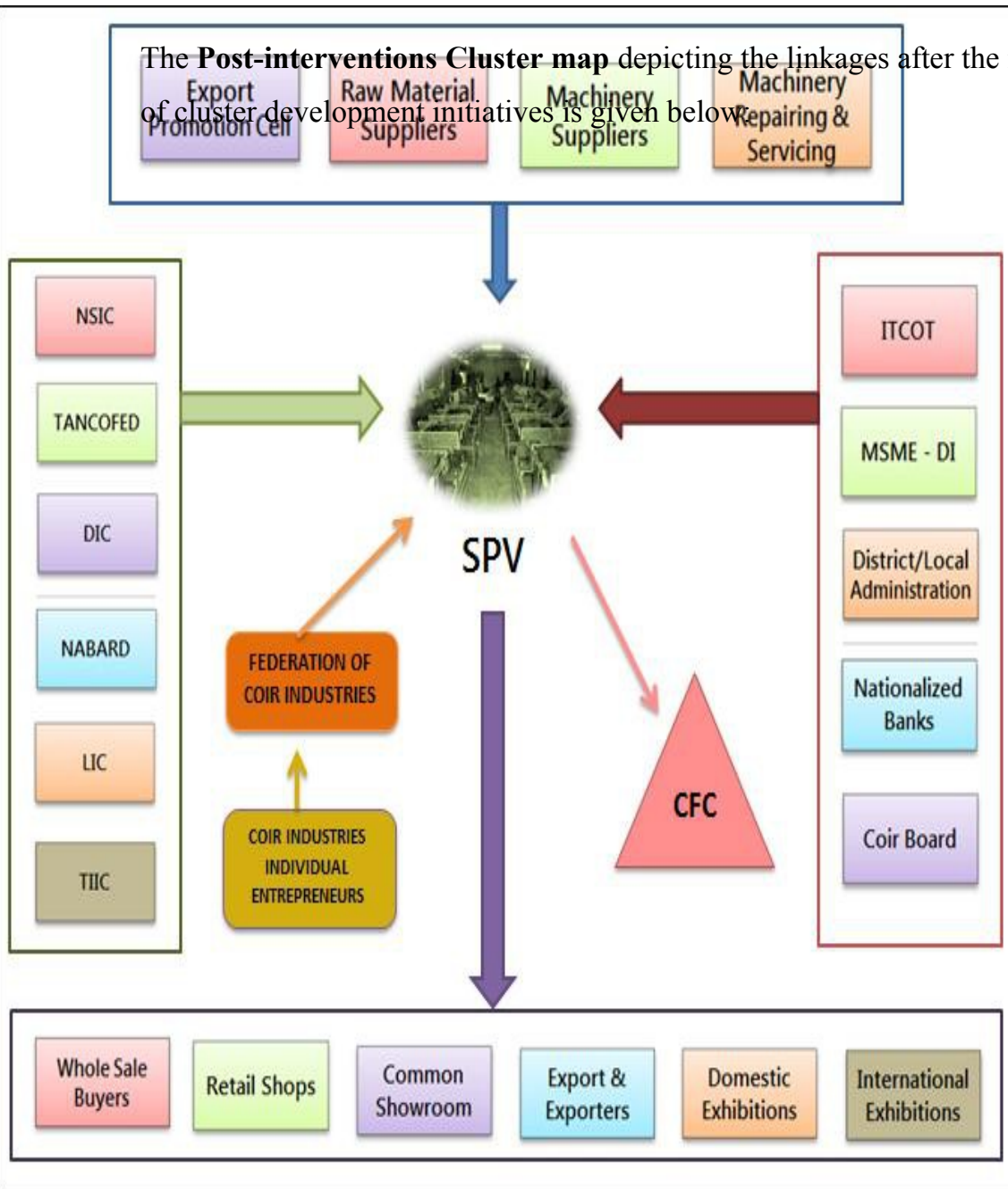
2.4 Cluster Map

COIR INDUSTRIES INDIVIDUAL ENTREPRENEURS

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.

TAMILNADU CORP. FOR DEVELOPMENT OF WOMEN (TNCDW)

TNCDW is one of the government agencies implementing many schemes for Self Help Groups. They also implement Tamil Nadu State Rural Livelihood Mission (TNSRLM) towards poverty eradication.

NABARD

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

LEAD BANK

Canara Bank is the lead bank in Dindigul district. 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

TAMIL NADU AGRICULTURAL COLLEGE (TNAC)

TNAC, the premier agricultural college, is located in Madurai, which is about 50 kms from the cluster. TNAC is the leading Agro technology provider in India.

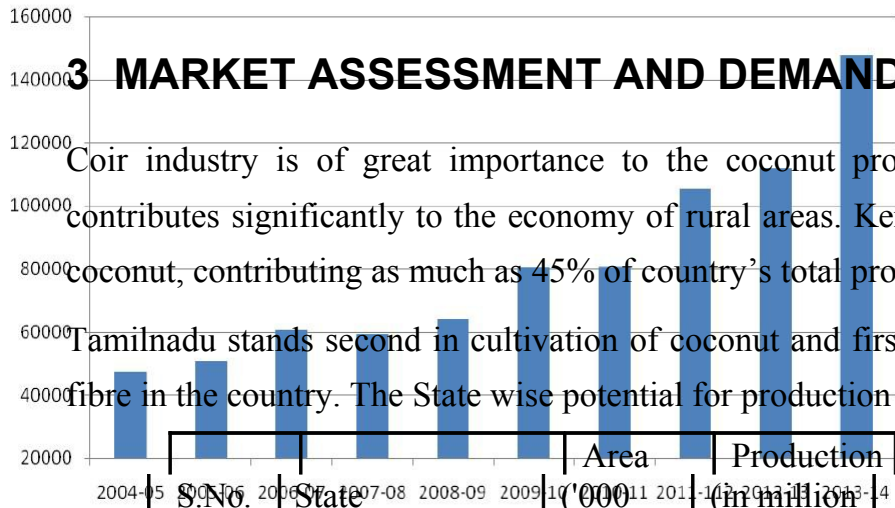
ITCOT Consultancy and Services Limited (ITCOT)

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.

**Export of Coir & Coir Products during the last 10 Years
in terms of Value (Value in Rupees Lakhs)**



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 ('000 Ha)	Production (in million nuts)	Coir fibre 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:

Composition of Export (Share in %)

Name of the item	Apr2013-March 2014		Apr2012-March 2013	
	Qty %	Value%	Qty %	Value %.
Tufted Mat	8.15	28.30	8.68	30.08
Coir Pith	50.55	23.15	48.52	23.10
Handloom Mats	4.21	16.00	5.62	20.44
Coir Fibre	32.38	22.27	32.76	18.39
Geo Textile	0.83	1.87	0.81	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 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:

Total	537040	147603.84	429501	111602.75	25.04	32.26
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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:

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

As far as the cluster is concerned the product line is limited to Coir Fibre, Coir Yarn, Curled coir and Pith blocks. The distribution of Coir Fibre produced in the cluster in marketing aspect is given below:

Coir Fibre – Present Market

Direct Export	30%
Export through Merchant	20%
Cluster Consumption (for Coir yarn & Curled coir)	15%
Sales to other districts (Direct & Agents)	35%

The Coir yarn produced in the cluster is directly marketed to Salem yarn market and marketed in the cluster for some extent. The Curled coir produced in the cluster is marketed through dealers. As far as Pith block is concerned, 25% of pith block produced in the cluster is directly exported and the balance 75% is marketed through dealers for domestic and export market.

It is observed that the export potential for value added products are not at all tapped by the cluster with its current products and hence value added products having good export market potential is identified to be the need of the cluster.

4 SWOT AND NEED GAP ANALYSIS

STRENGTHS:

- 0→ Easy to adopt technology to manufacture value added/diversified coir pith based products.
- 0→ Existence of engineering infrastructure such as workshops and lathes.
- 0→ Sufficient availability of Labour force.
- 0→ Well established physical infrastructure such as road, rail, power etc.
- 0→ Excellent network of commercial and co-operative banks in the cluster.
- 0→ Presence of unity among the members – Strong Federation.
- 0→ Products marketable in the local market
- 0→ Presence of Support institutions such as Coir Board, District Industries Centre, Commercial banks, ITCOT etc.

WEAKNESSES:

- 0→ Huge amount involved to mechanize the production process which is not affordable by most of the manufacturers
- 0→ Unable to come out of the vicious circle of making the traditional products.
- 0→ Huge dependence of Electricity Power.
- 0→ Most of them sold their products to middle man/agents
- 0→ Lack of formal networks for marketing and input procurement
- 0→ Limited contact with BDS providers and Technical Institutions
- 0→ Weak linkages with banks and financial institutions

OPPORTUNITIES:

- 0→ Good scope and potential for manufacturing of pith based value added /diversified products
- 0→ Products can be manufactured throughout the year
- 0→ Presence of supporting schemes by Government departments.
- 0→ Increasing Domestic and Export market prospects for coir products.
- 0→ Implementation of SFURTI Scheme for focused development of the cluster.

THREATS:

- 0→ Fluctuation in fibre pricing.
- 0→ Increase in production cost but decrease in net profit earned for the existing products.
- 0→ Competition from products such as Nylon, Jute Sisal fibre etc.
- 0→ 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.
- 0→ Competition from coconut growing country viz.: Sri Lanka, Indonesia & Philippines etc.
- 0→ Utilization of husk for fuel purposes

NEED GAP ANALYSIS:

The key concern areas of the cluster are identified to be:

- 0• Most of the fibre extraction units in the cluster and also in nearby districts are engaged in direct fibre export, for which baling of fibre is a necessity. But there is no baling facility in the cluster area, for which the fibre is being transported to Rajapalayam or Theni, which incurs high transportation cost. This result in increased cost of fibre which actually affects the competitiveness of the product in the market.
- 0• Cluster's present production is limited to intermediate products such as fibre, yarn etc., which fetches reduced margin only.
- 0• Coir Pith, generated during fibre production (2 Tons of Coir pith generated in 1 Ton production of Coir fibre), is not being exploited by the Cluster, eventhough scope for value addition of Coir pith is enormous and excellent market potential exists for value added coir pith products.

Increased production of value added pith products and venturing for exports would augment the cluster turnover and export revenues. Collaborative efforts to increase captive consumption of raw coir pith on cluster mode to tap the market opportunities for the value added coir products is considered to be the requirement of the cluster.

5 PROFILE OF THE IMPLEMENTING AGENCY

Small Industries Product Promotion Organisation (SIPPO) which has been promoted jointly by National Small Industries Corporation (NSIC, a Govt. of India Enterprise) and Tamilnadu Small Industries Development Corporation (TANSIDCO, a Tamilnadu Govt. Undertaking) is proposed as the Implementing Agency for Dindigul Coir Cluster under SFURTI scheme. The main objective of the organisation is the promotion of Micro, Small and Medium Enterprises. In addition, SIPPO has involved in the Cluster development initiatives for various clusters in Tamilnadu such as:

- 0• Tie and Dye & Hand Printed Textile Cluster at Madurai
- 0• Silk Handloom Cluster at Tanjore through NABARD
- 0• Handicrafts clusters in Musical instruments, Art Plate, Swamimalai icons, Pith work and Root Carving, Nachiarkoil Bell Metal Craft and other miscellaneous crafts like Thalaiyattibomma, Cut Glass work and Tanjore painting at Tanjore District.
- 0• Wood carving cluster at Karaikudi, Sheet Metal Craft and Miniature Metal casting at Ariyakudi and Handmade Tiles cluster at Athangudi through Office of Development Commissioner (Handicrafts), Ministry of Textiles, Govt. of India.

SIPPO was the Technical Agency for the Kandanoor Khadi Cluster at Sivagangai District, Coimbatore Khadi Cluster at Avarampalayam, Coimbatore District under SFURTI scheme of KVIC, Ministry of MSME, Govt. of India.

SIPPO has prepared the Diagnostic Study Report of this Dindigul Coir Cluster. Based on its experience in Cluster Development and their presence in the nearby district, SIPPO is proposed as the Implementing Agency for Dindigul Coir Cluster under SFURTI scheme.

6 PROJECT CONCEPT AND STRATEGY FRAMEWORK

6.1 Project Rationale

The project rationale is to rejuvenate the existing product mix in the cluster and to enhance the cluster competitiveness through capacity building of the entrepreneurs. Bridging the technological gaps and thereby reducing the cost of production, effective utilization of existing resource, improving the quality of the products and establishing global marketing linkages elevates the cluster to a higher level in terms of value addition, turnover, employment and foreign exchange earnings.

6.2 Project Objective

- 0→ Strengthening linkages among the Cluster members and actors and to have a Collaborative setup to address common problems
- 0→ Effective utilization of available raw pith resource in the cluster by strengthening the linkages.
- 0→ To manufacture value added competitive products, using the available raw material resource and to venture the export market decisively
- 0→ Exploit the benefits arising due to optimization of resources and economies of scale

6.3 Focus Products/Services

In addition to the Soft interventions for Capacity building and Market promotion initiatives, the following facilities are proposed as interventions for the development of the cluster:

- 0● Baling Press (120 Kg.) facility
- 0● Grow Bag manufacturing facility
- 0● 5 kg. Pith Block making facility
- 0● 650 gm. Pith Briquette making facility
- 0● Coco peat disc making facility

64 Conceptual Framework / Project Strategy

0→ Strengthen linkages within the cluster – with other SMEs, larger enterprises, support institutions, banks etc. At times such linkages are also created with

important organizations (private/public) outside the cluster;

0→ Assist cluster stakeholders to develop a consensus-based vision for the cluster as a whole;

0→ Help stakeholders to coordinate their actions and pool their resources to move towards a shared vision for the cluster as a whole; and

0→ Create an autonomous governance framework, in a step-by-step process that will sustain dynamism and change in the cluster after the withdrawal of the

implementing agency

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:

- 0● Trust Building: For strong association among cluster members to address common problems.
- 0● Awareness Programme: To provide awareness about SFURTI scheme benefits, Cluster development initiatives and the prospects for value added products in Coir sector
- 0● Entrepreneurship Development Programme: To foster entrepreneurship among cluster members.
- 0● Technology based EDP: To educate & adopt the latest technology in coir sector.
- 0● Skill Upgradation Programme: To increase the skilled labour force in the cluster to address the problem of limited skilled labour availability.
- 0● Exposure Visit: Visit to other vibrant cluster, research institutions etc. to understand the synergic effect and dynamics of vibrant clusters and to demonstrate the technology and marketability for value added products.

Market Promotional Activities

- 0● Market Study Tour: To enable the cluster members to gain a deeper understanding of the business environment and market dynamics in Coir sector.
- 0● 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:

0♣ Increased Sales

0♣ Product showcasing for enhanced product visibility

0♣ Establish qualified leads

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

- 0● Buyer Seller Meet: To meet various players in the value chain for building business contacts and enhance marketability.

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

0→ Baling Press (120 Kg.) facility

0→ Grow Bag manufacturing facility

0→ 5 kg. Pith Block making facility

0→ 650 gm. Pith Briquette making facility

0→ Coco peat disc making facility

THEMATIC INTERVENTIONS

Cluster's active involvement and participation in activities such as national and international level brand promotion campaigns, New Media marketing, 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	Coir Entrepreneurs, coir workers and Raw material suppliers
3	No. of Batches	2
4	Batch size	50 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/-
8	Implementation timeline	Year I Quarter I

S. No	Particulars	
1	Proposed Programme / Intervention	Awareness Programme
2	Target group	Coir Entrepreneurs, coir workers, Raw material suppliers
3	No. of Batches	2
4	Batch size	50 nos
5	Training content	About Cluster concept, SFURTI scheme, and other Government schemes
6	Trainer / Training Institution	ITCOT Consultancy and Services Limited
7	Cost of Training programme	Rs. 1,00,000/-
8	Implementation timeline	Year I Quarter II

S. No	Particulars	
1	Proposed Programme / Intervention	Entrepreneurship Development Programme
2	Target group	Coir Entrepreneurs
3	No. of Batches	2
4	Batch size	25 nos
5	Training content	Motivation, Project Identification, Govt. Subsidy Schemes, Banker role in Industries, Government statutory approvals, Export Import procedures & Marketing.
6	Trainer / Training Institution	ITCOT Consultancy and Services Limited

7	Cost of Training programme	Rs. 1,00,000/-
8	Implementation timeline	Year I Quarter III

S. No	Particulars	
1	Proposed Programme / Intervention	Technology based Entrepreneurship Development Programme
2	Target group	Coir Entrepreneurs
3	No. of Batches	2
4	Batch size	25 nos
5	Training content	Scope for Value added coir products, Technological inputs & feasibility inputs, Marketing strategies
6	Trainer / Training Institution	ITCOT Consultancy and Services Limited
7	Cost of Training programme	Rs. 2,00,000/-
8	Implementation timeline	Year I Quarter IV

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 for Grow Bag, Coco peat disc & Pith block making
6	Trainer / Training Institution	Coir Board (at CCRI, Alleppey)
7	Cost of Training programme	Rs. 3,00,000/-
8	Implementation timeline	Year I Quarter III & Quarter IV

S. No	Particulars	
1	Proposed Programme / Intervention	Exposure tours
2	Target group	Coir Entrepreneurs
3	No. of Batches	as per requirement
4	Programme content	Visiting other Coir clusters
5	Coordinating Institution	ITCOT Consultancy and Services Limited
6	Cost of programme	Rs. 2,00,000/-
7	Implementation timeline	Year II Quarter I

MARKET PROMOTION

S. No	Particulars	
1	Proposed Programme / Intervention	Market study tours
2	Target group	Coir Entrepreneurs
3	No. of Batches	As per requirement
5	Programme content	To understand market dynamics, To interact with market intermediaries to understand the product wise market potential in potential market centers
4	Coordinating Institution	IA & TA
5	Cost of Training programme	Rs. 3,00,000/-
6	Implementation timeline	Year II Quarter I & Quarter II

S. No	Particulars	
1	Proposed Programme / Intervention	Participation in Trade fairs
2	Target group	SPV members
3	No. of Batches	As per requirement
5	Programme objective	Participation, Exhibit their products in stall and to create extensive marketing potential
6	Coordinating Organisation	Coir Board
7	Cost of Training programme	Rs. 5,00,000/-
8	Implementation timeline	Year II Quarter II & Quarter III

S. No	Particulars	
1	Proposed Programme / Intervention	Buyer Seller Meet
2	Target group	SPV members
3	No. of Batches	As per requirement
5	Training content	Direct Contact with Buyers
6	Coordinating organisation	IA, TA & Coir Board
7	Cost of Training programme	Rs. 2,00,000/-
8	Implementation timeline	Year II Quarter III & Quarter IV

S. No	Particulars	
1	Proposed Programme / Intervention	Tie up with Business Development service(BDS) providers
2	Target group	SPV members
3	No. of Batches	As per requirement
5	Training content	New Product development New design development
6	Coordinating Organisation	BDS providers
7	Cost of Training programme	Rs. 5,00,000/-
8	Implementation timeline	Year III Quarter I & Quarter II

9 HARD INTERVENTIONS

CREATION OF COMMON FACILITY CENTRE:

Land: The land proposed have been leased for creating the Common Facility Centres in 2 different locations of the cluster. The details of land is given below:

Land	Area of Extent	Proposed CFC activities
Thottanoothu Village, Dindigul	0.50 Acres	120 Kgs. Baling Press
Adiyanuthu Village, Dindigul	2.72 Acres	i)Grow Bag manufacturing facility ii) 5 kg. Pith Block making facility iii) 650 gms. Pith Briquette making iv)Coco peat disc making facility

Location:

Unit I: The land proposed for 120 kgs. Baling press facility is in Thottanuthu village which is 8 kms. From Dindigul bus stand. It is situated between Dindigul – Natham Main Road. The labour force will be sourced from the nearby villages Koovanuthupudhur, Sandhaipatti, Alagarnaickenpatti, Nochi Odaipatti & Kurumbapatti.

Unit II: The land proposed for all other above mentioned facilities is in Adiyanuthu village which is 5 kms. From Dindigul bus stand. It is situated between Dindigul – A.Vellodu Main Road. A borewell of 600 feet is already available with soft water nature. The labour force will be sourced from Mottanampatti, Vedapatti, Thandakaranpatti & Narasingapuram.

Cost & Area of Building works:

CFC activities	Built up Area (in Sq.ft)	Cost of Building (Rs. in Lakhs)
Unit I - 120 Kgs. Baling Press	5000	40.00
<u>Unit II - Pith Value addition facilities :</u> 1) Grow Bag 2) 5 kg. Pith Block 3) 650 gm. Pith Briquette & 4) Coco peat disc	6000	48.00
Drying yard	3000	06.00
Water Sump with sprinkler piping	L.S.	2.00

TOTAL		96.00
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I) Baling Press (120 Kgs.):

1. Project Description:

Fibre Baling press is hydraulically operated and it compresses loose fine coconut fibre into bales of fixed sizes and weights. The commonly used specification of fibre bale is 120 Kgs. as per the export market need and specification.

2. Project Justification:

There is a large scope of export market to the fibre. At present, the fibre is compressed into the bale of 120 Kgs. for export consignment. Due to the absence of baling press to make 120 Kgs. bales, the cluster people have to go to Theni or Rajapalayam, which involves higher transportation cost. There are 87 fibre extraction units in the district which would utilize this facility to a greater extent. In addition to the above, the fibre extraction units in Madurai and Sivagangai districts would also utilize this facility.

3. Proposed Machineries and Cost:

S.No.	Machinery Description	Quantity	Total Price (Rs. in Lakhs)
1.	Baling Press	1	48.00
2.	Automatic Forklift with Grapper	1	18.00
3.	Platform Scale	1	00.50
4.	Civil works for Machinery erection		05.00
TOTAL			71.50

4. Installed Capacity & Utilization:

Year	1	2	3	4	5
Installed Capacity per annum (in Bales)	57600	57600	57600	57600	57600
Capacity Utilization	60%	70%	80%	90%	90%
Production quantity per Annum (in Bales)	34560	40320	46080	51840	51840
User charge realization (Rs. in Lakhs)	62.21	72.58	82.94	93.31	93.31

5. 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 User fee.

6. Implementation timeline:

Year II – Quarter I (Total Project timeline is given in Chapter 13)

II. Grow Bag manufacturing facility:

1. Project Description:

Coco peat grow bags are used as plant substrates for soil less cultivation, largely used in greenhouses for growing vegetables such as Tomatoes, Paprika, Cucumber, Strawberries and cut flower production. The dried coir pith (Low EC) will be screened to remove the baby fibres, fines and stone with the help of screener and destoner automatically and feed it manually to the grow bag machine to make slabs. These slabs will be packed in UV treated poly bags and palettized.

2. Project Justification:

Effective utilization of available raw material resource (coir pith) in Dindigul, Theni, Madurai & Sivagangai districts. This facility is proposed in view of increased export earnings for the cluster.

3. Proposed Machineries & Cost:

Sl.No.	Machinery Description	Quantity	Total Price (Rs. in Lakhs)
1.	Briquetting Machinery for Coir Pith Grow Slabs	2	53.00

4. Installed capacity & Production quantity:

Year	1	2	3	4	5
Installed Capacity per annum (in tons)	3600	3600	3600	3600	3600
Capacity Utilization	60%	70%	80%	90%	90%
Production quantity per Annum (in tons)	2160	2520	2880	3240	3240

User charge realization (Rs. in Lakhs)	64.80	75.60	86.40	97.20	97.20
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5. Raw material availability:

The raw material required per ton of output is 1.350 Tonnes. The cost of raw material per ton is Rs.6500/-. The major raw material will be sourced from the cluster itself. In addition, it will be sourced from the districts Madurai, Theni & Sivagangai. The packing materials UV treated bags, Pallet base etc., will be sourced from the vendors outside.

6. 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 CFC through User fee charges.

7. Implementation timeline:

Year II – Quarter II (Total Project timeline is given in Chapter 13)

III) 5 kg. Pith Block making facility:

1. Project Description:

The pith block making process involves receiving of pith, washing, drying, seiving and compacting as 5kg. block on user charge basis. This facility is proposed in view of increasing the profitability of the cluster.

2. Project Justification:

Effective utilization of available raw material resource (coir pith) in Dindigul, Theni, Madurai & Sivagangai districts. This facility is proposed in view of increased export earnings for the cluster.

3. Proposed Machineries & Cost:

S.No.	Machinery Description	Quantity	Total Price (Rs. in Lakhs)
1.	5 Kg. block making machine	1	13.00
2.	Assessories (Screener, Conveyor, Trolley etc.,)	-	03.50
3.	Tools & Handling Equipments (Weighing scale, Platform scale)	-	00.50
TOTAL			17.00

4. Installed capacity & Production quantity:

The installed capacity for the proposed 5 Kg. pith block making facility is 4000 Kgs. per shift.

Year	1	2	3	4	5
Installed Capacity per annum (in tons)	3600	3600	3600	3600	3600
Capacity Utilization	60%	70%	80%	90%	90%
Production quantity per Annum (in tons)	2160	2520	2880	3240	3240
User charge realization (Rs. in Lakhs)	32.40	37.80	43.20	48.60	48.60

5. Raw material availability:

The raw material required per ton of output is 1.200 Tonnes. The cost of raw material per ton is Rs.6500/-. The major raw material will be sourced from the cluster itself. In addition, it will be sourced from the districts Madurai, Theni & Sivagangai.

6. 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 User fee.

7. Implementation timeline:

Year II – Quarter II & Quarter III (Total Project timeline is given in Chapter 13)

IV. 650 gm. Pith Briquette making facility:

1. Project Description:

This process is similar to the above mentioned 5kg pith block making but for the size of the pith block, which is 650 gm. in this process. This facility would result in increased export earnings of the cluster and increased marketability of the product.

2. Project Justification:

Effective utilization of available raw material resource (coir pith) in Dindigul, Theni, Madurai & Sivagangai districts. This facility is proposed in view of increased export earnings for the cluster.

3. Proposed Machineries & Cost:

S.No.	Machinery Description	Quantity	Total Price (Rs. in Lakhs)
1.	650 gm. block making machine	2	20.00
2.	Shrink wrapping machine	2	03.50
TOTAL			23.50

4. Installed capacity & Production quantity:

Year	1	2	3	4	5
Installed Capacity per annum (in tons)	3600	3600	3600	3600	3600
Capacity Utilization	60%	70%	80%	90%	90%
Production quantity per Annum (in tons)	2160	2520	2880	3240	3240
User charge realization (Rs. in Lakhs)	43.20	50.40	57.60	64.80	64.80

5. Raw material availability:

The raw material required per ton of output is 1.200 Tonnes. The cost of raw material per ton is Rs.6500/-. The major raw material will be sourced from the cluster itself. In addition, it will be sourced from the districts Madurai, Theni & Sivagangai.

6. 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 User fee.

7. Implementation timeline:

Year II – Quarter II & Quarter III (Total Project timeline is given in Chapter 13)

V) Coco peat disc making facility:

1. Project Description:

Coco peat disc is an eco friendly and bio degradable product. It is an excellent soil conditioner and a high water retention one. Cocopeat disc is most suitable for individual and quick seed germination. These are used in nurseries as a growing medium for plants.

2. Project Justification:

Effective utilization of available raw material resource (coir pith) in Dindigul, Theni, Madurai & Sivagangai districts. This facility is proposed in view of increased export earnings for the cluster.

3. Proposed Machineries & Cost:

S.No.	Machinery Description	Quantity	Total Price (Rs. in Lakhs)
1.	Coco peat disc making machine	1	10.00

4. Installed capacity & Production quantity:

Year	1	2	3	4	5
Installed Capacity per annum (in tons)	90000	90000	90000	90000	90000
Capacity Utilization	60%	70%	80%	90%	90%
Production quantity per Annum (in tons)	54000	63000	72000	81000	81000
User charge realization (Rs. in Lakhs)	5.40	6.30	7.20	8.10	8.10

5. Raw material availability:

The raw material required per ton of output is 1.200 Tonnes. The cost of raw material per ton is Rs.6500/-. The major raw material will be sourced from the cluster itself. In addition, it will be sourced from the districts Madurai, Theni & Sivagangai.

6. 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 User fee.

7. Implementation timeline:

Year II – Quarter III & Quarter IV. (Total Project timeline is given in Chapter 13)

Vehicles for Pith Handling (CFC internal & User units)

As the project is completely pith oriented, the following vehicles are proposed for internal pith handling within the CFC and also for transport of pith from the member/user units.

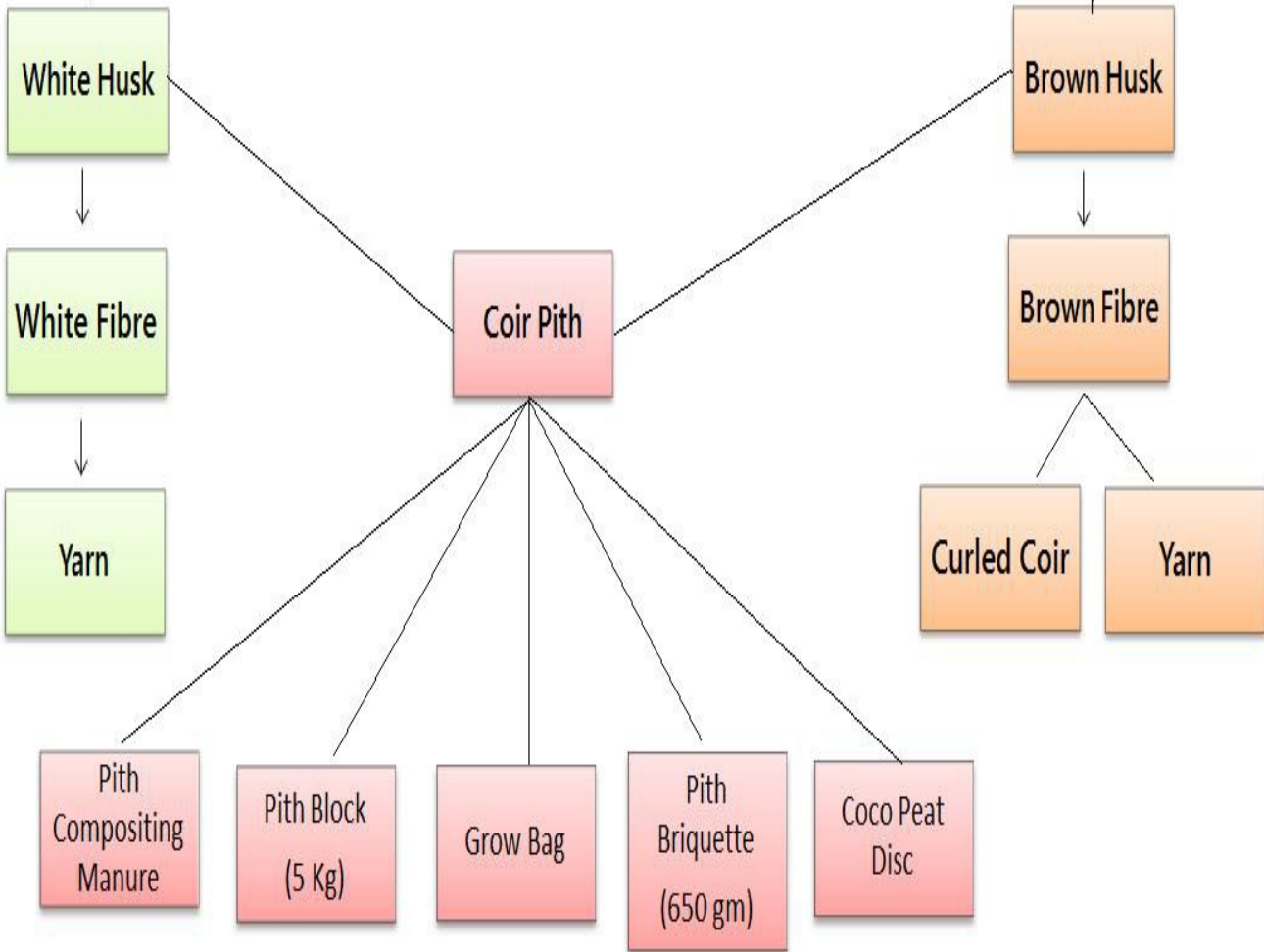
S.No.	Machinery Description	Utility	Quantity	Total Price (Rs.)
1	Tractor	To transport Coir Pith from user units	1	7,95,000
2	Trailer		1	1,50,000
3	Mini tractor	For ploughing dried pith in CFC yard	1	3,15,000
4	Hackler	For hackling the dried pith for further processing	1	25000
		Total		1285000

Since the whole CFC operation is PITH based, the movement of pith is the point of concern as indicated by prospective user units. In order to address the issue, vehicles for transport of pith to CFC is proposed and the transport cost is collected along with the user fee charges for the CFC utilization.



The product range of the cluster after creating common facility centre is shown below:

Coconut Husk



10 PROJECT COST AND MEANS OF FINANCE (Core SFURTI)

The estimated project cost based on the computations of the project interventions and the means of finance for the project is given

below:

Proposed Interventions	Project Cost	GOI Share (Rs.Lakhs)	SPV Share (in lakh)
1 SOFT INTERVENTIONS			
1.1 Capacity Building			
1.1.1 Trust building and motivational programme		1.00	1.00
1.1.2 Awareness Programme		1.00	1.00
1.1.3 Entrepreneurship Development Programme		1.00	1.00
1.1.4 Technology based EDP		2.00	2.00
1.1.5 Skill Upgradation Programme		3.00	3.00
1.1.6 Exposure Tour		2.00	2.00
Total Capacity Building cost		10.00	10.00
1.2 Market Promotion			
1.2.1 Market Study Tour		3.00	3.00
1.2.2 Participation in Trade fairs		5.00	5.00
1.2.3 Buyer Seller Meet		2.00	2.00
1.2.4 Tie up with Business Development Service (BDS) providers		5.00	5.00
Total Market Promotion cost		15.00	15.00
Total Soft Interventions Cost		25.00	25.00

CONTD...

HARD INTERVENTIONS			
2.1	Building for CFC	96.00	72.00
2.2	Machinery & Other infra for Common Facility Proposed		
2.2.1	Baling Press (120 Kgs) facility	72.10	54.07
2.2.2	Grow bag manufacturing facility	53.60	40.20
2.2.3	5 Kg. Pith block making facility	17.60	13.20
2.2.4	650 gm. Pith briquette making facility	24.10	18.08
2.2.5	Coco peat disc making facility	10.60	07.95
2.2.6	Electricals & Accessories (incl. borewells, pumps, etc.,)	15.00	11.25
2.2.7	Vehicles (for pith handling)	13.00	09.75
	Total Machinery & other infra cost	206.00	154.50
	TOTAL HARD INTERVENTIONS COST	302.00	226.50
	TOTAL INTERVENTIONS COST (SOFT & HARD)	327.00	251.50
3	Other Project Components		
3.1	Land Lease (3.22 acres – 15 years lease)	00.50	Nil
3.2	Contingencies, Deposits & Preoperative expenses	10.00	--
3.3	Working capital	12.00	--
	Total Other Project Components	22.50	
4	Cost of TA (8% of Total Interventions)	20.12	20.12
5	Cost of IA/SPV including CDE	20.00	20.00
	TOTAL PROJECT COST	389.62	291.62

11 PLAN FOR CONVERGENCE OF INITIATIVES

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

- 0→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
- 0→Exploring the opportunities for private sector participation in the cluster development project
- 0→Exploring Corporate Social Responsibility (CSR) foundations with proven track record for additional funding.
- 0→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 and the same would be included in the Detailed Project Report.

12 ENHANCED PROJECT COST AND 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.

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	Technology based EDP	I	Q4
1.1.5	Skill Upgradation Programme	I	Q3,Q4
1.1.6	Exposure Tour	II	Q1,Q3
1.2	Market Promotion		
1.2.1	Market Study Tour	II	Q1,Q2
1.2.2	Participation in Trade fairs	II	Q2,Q3
1.2.3	Buyer Seller Meet	II	Q3,Q4
1.2.4	Tie up with Business Development Service (BDS) providers	III	Q1,Q2
2	HARD INTERVENTIONS		
2.1	Land Lease (3.22 acres – 15 years lease)	I	Q1
2.2	Building for CFC	I	Q3,Q4
23 Machinery for Common Facility Proposed			
2.3.1	Baling Press (120 Kgs.) facility	II	Q1
2.3.2	Grow bag manufacturing facility	II	Q2
2.3.3	5 Kg. Pith block making facility	II	Q2,Q3
2.3.4	650 gm. Pith briquette making facility	II	Q3,Q4
2.3.5	Coco peat disc making facility	II	Q3, Q4

Project activity	Year 1				Year 2				Year 3					
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SOFT INTERVENTIONS														
Capacity Building														
Trust building and motivational programme	■													
Awareness Programme		■												
Entrepreneurship Development Programme			■											
Technology based EDP			■	■										
Skill Upgradation Programme					■									
Exposure Tour					■	■								
Market Study Tour						■	■							
Participation in Trade fairs							■	■						
Buyer Seller Meet									■	■				
Tie up with Business Development Service (BDS) providers										■	■			
HARD INTERVENTIONS														
Building for CFC			■	■										
Baling Press (120 Kgs) facility					■									
Grow bag manufacturing facility						■	■							
5 Kg. Pith block making facility							■	■						
650 gm. Pith block making facility							■	■						

Coco peat disc making
facility

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:

Installed Capacity		
a. Coir Fibre baling (120 Kgs.) facility		
Installed Capacity per shift	192.00	No. of bales
Number of shifts per day	1	
Number of days per annum	300	days
Installed Capacity per annum	57600	No. of bales
Charges on User fee basis	Rs. 180.00	per bale
b. Grow bags		
Capacity per machine per shift	3	Tons
Number of machines	2	
Number of shifts per day	2	
Number of days per annum	300	
Installed Capacity per annum	3600	Tons
Charges on User fee basis	Rs. 3,000.00	per Ton
c. Coir Pith Block (5 Kgs.)		
Capacity per machine per shift	6	Tons
Number of machines	1	
Number of shifts per day	2	
Number of days per annum	300	
Installed Capacity per annum	3600	Tons
Charges on User fee basis	Rs. 1,500.00	per Ton
d. Coir Pith Briquettes (650 gms.)		
Capacity per machine per shift	3000	Kgs.
Number of machines	2	
Number of shifts per day	2	
Number of days per annum	300	
Installed Capacity per annum	3600	Tons
Charges on User fee basis	Rs. 2,000.00	per Ton
d. Coco Peat Disc		
Capacity per machine per shift	300	Kgs.
Number of machines	1	
Number of shifts per day	1	

Number of days per annum	300	
Installed Capacity per annum	90000	Kgs.
Charges on User fee basis	Rs. 10.00	per Kgs.
Capacity Utilisation		
- First year	60%	
- Second year	70%	
-Third year	80%	
-Fourth year onwards	90%	
Power Cost	Rs.6.50	per KWH
Repairs & Maintenance	2.00%	of P&M cost in the first year of operation and 20% increase in every subsequent years
Lease Rental for Land (Unit I)	Rs. 2,000	per month in the first year and 10% increase in every subsequent years
Lease Rental for Land (Unit II)	Rs. 3,000	per month in the first year and 10% increase in every subsequent years
Administrative Expenses	1.00%	Of sales realisation
Selling Expenses	2.00%	Of sales realisation

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

Statement 1: Cost of Project and Means of Finance

Statement 1.1: Estimation of Deposits / Advances

Statement 1.2: Preliminary and Preoperative Expenses

Statement 2: Assessment of Working Capital Statement 3:

Cost of Production & Profitability

Statement 4: Assumptions for Cost of Production and Profitability

Statement 5: Calculation of Income Tax

Statement 6: Estimation of Power Cost

Statement 7: Manpower Requirement and Estimation of Cost

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

Statement 13: Sensitivity Analysis

15 PROPOSED IMPLEMENTATION FRAMEWORK

15.1 Role of Implementing Agency

The role and responsibility of the IA includes the following:

1. 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
2. The IA would implement various interventions as outlined in the approved DPR
3. Undertake procurement and appointment of contractors, when required, in a fair and transparent manner
4. The IA will enter into an agreement with the Nodal Agency for timely completion on cluster intervention and proper utilization of Government Grants
5. Operation & Maintenance (O&M) of assets created under the project by way of user-fee based model
6. 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 Small Industries Product Promotion Organisation (SIPPO), Madurai. 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 'DINDIGUL COIR CONSORTIUM PRIVATE LIMITED as per the Certificate of Incorporation issued by Registrar of Companies, Coimbatore dated 22.05.2015. The CIN of the company is U37100TZ2015PTC021408.

15.4 Composition of the SPV

An SPV is formed with 4 members initially and subsequently 18 members have been included. The list of members and office bearers are given below:

S.	Name	Designation	Present Activity
No.			
1	K.Malkar Sayabu	Chairman	Coir Fibre mfg.
2	A.S.Mohamed Usman	Managing Director	Coir Fibre & Pith block mfg
3	M.Sheik Mujipur Rahman	Director	Coir Fibre mfg. & yarn spg.
4	Ks.Senthil kumar	Director	Coir Fibre & Pith block mfg
5	J.Ravindran	Member	Coir Fibre mfg.
6	A.Antony	Member	Coir yarn spg..
7	N.Suriyan	Member	Coir Fibre mfg.
8	P.Mohan	Member	Coir Fibre mfg.
9	N.Vijayan	Member	Coir Fibre mfg.
10	A.Manickam	Member	Coir Fibre mfg.
11	N.Rizwan	Member	Coir yarn spg.
12	M.Syed Mohamed	Member	Coir Fibre mfg.
13	B.Manimegalai	Member	Coir Fibre mfg.
14	M.Aishaa	Member	Coir yarn
15	A.S.Najma	Member	Coir yarn
16	R.Rathimala	Member	Coir yarn
17	S.Shafin	Member	Coir yarn
18	A.Palaniappan	Member	Coir Fibre mfg.
19	Selvarani	Member	Coir Fibre mfg.
20	P.Manikandan	Member	Coir yarn
21	N.Balachander	Member	Coir Fibre mfg.
22	Karthikeyan	Member	Coir pith mfg.

16 EXPECTED IMPACT

- 0→ Unique space in global fibre market, because of price competitiveness due to the establishment of 120 Kg. fibre baling facility.
- 0→ Effective utilization of pith generated from fibre extraction units, resulting in increased cluster earnings by 20 – 25%.
- 0→ Post interventions, the Cluster's export earnings will be increased by 15-20%
- 0→ Expansion of activities by existing fibre extraction units to value added pith based activities, as no additional fixed investment is required for the same, due to the common facility created for manufacture of value added pith based products to operate on User fee charge basis
- 0→ Emergence of more number first generation new entrepreneurs utilizing the CFC, with minimum investment, who purchase the pith, get it converted to value added product on User fee basis in the CFC, and market it globally.
- 0→ Emergence of specialized support service providers and their active involvement in the development process
- 0→ Establishment of new units by converging various schemes of State and Central Governments (such as Coir Udyami Yojana, NEEDS, PMEGP, UYEGP, etc.)
resulting in additional investments in Coir sector by the cluster members
- 0→ Improved access to financial capital for cluster members