CHAPTER 1: CLUSTER PROFILE

1.1 BACKGROUND

The traditional industries in India have rich heritage and was the major sources of income for the rural people. The industry basically stands for its skills and the artisans used the same for their livelihood. With minimum capital investment, the rural poor could earn for their livelihood with this skills. The major traditional industries are handloom, handicrafts, coir, etc.. It was mentioned that more than one million traditional manufacturing enterprises exists in India. Most of them are tiny/micro sector and fall under unorganized sector. The scattered unorganized artisans later formed societies to advocate their needs and submission to competent authorities.

After the industrial revolution, the face and pace of traditional industry has changed. "Capital" became the focal point of industrial development. In most of the traditional industries, technology based, production oriented machineries have come into existence. There were apprehensions amongst the artisans and certain cases it has become resistance. Over a period of time it was experienced that the traditional industries in India is in a fading mode.

After the liberalization, government of India has introduced cluster approach for increasing competitiveness in the industrial sector. The cluster strategy is expected to help the micro enterprises to enhance their productivity as also develop innovative products. Enhancing the technology, the productivity may be increased and thereby increase in their income resulting better way of life. This has also helped a balanced local economic growth.

Government of India during the 11th plan has introduced special scheme for the revival of traditional industries. 100 clusters have been identified under this scheme. Khadi and Village Industries Commission and Coir Board were the Nodal Agencies for implementing the scheme. 26 clusters from Coir sector could get the benefit from this scheme during the 11th plan period.

During 12th plan Ministry of MSME, Government of India has given further impetus and introduced the same under "Revamped Scheme of Fund for Regeneration of Traditional Industries". The scheme has introduced in an on-going process. Entrepreneurship Development Institute of India (EDI) is engaged as Technical Agency for developing DPR and providing support to this cluster in Kerala and Gujarat States.

1.1.1 Coir Industry – An overview:

Indian coir industry is an important cottage industry contributing significantly to the economy of the major coconut growing States and Union Territories, i.e., Kerala, Tamil nadu, Andhra Pradesh, Karnataka, Maharashtra, Goa, Orissa, Assam, Andaman & Nicobar, Lakshadweed, Pondicherry, etc. About 5.5 lakh persons get employment, mostly part time, in this industry. About 80% of workforce is women.

India accounts for more than two-thirds of the world production of coir and coir products. Kerala is the home of Indian coir industry, particularly white fiber, accounting for 47 per cent of coconut production and over 85 per cent of coir products. Although India has a long coastline dotted with coconut palms, growth of coir industry in other coastal States has been insignificant.

Not more than 50 per cent of the coconut husks are utilized in the coir industry, the remaining being used as fuel in rural areas. The development programmes so far undertaken aimed at revitalization of coir cooperatives, improvement in quality and products diversification. Efforts were also made for exploring wider export markets for coir and coir products. Judged from the increase in production and employment, the progress has been rather slow and exports in physical terms have remained more or less static.

1.2 Regional Setting of the Cluster:

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

1.3 Location

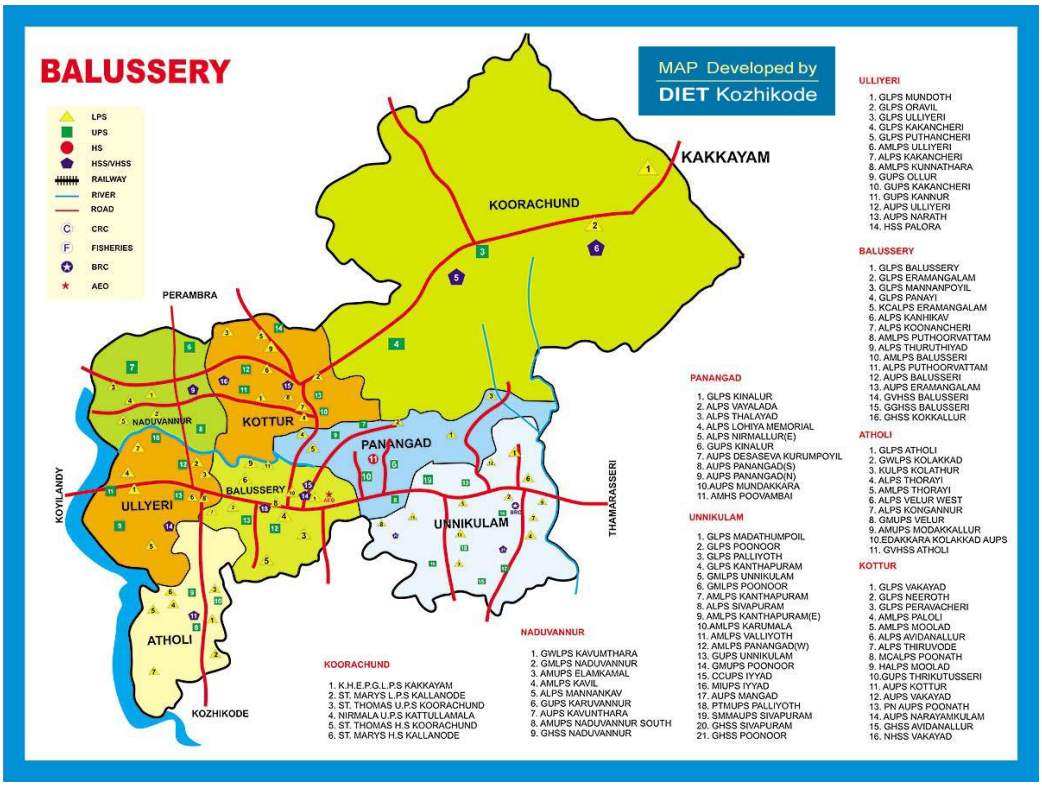
The regional settings of the cluster extend to Koylandy taluk of Kozhikode district and cover the following villages:

1) Atholi
2) Balusseri
3) Koorachundu
4) Kottur
5) Naduvannur
6) Panangad
7) Uliyeri
8) Unnikulum

Kozhikode has highest production of coconut compared to other districts with production of 948 Million nuts. It is the 16.01 percent of coconut production in the state. The major crops in the district are Coconut, Arecanut, Mango and Jack. Also the productivity of Coconut is higher in the district than the state

average. Husk utilization is only about 20%. The husk utilization has to be increased so that more employment opportunities can be created.

In Balusserry block, about 35,000 farmers which includes marginal farmers, grows coconut in about 7,000 hectares. About 12.25 lakh trees contribute annually approximately 6.12 million nuts. After de-husking, the coconut is transported to Tamilnadu, around 50 trucks daily ply between Balusserry and Tamil Nadu with de-husked coconuts. Therefore husk is abundantly available in Balusserry and more facilities are to be created to enable the utilization of more husks.



1.4 Evolution of the Cluster:

The activity in Balusserry was depended on the river banks so that the husks can be immersed in waters for hand-beating later on. Now, only women are engaged in the production of hand spinning yarn from the fine un-soaked variety of fiber. The fiber was sold in the nearby markets known as evening markets, mainly for household and agricultural purposes. In addition to local users, there were some big merchants to collect it from intermediaries and market it in other places. Mats and mattings were also available, but very few players were there even now.

The Balusserry Coir cluster consists of seven Panchayaths where large coconut cultivation is available and about 50 trucks of de-husked coconuts are being transported to other states on daily basis. This indicates the availability of husks. The following are the main constituents of Balusserry cluster:

Sr. No.	Name of constituents	Type
01	Kavunthara Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
02	Vakayad Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
03	Koorachundu Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
04	Unnikulam Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
05	Chelanur Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
06	Kanayamkode Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
07	Mrs. Laila Mani NJ, Nandhalath Coir Products, Phone NO. 9446294977	Entrepreneur
08	Mr.Gangadharan M, Manathanath Coir Works, Naduvannur (PO), Ph 9400788228	Entrepreneur

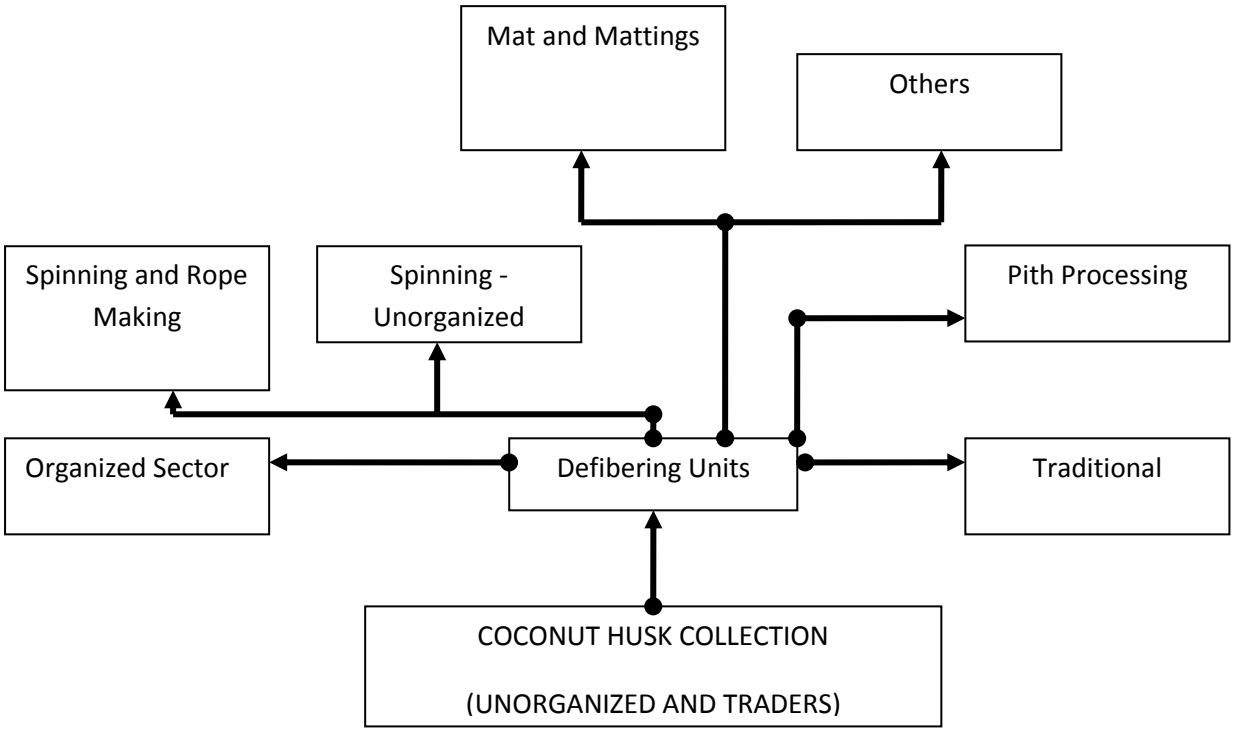
Sr. No.	Name of constituents	Type
09	Mr.RajanIyyad, Deepam Coir Works, Iyyad, Unnipuram, Balussery, Ph 9645309358	Entrepreneur
10	Mr.Soman KM, Grameena Charitable Society, Kavil PO, Naduvannur, Ph: 9447634075	NGO
11	Komathkara Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
12	Viyyoor Samyojitha Coir Vyvasaya Sahakarana Sangham	Society
13	KayannaSamyojitha Coir Vyvasaya Sahakarana Sangham	Society
14	Pratheeksha Coir Training Centre, Atholi	Entrepreneur
15	Samabhavana Coir Trading Centre, Naduvannur	Entrepreneur
16	Nenma Soyam Thoyyil Unit, Narikkuni	NGO

The cooperative societies have an average of 51 employees and the private units together have around 200 workers. More units will be brought into the umbrella as the stakeholders are trying to enrol units from surrounding areas, including the husk suppliers, transporters etc. The cluster is having more than 600 workers. The current turnover of the cluster is around Rs. 50 lakhs.

Currently, the following machineries/rats are available in Balusserry Cluster:

a) Ratts 100 nos
b) Mini DF Machine 1 no
c) Frame mat 3 nos
d) Motorized ratts 25 nos

The typical cluster map is depicted below:



1.5 Demography and Growth Trends

BARE FACTS	
District	Kozhikkode
Area (in sq.km.)	2344
Population	2,878,498
Males	1,398,674
Females	1,479,824
Sex ratio : Females/1000	1058
Density of Population	1228
Per Capita Income (in Rs)	18105

Literacy rate	92.45%; Male 96.30%; Female 88.86%
Coastal line in km.	71
Water bodied area in ha.	4,400
Forest area in ha.	41386

1.6 Socio-economic Aspects

More than 52 per cent of the total population depends on agriculture for their livelihood. Agricultural labourers constitute 48 per cent of the total labour class. Large scale industries are not established in the district. Most of the people are engaged in low remunerative pursuits which require very little capital. Political and social consciousness, coupled with the efforts of the social, religious and cultural leaders, have helped considerably pull down the age-old feudal order. Economic changes have also affected the social life and attitude of the people.

1.7 Human Development Aspects

As of 2013, Kerala has a human development index (HDI) 0.0790 which comes under 'high' category and it is the highest in the country. Comparatively higher spending of the government in primary level education, health care and alleviation of poverty from the 19th century onwards has helped the state to maintain the an exceptionally high HDI.

1.8 Key Economic Activities of the Region

Industrial Scenario of Kozhikode

Kozhikode District was once the capital of the powerful Zamorins and a prominent trade and commerce Centre, Kozhikode was the most important region of Malabar in the days gone by. Today, lush green countryside, serene beaches, historic sites, wildlife sanctuaries, rivers, hills, a unique culture and a warm, friendly ambience make Kozhikode a popular destination. Kozhikode District found a place in the World History with the discovery of Sea Route to India in 1498 by the Portuguese Navigator Vasco Da Gama. Kozhikode is a historical town with a hoary past. The following are the industrial scenario of Kozhikode:

Sl. No.	Particulars	Numbers
01	Heavy industries	7
02	Industries as on 31/03/14	159
03	Investment in Plan and Machinery (in lac)	91239
04	Employment generated	76762
05	Development Plots/Areas	6
06	Mini industrial estates	12
07	Developed Industrial Areas	83
08	Handloom societies	32
09	Coir Societies	54
10	General Industrial Societies	19
11	Handloom clusters	3
12	Industrial clusters	3
13	Medium scale industries	12

1.9 Infrastructure – Social, Physical, Financial and Production – Related:

The location is well connected with main roads and national high ways. The nearest airport is Karipur International Airport and the there are two nearby railway stations, namely, Kozhikode and Quilandy. The premier agency of coir sector is Coir Board in Kannur.

The district has fairly extensive road network. The length of national highway, state highway and major district roads in the district are furnished below:

Road	**Length (in Kms.)**
National Highway	129.5
State Highway	333.548
Major District Road	2033.934
Total	**2496.982**

National Highways run almost parallel to coastal line linking to head quarters of 3 Taluks namely Kozhikode, Koilandy and Vatakara.

Railways

The district has 75.48 Kms. broad gauge railway lines with 18 stations in the district. Railway plays a crucial role in the passenger as well as goods traffic in the district.

Airport

Karipur International Airport is only 26.5 Kms away from the city. Now flights are operated from Kozhikode to Middle East countries. In the near future, Kozhikode will regain the past glory through the expansion of Calicut Airport as the doors of international trade are being opened.

Port

Beypore is located in Kozhikode at the mouth of the Chaliyar River. Historically, it has a special place as being one of the prominent ports and fishing harbours, and was also an important trade and maritime centre during the days of the early Arab and Chinese travellers and later the Europeans. Soon after gaining prominence as a port and trade centre, Beypore slowly began to flourish as a centre for shipbuilding, since ships were in great demand merchants from Western Asia. The shipbuilding yard at Beypore port is famous for its traditional construction of the Uru or the Arabian trading vessel. This tradition of shipbuilding is nearly 1,500 years old, and the craftsmanship of the workers here is exceptional.

CHAPTER 2: CLUSTER PRODUCT AND PRODUCTION PROCESS

2.1 Product Profile:

At present the main cluster products are:

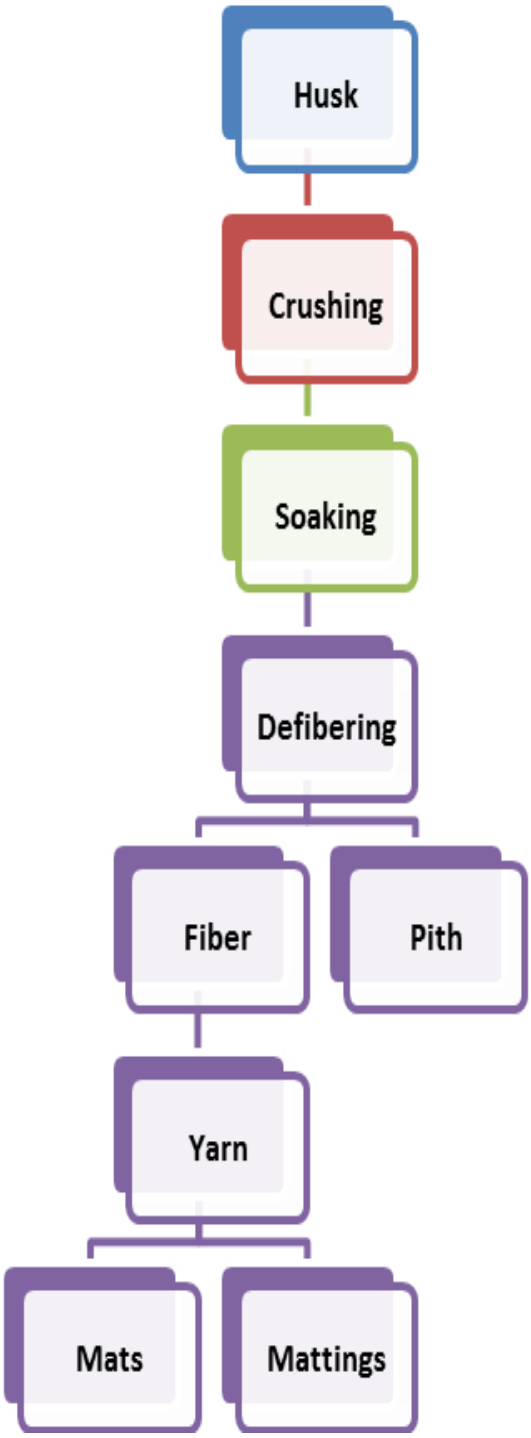
1) Fibre
2) Yarn
3) Mat and mattings.

After the intervention the following products will be available in the cluster.

- Fiber
- Pith Compost
- Yarn
- Garden Article
- Coir Ornaments
- Mat & Mattings

2.2 Production Process:

Process flow chart



a) De-fibering:

i) Traditional method:

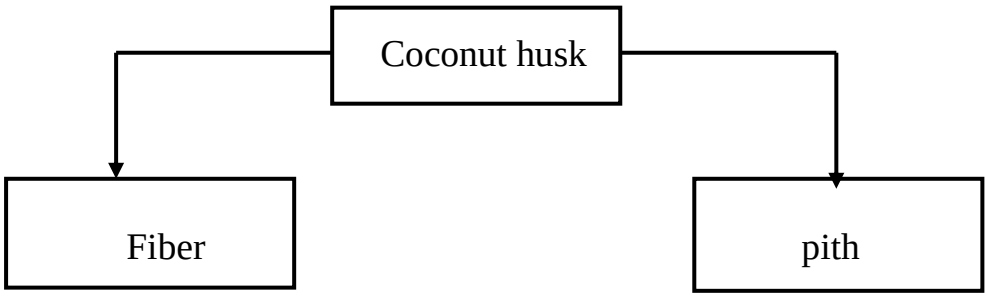
The traditional method of producing coir is by immersing green coconut husk in brackish waters for 10 - 12 months for retting, taking out of the retted husk and beating the same manually with wooden mallets to extract the fiber, cleaning the fiber by beating with sticks. The traditional husk retting, fiber extraction and spinning operations are carried out in the most unhygienic conditions. Because of unhygienic process and the drudgery involved in the traditional fiber and spinning, the younger generations are reluctant to take up work related to coir industry. The traditional retting process is also a source of pollution to the rivers and lagoons; environmental consciousness will be another deterrent factor in the expansion and even for continuance of the traditional coir manufacturing process. With this traditional retting, white fiber may be obtained.

However, this kind of extraction yields the highest quality of white fiber for spinning and weaving. Retted fibres from the green husk are the most suitable fibres for dyeing and bleaching.

ii) Mechanized process:

The coir industry has been undergoing various modernization process aimed at dispensing with the polluting retting process. Mechanized defibering process has replaced the traditional one considerably. In this process, the brown fiber will be received.

The products obtained from this process is fiber and coir pith.



b) Coir Pith Manure:

From the husk, the ratio of pith and fibre is 2 :1. The pith was a waste for a long time. However, the advancement of coir research, this waste has been converted to value added products. Pith block has good export potential, whereas pith compost is an organic manure, used extensively by the horticulture department.

Manure

c) Coir Yarn:

The Coir yarn spinning process involved the following process:

- Willowing
- Slivering
- Spinning
- Winding (figure)

The yarn from the fiber can be spun in the following ways:

i) Hand spinning

The usual practice in hand spinning is to roll the fiber into short length of 6 to 9 inches, giving a clock-wise twist by hands. When a sufficient quantity has been made, two of these short lengths are taken in hand together and made into yarn of two plies by giving a counter twist, using both palms. When the counter twist reaches near the end of the striking, further pieces of short lengths kept ready are added one after other, while the counter twist by hand is continued till the required length of yarn for a knot is reached. This is reeled in the form of a hank and a knot is made at the end. Hand spun yarn always has a soft twist.

ii) Traditional 'Ratt' spinning

Spinning is usually done on the 'charka' or spinning wheel. Wheel spinning is gradually displacing hand spinning. From the middle of 19^{th} century, coir spinning wheels have been introduced with a view to increasing production and obtaining the hard twist required for the manufacture of matting, etc.

To prepare two ply coir yarns on the spinning wheel, one set of two wheels, one stationary and the other movable is required. The stationary wheel usually contains two spindles set in motion through the centre of the wheel. The movable wheel contains one spindle only. Two persons take the silvers of ‘coir’ prepared and kept ready after willowing.

iii) Motorized Traditional Ratt

Motorized Traditional Ratt is a developed form of a coir spinning 'charka'. Here, the stationary ratt is rotated using a suitable contrivance attached to an electric motor. By attaching the rotating system to the stationary ratt one worker is avoided and the productivity is increased. The wages thus earned are divided among the two workers resulting in enhancement of wages of spinners. This system has been introduced recently and found successful in the industry for spinning all varieties of yarn.

iv) Motorized Ratt

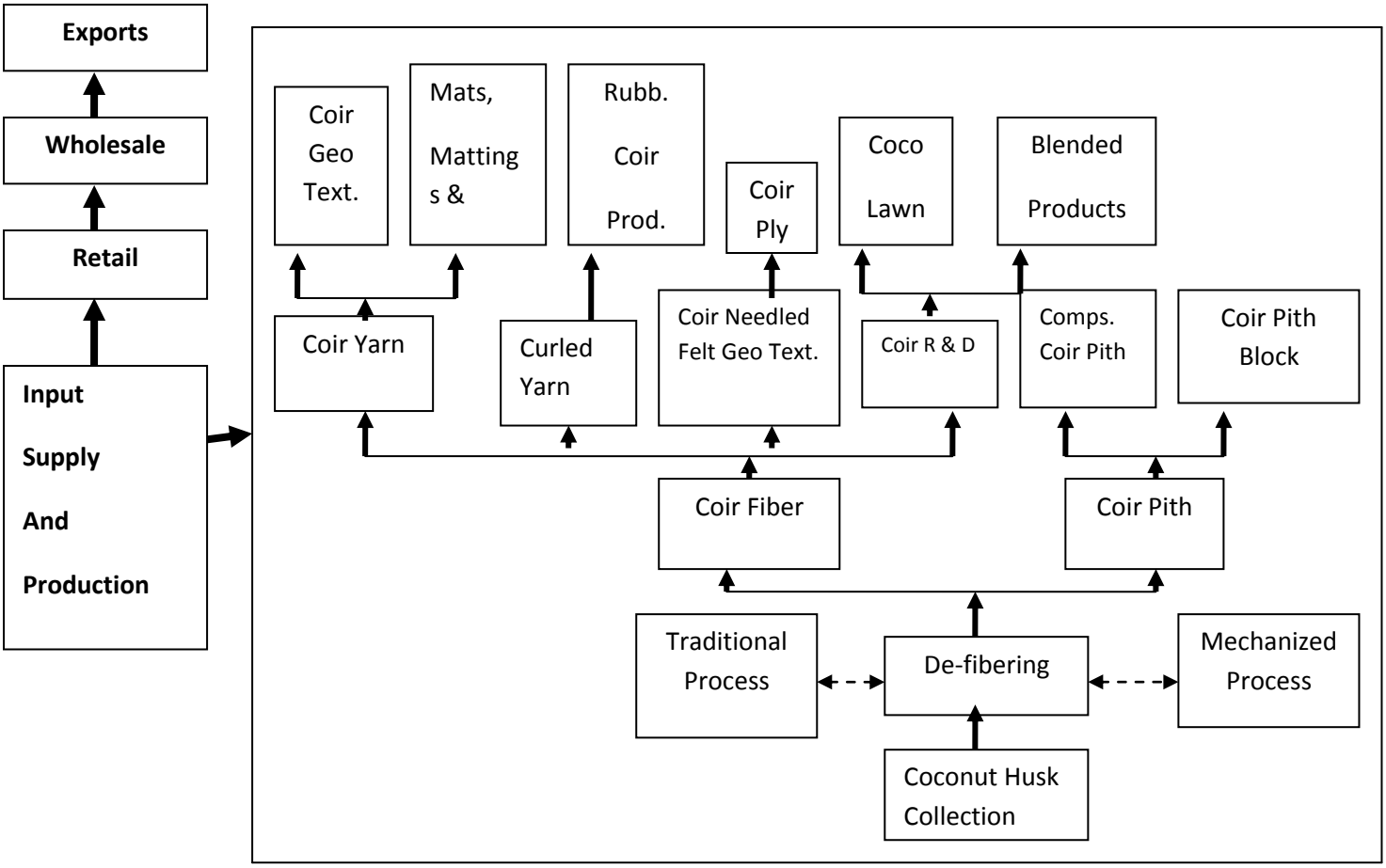
The research and development in coir industry was mainly aimed for reducing the drudgery of the workers involved in the spinning of coir yarn on traditional and motorized traditional ratt. Two or three spinners are engaged for exercising the production activity in yarn spinning, where they are exposed to changing weather conditions, which ultimately affects the production. They are also forced to walk up and down in the spinning yard for taking the individual strands and for doubling operation.

It was a long-time dream of the coir industry to introduce a contrivance for reducing the drudgery of the labourer and improve the productivity and also enhance the earnings of the workers engaged in the spinning. As a result of research and development, a spinning device for attaining the real goals of reducing the drudgery, improving the productivity and to improve the working environment, the motorized ratt was introduced in the industry.

v) Automatic Spinning

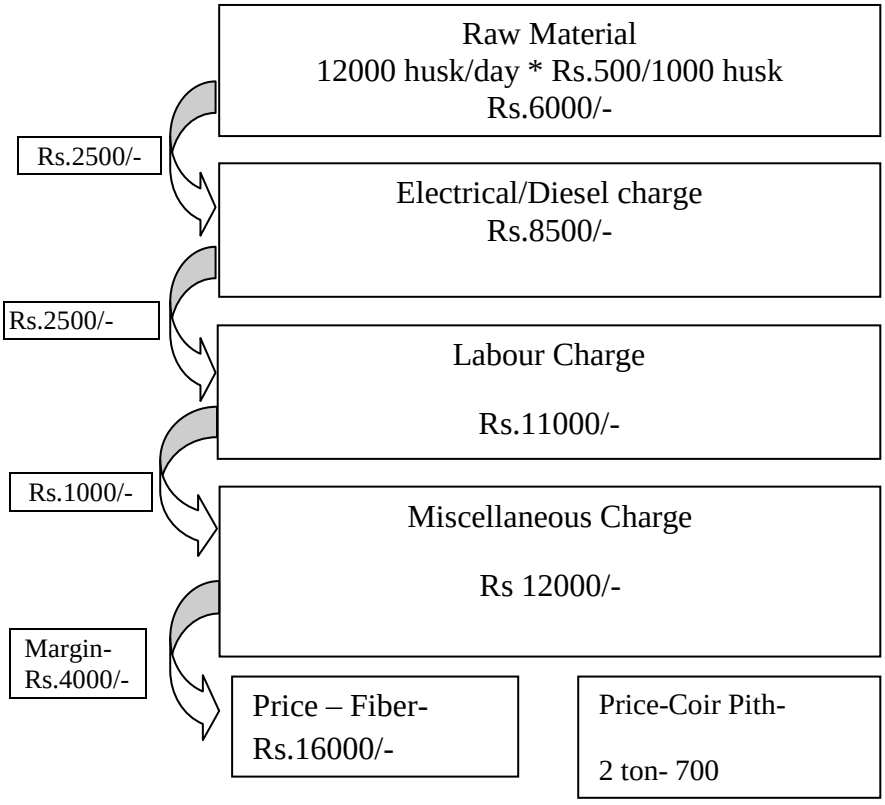
The production turnover in the case of hand spinning was less. The efforts to maximize the productivity of the yarn resulted in the introduction of automatic spinning machine units.

The sector map of coir industry may be depicted as under:

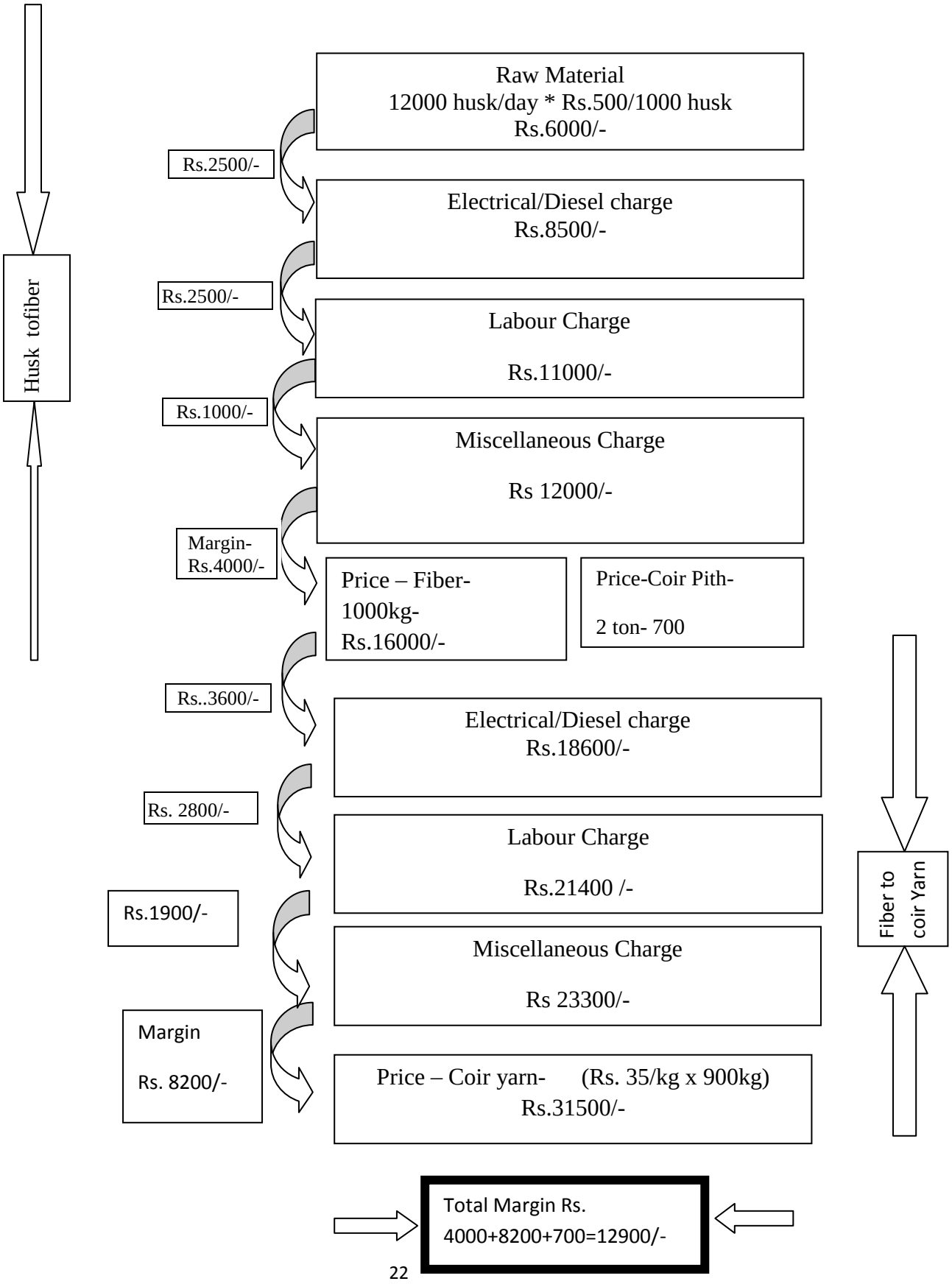

Exports
Wholesale
Retail
Input
Supply
And
Production
Coir
Geo
Text.
Mats,
Matting
s &
Rubb.
Coir
Prod.
Coir
Ply
Coco
Lawn
Blended
Products
Coir Yarn
Curled
Yarn
Coir Needled
Felt Geo Text.
Coir R & D
Comps.
Coir Pith
Coir Pith
Block
Coir Fiber
Coir Pith
Traditional
Process
De-fibering
Mechanized
Process
Coconut Husk
Collection

2.3 Value Chain Analysis

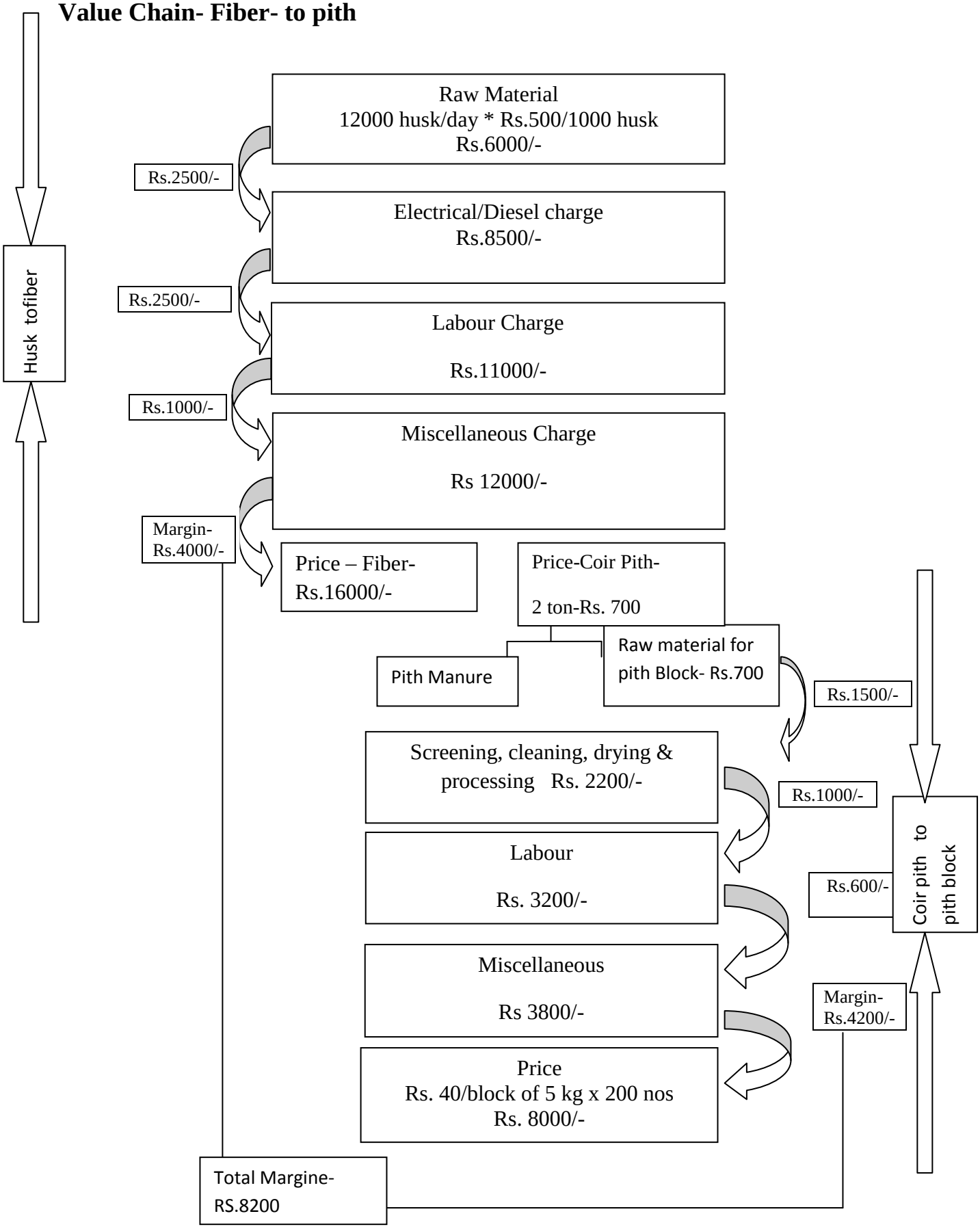
Value Chain- Husk to Fiber



Value Chain- Husk to Coir yarn

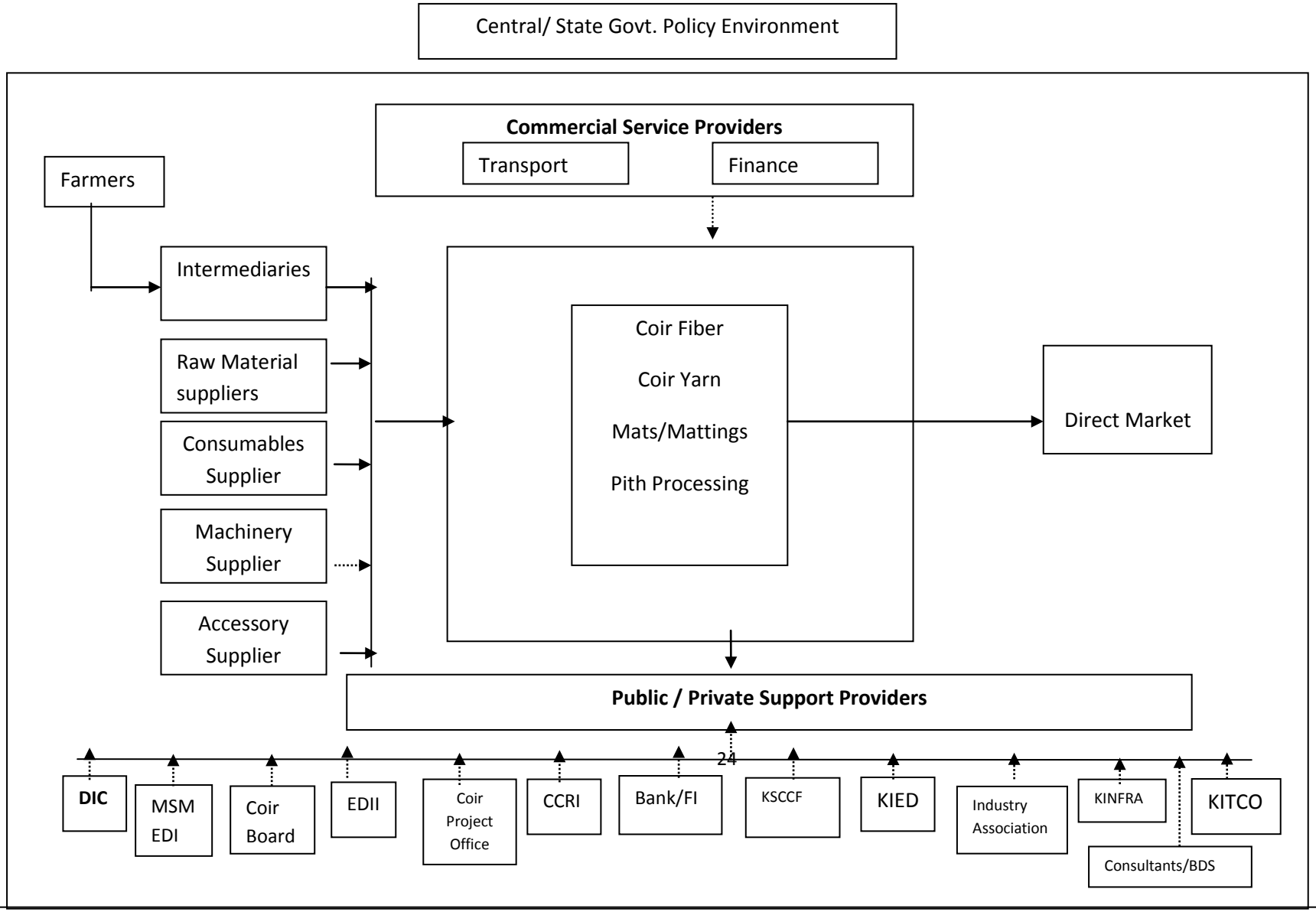


Value Chain- Fiber- to pith

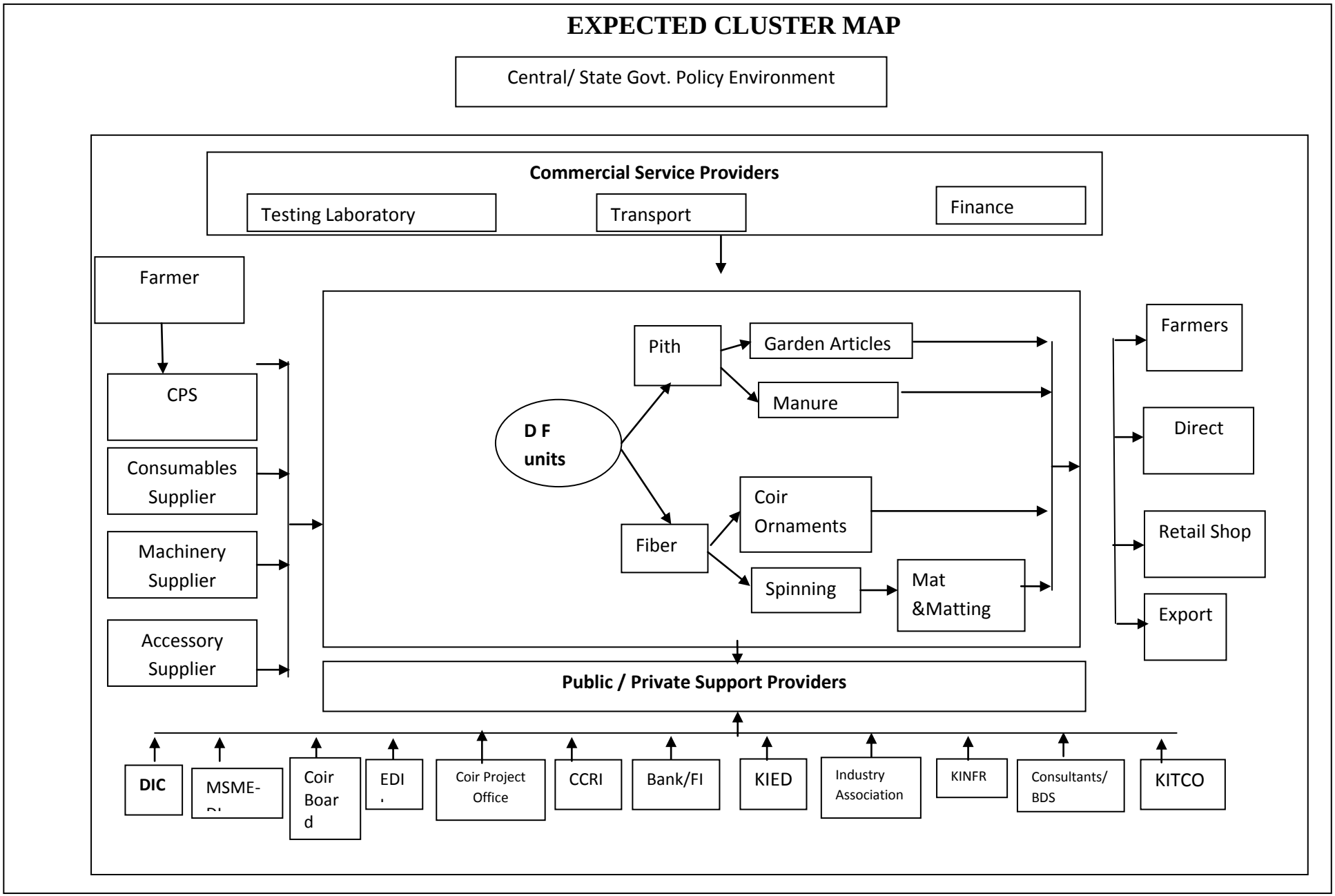


2.4 Cluster Map – highlighting backward and forward linkages

PRESENT CLUSTER MAP



Cluster Map After Intervention



Plan for Backward and Forward linkage for strengthening the Balusserry Cluster

Backward Linkage

a) Strengthening Coconut Producers Society (CPS) : Eefforts have to be initiated for producing sufficient fibre in the cluster. In view of this, the CPS formed and controlled by Coconut Development Board can be strengthened. By ensuring the husk collection, new entrepreneurship on coir defibering can be promoted in Balusserry cluster area. This will be done through arranging the coconut climbers and scheduling, arrange facilities for timely de-husking the coconut, providing pith manure, help the farmers to establish micro units for producing vinegar from coconut water and chips.

b) Install mobile de-fibering units at CPS level

c) Engage Kudumbasree /Janasree/ SHGs for collection of husks

d) Promote private entrepreneurs for collection of husk and de-fibering.

Forward Linkage

e) Providing training to artisans (in association with Kudumbashree and Women Development Corporation) on making coir ornaments, garden articles, etc. Provide marketing support to the artisans in association with Rural Development Department, as they are doing exhibitions. Also explore the possibility of marketing with the help of Tourism department.

f) Promote private entrepreneurs to start units in value added coir products using cluster raw materials.

g) Provide organic manure to the farmers at subsidized rate

h) Sufficient tie ups can be made to export the products

i) Tie ups with inter-state departments marketing network to sell coir products through their network

2.5 Principal Stakeholders

The main stakeholders of Balusserry Coir Cluster are societies and private units from in and around the Balusserry block. There are about 9 co-operative societies and many private units operating in different level of coir sector. In addition, there are micro units and household units which are in unorganized sector.

There are about 600 artisan members involved in the cluster on day to-day basis and majority of them are women from socially backward section.

Business Development Service Providers

A number of public/private support institutions are available in the cluster.

a) Machinery Suppliers

Currently the stakeholders are approaching the Palakkad based manufacturers for necessary machineries. Modernization of machineries is a very slow process. An awareness exercise is to be carried out to get a better option for stakeholders. Research and development works has to be executed for modernization of machineries.

b) Coir Board Kochi/Kannur

Coir Board's presence with a regional office in Kannur is very advantageous for this cluster. Coir Board provides financial, market development, skill training assistance for the development of coir industry and extends the financial 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.

c) District Industries Centre

This Kerala government organization helps existing and potential entrepreneurs from all walks of life and sectors. DIC is equipped with Entrepreneurs Guidance Cell to guide the entrepreneurs. In addition to this, there are several schemes of state and central governments directed through this organization. The Kozhikode Coir Project office functions within the campus in close coordination with DIC,

d) Kerala State Co-operative Coir Marketing Federation (Coirfed)

COIRFED, an Apex Federation of Cooperative Societies engaged in the manufacture of coir and products is entrusted with the task of marketing the products of the cooperative societies. It aims the sustenance of coir workers, especially women. The mission of COIRFED is to eliminate middlemen and provide better services to cooperatives. Presently, more than 620 societies, all over Kerala, are affiliated to this organization.

The product range of Coirfed include fiber, pith funus, pith soil condition, 80 odd varieties of coir yarn, geo-textiles, alluring range of coir products like mats, mattings, rugs, coir tiles and rubberised coir products like mattress, pillows, PVC tufted mats, briquettes, garden materials like pots, climbers etc.

e) Commercial banks and micro finance institutions

The stakeholders are having linkages ranging from Co-operative to Nationalized banks. Almost all the nationalized banks, designated cooperative banks have branches all over Kozhikode and Balusserry areas.

2.6 SWOT Analysis

Strength

- Good transport link, rail, road and air.
- Abundant availability of raw material
- Direct market facility and door to door delivery
- Low investment with high employment
- Govt. assistance through the Coir Directorate, Govt. of Kerala
- Market can be expanded as an eco-friendly product, for export market

Weaknesses

- No value added products
- Low credit facility due to inability of stakeholders to provide collateral security and margin for working capital
- Lack of linkage and trust among important stake holders
- Lack of awareness in technical and managerial knowledge
- Gaps in linkages among cluster stakeholders

Opportunity

- Natural product and eco-friendly hence acceptable to even developed market
- Availability of govt. schemes like SFURTI, soft credit etc.
- Willingness of entrepreneurs for associating in the scheme and hence share beneficiary contribution can be mobilised

Threats/Challenges

- Due to mite disease broken fibers and very difficult to maintain quality of fiber/yarn
- Competition from countries like Sri Lanka, Philippines, Bangladesh and Vietnam
- Absence of modernization, technology up-gradation

CHAPTER 3: MARKET ASSESSMENT AND DEMAND ANALYSIS

India is one of the top producers and exporters of coir in international market. The Indian Coir Products are in great demand in the international market because of their special attributes like fitness, price, craftsmanship, quality, attractiveness and Eco-friendly, biodegradable renewable natural resources, non-pollutant, usage of the product is up to the expected level when compared to plastic and other environment pollutant item. Even India is one of the leading exporters it could not top the list and there seems to be several reasons for India's unsatisfactory and poor performance in Coir and coir products exports.

The trend in the overall volume of sale of coir and coir products significantly changed from the sixties when more than 50 percent of the production used to be exported. Presently the domestic consumption has increased significantly to absorb about 85 percent of total production. While export volume has been increased the domestic market has became much more prominent.

Coir products face stiff competition in aboard especially from products exported from other coir producing countries and other natural and synthetic products like jute, sisal, abacca, rubber, PVC etc. Vigorous promotional efforts are to be undertaken to sustain the existing markets and to enter into the new markets. The high incidence to freight on the FOB value of export from India renders the products often uncompetitive in price sensitive markets. A wide range of coir and coir products are exported from the country. These inter alia include coir yarn, coir pith, coir fibre, coir rope, coir rugs, handloom mats, handloom mattings, power

loom mats, rubberized coir, curled coir, coir geo-textiles and coir other sorts.

Kozhikode is the highest coconut production district in Kerala. As a result the presence of coir industry is prominent in this district. But like, Alapuzha, Kozhikode has not gone for value added products. However, the potential of this industry is very high as the availability of basic raw material. Coirfed, the State Government agency supporting coir industry in Kerala is doing efforts to promote the industry both national and international level. They have 27 show rooms at national level in addition to the State level ones.

The cluster will be using following marketing strategies:

Fibre

It is expected to produce 240 Tons fibre from the cluster on a single shift basis. Of which 156 Ton will be used for the facility available in the cluster (12 automatic spinning machine). The remaining will be sold to societies and private entrepreneurs in the cluster. There are 9 societies and 5 private entrepreneurs as well as two NGOs. With the balance fibre, the cluster can provide productive employment to 50% of its society members. It indicates that the utilization of produces fibe will not be a problem.

Coir Yarn:

- There are two mat making units in the clustr, viz. Deepam Coir Industry as well as Grameena Seva Trust. Both are situated in Balusery Coir cluster
- Coirfed, Government of Kerala is the major purchaser of coir in Kerala. Cluster will use their net work for marketing the product
- In the Balussery block and nearby areas, it is estimated that there are 35,000 families involved in farming. Kerala is now moving to organic cultivation by using eco-friendly materials. This will pave avenues for utilization of coir in the cluster.
- Government of Kerala promoting vegetable cultivation through school children. For certain vegetables like bitter gourd , snake gourd, etc. one need coir. Hither to people were using alternate materials like plastic. This will be avoided by creating more awareness to students/farmers.
- Domestic marketing will be done through retail shops, Kudumbashree SHGs, members of the societies, through schools, etc.
- Agriculture and horticulture departments in the district will be approached for consumption.
- Through cluster net work. EDI is doing SFURTI clusters in Kodungallur (Trichur) and Haripad (Alapuzha). Networking with these clusters Balussery can sell their products.
- There are private entrepreneurs who are manufacturing value added products. The cluster will explore their requirement and do the tie up with them.

Coir Pith:

Pith will be converted to compost and the same will be marketed by using the above channels.

Further discussions have been held with State Agricultural Management and Extension Training Institute, Trivandrum and Krishi Vignan Kendra (KVK) for using eco-friendly materials and bio-fertilizers for cultivation throughout Kerala.

Garden articles:

Garden articles will be sold using the following channels :

The trend for gift articles will always be based on custom, taste, preference, culture etc. As such when we produce a variety item like garden articles, we propose to use it with ***'gift value'*** along with environmental love. Once this strategy is materialized the cluster will try to focus mostly on domestic market

Software professionals at Calicut : Calicut is the emerging IT Centre in Kerala. These professionals are following highly socialized way of life. This will encourage various celebrations. Cluster will promote providing organic gifts such as "green garden articles" during this occasion. This will lead to a different culture.

School Students: We also propose the birth day celebrations or similar occasions to be graced with presents garden articles. Once students accepted the concept behind the need of using green items, environmentally sensible students will accept it wholeheartedly.

Kudumbashree net work : Kudumbashree had a strong net work in Kerala. This NHG women will be used for marketing the products.

Using existing traders: Use the channel of existing traders, who are in the field of selling gift articles. Calicut marketing is having more than 100 such traders.

Coir ornaments and handicrafts: The same will be sold through Kudumbashree net work, existing traders, local level exhibitions. ,etc.

In short marketing will not be a major problem for the cluster products.

CHAPTER 4: SWOT ANALYSIS AND NEED GAP ANALYSIS

A threadbare discussion with various stakeholders of the cluster helped us to understand the limitations and dynamics of the cluster with more clarity. Following are the major observations on the cluster.

Strengths:

Kozhikode district, where the cluster is located, is a coconut growing district. The availability of husk in this area is about 9480 lacs nuts. Hardly 5% of the husk is utilised for productive purpose. The fibre produced in this area is of best quality and its value added products will encash better results. Since the traditional retting has been stopped due to pollution problem, the cluster was experiencing shortage of fibre. Availability of skilled man power is other important strength of the cluster. The major cream of the coir industry is the spinners, where employment opportunity is high with low investment. The cluster is having more than 1000 active artisans involved in spinning segment.

Weakness:

The utilisation of raw material for productive purpose is very less, due to inadequate defibering facility. The cluster is depending on outside fribre. The level of technology as very old and as such the production cost is high. The cluster need product diversification, such as coir ornaments, handicrafts, garden articles, etc.

Opportunity:

Coconut Board has initiated Coconut Producers Society at local level. These societies are working for the betterment of coconut farmers. With the help of these societies, the cluster can develop a conducive mechanism in husk collection. Government of Kerala has been putting lot of efforts for the revival of the cluster. New schemes have been enunciated by them in the budget. The market for eco-friendly products have been increasing rapidly at national and international level.

Coir pith has enough market potential at national and international level. Pith was exporting by making blocks. However, now the same has been considered as organic manure at national level. Therefore it has enough market potential. Garden articles are basically used for the beatification of officers, houses, etc and also have enough market scope. Coir ornaments and handicrafts have good market potential. Market scope for tufted mat is very high and shows rapid growth in export. National level also the demand is increasing.

Threats:

The technology is highly influencing the price structure. If effective mechanism is used for production that will cause for cost escalation as well as in pricing pattern. Lack of continuous electricity may create havoc if high end machinery installed for production. The State like Kerala is highly alerted on environmental degradation and the process could be tampered, if proper mechanism and sensitization is not carried out.

Need Gap Analysis:

a) As per the statistics of Coconut Board, the production of coconut in the envisaged cluster area is 9480 Lakhs nuts per year. However, the utilization of husk is estimated to below 10%. The major problems perceived in this context are small land holding, irregularity of the coconut plucking, inadequate system for collection of husks from the farms, etc.

b) Product diversification is not employed in the cluster. The cluster is making only coir yarn. There is a need to diversify the activity and go for marketable value added products.

c) Due to the slackness in the market, the cluster is facing working capital problem, affecting the employability condition, which further resulted negatively in the growth of the cluster. The cluster therefore required to produce value added products so as to increase the demand of coir in the optimum level.

Based on the need gap assessment, it is suggested to have an integrated coir processing unit consisting defibering, spinning, pith compost making, garden articles, coir ornaments/handicrafts, etc.

Considering the above, the major intervention in the cluster will be:

a) Strengthening Coconut Producers Society (CPS) : This will include arranging the coconut climbers and scheduling, de-husking the coconut, providing pith manure, help the farmers to establish micro units for producing vinegar from coconut water and chips.

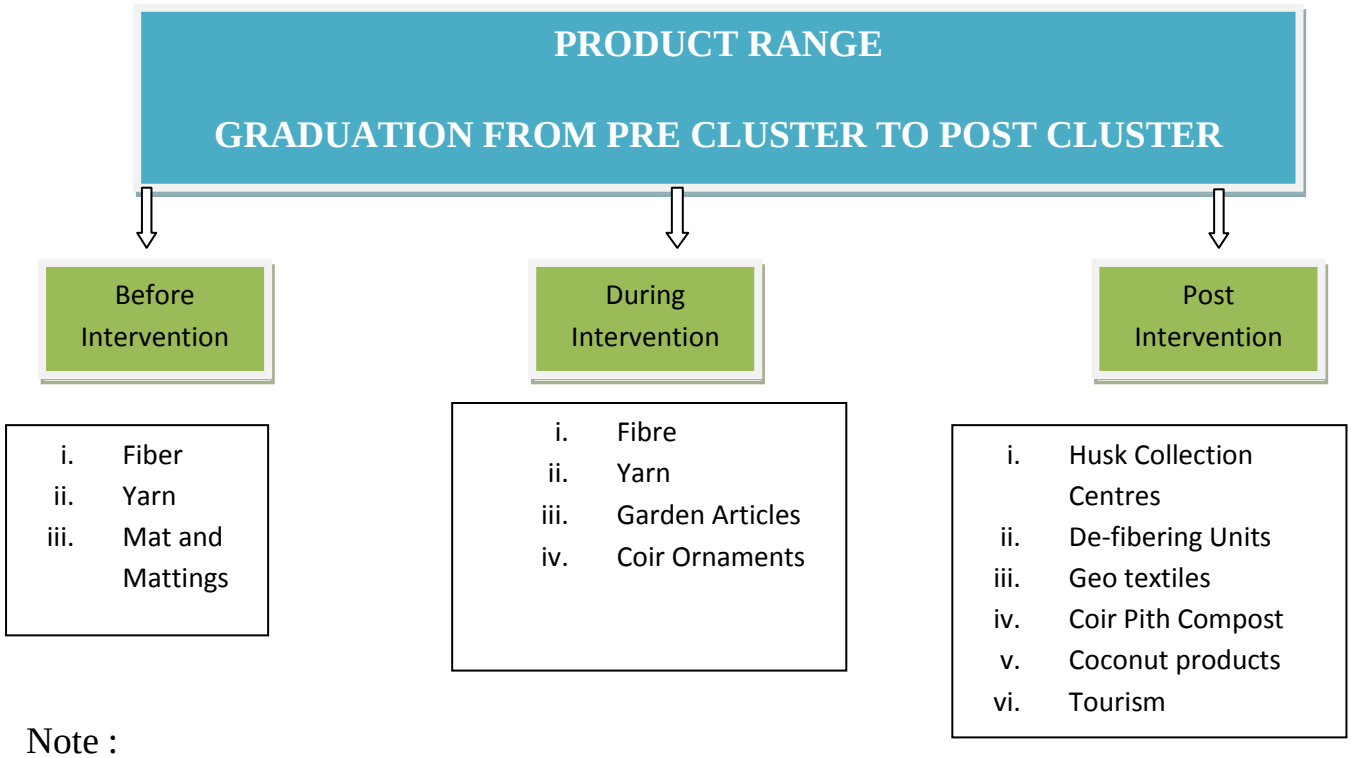
b) Providing training to artisans (in association with Kudumbashree and Women Development Corporation) on making coir ornaments, garden articles, etc. Provide marketing support to the artisans in association with Rural Development Department, as they are doing exhibitions. Also explore the possibility of marketing with the help of Tourism department.

c) Making pith compost. This will be marketed to members of the CPS as well as through agriculture department.

d) Establishing a production facility for de-fibering and automatic spinning in the cluster. Once the intervention is over, the cluster will have following benefits

- Strengthening the CPS and value addition to farmers for starting high capacity DF units
- Develop micro units for making coconut products in association with Kudumbashree
- Establish mobile defibering units with the help of Coir Directorate
- Value addition in coir pith by making compost and garden articles
- More employment opportunity for artisans (especially spinners)
- Training artisans to product coir ornaments, coir handicrafts, etc. as also arranging marketing support through various departments like Rural Development, Kudumbashree, Tourism, etc.
- Production centre for conventional products like mat/mattings, geo textiles, etc.

Product range



Note :

- Products mentioned before the intervention is currently being produced items in the cluster
- The product range mentioned 'during the intervention' is to be produced within 3 years by SPV under project funding
- Products range mentioned 'post intervention' is to be produced from the synergy of cluster intervention at other funding.

CHAPTER 5: PROFILE OF THE IMPLEMENTING AGENCY

Profile of the Implementing Agency (IA)

I	**Institutional Structure/ Registration Details**					
1	Legal Status	Society (Under Societies Registration Act1860)				
2	Date of Incorporation/ Registration	404/ 2009 Dt: 16-09-2009				
3	Registered Address	Technology Business Incubator National Institute of Technology Calicut NIT Campus P.O Kozhikode - 673601				
4	Office Address/ Locations	Technology Business Incubator 2nd Floor, Administrative Block National Institute of Technology Calicut NIT Campus P.O Kozhikode – 673601 Phone: 0495-2286147				
5	Affiliated to coir Board	No				
II	**Governance Structure**					
6	Composition of the Executive Board/ Trustees/ Governing Body/ Managing Committee and Back Ground of Members					
	Constitution of Executive Committee (Enclosed as Annexure I)					
	Constitution of Board of Governors (Enclosed as Annexure II)					
7	In case, IA is registered under Companies Act , provide share holding pattern	Sr. No	Name of Member	Back Ground /profile	Share Holding (%)	
		Not Applicable				
III	**Operational Profile**					
8	Major Objectives – Vision, Mission, Goal of the Organisation	i) To create technological awareness and consciousness in existing Micro, Small and Medium Enterprises(MSMEs) ii) To support and nurture new enterprises iii) To develop new tools of technology				

		transfer and to foster the entrepreneurial spirit iv) To facilitate speedy commercialisation of R&D Outputs and technologies developed v) To provide assistance to existing MSMEs by way of specialised services. vi) To have incubatees, and to provide financial assistance by way of loan/grant/donations for the development and implementation of innovative projects, and for equity participation in their ventures. vii) To act as catalyst between any Government/Quasi Government Departments for the development and implementation of innovative projects of the incubatees
9	What are focus Areas of operation	Development of Small Scale Industries
10	Provide Key projects/ Activities being under taken by the IA-Brief description including the project scope, size and duration (mention specific experience in the area / sector of the proposed project)	1. Support for Entrepreneurial and Management Development of SMEs through Incubators – Ministry Of MSME 2. Technology Incubation & Development of Entrepreneurs (TIDE) scheme - Ministry OF Communication and Information Technology 3. Seed Support System for Start-ups in Incubator – Technology Development Board (DST) 4. Entrepreneurship Development Programmes sponsored by DST**etc.**
11	Mention Key Clients/ donors/ Associated with for project implementing along with details on the nature of Association	47 start ups – provided them technical, managerial and financialassistances

12	Mention key partnerships / Alliances (if any)	1. Ministry Of MSME – Incubation of start ups 2. Ministry OF Communication and Information Technology - Incubation of start ups 3. Technology Development Board (TDB-DST) – Seed Funding to start ups 4. National Science and Technology Entrepreneurship Development Board (NSTEDB-DST) - Incubation of start ups
IV	**Management Profile**	
13	Back ground of key personnel (Professionals and others) with brief profile of the senior management personnel	Dr. Abraham T. Mathew (Professor, Electrical Eng. Dept. Of NIT Calicut) Chairman, TBI & Dean (R&C), NIT Calicut Technology Business Incubator, National Institute of Technology Calicut Mrs. Preethi. M Manager, Technology Business Incubator, National Institute of Technology Calicut Mr. Vijith Kumar C.V Administrative Officer , TBI Technology Business Incubator, National Institute of Technology Calicut
V	**Financial Position**	
14	Key Financials of the organization (Provide copy of the audited financial statements for last three years)	Copy of the Audited statements will be provided soon
VI	**Bank Account Details**	

15	Name of Bank	State Bank of India
16	Branch Name	**SBI NIT CALICUT (CREC CALICUT)**
17	Bank account No	10401160454 SB
18	MICR Code	673001012
19	IFSC	SBIN0002207
VII	**Contact Details**	
20	Name of the Contact Person	Dr. Abraham T. Mathew
21	Designation of Contact person	Chairman, TBI & Dean (R&C), NIT Calicut
22	Correspondence Address	Technology Business Incubator National Institute of Technology Calicut NIT Campus P.O Kozhikode - 673601
23	Contact No.	9447087949, 0495-2286144
24	Email Address	atm@nitc.ac.in
25	Name of alternate contact person	Mrs. Preethi. M
26	Designation of Contact person	Manager, TBI
27	Correspondence Address	Technology Business Incubator National Institute of Technology Calicut NIT Campus P.O Kozhikode - 673601
28	Contact No.	9995421341, 0495-2286147
29	Email Address	preethi@nitc.ac.in

Annexure I

Constitution of Board of Governors of Technology Business Incubator (TBI) of National Institute of Technology Calicut (NITC)

1.	Dr. Sivaji Chakravorti	Director, NIT Calicut	Chairman
2.	Dr. Abraham T Mathew	Chairman(Exe. committee) TBI	
3.	Dr.Vineeth Paleri	Secretary (Exe. committee) TBI	Member
4.	Shri.Suresh Kumar	Asso Prof, EED NITC	Member
5.	Dr.Anita Guta/ H K Mittal	Advisor, NSTEDB	Member
6.	Deputy Gen Manager, SIDBI	Deputy Gen Manager, SIDBI	Member
7.	Shri. C A C Mohan	President Malabar Chmaber of Commerce	Member
8.	Dr(Pro).Kulbhushan Balooni	Director (in-charge) IIMK	Member
9.	Dr. M P Pillai	Director, NIELIT Kozhikode	Member
10.	Shri. Joy Umman IAS	CMD, KFC Kozhikode	Member
11.	Shri. Ajith Kumar R	CEO, Kozhikode Cyberpark	Member
12.	Sri. K G Gopakumar, Managing Director Hages Business Solutions	Alumni Entrepreneur	Member

Annexure II

Constitution of Executive Committee of TBI

1.	Dr. Abraham T. Mathew	Dean (R&C)	Chairman
2.	Dr. Vineeth K Paleri.	Professor, CSED,NITC	Secretary
3.	Sri. Suresh Kumar. K.S	Associate Professor, EED, NITC	Joint Secretary
4.	Dr. Nandakumar. M.K	Professor, IIMK	Member
5.	Sri. Prasannakumar. A	Branch Manager , SBI NITC	Member
6.	Dr. R Sreedharan,	Head, SOMS, NITC	Member
7.	Adv. Shyam Padman	Legal Advisor	Member
8.	Sri. Mony. A	Chartered Accountant	Member
9.	Sri. B Sabarinathan	Deputy Registrar (Finance), NITC	Member

CHAPTER 6: PROJECT CONCEPT AND STRATEGY FRAMEWORK

6.1 Project Rationale

The project is developed on the basis of need gap analysis felt in the cluster. Kozhikode is the top district as far as coconut production is concerned. The production average is above the state average. The cluster location is blessed with large area of coconut growing but the living standard of its dependents is in slow pace. The coir activities started here since long and right now there are about 9 co-operative societies and number of private units/NGOs has agreed to join the cluster. All communities viz., SC, ST, OBC, Minority and OC are involved in coir industry. The daily income for men is Rs.400/- whereas that of women is Rs.260/-. This income is too low compared to the average earning of agricultural labour wherein a woman get Rs.400/- per day and men gets Rs.700/-. This scenario is functioning as entry barrier to members to work in the coir cluster.

Under the above circumstances, it is the need of the hour to rejuvenate the activities of coir cluster by adopting suitable strategies to enhance earning of its members. It is the rationale for intervening in the cluster.

6.2 Project Objective:

The main objectives of the cluster are:

- Creation of additional employment opportunities in the cluster
- Providing better income to the people associated with coir sector
- Improve quality and standard of life of the people working in the cluster

- Develop a constant value chain for production process
- Manufacture value added products
- Ensure export linkages to the products manufactured in the cluster

6.3 Focus Products/ Services:

Keeping in mind the project objective as specified above, the cluster intervention focus on followings:

Products:

- Manufacturing and supply of Quality Fibre and Yarn by engaging the cluster in de-husking process
- Processing of Coir Pith and adding value to its use
- Automatic spinning

Services:

- Provide training to new entrepreneurs to join in the coir related activities
- Enhance skills of existing members
- Provide training for leading a quality life
- Marketing cum Production centre

6.4 Conceptual Framework/ Project Strategy

The overall framework of the project is the development of coir sector. It has strategized the intervention on the guidelines and framework of SFURTI schemes of Coir Board. The intervention will take care of followings:

- Bring all stakeholders together and increase effectiveness of the cluster
- Take a cluster approach in the area and improve life and product cycle of coir workers and coir
- Ensure availability of raw material and produce them locally in quality methods
- Frame out a proper value chain suitable to the cluster and involve stakeholders in the process
- Establish a common facility centre and offer its service to all
- Develop value added products and link them with export market for getting high return to the coir workers
- Holding the slogan of ‘zero’ waste policy convert its waste to products and offer them in the market
- Develop forward and backward linkages to ensure vibrancy of the cluster

CHAPTER 7: PROJECT INTERVENTIONS (CORE SFURTI)

The following Soft and Hard Interventions are envisaged in the Balusserry Cluster:

Soft Interventions:

- Cluster awareness and Trust Building workshops may be conducted
- Exposure visits to successful clusters in and outside Kerala for value addition exposure
- Visit to national / international exhibitions
- Entrepreneurship development training
- Skill and skill up-gradation training
- Training program for quality way of life and social engineering
- Soft skills for smooth implementation of SFURTI/CDE training
- New technology absorption training
- Intensive training for skill development for value addition and producing new articles from coir fibre
- Awareness programme for schemes of central and state governments/converging various developmental and welfare schemes for coir industry, including for workers/employees etc.

Hard Interventions:

- Creation of a CFC for Fiber Extraction
- Establishment of Training cum production centre for Automatic Spinning Unit
- Provision for Coir Pith Compost
- Provision for Garden Article and coir Ornaments/Handicrafts
- A truck for transportation of husks

The SPV is open to all. It will also provide services to public in a differential price mode

Thematic Interventions:

The cluster will involve and participate in programmes of national and international brand building events through the suitable and available media, e-commerce etc. This will also enable the cluster members to gain new capacity in increasing the visibility of their products in domestic as well as international markets.

CHAPTER 8: SOFT INTERVENTIONS

Followings are soft intervention proposed for the cluster:

Sl. No.	Project Intervention	No. of Beneficiaries Covered	Cost (Rs. In Lakhs)
A	**Trust Building & Empowerment**		
a)	Cluster Awareness and Trust Building	500	4.0
b)	Exposure visits to Successful clusters in Kerala and Tamil Nadu	100	5.0
c)	Awareness programme for schemes of central and state governments/converging various developmental and welfare schemes	100	1.5
d)	Training programme on social engineering	200	3.0
e)	Training programme on quality	50	1.2
f)	Management Development Programme	30	0.6
B	**Skill Development**		
a)	Skill and skill upgradation training	120	3.0
C	**Market Development**		
a)	BDS Support		1.65
b)	Visit to national/international workshops	50	4.0
c)	Buyer/Seller Meet		0.65
d)	Website Creation		0.40
	Total	**1150**	**25.00**

A) Trust Building and Empowerment:

1. Workshop on Development Schemes:

Sl.No.	Descriptions	Details
01	Course outlines	Awareness of Development Schemes
02	Target Group	Trainess are from the identified artisans, SPV Members etc.
03	Number of batches	2 (two)
04	Batch size	50 members
05	Trainers	From TA/IA and NA
06	Delivery method	Lecture
07	Estimated budget	Rs. 75,000/- X 2 = Rs. 1,50,000/-
08	Total beneficiaries	100
09	Time line	I & III quarters
10	Duration	1 day
11	Infrastructure required	Training hall
12	Availability of infrastructure	yes

2. Cluster Awareness and Trust Building Workshop

Sl.No.	Particulars	Target Details
01	Course outline	Trust building exercises Cluster awareness Developing Cohesiveness
02	Duration	One day
03	Batch size	50
04	Trainers	From TA/NA and profiessionals
05	Delivery method	Lecture ad simulation games
06	Details of infrastructure	Training hall
07	Availability of infrastructure	Yes
08	Method of trainee identification	Trainees are from the identified artisans
09	Cost of training programme	Rs. 40,000/-
10	No. of training	10
11	Total beneficiaries	500
12	Time line for implementation	I,II,III,IV,V,VI,VII & VIII quarters

3. Exposure Visit to successful cluster:

Sl.No.	Particulars	Target Details
01	Target group	Stake holders/cluster members
02	No. of batches	2 (two)
03	Batch size	50
04	Organizers	IA, TA and NA
05	Expected outcome	Experiencing the coir industry and motivation for moving to such value chain
06	Organizers	NA, TA and IA
07	Estimated budget	Rs. 2.50 lakhs
08	Total budget	Rs. 5.00 lakhs
09	Total beneficiaries	100
10	Time line	II and V quarters

4. Training programme on social engineering:

Sl.No.	Particulars	Target Details
01	Course outlines	Improve the quality of the both personally and professionally
02	Duration	2 days
03	Batch size	40
04	Trainers	From TA/NA and professionals
05	Training deli very method	Lecture and simulation games
06	Infrastructure required	Training hall
07	Availability of infrastructure	Yes
08	Method of trainee identification	Trainees are from the identified artisans, SPV members, cluster management team etc.
09	Cost of training programme	Rs. 60,000/-
10	No. of training	5
11	Total cost	Rs. 3.0 lacs
12	Total beneficiaries	200
13	Time line for implementation	II,II,IV,V and VI quarters

5. Training Programme on Quality:

Sl.No.	Particulars	Target Details
01	Course outlines	Maintain the quality of product
02	Duration	2 days
03	Batch size	25
04	Trainers	From TA/NA and professionals
05	Training deli very method	Lecture and simulation games
06	Infrastructure required	Training hall
07	Availability of infrastructure	Yes
08	Method of trainee identification	Trainees are from the identified artisans, SPV members, cluster management team etc.
09	Cost of training programme	Rs. 60,000/-
10	No. of training	2
11	Total cost	Rs. 1.20 lacs
12	Total beneficiaries	50
13	Time line for implementation	III, and IV quarters

6. Management development programme:

Sl.No.	Particulars	Target Details
01	Course outlines	Effective cluster management
02	Duration	2 days
03	Batch size	30
04	Trainers	From TA/NA and professionals
05	Training deli very method	Lecture and simulation games
06	Infrastructure required	Training hall
07	Availability of infrastructure	Yes
08	Method of trainee identification	Trainees are from the identified artisans, SPV members, cluster management team etc.
09	Cost of training programme	Rs. 60,000/-
10	No. of training	1
11	Total cost	Rs. 60,000/-
12	Total beneficiaries	30
13	Time line for implementation	VI quarter

B) Skill Development

7. Skill and skill up gradation training

Sl.No.	Particulars	Target Details
01	Course outlines	Improve the skill for enhancing the productivity (spinning)
02	Duration	5 days
03	Batch size	30
04	Trainers	CCRI
05	Training deli very method	Lecture and practicing
06	Infrastructure required	Training hall
07	Availability of infrastructure	Yes
08	Method of trainee identification	Trainees are the identified artisans
09	Cost of training programme	Rs. 75,000/-
10	No. of training	4
11	Total cost	Rs. 3.0 lacks
12	Total beneficiaries	120
13	Time line for implementation	VI, VII and VIII quarters

C) Market Development:

8. BDS Support

Sl.No.	Particulars	Target Details
01	Course outlines	To ensure the marketability of the product
02	Cost of training programme	Rs.1,65,000/-
03	Time line for implementation	VIII quarters

8. Visit to national/international workshops

Sl.No.	Particulars	Target Details
01	Activity	Exposure to cluster members
02	Duration	5 days
03	Batch size	25
04	Method of trainee identification	Trainees are identified artisans, SPV members, cluster managers
05	Cost of programme	Rs. 2.0 lacs
06	No. of programme	2
07	Total cost	Rs. 4.0 lacs
08	Total beneficiaries	50
13	Time line for implementation	VI and VIII quarters

9. Buyer/Seller Meets

Sl.No.	Particulars	Target Details
01	Activity	To establish a marketing network
02	Cost of programme	Rs. 65,000/-
03	No. of progtamme	01
04	Total cost	Rs 65,000/-
05	Time line for implementation	IX quarter

10. Website creation

Sl.No.	Particulars	Target Details
01	Activity	To create website for the promotion of cluster products
02	Cost of programme	Rs. 0.40 lakhs
03	Time line for implementation	IX quarter

CHAPTER 9: HARD INTERVENTIONS

Following hard interventions proposed in the cluster:

An Integrated Coir Processing Unit-

Project Cost

Sl.No	**Particulars**	**Rs. In Lakhs**
i)	Land	Available
ii)	Building	8.5
iii)	Plant and Machinery	55.35
iv)	Miscellaneous Fixed Assets	0.15
v)	Preliminary and Preoperative Expenses	1.30
vi)	Provision for contingency	2.94
vii)	Margin Money for working Capital(25% of Working Capital Requirement)	2.61
	Total Cost for Fixed Asset	**70.85**
vii)	Working Capital Requirement	7.84
	Total Project Cost	**78.69**

Means of Finance

#	**Particulars**	**Amt. in Lakhs**
i)	Beneficiary Contribution	21.26
ii)	Grant from Coir Board, Govt. of India	57.43
	Total Means of Finance	**78.69**

Detailed Business Plan is indicated in Chapter No. 14

CHAPTER 10: PROJECT COST AND MEANS OF FINANCE

A. Project Cost And Means Of Finance

Sl. No.	Project Intervention	Cost (Rs. Lakhs)	Means of Finance	
			Grant from Coir Board	Beneficiary Contribution
1	**Soft Intervention**	**25**	**25**	
2	Hard Intervention			
a.	CFC-Integrated Coir processing unit			
i	Fixed Capital	70.85	53.14	17.71
ii	Working Capital	7.84	4.30	3.54
	Total 2 (i + ii)	**78.69**	**57.43**	**21.26**
3	**IA Cost**	**20**	**20**	
4	**TA Cost**	**6.59**	**6.59**	
	Total	**130.28**	**109.03**	**21.26**

B. **Project Phasing**

Sl. No.	Project Intervention	Phasing
	Soft & Thematic Intervention	
i)	Workshop on Development Schemes:	Phase 1
ii)	Cluster Awareness and Trust Building Workshop	Phase 1 & 2
iii)	Exposure Visit to successful cluster	Phase 1 & 2
iv)	Training programme on social engineering:	Phase 1 & 2
v)	Training Programme on Quality:	Phase 1
vi)	Management development programme:	Phase 2
vii)	Skill and skill up gradation training	Phase 1 & 2
viii)	BDS Support	Phase 2
ix)	Visit to national/international workshops	Phase 2
x)	Buyer/Seller Meets	Phase 3
xi)	Website creation	Phase 3
	Hard Intervention	
A	Integrated CFC	Phase 1 & 2

Phase 1- Year 1, Phase 2- Year 2, and Phase 3-Year 3

CHAPTER 11

PLAN FOR CONVERGENCE INITIATIVES

a) Directorate of Coir Development, Government of Kerala

- **Market Development Assistance: An amount of Rs. 800.00 lakhs has been apportioned in the budget by Government of Kerala. The cluster is expected to avail Rs. 1 lakhs under this scheme.**
- **Government of Kerala is also supporting cluster development program: A sum of Rs. 150.00 lacs has been earmarked for the same. Since the cluster is having societies as stakeholders, a sum of Rs.1.00 lacs may be sourced under this scheme.**
- **Husk Collection Scheme : To promote utilization of husk in the State, State Government is offering subsidy for the following :**

- **Husk collection**
- **Establishing Defibering units**
- **Revamping existing DF mills.**

State Government promoting husk collection through workers' co-operatives and Kudumbashree units. A sum of Rs. 6 crores has been ear marked on this account. During the cluster development program it would like to avail Rs. 0.50 lacs from this scheme.

b) Coir Board

- **Avail the schemes of Coir Udyami Yojana of Coir Board for developing private entrepreneurs. 2 private entrepreneurs will be developed availing this scheme. This scheme will have the**

component of subsidy as well as loan. A sum of Rs. 20 lacs may be earmarked under this scheme.

- **Coir Board is providing spinning equipment subsidy under Coir Vikas Yojana. The subsidy will be provided for purchasing electronic ratt or motorized ratt. It is proposed to procure 25 electronic rats under this scheme. A sum of Rs 80,000/- is expected .**
- **Under Mahila Coir Yojana , Coir Board is providing subsidy for purchasing machinery for coir handcraft and jewellery manufacturing units. A sum of Rs. 60,000/- is earmarked.**

c) Social Security Schemes

During the cluster intervention, the artisans will be linked to following social security schemes :

- **Pradhan Mantri Suraksha Bhima Yojana**
- **Pradhan Mantri Jeevan Jyoti Yojana**
- **Atal Pension Yojana**

CHAPTER 12: ENHANCED PROJECT COST AND MEANS OF FINANCE

We expect to bring a sum of Rs. 23.90 Lakhs to the cluster by converging from other departments.

Sl.No.	Particulars	Amount in Lakhs
1	Market Development Assistance, Directorate of Coir Development, Government of Kerala	1.00
2	Cluster development program ,Directorate of Coir Development, Government of Kerala	1.00
3	Husk Collection Scheme, ,Directorate of Coir Development, Government of Kerala	0.50
4	Coir Udyami Yojana of Coir Board	20.00
5	Spinning Subsidy Scheme of Coir Board	0.80
6	Mahila Coir Yojana of Coir Board	0.60
	Total	23.90

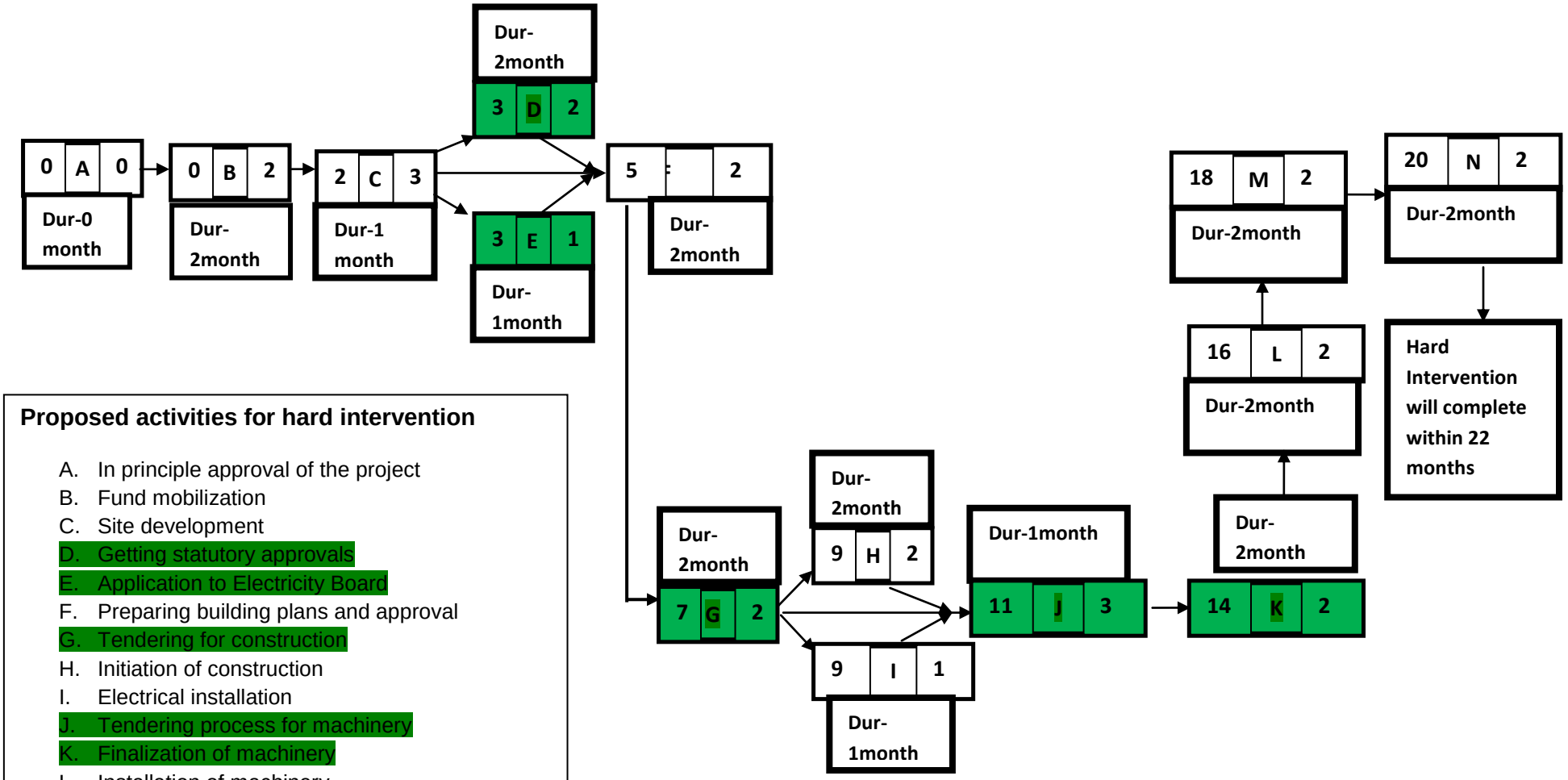
CHAPTER 13: PROJECT TIMELINE

Sr. No	Name of Activity	Objective	Duration	Year 1				Year 2				Year 3			
				Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 5	Qtr 6	Qtr 7	Qtr.8	Qtr 9	Qtr 10	Qtr 11	Qtr 12
1	Workshop on Development Schemes:	Awareness of Development Sch.													
2	Cluster Awareness and Trust Building Workshop		One day												
3	Exposure Visit to successful cluster														
4	Training programme on social engineering:		2 days												
5	Training Programme on Quality:	Maintain the quality of product	2 days												
6	Management development programme:	Effective cluster management	2 days												
7	Skill and skill up gradation training	Improve the skill for enhancing the productivity (spin.)	5 days												
8	BDS Support	To ensure the marketability of the product													
9	Visit to national/international workshops	Exposure to cluster members	5 days												
10	Buyer/Seller Meets	To establish a marketing network													
11	Website creation	To create website for the promotion of cluster products													

Action Plan – Hard Intervention

Hard Intervention													
		Year 1			Year 2				Year 3				
Sr. No.	**Name of Activity**	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 5	Qtr 6	Qtr 7	Qtr 8	Qtr 9	Qtr 10	Qtr 11	Qtr 12
1	Finalization of project												
2	In principle approval of the project												
3	Fund mobilization												
4	Site development												
5	Getting statutory approvals												
6	Application to Electricity Board												
7	Preparing building plans and approval												
8	Tendering for construction												
9	Initiation of construction												
10	Electrical installation												
11	Tendering process for machinery												
12	Finalization of machinery												
13	Installation of machinery												
14	Trial Run												
15	Commercial Production												

CRITICAL PATH METHOD



Proposed activities for hard intervention

A. In principle approval of the project
B. Fund mobilization
C. Site development
D. Getting statutory approvals
E. Application to Electricity Board
F. Preparing building plans and approval
G. Tendering for construction
H. Initiation of construction
I. Electrical installation
J. Tendering process for machinery
K. Finalization of machinery
L. Installation of machinery
M. Trial Run
N. Commercial Production

CHAPTER 14: DETAILED BUSINESS PLAN

CFC-Integrated Coir Processing Unit

Project Summary

Sl.No	Description	Amount in Lakhs
1	Name of Cluster:	Balusserry
2	**Name of project: Integrated Coir Processing Unit**	
3	**Project Cost**	
a	**Fixed Capital**	
i)	Land	Available
ii)	Land Development & Building	8.5
iii)	Plant & Machinery	55.35
iv)	Miscellaneous fixed asset	0.15
v)	Preliminary Expenses	0.50
vi)	Pre-operative expenses	0.8
vii)	Provision for Contingency	2.94
vii)	Margin Money for working Capital(25% of Working Capital Requirement)	2.61
	Total	**70.85**
b	**Working Capital**	7.84
	Total Project Cost (a+b)	**78.69**
3	**Means of Finance**	
i)	Beneficiary Contribution	21.26
ii)	Grant from Coir Board	57.43
	Total	**78.69**
4	Annual Income	142.10
5	Net Profit	27.80
6	BEP	42.88
7	IRR	59

Introduction:

The objective of the Integrated Coir centre is to increase the availability of quality raw material on a continuous basis to the beneficiaries of SFURTI Cluster at a reasonable price. The CFC will have one Defibering unit, automatic spinning looms, coir pith compost and Garden Article.

Through this the flow of coir from raw material to value added coir product can be ensured. This will ensure sufficient income for the coir related workers as well as industry. It will also create new employment opportunities for the unemployed.

Project Details

A. Land- Existing

B. Building

SL. No	Description	Qty.	Unit	Rate Rs. (Lakhs)	Amount Rs. (Lacs)
1	Building for DF			LS	2.25
2	Building for ASM				6.00
3	Drying Yard			LS	0.25
	Sub Total B				**8.50**

C. Plant and Machinery

SL. No.	Description	Quantity	Rate	Amount in Lakhs
	1. Defibering Unit			
a)	Husk Buster Machine with 20hp Motor -10000 husk capacity/day	1	2	2
b)	Defibering Machine (Beater Type) with 25hp Motor	1	3.25	3.25
c)	4mtr long SS Rotary Screener for Fibre with 2hp Motor	1	1.1	1.1
d)	Ginning Machine with 2hp Motor	1	0.7	0.7
e)	Rotary Screener for Pith with 2hp Motor 1 No. @ 75000	1	0.75	0.75
f)	Baling Press - Screw Type for compact bales with 5hp Motor 1 No. @ Rs. 240000	1	2.4	2.4
g)	Conveyors 7sets of various lengths with 10.5hp Motor	7	1.1	7.7
h)	Pump set and pipeline			1.2
i)	Installation charges			1.2
j)	Taxes & duties under KVAT but subject to change under GST			1
k)	Transportation machinery (approx)			0.75
l)	Electrification charges			2.3
	Total			**24.35**
2	Automatic Spinning machine	12	1.5	**18.00**
3	Garden Article, Coir Ornaments & Coir Handicrafts			**2.00**
4	Coir Compost			5.00
	-Auto clave 100 Lr. Capacity			
	-Hot Air Oven			
	-Incubator			
	-Rotary Screener			
	-Sieve			
	-Chemical Balance			

SL. No.	Description	Quantity	Rate	Amount in Lakhs
	-Refrigerator			
	-Laboratory, testing etc.			
	-Water Pump & Hose			
5	Nissan Truck			6
	Total			55.35 Lakhs
Total cost for Plant and Machinery: Rs.55.35 Lakhs				

D. Miscellaneous Fixed Assets

SL No	Description	Qty.	Unit	Rate Rs. (Lacs)	Amount Rs. (Lacs)
1	Furniture		LS		0.15
	Total				0.15
Total Cost for Miscellaneous Fixed Assets: Rs.0.15 Lakhs					

E. Preliminary Expenses

SL No	Description	Qty.	Unit	Rate Rs. (Lacs)	Amount Rs. (Lacs)
1	Preliminary Expenses (DSR, DPR, etc)	LS	LS		0.50
	Total				0.50
Total Preliminary Expenses: **Rs.0.50 Lakh**					

F. Pre-operative Expenses

SL No	Description	Qty.	Unit	Rate Rs.(Lacs)	Amount Rs.(Lacs)
1	Establishment, Travel, etc	--	--	LS	0.80
	Total				0.80
Total Pre-operative Expenses: **Rs.0.80 Lakhs**					

F. Provision for Contingency

SL No	Description	Qty.	Unit	RateRs (Lacs)	Amount Rs(Lacs)
1	2 % of Building and 5 % on Machinery				2.94
	Total				2.94
Total Provision for contingency: **Rs.2.94 Lakhs**					

H. Working Capital

Sl.No.	Particulars	Period(days)	Amount (Rs.)
1	RM Stock	15	3.31
2	Good in Process	3	0.66
3	Finished Goods	2	0.44
4	credit sale	10	2.20
5	working expenses	30	3.84
Total			**10.45**

I. Project Cost

Sl.No	Particulars	Rs. In Lakhs
i)	Land	Available
ii)	Building	8.5
iii)	Plant and Machinery	55.35
iv)	Miscellaneous Fixed Assets	0.15
v)	Preliminary and Preoperative Expenses	1.30
vi)	Provision for contingency	2.94
vii)	Margin Money for working Capital(25% of Working Capital Requirement)	2.61
	Total Cost for Fixed Asset	**70.85**
vii)	Working Capital Requirement	7.84
	Total Project Cost	**78.69**

J. Means of Finance:

Sr.No	Particulars	Amount in Lakhs	Amount in Lakhs
i)	**Fixed Capital**		
a	Beneficiary Contribution-25% of Fixed Capital		17.71
b	Grant from Coir Board- 75% of Fixed Capital		53.14
	Total i) (a+b)		**70.85**
ii)	**Working Capital**		
	Working Capital Corpus(20% of Total Fixed Capital)	14.17	
a	Beneficiary Contribution-25% of Working Capital Corpus		3.54
b	Grant from Coir Board		4.30
	Total ii) (a+b)		**7.84**
iii)	Total i)+ii)		**78.69**

In short, the means of finance are:

Sl.No	Particulars	Amount(Rs.Lakhs)
1	Beneficiary Contribution	21.26
2	Grant from Coir Board	57.43
	Total	**78.69**

K. Annual Sales Turnover

Sl. No.	Item	Quantity	Rate	Amount (Rs.)
1	Fiber -Ton	240	0.24	57.60
2	Yarn-Ton	156	0.44	68.64
3	Pith Compost	384	0.04	15.36
4	Garden Article, Coir Ornaments			0.50
Total				**142.10**

L. Production Cost

Raw Material

Annual Requirement of Raw Material				
Sl. No.	**Item**	**Quantity**	**Rate**	**Amount (Rs) (Lakhs)**
1	Coconut Husk in Lakh	30	0.7	21.00
2	Fiber-in Ton	180	0.24	43.20
3	Pith-in Ton	384	0.005	1.92
Total				**66.12**

Utility

SL No	Description	Qty.	hp	Rate Rs. (Lakhs)	Amount Rs. (Lakhs)
1	Husk Buster Machine -20 hp	1	20		
2	DF Machine Beater type-25hp	1	25		
3	Bailing Press (Screw Type) -5hp	1	5		
4	Pump Set -2 hp	1	2		
	Total				**1.68**
5	Automatic Spinning Machine& Electronic ratt				1.20
6	Pith Compost				.35
	Total				**3.23**
	Total Utilities: **Rs. 2.33 Lakhs**				

Man Power

Sl No.	Designation	Unit	Unit Cost	Annual Amount (Rs)
1	Manager	1		1.8
2	Mechanic	1		1.8
3	Watchman	1		1.2
4	Semi-skilled men workers	1		1.05
5	Unskilled women workers	10	0.07	8.52
6	Automatic Spinning Machine Operators	12	0.075	10.8
7	Pith Compost	1	0.15	1.8
8	Staff for Vehicle	2	0.15	3.6
Sub Total				30.57
Employees benefit				4.59
Grand Total		**29**		**35.16**

Repairs, Maintenance and Insurance

SL No	Description	Qty.	Unit	Rate Rs. (Lakhs)	Amount Rs. (Lakhs)
1	Spares and Lubricants, etc.		LS		1.2
	Total				1.2
Total Repairs, Maintenance and Insurance : Rs.1.2 Lakhs					

Other Manufacturing Expenses

SL No	Description	Qty.	Unit	Rate Rs. (Lacs)	Amount Rs. (Lacs)
1	Other Manufacturing Expenses				1.2
	Total				1.2
Total -1.2 Lakhs					

Administrative Overheads

SL No	Description	Qty.	Unit	Rate Rs. (Lakhs)	Amount Rs. (Lakhs)
1	Administrative Overheads			LS	0.5
	Total				0.5
Total Administrative Overheads-0.5 Lakhs					

Marketing Overheads

SL No	Description	Qty.	Unit	Rate Rs. (Lakhs)	Amount Rs. (Lakhs)
1	Marketing Overheads			LS	0.5
	Total				0.5
Total Marketing Overheads-0.5 Lakhs					

M. Project Profitability Statement

(Amount in Lakhs)

Sl.No.	Particulars	I Yr	II Yr	III Yr	IV Yr	V Yr
1	No. of working Days	300	300	300	300	300
2	No. of shifts	1	1	1	1	1
3	Installed Capacity	60%	65%	70%	75%	80%
4	Annual Income	142.10	170.52	198.94	227.36	255.78
B.	**Cost of Production**					
1	Raw Materials	66.12	79.34	92.57	105.79	119.02
2	Salaries & Wages	35.16	42.19	49.22	56.25	63.28
3	Utility	3.23	3.55	3.88	4.20	4.52
4	Repair & Maintenance	1.20	1.32	1.44	1.56	1.68
5	Other expenses	1.20	1.32	1.44	1.56	1.68
6	Depreciation	5.98	5.40	4.88	4.41	3.99
7	Preliminary Expenses Written off	0.42	0.42	0.42	0.42	0.42
	Total	113.30	133.55	153.84	174.19	194.59
	Gross Profit	28.80	36.97	45.10	53.17	61.19
C.	**Administration & Sales Expenses**					
1	Selling & Administrative expenses	1.00	1.10	1.20	1.30	1.40
	Profit before Int & Tax	27.80	35.87	43.90	51.87	59.79
D	Net Profit after Dividend	27.80	35.87	43.90	51.87	59.79
E	Depreciation	5.98	5.38	4.88	4.41	3.97
F	Preliminary Expenses Written off	0.42	0.42	0.42	0.42	0.42
G	Annual Cash Accrual	34.19	41.25	48.77	56.28	63.76

N. Cash Flow Statement

(Amount in Lakhs)

Sl No	Source of Funds	I Year	II Year	III Year	IV Year	V Year
1	Promoters' capital	21.26				
2	Grant	57.43				
3	Depreciation	5.98	5.40	4.88	4.41	3.99
4	Preliminary Expenses written	0.42	0.42	0.42	0.42	0.42
5	Profit before Int & Tax	27.80	35.87	43.90	51.87	59.79
	Total	112.88	41.70	49.20	56.70	64.20
B.	**Application of Funds**					
1	Capital Expenditure	64.00				
2	Pre-operative expenses	4.24				
3	Increase in W. Capital	10.45	1.05	2.09	3.14	4.18
	Total	**78.69**	**1.05**	**2.09**	**3.14**	**4.18**
	Opening Balance	0.00	34.19	74.85	121.95	175.52
	Surplus (A-B)	34.19	40.65	47.11	53.57	60.02
	Closing Balance	34.19	74.85	121.95	175.52	235.54

O. Projected Balance Sheet

(Amount in Lakhs)

Liabilities						
Sl.No.	Liabilities	**I Year**	**II Year**	**III Year**	**IV Year**	**V Year**
1	Promoters' Capital	21.26	21.26	21.26	21.26	21.26
2	Grant	57.43	57.43	57.43	57.43	57.43
3	Working Capital Loan	0.00	0.00	0.00	0.00	0.00
4	Reserve & Surplus	27.80	63.67	107.57	159.43	219.22
	Total	**106.48**	**142.36**	**186.25**	**238.12**	**297.91**
Sl.No.	**Assets**	**I Year**	**II Year**	**III Year**	**IV Year**	**V Year**
1	Building	8.50	8.50	8.50	8.50	8.50
2	Machinery	55.50	55.50	55.50	55.50	55.50
3	Depreciation	5.98	11.37	16.25	20.66	24.65
4	Net Block	58.03	52.63	47.75	43.34	39.35
5	Current Assets-cash	10.45	11.50	13.59	16.72	20.90
6	Preliminary Expenses Written Off	3.81	3.39	2.97	2.54	2.12
7	Cash in hand & bank	34.19	74.85	121.95	175.52	235.54
	Total	**106.48**	**142.36**	**186.25**	**238.12**	**297.91**

P. Break Even Point

(Amount in Lakhs)

Break Even Analysis (Based on I st Year)		
A.	**Variable cost**	
1	Raw Material	66.12
2	Power	3.23
3	Administrative expenses	1.00
		70.35
B	**Semi Variable and fixed cost**	
1	Salary & wages	35.16
2	other Expenses	1.20
3	Repair and maintenance	1.20
4	Depreciation	5.98
5	Preliminary Expenses Written Off	0.42
		43.95
	Annual Income	142.10
	Variable cost	70.35
	SP-VC	**71.75**
	Breakeven point	**42.88%**

Q. Depreciation Amount

Sl.No	Building (5%)	Machinery& Miscellaneous fixed Asset (10%)	Dep. Amount
	8.5	55.50	
1 Yr	0.43	5.55	5.98
	8.1	49.95	
2 Yr	0.40	5.00	5.40
	7.7	44.96	
3 Yr	0.38	4.50	4.88
	7.29	40.46	
4 Yr	0.36	4.05	4.41
	6.92	36.41	
5 Yr	0.35	3.64	3.99

CHAPTER 15: PROPOSED IMPLEMENTATION FRAMEWORK

15.1 Role of the Implementing Agency:

- Recruit a full-time CDE in order to ensure efficient implementation of the project;
- The IA would identify and arrange suitable land for the project whose book value may be shown as their contribution towards the project;
- Implement various interventions as outlined in the approved DPR;
- Undertake procurement and appointment of contractors, when required, in a fair and transparent manner;
- The IA will enter into an agreement with the Nodal Agency for timely completion on cluster intervention and proper utilization of Government Grants;
- Operation & Maintenance (O&M) of assets created under the project by way of user-fee based model;
- Responsible for furnishing Utilization Certificates (UCs) and regular Progress Reports to Nodal Agency in the prescribed formats.

The IA shall endeavour to increase participation of various other cluster stakeholders and institutions by forming a Cluster Advisory Group, preferably headed by a prominent individual and with representation from PRIs, traditional industry enterprises, support service institutions, banks, etc. with the objective of fostering increased level of involvement of various cluster stakeholders and strengthening the implementation of the project.

15.2 Details of Strategic Partner and Other Project Stakeholders

Strategic Partners:

1. Coir Board, Cochin
2. Project Officer, Coir Project Office or Coir Project Directorate
3. General Manager, DIC
4. Coir Co-operative Societies
5. Entrepreneurship Development Institute of India
6. NGOs
7. Private Entrepreneurs

Project Stakeholders:

a) Machinery Suppliers
b) Kerala State Co-operative Coir Marketing Federation (Coirfed)
c) Commercial banks and micro finance institutions
d) National Bank for Agriculture and Rural Development
e) Small Industries Development Board of India, Cochin
f) R&D, Testing and Training Institutions
g) Central Coir Research Institute at Kalavoor
h) National Coir Training and Design Centre at Alleppey .
i) Central Institute of Coir Technology, Bangalore
j) MSME-DI in Thrissur.

15.3 Structure of the SPV

In Balussery, the proposed SPV will function in close guidance of Grameena Charitable Society for grounding the schemes and also to enjoy the benefits as per the advice of EDI under the prescribed norms of Coir Board. The SPV will be the integral part of the project and that should represent all stakeholders, especially the entrepreneurs, as they are the primary stakeholders. The SPV has registered under the Charitable Societies Registration Act 1860:

Sl. No	Name	Age	Address	Proposed Position	Sign ature
1	P. Ramachandran, Agriculture	53	Kidangoth (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Chairman	S/d
2	K. Vinodan, Business	43	Koroth (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Vice Chairman	S/d
3	M. Sathyanathan, Teacher	53	Meledath (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Treasurer	S/d
4	K.P.Sathyan, Contractor		Kuliyapoyil (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Executive Committee Member	S/d
5	P. Sudhakaran Nambeesan, Agriculture		Gayathri (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Executive Committee Member	S/d
6	Pratheesh Lal, Teacher		Akshaya (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Executive Committee Member	S/d
7	M. Rajan, Agriculture		Sreeparnam(H), Kavil P.O., Naduvanoor, Kozhikode-673614	Executive Committee Member	S/d
8	Liju T.P., Agriculture		Thaikkandypurayil (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Executive Committee Member	S/d
9	T. Balakrishnan Nair, Agriculture		Koyampurath (H), Kavil P.O., Naduvanoor, Kozhikode-673614	Executive Committee Member	S/d

15.4 Composition of the SPV with details of roles and responsibilities of each partner/ shareholder

a) Any persons belonging to Koyilandi Taluk of Kozhikode District who are working in the Coir Sector shall be eligible for memberships.

b) 25% of the total membership of the Society to be from Sympathisers.

c) The Membership fee will be Rs. 5000/-

Executive Committee and Board of Directors:

Board of Directors

The Board of Directors shall have 9 members who will be elected from the General Body Meeting. The period of the Board of Directors shall be 3 years from the date of assumption of the charge.

Officer Bearers

The Office Bearers of the Society its will be Chairman, Vice Chairman, and Treasurer.

Rights and Duties of Office Bearers

Chairman:

The President shall preside over all the meeting of the Society. Give direction to the office bearer and members of the Society for better functioning of the same. Give overall supervision and other matters decided by the Board of Directors. All the powers to run the Society, which are not delegated to other office bearers, will rest with President.

Vice Chairman:

Vice president will be chairing all meetings in absence of President and shall perform the duties and functions assigned by the President.

Treasurer:

The treasurer will be holding the charge of financial aspect of the SPV

CHAPTER 16: EXPECTED IMPACT

Once the proposed interventions are completed, the expected impact will be as under:

- The turnover of the cluster will be increased from Rs.60.00 Lakhs to Rs.200 lakhs shortly
- Sustainable employment will be created for 500 beneficiaries in the cluster.
- The husk produced in the district will be converted to fibre and pith. Utilization of husks will be increased to 35 per cent from the current 20 per cent.
- Since the production centres are for value added products, the profitability of societies and private entrepreneurs will be considerably increased and this will pave avenues for further private investment.
- The farmers will have additional income from their husk.
- Coir industry will have new outlook and new entrepreneurs may try to come into it,
- Mind-set of the artisans will be changed and develop a positive thinking, which will affect the quality way of life. The social and economic empowerment of the artisans will take in place.
- Better market possibility for the value added products will be explored, which will give wide network to the cluster.
- E-commerce will be encouraged.
- The intervention will further boost the overall social change.