



DPR | DETAILED
PROJECT REPORT

KUMTA COIR CLUSTER

Submitted to
Coir Board of India
Ministry of MSME, Government of India

Submitted by



Foundation for MSME Clusters

(ISO 9001:2008 Certified Organisation)

USO House, 2nd Floor, USO Road, Shaheed Jeet Singh Marg,
6, Special Institutional Area, New Delhi - 110067.

TABLE OF CONTENTS

Chapter No	Name	Page Nos.
PART I		
1	CLUSTER PROFILE	1
2	CLUSTER PRODUCTS AND PRODUCTION PROCESS	8
3	MARKET ASSESSMENT & DEMAND ANALYSIS	13
4	SWOT AND NEED GAP ANALYSIS	17
5	PROFILE OF IMPLENTING AGENCY	22
6	PROJECT CONCEPTS & STRATEGIC FRAME WORK	25
PART II		
7	PROJECT INTERVENTIONS (CORE SFURTI)	28
8	SOFT INTERVENTIONS	32
9	HARD INTERVENTIONS	40
10	PROJECT COST & MEANS OF FINANCE (CORE SFURTI)	46
11	PLANS FOR CONVERGENCE OF INITIATIVES	49
12	ENHANCED PROJECT COST & MEANS OF FINANCE	50
13	PROJECT TIMELINE	51
14	DETAILED BUSINESS PLAN	52
15	PROPOSED IMPLEMENTATION FRAME WORK	56
16	EXPECTED IMPACT	
Annexures		
1 - 14	FINANCIAL STATEMENTS	61 - 82
15	SPV REGISTRATION DOCUMENT	
16	SPV BY LAWS AND LIST OF MEMBERS	
17	SPV BANK ACCOUNT DETAILS	
18	LAND AFFIDAVIT/ RELATED DOCUMENTS	
19	QUOTATIONS	
20	TRIPRATITE AGREEMENT	
21	IA REGSITRATION	
22	IA LAST 3 YEAR IT STAEMENTS	
23	PROFILE OF ARTISANS	

LIST OF ACRONYMS

1	BIS	Bureau of Indian Standards
2	BEP	Break Even Point
3	CCRI	Central Coir Research Institute
4	CFC	Common Facilities Centre
5	CGTMSE	Credit Guarantee Trust for Micro, Small and Medium Enterprises
6	CICT	Central Institute of Coir Technology
7	CLCSS	Credit Linked Capital Subsidy Scheme
8	CUY	Coir Udyami Yojana
9	CVY	Coir Vikas Yojana
10	DIC	District Industries Centre
11	DRDA	District Rural Development Agency
12	DPR	Detailed Project Report
13	FICEA	Federation of Indian Coir Exporters Association
14	FI	Financial Institution
15	IRR	Internal Rate of Return
16	KSFC	Karnataka State Coir Federation
17	KVIC	Khadi & Village Industries Commission
18	MSME	Micro Small & Medium Enterprises
19	MoMSME	Ministry of Micro Small & Medium Enterprises
20	MSMEDI	Micro Small Medium Enterprise Development Institute
21	MDA	Market Development Assistance
22	NABARD	National Bank for Agri & Rural Development
23	NMCP	National Manufacturing Competiveness Program
24	NPV	Net Present Value
25	NH	National Highway
26	NTDC	National Technology Development Corporation
27	ROCE	Return on Capital Employed
28	SFURTI	Scheme of Fund Under Rejuvenation of Traditional Industries
29	TI	Technical Institution
30	TL	Term Loan
31	EC	Working Capital
32	PC & MF	Project Cost and Means of Finance
33	UPS	Uninterrupted Power Supply

CHAPTER – 1

CLUSTER PROFILE

1.1 Background

India has a rich tradition in traditional industries. Coir industries are also one among the major traditional industries. MSME Ministry, Central Govt of India with a vision to regenerate traditional industries aims to provide support through different schemes related to technology up gradation, infrastructure provision and training through various institutions at national and state level. SFURTI is one of the above schemes designated to develop rural coir clusters including Khadi and village industry clusters. This was commenced in 2005. So far 96 Khadi & VI clusters and 26 Coir clusters approved and are under various stages of implementation. Subsequently in the year 2014 the guidelines have been revamped and it is expected to cover 800 clusters in the 12th five year plan.

Kumta coir cluster is one out of 7 Clusters in Karnataka selected by Coir Board with the help of Commissioner of Industries, Government of Karnataka. This Cluster is situated in Karwar (Uttara Kannada) Dist of Karnataka. Vikas Seva Samasthe is the Implementing Agency for implementing SFURTI project under the scheme. M/s Foundation for MSME clusters has been appointed as the Technical agency and entrusted the task of DPR preparation.

1.2 Regional Setting of the cluster

There are 4 major training and production units run by the Karnataka State Coir Cooperative Federation, 1 women's cooperative society (Mahila Tengina Narina Sahakari Sangha) and more than 200 household units operating in the cluster. The profile of the cluster firms is given below:

,

Type of Units	No.	Avg. investment	Production	Turnover	Employment
Karnataka State Coir Co-op Federation Units	4	10 lacks	50 kg yarn and 50 mats per day Aggregate production= 60000 kgs of yarn and 60,000 mats	1 kg yarn at Rs 40 and 1 mat at Rs. 52= Rs 4600 per day Aggregate turnover= 4600* 4 *300= Rs 55,20,000	150
Household units	200	0.10 lakhs	5 kg yarn/day Aggregate production= 5 kg yarn/day* 200persons x 250days =2,50,000 kgs	1 kg yarn at Rs.40 per day= Rs.200 per day Aggregate turnover= 200 * 250*200= Rs 1,00,00,000	200 @ 1/ family.
Mahila Tengina Narina Sahakari Sangha Unit		10 lakh	60 kg yarn and 50 mats per day	Rs.5000 per day Aggregate turnover= Rs.5000*300= 15,00,000	100

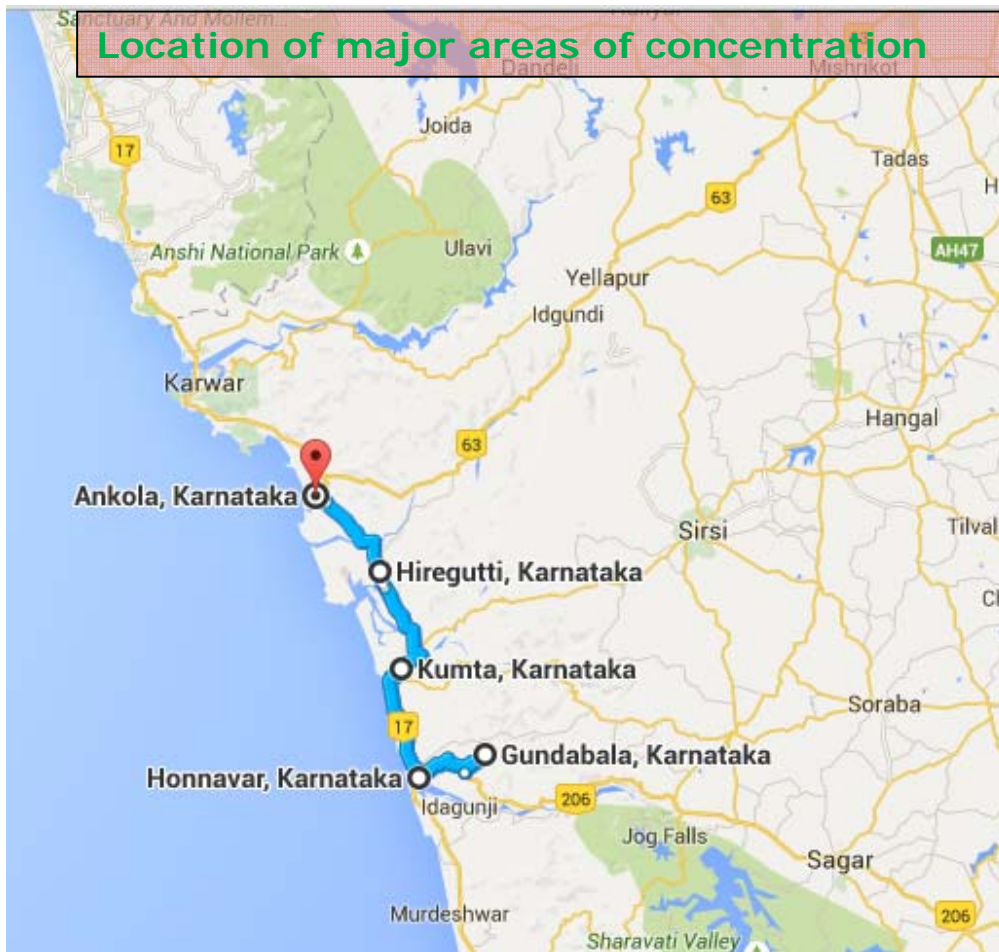
All the household units are selling yarn @ Rs.40/kg to mat manufacturing units. Some of them are also doing job work at the federation units @ Rs.17.5/ kg getting as yarn making charge. All mat making units are selling at wholesale rates.

Units are getting 10% MDA rebate from central govt.

Since the cluster is producing in such small quantities, they are not able to target far/distant markets as the economies of scale will not fit them. There is a need for enhancing the productivity by improvising quality, introducing new products, installing new improved machinery's & tools.

1.3 Location

Kumta coir cluster is situated in Uttar Kannada (Karawar) district. It is bordered by the state of Goa and Belgaum District to the North, Dharwad District and Haveri District to the east, Shimoga District and Udupi District to the south and the Arabian Sea to the west. The six major coir federation centres are located in Kumta, Hiregutti, Honnavara, Gundabal, Hegade and Ankola. They are spread over 3 talukas in a 20 kms radius. More than 200 House hold units are located in Kumta, Honnavar & Ankola talukas of Northa Cenara (Karawar).This cluster is connected with NH 17 and Konkan Railway line running between Mumbai Mangalore. This cluster is 550 kms from Bangalore.



1.4 Evolution of the cluster

Karwar region produces the best quality coconuts with long stapled/fibre coir husk and also has sufficient availability of skilled workers/artisans. Kumta is one among the main coconut growing areas in the region from quite a long period. With an idea of properly making use of abundantly availability of coconut husk in this area in the year 1961 Karnataka state coir co-operative Federation, started trainings & production centres in this belt.

1.5 Demography and growth trends

Coir units in the cluster are scattered in Kumta, Honnavara & Ankola talukas of Uttara Kannada district in Karnataka. The total population in the district is 14, 36,847 as per the survey of census during 2011 by Indian Government. Of this about 4, 18,631 people are living in the urban (towns and cities) area and about 10, 18,216 are living in villages

(rural areas). There are 5, 32,366 House Holds in this district with 7, 27,424 males (50.6%) and 7, 09,423 females (49.4%). Further the children below 6 years of age are 80,605 of which 41,102 are males and 39,503 are females. Total Scheduled Cast is 4, 80,817. Total Scheduled Tribe is 1,84,5431.

Literates are 13, 81,092 of which males are 7, 59,554 and Females are 6, 21,538. There are 55,755 Illiterates.

Workers in the District of Karawar are calculated as 11, 56,680 of which 7, 51,790 are males and 4, 04,890 are females. Further 10, 40,940 are regular and 1, 15,740 are Irregular i.e. get jobs only few days in a month. There are 2, 80,167 Non Workers (include students, house wives, and children above 6 years also.)

Growth trends of Kumta Cluster area of Uttar Kannada district:

Both the material and human resources are considered for identifying suitable and profitable opportunities in the cluster. Based on the present cluster scenario, infrastructural facilities available, this cluster has been identified to be implemented under SFURTI program.

- Agro Based industries

The district consists of 8, 13,595 hectares forest covers mainly teak plantations. Wood and wooden based industry with 1235 units and with an investment of 3852 lakhs is the major agro based sector in the region, providing employment to 7392 people. The cultivable land in the district is approximately 10 percent, as the forest area dominates the total region. It is situated in between Arabian Sea and Western Ghats belt with assured rain fall. Commercial horticultural crops like coconut, areca nut, cashew nut, sugar cane, cotton and banana are cultivated.

Few of the large scale private and public sector undertakings are:

1. West coast paper mills at.Dandeli block, Halyal.
2. Parry's Sugars Ltd, at Hullatti
3. Solaris Chem. Tec Industries Ltd at.Binaga Tq. Karawar.
4. Nuclear power Corporation of India Ltd. Kaiga project Tq. Karawar.
5. Indian Navy, Sea Bird project At Chendia, Karawar.

KSSIDC has developed 8 industrial estates in the district, one each at Sirsi, Kumta, Karwar, Bhatkal, Dandeli, Halyal, Yellapur and Ramnagar.

There is also a total 14,813 (registered 9,532) Micro & small scale industries with an investment of Rs.29, 939 lakhs given employment to 75,613 workers with a turnover of 80,000 lakhs.

There is an increase in number of registered units in the district and details are given as below:

Year	Nos of units registered	Employment.	Investments in lakhs.
Since inspection to 2006-07	6844	33385	16084.37
2007-08	454	1570	1107.57
2008-09	401	2443	3249.65
2009-10	415	2845	3399.76
2010-11	416	1471	1992.74
2011-12	426	1736	2405.25
Total	8956	43450	28239.34

1.6 Socio-Economic aspects of the cluster region

Most of the major unit holders belong to upper cast Konkani Brahmins and Maratha community, while among the house hold units; it is a mix of 80% upper caste and 20% SC and ST. While major unit holders are graduates, the literacy among house hold units and workers not crossed elementary level. The income of major unit holders ranges between Rs. 30000 to 40000 per month whereas for artisans it is Rs. 200 to 300 per day if skilled and Rs.100 to 150 per day for semi/ unskilled.

1.7 Human Development Aspects

Few of the human development index parameters of Uttara Kannada are given as below:

- Health index is 0.632 and ranked 22nd in the state, with Udupi district raking no.1
- Education index is 0.781 and ranked 5th with Bangalore urban as No.1
- Income index is 0.546 and ranked 11th with again Bangalore urban as number 1.

- In the overall human development index, Uttarakannada stands in 7th position with 0.653 points.

(Source: <http://planning.kar.nic.in>)

Ove all, while Uttara Kannada fared better in education and income levels, its health management is poor and much need to be done.

1.8 Key Economic Activities in the region

Uttara Kannada is an agriculture region. The district is a one of the biggest area wise in the state of Karnataka, with abundant natural resources. The district has varied geograical features with thick forest, perennial rivers, abundant flora and fauna and a long coastal line of about 140 KM availability of major minerals like, lime shell, silica sand & Building stones. As such there are many natural resource based industries in the region.

The coastal location of the cluster lends to fishing and fisheries. Karawar is known for its seafood cuisine. Fishing and fisheries is providing employment to more than 10,000 peoples, while more than 5000 families are engaged in tourism. There are more then 5000 farmers cultivating coconut. To take proper use of coir and pith after copra, coir industry also has become a major industry in this reason.

1.9 Infrastructure

Power:

In the district there are five power producing plants operating. One of them is a nuclear power plant situated at Kaiga (50 Kmts from Karwar) and the other four are Hydro Electric Power Projects : Supa Dam, Kadra Dam, Kodasalli and Gerusoppa Dam .

Water:

Uttar Kannada District receives heavy rainfall during monsoon period. The important rivers flowing in the district are Kali River (Karwar, Supa (Joida) Taluk, Gangavali/Bedti River (Ankola Taluk), Aghanashini River. Supa, Kadra, Kodasalli & Gerusoppa Dam mentioned above are also being used to store water.

Education:

In the district, there are 1198 Primary schools, 1141 Middle schools, 429 secondary schools. There are 26 colleges for arts, commerce and science, 1 govt and 2 pvt engineering collages, 1 Medical college and a number of ITI, Nursing training colleges.

Health:

In the district there are 94 allopathic Hospitals, 3 Ayurveda Hospitals, 78 Primary health centres 114 Dispensaries & 81 Private hospitals.

CHAPTER – 2**CLUSTER PRODUCT AND PRODUCTION PROCESS****2.1 Product Profile**

There are total six units in the cluster; all the five centres are using traditional raats or automatic single head spinning machines for yarn making. Recently they have procured automatic double head (Two ply) yarn spinning machines and will be installing them. The main products produced in the cluster are yarn, door and corridor mats.

2.2 Production Process

Procurement of Fibre: Fibre is procured mainly from Kundapur and Arsikeri. At present no quality checking is done by centres. This is leading to poor quality of Yarn and Mats.

Yarn Making: All of the five centres are presently using automatic single head spinning machines or traditional raats. The automatic spinning machines produce mat yarn and the traditional raats produce draw yarn. House hold units are spinning coir with traditional raats which is leading to low productivity and poor quality yarns. Yarn dying is done to weave coloured/designed mats.



Mats making: All the centres are having one or two traditional manual mats making frames with tools. Artisans by using mat yarn, coloured yarn and the draw yarn weave and stitch the required size of corridor mats on the manual mats making frame. The finished mats are cleaned, packed and sent for sale.



Analysis of production Process:

- *As there are no defibering units, fibering is being procured at higher costs from Kundapur and Arsikere.*
- *There are no quality checks observed during receipt of fiber leading to quality related issues.*
- *Bales of yarn are made using manual operated press, resulting in frequent spill overs and loss in transit.*
- *Traditional yarn making with charkhas is leading to poor production and employee drudgery.*
- *Lack of proper matting looms is resulting limited production of mats which have good domestic and overseas market.*

2.3 Value Chain Analysis

Value chain of a 14 x 24 inches mat

Activity	Present Value Chain (In Rs.)	
	Cost	Cumulative
Procurement of fibre (Rs 19 for 1.2 kg)	19	19
Yarn making (1 KG yarn will come from 1.2 KG of fibre)	15 (labour cost)	34
Dyeing of 1 KG of yarn	2.00 (material + labour cost)	36
Mat making	12.00 (labour cost)	48
Selling price at wholesale rate to KSCF godowns	4 (7.6%)	52.00

Value Chain for geo textiles (Post CFC)

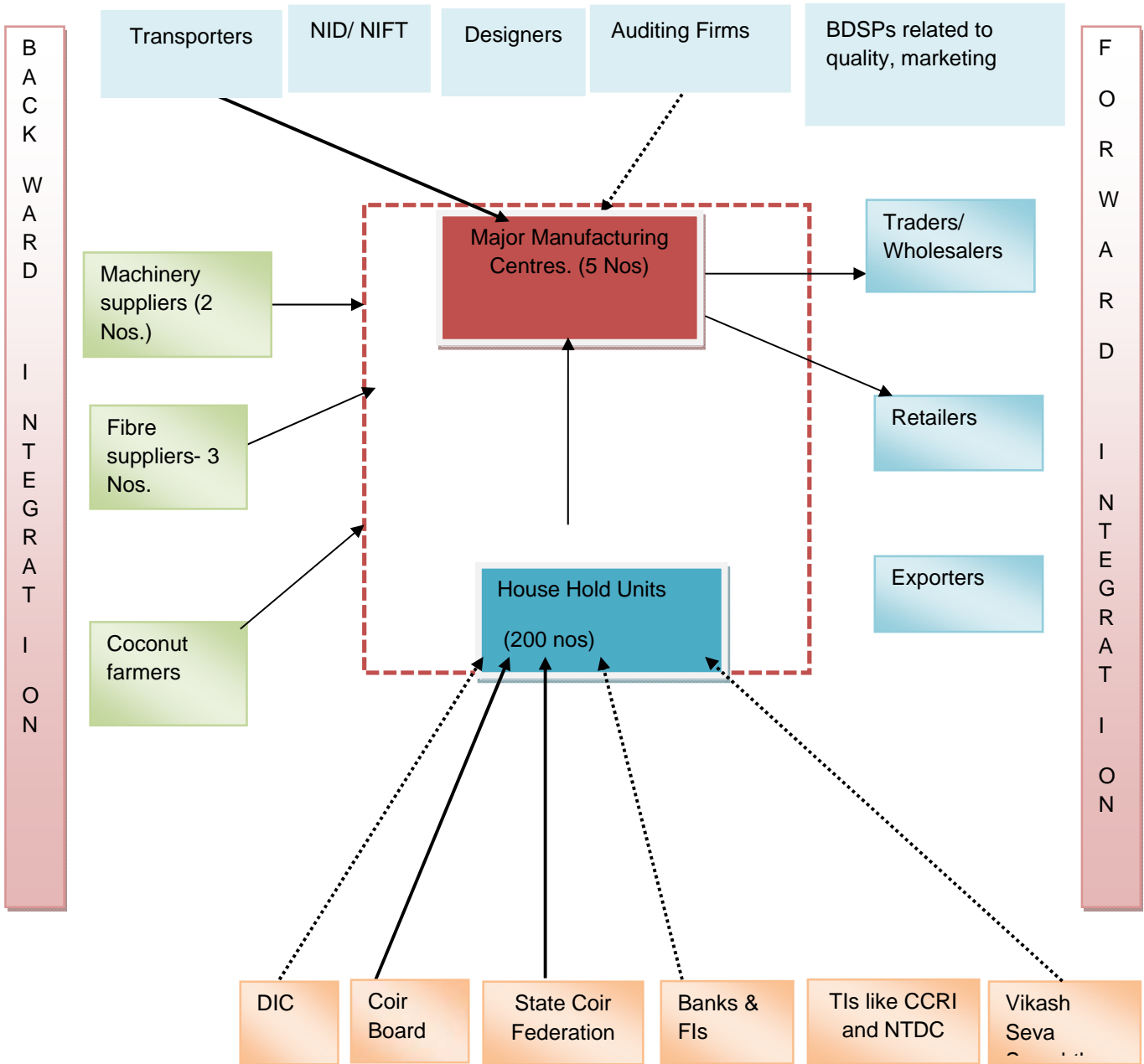
Activity	Cost (In Rs.)	Cumulative (In Rs.)
Raw material :1 sq m geo textile requires 1.25 m yarn (Procurement of fibre + Yarn making charges)	32	32
Power	11	43
Wages	18	61
Administrative and Selling expenses	15	76
Tax	7	83
Transport Expenses	2	85
Market Retail Price	15 (15%)	100

Analysis of value chain:

At present due to manual yarn and mat making, the labour cost is enormous and units are unable to get more than 10% profit. They sell it at a wholesale rate of Rs.52 from where it is sold at the KSCF outlets. If they can establish a geotextile making unit as CFC with an automatic yarn making unit that provides the necessary raw material, it can be capacitated to sell geotextiles at a minimum margin of 15%. This is considering the fact that sale of geo textiles will not have any middlemen as they will be directly selling to end users.

Cluster Map highlighting backward and forward linkages :

Figure 2.1 Present Cluster Map



- Index:**
1. Dotted square box around core cluster firms indicate poor inter-firm linkage
 2. Dotted arrow represents weak linkages
 3. Solid arrow represents strong linkages
 4. Lack of arrow represents absence of any linkages
 5. Double sided arrow represents two way linkages

2.5 Principal stakeholders:

There are 6 major manufacturing centres out of which one is in to direct producing mainly making Yarns and Mats. Remaining 5 centres are belongs to KSC Co-op Federation acting as a common CFC for Artisans of this clusters. Family members of House hold units getting coir fibre from cluster centres or from traders and selling produced Yarn to centres or to traders. Other then the above there are more then 150 artisans who are working in the centres either on daily basis or on fulltime.

Backward Linkages

Fibre is mainly supplied by Traders and central godown of coir federation at Arasikere, and from Kundapur DF unit. Husk is available locally at Kumta. The major machinery like raats, mat frames, spinning machine are purchased from suppliers situated at Coimbatore. However maintenance will be done by unit owners with the help of their workers.

Forward linkages

At present all the produce of the Federation centres are sold through their own outlets at Bangalore (2), Hubli, Hassan, Mysore, Karawar, Davangere, Chikmangalore, Madikeri, Sirsi or at wholesale market at Arasikeri. Federation is having 3 sales vans to carryout door to door sales. Household units are selling rope in the local market and yarn to the federation units. There are no direct exports as the quality of cluster products is not matching international standards.

Support Institutions

Coir Board is the major support institution for the cluster. Organising Skill Development Programs, reimbursement of 75% of cost of motorise raats are the major functions of Coir Board, Regional Office, Bangalore in the cluster. All the 6 units have taken MSME Part 1 registration from DIC. However no benefits have been derived from DIC. Though units have applied for power subsidy, so far not availed any subsidy due to procedural delays. Cluster firms are having good linkage with State bank of India, Canara Bank, Kumta Branch.

No linkage with DRDA, State Finance Corporation observed. No linkage with testing labs observed.

CHAPTER – 3**MARKET ASSESSMENT AND DEMAND ANALYSIS**

The coir manufacturing industry is producing coir mats, matting and other floor coverings, which was started in India on a factory basis, over a hundred years ago when the first factory was set up in Alleppey in 1859 by the Late Mr. James Darragh, an adventurous Irish born American national. Enterprising Indians followed the trail blazed by this foreigner. India accounts for more than two-thirds of the world production of coir and coir products. Amongst the coconut growing countries of the world India ranks 3rd after Philippines and Indonesia with 1.2 Million hectares of coconut growth and an average production of 6620 Million nuts.

Indian coir industry is an important cottage industry contributing significantly to the economy of the major coconut growing states and Union Territories of India, i.e., Kerala, Tamilnadu, Andhra Pradesh, Karnataka, Maharashtra, Goa, Orissa, Assam, Andaman and Nicobar, Lakshadweep, Pondicherry, etc. Modern machines were introduced into the coir industry in the late 1960's. About 5.5 lakh persons get employment in this industry. India exports around Rs.1000 crores of coir and coir products annually. Coconut husk is the basic raw material for coir products. Coir or Cocos - Nature's wonder fibre is extracted from the protective husk of the Coconut.

3.1 Coir Products and their applications

A score of varieties/grades of coir yarn are produced and each variety is associated with certain specific characteristics, used for industrial, agricultural and domestic applications. The exhaustive range of floor coverings, hardwearing door mats, durable Mattings and rugs, crush-proof pile carpets, heavy flowered Mourzouks, etc. in a variety of dimensions enhance the elegance of the place of choice. These products are either hand woven by expert craftsmen or are aesthetically manufactured on modern mechanised looms.

Other products of coir are, Geo-Textiles which are inexpensive, quick and effective in Civil Engineering practices. Rubberised coir, a blend of coir and latex, offers mattresses and cushioning for restful comfort and Pith which is now being widely used in agriculture as a natural hydroponics growing medium.

3.2 Domestic and Global markets for coir

The domestic market for coir products is currently estimated at Rs 2,000 crore and this is expected to grow to Rs 3,500 crore by 2017. The state of Kerala is responsible for about 80% of India's coir market. The coir industry in Kerala employs almost 3.5 lakh people. Over 50% of the coir fibre produced annually throughout the world is consumed mainly in India.

The exports of coir and coir products from India during 2014-15 have reached 1630.30 crores which is an increase by Rs. 154 crores from previous year. During the year 2014-15, 6, 26,666 MT of coir and coir products were exported from the country as against 5, 37,040 MT exported during preceding year. The increase in quantity and value works out to 16.7% and 10.5% in comparison with 2013-14. Coir pith, fibre, handloom mats, coir rope, curled coir, coir rugs and coir mats registered a growth ranging from 12 to 45%, coir yarn tufted mat, power loom mat, handloom matting, and coir geo textiles and rubberised coir recorded decline ranging from 5 to 51%.

China is the major importer of coir fibre for manufacturing mattress boards for their domestic requirement. They are focussing further to import more coir pith/ grow bags for horticulture/agriculture requirements. The coir handloom products export has shown marginal increase by quantity but no increase by value comparing last year.

Coir fibre with export earnings of Rs, 419.23 crores constituted 26% of total export of coir products from the country. Similarly coir pith with an export of Rs. 432.95 crores constituted to 27% of total exports. All other value added items put together constitutes 47% of total exports. During the year 2014-15 coir and coir products from the country were exported to 115 countries around the globe. China topped the importing countries with 28.6% in value and 39% in quantity. USA emerged as the second largest importer of coir from India with a share of 21.3%. Coir exports from India now have new markets such as Russia and Latin America.

(Source: website of Coir Board)

3.3 Programs to promote Coir Products

Programs for coir industry aims at increased utilisation of coconut husk for production of coir fibre, coir pith, growth of the domestic market, strengthening of research and development to find out new uses of coir fibre especially in the areas of geo-fabric, acquiring of new technology like Vinyl backed coir products. Mechanisation in all areas of production like the defibaring, spinning and weaving are implemented in a phased manner without affecting employment to make Indian coir products competitive in the export market. Modernisation of coir units has been propelled by providing incentives for installation of modern equipment's to make the coir industry more productive and labour friendly. Some of the common attributes are it provides excellent insulation against temperature and sound.

3.4 Major associations involved in coir promotion

FICEA Is the Confederation of Coir and also allied products exporters of India. FICEA, under its single umbrella, has to its credit all the Exporter Associations of coir from the country namely- the Indian Coir Exporters Chamber, Indian Coir Association, Coir Shippers Council, Travancore Coir Mats and Mating Manufacturers Association and The Coir Pith and Allied Products Manufacturers and Exporters Association, which exports about 1000 crores worth of Coir and Coir Products from the country. At state level KSCD Corporation Ltd established 7 nos sales outlets in potential market, KSC Co-op Federation established 14 sales outlets and 3 nos Mobil sales van are regularly visiting door to door sales in Karnataka. It voices the problems and difficulties being faced by the coir industry in general and the exporters in particular.

(Source: Indian Mirror.com)

3.5 Analysis

- *Cluster firms never capitalised, the growing export market for coir yarn and mats, which are its major products. All the firms are depending only on domestic traders who in turn by exporting are making major profits. There is a need for cluster firms to opt for direct export market.*

- *With the existing production process, cluster firms are capable of making pith, for which no conscious efforts were made. In fact cluster firms can opt for a Common Pith making unit, if economics of scale for individual units is adverse.*
- *Linkage of cluster firms never gone beyond coir board; it is high time for at least major manufacturers to be the members of FICEA, which can facilitate in direct marketing.*
- *There is a huge untapped market in countries like Russia and Latin America for coir mats and pith, which cluster firms need to tap. However for any exports firms need to understand international quality norms and upgrade their facilities accordingly.*
- *Even there is a huge untapped market in our state and country for Mats, Roaps, coir-pith, etc.by opening sales out lets or franchises in untapped market and districts in Karnataka as well as in India.*

CHAPTER – 4

SWOT AND NEED GAP ANALYSIS

4.1 Cluster SWOT

Based on the status of the cluster, production process and market analysis, following cluster SWOT has been derived:

4.1.1 Strengths:

- All units are well established (more than 25 years old) with well-equipped production centres having advanced manual and mechanised machines in yarn/ mat making.
- Availability of workers having skills in yarn/ mat making.
- Products well received at local markets.
- Established net work with local marketing channels.
- Availability of husk within cluster region.
- Strong linkages with Coir Board since they are owned and managed by KSCF Ltd.

4.1.2 Weakness

- Use of old modal motorised coir spinning charkhas resulting in limited production with poor quality yarn.
- Lack of defibering machines leading to purchase of fibre from far off places at higher prices including transportation costs resulting in higher production costs.
- Limited awareness on quality standards.
- Lack of matting looms resulting in limited production on manual basis.
- Limited efforts on value addition of pith resulting in lower price realisation.
- Limited efforts on value added products like matting, pith block making and pith manure to capture wider markets.
- No awareness on export marketing procedure, as manufacturers is apprehensive to opt for direct exports.
- Linkage with banks is restricted to availing grants from coir board, but banks are not willing to finance for any expansions.
- With the exception of schemes of coir board, principle firms are not aware of Public Support Schemes like CGTMSE, CLCSS, MDA of MSME, NMCP etc.

4.1.3 Opportunities

- Availability of advanced machinery in spinning, geo textile and non woven geo textiles.
- Geo textiles are a new, innovative product and its production has not been undertaken extensively in the state.
- Huge demand for geo textiles in international markets.
- Presence of sector specific promotional agencies like Coir Board, CCRI, FICEA to help in the areas of grant, soft loans, market promotion and skill development.
- Huge untapped export market in countries like Russia and Latin America besides China for Coir Yarn
- Presence of at least 40 schemes like CGTMSE, CLCSS, TUFS, NMCP, for technology and quality up gradation, export market promotion, working capital requirement for individual units.
- Presence of cluster development schemes like SFURTI, MSECDP, and IDS to implement requisite soft and hard interventions.
- In Karnataka two state level organisations KSCD Corporation & KSC Co-op Federation are established to support over all coir Industries.
- Huge untapped market in local Karnataka and in India itself.

4.1.4 Threats/ Challenges

- Since the cluster is still using traditional or semi-automated techniques of production, there may be opposition to up gradation and automation.
- Severe competition from Rubber, plastic and wooden products.
- High price fluctuations of coir husk and fibre.
- Still limited awareness among middle and lower income groups about importance of eco friendly products.
- Centres are in a rural area, facing which faces frequent power cuts.
- Fluctuating quality of husk in the market leading to poor quality finished products.

4.2 Need Gap Analysis

Based on the above cluster SWOT, area wise need gap analysis has been derived and presented as below:

4.2.1 Technology

Improper yarn making process adopted is a major area of concern, resulting in limited production. Major units are still using motorised raats which can only produce 50 KG per day, while majority of household units are using manual ones are semi mechanised raats which can produce 5 to 10 KG per day. Thus the overall production of the cluster is not even reaching to 3 MT per day. There is a need to upgrade to automatic yarn making by major firms either as CFC or at individual level to not only increase production levels but also improve product quality. Both the household units and manufacturing units require training on use of automatic spinning machines prior to any major investments.

With the exception of one unit, no cluster firm is found to have frame looms to make mats. No power looms observed for mat making. Even if making of mats on power looms is against traditional industry norms there is a need to create awareness on use of frame looms. Either frame looms can be provided as a common facility or for individual units at subsidised price.

Lack of defibering machines with any of the manufacturing units is resulting in brings fiber from Arasikeri by paying transportation resulting in higher production cost. Limited skill sets of workers on defibering and lack of capital to purchase defibering machines are the major reasons cited. As such, there is a need to upgrade the skill sets of workers in defibering and help at least the major centres to purchase mobile defibering units. .

4.2.2 Marketing

At present marketing is restricted to KSCF outlets in Karnataka. Even the household units are selling their yarn to the major units for mat making. They are reluctant to sell the yarn to end users directly mainly due to limited production and lack of awareness. There is a need to capacitate the artisans so that they can increase their production and explore new markets.

In Cluster production centres are making only coir yarn and mats, with no emphasis on value added items. Every day in all the centres together around estimated 500 KG of

pith is sold at through away prices of 400 per MT with value addition like block making or manure conversions which can fetch Rs. 3000 per MT.

4.2.3 Suggested Market Plan for the Cluster

Geotextiles: Major area for geo textiles is civil engineering applications and agricultural enhancement applications. They come with a wide range of products and applications including construction of buildings, bridges, roadways, railroads, dams, embankments, and sea level protection coastal engineering applications. Geotextiles have given consistent performance and have proven to be among the most versatile and cost effective ground modification materials. Their expansion has been rapid in recent years in the fields of civil engineering and agricultural enhancement. The geotextiles market has grown significantly during the past few years and is projected to display higher growth rates in the next five years. The government policies and environmental norms supporting the commercial usage of geotextile products, has led to the growth of the geotextiles during the forecast period 2014-2019.

Considering the above applications it is planned to establish linkages with the following state level organisations: Karnataka state road Development Corporation, Karnataka PWD, National Highway Authority of India, Karnataka Agriculture Department, Karnataka Horticulture Department.

Handicrafts: As Uttara Kannada district is a major tourist attraction due to its numerous beaches, handicraft items such as caps, toys, bags and purses will be sold at private outlets situated in all tourist areas (of the district).

4.2.4 Finance:

As the cluster centres belongs state owned organisation generally finance problems may not arise. There is also a need to organise an awareness workshop on Public Support Schemes with the help of NABARD, KVIC, MSMEI, and local DIC.

4.2.5 Quality:

With the installation of automatic double head spinning (Two ply) the yarn quality will be improved, with this improved quality yarn a better quality mats will be produced.

For 2 ply coir yarn made manually, the cluster firms are required to follow IS 14596 and for other coir products IS 2295 have been framed. There is also IS 1410: 2001 for coir ropes. Similarly there is an IS 11420 for coir mats. Even to make coir pith DOC.TXD 25 (1164), the standards are under making by BIS. Unless the cluster firms won't understand the specifications and standards of BIS, their chances of exporting and supplying to major market chains will be difficult. Thus there is a need to educate cluster firms on quality standards with the help of CCTRI through a training programme. They also need to be educate on procurement of quality yarn which otherwise is resulting in substandard quality of yarn and mats.

4.2.6 Linkage with Institutions:

At present the cluster firms are having linkage only with Coir Board. There is a need to link them with CCTRI for quality skill up gradation, FICEA for export market promotion, MSME-DI for leveraging NMCP scheme, Banks not only to avail credit facility but also benefit under CGTMSE, DIC for EM registration and availing state schemes, NABARD to avail schemes like Rural Mart, UPNRM. A link Developed between Khadi institutions for marketing the products through their sales outlets.

CHAPTER – 5

PROFILE OF THE IMPLEMENTING AGENCY

5.1 Institutional Structure

VIKASH SEVA SAMSTHE (R.) is a voluntary organization registered under the Karnataka society's Registration act 1960 (of 1960 rules 17th serial number of Karnataka) in Uttar Kannada District in the year 1999. Ever since its inception, **Vikas seva samsthe** had been working with rural and urban communities to ameliorate the conditions of their lives in Uttar Kannada district with several social, economic, health, education and self employment training programs sponsored by central and state Government department and from other agencies..

5.2 Governance Structure

This Organization has 5 professional staff and 7 members on the board of trustees as given below:

S. No	Name	Designation	Experience	Contact Number
1	Mr.Ganesh A. Boormane At. Manchikere Tq. Yellapur, Dist. Uttar kannada.	President	15 Years	9448965686
2	Mrs. Vera Rodringeis	Vice President	15 years	9480746496
3	Mr.Venkatraman R. Hegde	Treasurer	15 Years	8419254638
4	Mrs. Suma R. Ugrankar	Joint secretary	15 Years	9986399191
5	Mrs. Nagaratna Mogveer	Director	15 years	08419-268946
6	Mrs. Madhura M. Bhat	Director	15 Years	08419-268749
7	Mr.Ganesh G. Bhat	Chief Secretary	15 Years	9480041887

5.3 Operational Profile

This organization has conducted many developmental activities such as Chittara, Self-Employment trainings, Ashakiran, rain water harvesting, road safety programs sponsored by state govt., NABARD and other such organization. It has received state level awards in 2004 and 2011.

5.4 Management Profile

The founder of this organization is shri Ganesh Boormane. Secretary of this organization is taking care of overall administration of the organisation; he is ably assisted by the directors and vice president. Each executive has entrusted with a separate activity like marketing, training, livelihoods, water shed programs and public relations. While the management committee is the apex body, the executive function under it and are supported by staff.

5.5 Financial Position

The financial position of this organization is reasonably strong and its income is generated from implementation of projects sponsored by State govt., NABARD and other such organizations. Its financial position since last three years is as given below:

Sr.no	Particulars	2012-13	2013-14	2014-15
1.	Fixed Asset	6,45,050.00	6,45,050.00	Not yet submitted
2.	Current asset	2,80,717.00	2,80,325.00	
3.	Current liabilities	8,85,795.00	8,85,403.89	
4.	Revenue	35,29,446.00	33,43,662.00	
5.	Profit loss for last three years.	nil	nil	

6. Bank Account Details:

Joint SB acc. No: 03212200018799

Name of Bank: Syndicate Bank

Branch: Manchikeri. 581317 Tq, Yellapur Dist Uttar Kannada

IFSC code: SYNB0000321.

7. Contact Details:

Name of Contact person: Shri Ganesh A. Boormane.

Designation: President

Correspondence address: VIKASH SEVA SAMSTHE

AT. Manchikeri. 581317

Tq, Yellapur Dist Uttar Kannada

Email address. Ngo_vikas@yahoo.com

Analysis:

The experience of implementing agency is confined to organising skill development programs; there is no prior experience in implementation of cluster development, which is a major impediment. Thus the role of Technical Agency is crucial in this cluster as the IA needs continuous handholding. TA needs to capacitate the IA and its staff in implementation of soft interventions and also provide Project monitoring services in establishment of proposed CFC.

CHAPTER – 6**PROJECT CONCEPT AND STRATEGY FRAMEWORK****6.1 Project Rationale**

Kumta coir cluster had been established 30 years ago and it was initiated mainly through yarn spinning activity by using traditional raats/charkas and automatic single head spinning machines. Recently the units have acquired automatic double head spinning machines that are to be installed. As there are no defibering units, fibre is being acquired from neighbouring Kundapur and Arsikere, involving high costs. These costs have been escalating over the past few years as the demand of fibre from these regions have gone up. Thus, at the present fibre rate and high costs of transportation, there are negligible profit margins for both major units as well as the household units. If the trend of escalating costs continues within a decade there is chance of cluster having to fade away. Thus coordinate efforts have to be made not only to improve the skill levels, but also upgrade the technology by installing the latest machinery to produce higher quality quantity to reduce the cost to possible extent. Value added products like geo textiles and handicrafts have a ready demand and will give a much needed boost to the limited level of activity in the cluster. The units should also be helped in expanding their market channels with the help of relevant institutions. This can be only possible through a CDP approach and implementation of SFURTI in this traditional coir cluster is justified and required.

6.2 Project Objective

Major objectives of implementing SFURTI in the cluster are:

- To improve the aggregate cluster production by introducing part mechanisation and upgradation of existing equipment.
- To improve the social capital of the cluster by capacitating the IA and SPV.
- To establish requisite Common Facilities for value added products: Geo textiles and non woven textiles.
- To strengthen linkages of cluster firms with support institutions and relevant BDSPs so as to make the proposed interventions sustainable.
- To encourage direct marketing by cluster firms instead of existing trader controlled sales.

- To improve entrepreneurial skills of principal stakeholders so as to gain confidence to opt for export marketing besides improving linkages with banks and FIs.

6.3 Focus Products/ Services

There are only 2 products made in the cluster which are coir yarn and mats. Focus will be given to stepping up the production of yarn through up gradation of machinery and utilizing this higher capacity as a raw material for making value added products: Geo textiles and Handicrafts. While improving the quality and quantity is the major thrust area for yarn, successful introduction and initiation of production are the priorities for the new value added products (Geo textiles and handicrafts). At present pith is sold at cheaper prices without value addition like block making or manure, thus focus will also be on packing and selling of manure generated by the cluster firms on common brand basis either SPV or by IA.

6.4 Conceptual Framework/ Project Strategy

Kumta coir cluster has been active from last 30 years, established and controlled by the state govt formed organisation KSC Co-op federation Bangalore and thus has internal linkages with support institutions but it is not sufficient to over-all development of the cluster. Awareness generation on coir support schemes and training on best practices in cluster development need to be given a priority in the initial phase, so as to make a paradigm shift in cluster centres from traditional ways to competitiveness' in productivity. Awareness workshop on government schemes followed by exposure visit to Allapey is needed at the initial stage to make the cluster firms understand collective bargaining.

Development of skilled manpower in the cluster through appropriate training programmes is one of the major activities of the project in the subsequent phase. Organising one month training programs on maintenance and manufacture of spinning yarn and ropes on automatic spinning will be organised. Also for the new products, geo textiles and handicrafts, there will be two-week and five day training programs respectively. The target group will be workers from manufacturing units and house hold artisans. An exclusive program on better cultivation practices will also be organised for 200 coconut farmers in order to boost local production.

By the fourth quarter, capacity building of cluster firms through participation in Techtextil, Mumbai for marketing their Geo textile will be undertaken.

By middle of second year after capacitating the SPV and cluster firms, the Common Processing Centre for automatic spinning, geo textiles and handicrafts will be set up. Mobile fibre making units, 2 units for each centre will be provided to get fibre locally at centres.

Due weight age will also be given for strengthening competencies of SPV members and staff which will then act as Natural Facilitating Agency for long term sustainability of interventions.

Part – II

CHAPTER – 7 PROJECT INTERVENTIONS

7.1 Soft Interventions

Based on the SWOT and need gap analysis, following soft interventions are proposed for the cluster:

S. No	Name of the Activity	Time Line	Target group	Estimated Outcome
Building Awareness on various Government Schemes				
1	Awareness workshop on Government schemes (2 Nos)	Q1& Q3	5 cluster firms and 45 artisans	At least 50 members get awareness on various schemes like PMEGP, NMCP, CGTSME
2. Capacity Building				
4	Study tour to Allapey Coir Cluster and CCRI	Q2	20 manufacturers and artisans including members of federation	Participants understand the product diversification, marketing methodology and CFC operations followed in Aleppy cluster
3. Training Programmes & SDPS				
6	4 week training program on automatic spinning	Q3-Q4	10 artisans	10 workers trained in automatic spinning for yarn making
7	2 week training program on geo textiles	Q2	20 workers in manufacturing firms	20 workers of major manufacturing firms will be trained in geo textile production
8	5 day training program on making coir handicrafts	Q3-Q4	40 manufacturers and workers	40 participants trained in making coir handicrafts.
9	Training for coconut growers on better cultivation practices	Q4-Q5	100 Farmers	100 farmers trained on better cultivation practices
4. Marketing				
10	Participation in Techtextil, Mumbai	Q4	5 unit representatives	For direct marketing of geotextiles to national and international clients
11	Participation at Kissan Expo, Pune	Q5	5 unit representatives	For direct marketing of geotextiles to national level clients.

7.2 Hard Interventions

7.2.1 Automatic Spinning Unit

At present all the 5 major units are using charkas for spinning yarn which can produce 20 KG of yarn from fibre per day per machine. Thus on an average a unit is making only 100 to 150 KG, of yarn. Due to low production they could not able to take orders from major wholesalers or exporters which is restricting their markets and income levels. Moreover the quality of yarn is also not very good since spinning cannot be as tight as made by an automatic spinning machine.

Thus all the 5 units are seeking an automatic spinning unit as common facility which can make 50 KG per day per machine, thus improving the productivity and reduced employee drudgery. 6 machines are planned to be bought for the facility which can make 300 KG per day per shifts. Each machine is expected to cost Rs. 3.00 lakhs thus the total cost is coming to Rs. 18 lakhs. The Coir federation is already having 20 Kuntas of land, which is sufficient for the CFC. A 4000 sqft shed is planned to be constructed for the CFC. All the yarn produced by the automatic spinning machines will be used as raw material for geo textiles production.



(Coir yarn spinning machine by SUKU)

7.2.2 Geo textile making unit

At present the cluster firms are not making geo textiles, which have good local market from farming community. Even department of high way development board is willing to purchase for non-erosion of soil. Since the facility is capital intensive and cannot be viable at individual unit level the same is proposed at CFC level. One Geo textile power loom will be purchased at a cost of Rs.40 lakh. It will be set up on the same 20 kuntas of CFC land as mentioned above.

The capacity of each power loom is 450 square meters per day. The facility is expected to run 300 working days per annum. However in the first year only 60% capacity utilisation is considered with 5% increase every year. By sixth year, the unit is expected to reach its optimal capacity and from then onwards it is expected to maintain 85% capacity utilisation.



7.2.3 Handicraft making unit

None of the cluster firms are undertaking manufacture of coir based handicrafts (toys, bags, purses etc.) that are easy to make and will generate a steady demand as Uttara

Kannada district draws many tourists throughout the year. More over there is good demand for handicrafts in nearby tourists places like Gokarna, Goa, bruhudeswara, Sirsi, Udupi etc. 10 stitching machines are proposed to be set up at the CFC where local artisans can be make handicrafts after the necessary training.



7.2.4 Other Facilities

Other than above major facilities, it is also decided to purchase a mobile defibering machine, 4 dehusking machines as there are such facilities in all 5 of the units and house hold units. This will not only be useful to cluster firms who are intended to do defibering but also for household units who can make use of it. The machinery is expected to cost Rs. 4.00 lakhs.

CHAPTER – 8
SOFT INTERVENTIONS

Detailing of soft interventions as per the suggested guidelines is given as below:

8.1 Proposed Program: Study tour to Alleppy Coir Cluster & CCRI

Course outline: Stakeholders to understand advanced technology in making of geo textiles. They can also interact with scientists of CCRI to know possible product diversifications with existing raw material and intermediate products made.

Duration: 3 days

Batch Size: 205 manufacturers, artisans including members of federation and society

Trainers and their details: Not applicable

Training deliver method: Not applicable

Details of infrastructure required: Not applicable

Availability of Infrastructure: Not applicable

Cost of training program:

travel expenses 20 members other than CDA @ Rs. 3000 per head	60000
Lodging & Boarding for members @ Rs. 1000 per head x 4 days	80000
Misc. expenses incl. local transport	20000
Total	160000

8.2 Proposed Program: Awareness Workshop on Government Schemes (2Nos)

Course outline: 50 artisans get awareness on various schemes like Coir Udyami Yoajana, Coir Vikas Yojana, Export Market Scheme, accident insurance scheme of Coir Board and CLCSS, CGTMSE schemes of MOMSME

Duration: One day

Batch Size: 50 artisans

Trainers and their details: Not applicable

Training delivery method: Officials from Coir Board, DIC, MSME-DI, lead bank will attend and explain about the relevant artisan centric schemes.

Details of infrastructure required: Excepting a venue, projector and LCD no other infrastructure is required

Availability of Infrastructure: Community hall will be used for organising the event, while chairs and tables will be taken on hire from local tent house

Cost of training program:

Awareness Workshop on Govt. schemes	
Venue Cost	2000
Local TA/ DA	4000
Refreshments 60 persons @ Rs. 100 per head	6000
Photo & Video expenses	5000
Literature & Misc.	5000
Total	22000
For 2 programs	44000

8.3 Proposed Program: 4 week training program on automatic spinning

Course outline: 30 artisans trained in automatic spinning for yarn making

Duration: One month

Batch Size: 10 (The persons trained will themselves act as master trainers for other artisans in 5 production centres to be trained in auto spinning and its maintenance)

Trainers and their details: Central Institute of Coir Technology, Bangalore is a research institute of Coir Board, an autonomous body, under the control of Ministry of Agro and Rural Industries, Government of India. It has vast experience in conducting such programs.

Training delivery method: Class room sessions followed by practical sessions on machines

Details of infrastructure required: Venue (preferably at campus), LCD, Projector, Tables and Chairs

Availability of Infrastructure: The existing production centre is having a big hall which will be used as venue, while chairs and tables will be taken on hire from local tent house. As alternative program can also be organised in CICT Campus

Method of selection of trainer: As per the norms, selection of trainers has to be done in bidding process. However coir based institutions is limited as such direct selection is preferred.

Cost of training program:

Venue Cost	10000
travel expenses for faculty	15000
Local TA/ DA	10000
Stifund for participants 10 persons @ Rs. 200 per head x 20 days	40000
Refreshments 10 persons @ Rs. 100 per head x 20 days	40000
Faculty Fees	20000
Photo & Video expenses	5000
Literature & Misc. expenses	10000
Total	150000

8.4 Proposed Program: 2 week training program on making and testing of geo textiles

Course outline: 20 workers of major manufacturing firms will be trained in mat making of power looms

Duration: Ten Days

Batch Size: 20

Trainers and their details: CCRI, Alleppy, Bangalore is a research institute of Coir Board, an autonomous body, under the control of Ministry of Agro and Rural Industries, Government of India. It has vast experience in conducting such programs.

Training delivery method: Class room sessions followed by practical sessions on machines

Details of infrastructure required: Venue (preferably at campus), LCD, Projector, Tables and Chairs

Availability of Infrastructure: Program can also be organised in CCRI Campus, which has all amenities

Method of selection of trainer: As per the norms, selection of trainers has to be done in bidding process. However coir based institutions is limited as such direct selection is preferred.

Cost of training program:

Venue Cost	0
travel expenses for artisans @ Rs. 2000 per head x 20 persons	40000
Local TA/ DA including lodging @	40000

Rs. 1000 per day x 20 days x 20 persons	
Faculty Fees to CCRI	20000
Photo & Video expenses	10000
Literature & Misc. expenses	10000
Total	120000

8.5 Proposed Program: 5 day training on coir handicrafts

Course outline: 40 manufacturers and their workers and selected house hold units

Duration: One week

Batch Size: 40

Trainers and their details: The Central Coir Research Institute is one of the prime research centre of Coir Board (Recognised by the Department of Science & Technology, Government of India) established in the year 1959. The Institute has infrastructure for imparting training to students to acquire in depth knowledge in the processing of coir and coir products, weaving of mattings in semi-automatic / jacquard looms, wet processing of coir, Shade Matching, Testing of Coir and Coir Products, Composting of Coir pith in to organic manure, Conversion of coir fibre to the quality of retted fibre, Manufacture of instant Coco lawn, Manufacture of blended/handicraft items from coir and allied fibres, evolving designs for coir products on CAD, Repair and maintenance of Coir Processing Machineries, Weaving of Geo-textiles, Spinning of Coir fibre on motorized ratt / motorised traditional ratt, beaming of warp coir yarn.

Training delivery method: Class room sessions followed by practical sessions on machines

Details of infrastructure required: Venue (preferably at campus), LCD, Projector, Tables and Chairs

Availability of Infrastructure: Program can be organised in CCRI Campus, which has all amenities

Method of selection of trainer: As per the norms, selection of trainers has to be done in bidding process. However coir based institutions is limited as such direct selection is preferred.

Cost of training program:

Venue Cost	2000
travel expenses for artisans @ Rs. 4000 per head x 2 persons	8000
Local TA/ DA including lodging @ Rs. 3000 per day x 5 days x 2 persons	30000
Food expenses for participants @ Rs. 100 per person per day x 5 days x 40 Nos	20000
Stifund for participants @ Rs. 200 per day x 5 days x 40 Nos	40000
Faculty Fees to CCRI	20000
Photo & Video expenses	10000
Literature & Misc. expenses	10000
Total	140000

8.6 Proposed Program: 2 day training on better cultivation techniques for 100 farmers in 4 batches

Course outline: 100 coconut cultivators will be trained in better cultivation techniques by Coir Board Training centre at Tiptur

Duration: 2 days

Batch Size: 25

Trainers and their details: The coconut board has vocational training Central at Tiptur which is having scientists related to coconut cultivation.

Training delivery method: Class room sessions

Details of infrastructure required: Venue (preferably at campus), LCD, Projector, Tables and Chairs

Availability of Infrastructure: Program can be organised Federation production centre campus

Method of selection of trainer: As per the norms, selection of trainers has to be done in bidding process. However coir based institutions is limited as such direct selection is preferred.

Cost of training program:

Venue Cost	4000
Stifund for farmers @ Rs. 200 x 2 days x 25 Nos	10000
Food expenses for participants @ Rs. 100 per person per day x 2 days x 30 Nos	6000
Faculty Fees to Coconut Board	20000
Photo & Video expenses	5000
Literature & Misc. expenses	5000
Total	50000
4 Nos	200000

8.7 Proposed Program: Participation in TechTextil India at Mumbai

Course outline: To participate in exhibition and showcase their products in coir board sponsored stall

Duration: 3 days

Batch Size: 5 society and federation members

Trainers and their details: Not applicable

Training delivery method: Not applicable

Details of infrastructure required: A space in stall taken by Coir Board

Availability of Infrastructure: As given above

Method of selection of consultant: Not applicable

Cost of program:

Venue Cost	0
travel expenses for participants @ Rs. 1500 per head x 5 persons	7500
Local TA/ DA including lodging @ Rs. 2000 per day x 4 days x 5 persons	40000
Photo & Video expenses	5000
Literature & Misc. expenses	10000
Total	57500

8.8 Proposed Program: Participation at Kisaan Expo at Pune (1 No)

Course outline: To showcase the farmer centric products like geo textiles, pith manure and try obtain few orders

Duration: 3 Days

Batch Size: 5

Trainers and their details: Not applicable

Training delivery method: Not applicable

Details of infrastructure required: Stall

Availability of Infrastructure: Need to be taken from organisers

Method of selection of trainer: Not applicable

Cost of program:

Venue Cost (Stall rent)	20000
Local TA/ DA (5 persons x Rs. 2000 per person x 3 days)	30000
Travel Rs. 2000 per person x 5 Nos	10000
Photo & Video expenses	10000
Literature	10000
Total	80000

Activity wise budget for Soft Intervention Action Plan is given as below:

S. No	Name of the Activity	Time Line	Gol Grant	State Government Contribution	Stake Holders Contribution	Total Funds required
I. Building Awareness on various Government Schemes						
1	Awareness Workshop on Government Schemes (2 Nos)	Q1 & Q3	0.44	0	0	0.44
II. Capacity Building						
2	Study tour to Alleppy Coir Cluster & CCRI	Q2	1.6	0	0	1.6
III. Training Programmes & SDPS						
3	4 week training program on automatic spinning	Q3 - Q4	1.5	0	0	1.5
4	2 week training on geotextiles	Q2	1.2	0	0	1.2
5	5 day training program on making coir handicrafts	Q3-Q4	1.4	0	0	1.4
6	Training for coconut growers on better cultivation practices (4 Nos)	Q4-Q5	2	0	0	2
IV. Marketing						
7	Participation in Techtexil, Mumbai	Q4	0.58	0	0	0.58
8	Participation at Kissan Expo, Pune	Q5	0.8	0	0	0.8
Grand Total			10.72	0	0	10.72

CHAPTER – 9
HARD INTERVENTIONS**9.1 Automatic spinning unit:**

9.1.1 Proposed intervention

The SPV is contemplating to establish a geo textile making unit, which require 450 sq. meters of high quality yarn. Thus as backward integration it is planned to purchase 6 fully automatic spinning machines, with a capacity of 25 Kg per shift per machine. Thus the total production of yarn per day is coming to 150 KG considering one shift of operation.

9.1.2 Land details

20 Kuntas of land is available for the proposed CFC at Survey No: 90, eravatta, Kumta Post and Block, Uttar Kannada District. This land belongs to Karnataka State Coir Federation, which is willing to give the same on lease for 15 years to SPV. The land has already been converted in in to industrial purpose for which necessary approvals are available. A 4000 SFT of shed is planned which will house all the proposed facilities, with a total cost of Rs. 25.00 lakhs.

9.1.3 Proposed capacities

Each Capacity of the machine is 50 KG per shift and 6 machines are going to be bought considering the requirements of Geo Textiles CFC. Thus the total capacity is coming to 300 KG per Day (with 1 shift) at 100% capacity utilisation. However in the first year only 60% capacity utilisation is considered with 5% increase every year. By sixth year, the unit is expected to reach its optimal capacity and from then onwards it is expected to maintain 85% capacity utilisation.

9.1.4 Proposed equipment's/ machines etc.

6 automatic double head spinning machines are considered for the proposed centre which is of SUKUMAR make. Other than the machines, electrical cabling worth of Rs. 1.00 lakhs is required. All the accessories of the machines will be given by the supplier and the proposed cost is inclusive of them.

9.1.5 Master Plan/ Detailed engineering drawings

A detailed master plan along with civil estimates are given as **annexure – 14**

9.1.6 Project Cost

The total project cost includes civil construction and purchase of machinery is given as below:

Parameter	Specifications	Amount per unit	Total cost
Civil	4000 SFT of Shed (Used for all facilities)	625	25,00,000
	Alterations		3,00,000
Machinery	Automatic spinning machines 6 Nos	3,00,000	18,00,000
Total			46,50,000

(Detailed break up is given in the financial statements of business plan chapter)

9.1.7 Operation and maintenance model

The produce is meant for making of geo textiles in CFC itself as such operation and maintenance costs will be taken care by Geo Textile Facility.

9.1.8 Business Plan

Not applicable as it is only a backward integration facility for geo textiles unit.

9.1.9 Implementation schedule

The civil construction is expected to be completes by end of last quarter of the first year of the project implementation. Purchase and erection of machinery will be done by second quarter of 2nd year and plant is expected to start its commercial operations by end of second quarter. It is expected to reach breakeven in the first year of operation.

9.1.10 Any other information pertaining to the project

Nil

9.2 Geo Textiles Unit

9.2.1 Proposed intervention

AT present the cluster firms are not making geo textiles, which have good local market from farming community. Even department of high way development board is willing to purchase for non-erosion of soil. Since the facility is capital intensive and cannot be viable at individual unit level the same is proposed at CFC level. 2 Nos of Geo Textile power looms will be purchased each with a capacity of 300 meter per day.

9.2.2 Land details

20 Kuntas of land is available for the proposed CFC at Survey No: 90, eravatta, Kumta Post and Block, Uttar Kannada District. This land belongs to Karnataka State Coir Federation, which is willing to give the same on lease for 15 years to SPV. The land has already been converted in in to industrial purpose for which necessary approvals are available. A 4000 SFT of shed is planned which will house all the proposed facilities, with a total cost of Rs. 25.00 lakhs.

9.2.3 Proposed capacities

The capacity of each power loom is 300 meters per day based on 1 shift of operation thus the total capacity is coming to 600 meters per day. The facility is expected to run 300 working days per annum. However in the first year only 60% capacity utilisation is considered with 5% increase every year. By sixth year, the unit is expected to reach its optimal capacity and from then onwards it is expected to maintain 85% capacity utilisation.

9.2.4 Proposed equipment's/ machines etc.

A 600 meters capacity per day (on 1 shift basis) matting power looms of 2 Nos made by ESSAR Engineering, Coimbatore is considered. Other than the machines, electrical cabling worth of Rs. 0.50 lakhs is required. All the accessories of the machines will be given by the supplier and the proposed cost is inclusive of them.

9.2.5 Master Plan/ Detailed engineering drawings

A detailed master plan along with civil estimates are given as **annexure – 14**

9.2.6 Project Cost

The total project cost includes civil alterations and purchase of machinery is given as below:

Parameter	Specifications	Amount per unit	Total cost
Civil	4000 SFT Shed		Cost given as in facility 1
Machinery	Geo Textile power looms 1 No.	40,00,000	40,00,000
Working Capital	Selling on common brand basis		6,64,000
Total			41,00,000

9.2.7 Operation and maintenance model

The unit will run on

Production basis: To make the facility sustainable, 100% of the capacity will be utilised to make the geo textiles on common brand basis, where SPV itself will make the raw i.e. yarn and sell geo textiles directly to clients. In this option, the SPV is expected to sell high quality textiles at Rs. 100 per meter.

The unit is expected to generate revenue of Rs.81.00 lakhs and production costs of Rs. 77 lakhs, thus giving Rs. 4 lakhs as surplus in the first year of operation.

9.3 Coir Handicrafts making unit

9.3.1 Proposed Intervention

None of the cluster firms are undertaking manufacture of coir based handicrafts (toys, bags, purses etc.) that are easy to make and will generate a steady demand as Uttara Kannada district draws many tourists throughout the year. 10 stitching machines are proposed to be set up at the CFC where local artisans can be make handicrafts after the necessary training.

9.3.2 Land details

20 Kuntas of land is available for the proposed CFC at Survey No: 90, Eravatta, Kumta Post and Block, Uttar Kannada District. This land belongs to Karnataka State

Coir Federation, which is willing to give the same on lease for 15 years to SPV. The land has already been converted in in to industrial purpose for which necessary approvals are available. A 4000 SFT of shed is planned which will house all the proposed facilities, with a total cost of Rs. 25.00 lakhs.

9.3.3 Proposed capacities

The proposed capacity is 100 handicrafts per day based on 1 shift of operation. The facility is expected run 300 working days per annum. However in the first year only 60% capacity utilisation is considered with 5% increase every year. By sixth year, the unit is expected to reach its optimal capacity and from then onwards it is expected to maintain 85% capacity utilisation.

9.3.4 Proposed equipment's/ machines etc.

10 stitching machines costing Rs.10, 000 each is to be procured. Other than the machines, electrical cabling worth of Rs. 1.00 lakhs is required. All the accessories of the machines will be given by the supplier and the proposed cost is inclusive of them.

9.3.5 Master Plan/ Detailed engineering drawings

A detailed master plan along with civil estimates are given as **annexure – 14**

9.3.6 Project Cost

The total project cost includes civil alterations and purchase of machinery is given as below:

Parameter	Specifications	Amount per unit	Total cost
Civil	4000 SFT Shed		Cost given as in facility 1
Machinery	Stitching Machines 10 No's	40,00,000	1,00,000
Working Capital	Selling on common brand basis		2,84,000
Total			41,00,000

9.3.7 Operation and maintenance model

The unit will run on

Production basis: To make the facility sustainable, 100% of the capacity will be utilised to make the handicrafts on common brand basis, where SPV itself will make the raw i.e. yarn and sell handicrafts directly to clients. In this option, the SPV is expected to sell high quality handicrafts at an average of Rs. 100 per unit.

The unit is expected to generate revenue of Rs.18.00 lakhs.

9.4 Other facilities

Other than above major facilities, it is also decided to purchase a mobile defibering machine, 4 dehusking machines as there are no such facilities in all 5 of the units and house hold units. This will not only be useful to cluster firms who are intended to do defibering but also motivate them to go for individual defibering units. The facility is expected to bring Rs. 5.60 lakhs as revenue in the first year of operation. The machinery is expected to cost Rs. 4.00 lakhs.

With the defibering gaining momentum by end of second year, there will be an estimated 5 to 8 MT of pith will come as waste per day and can be utilised to make coir pith compost, which is not only eco-friendly but also has great demand in agriculture sector. The facility is expected to bring Rs. 7.20 lakhs as revenue in the first year of operation. The compost will be sold on common brand and the profits will be shared among members on pro rata basis. The facility is expected to cost Rs. 2.00 lakhs.

CHAPTER – 10
PROJECT COST AND MEANS OF FINANCE
10.1 Project Cost

The cost of project include cost of implementing Soft Interventions, Hard Interventions, IA fees and TA fees with a total project span of 3 years. However for SI and HI the aggregate project costs are given. Following table shows the aggregate cost of project:

Sl.No	Particulars	Total
A	Land (Lease)	0.00
	land Development	2.00
B	Building & other Civil Works	0.00
	Civil Works	28.00
C	Plant and machinery	
	a. indigenous	92.10
	b. import	
D	Lease Deposit & Electricity Deposit	5.00
E	Technical consultancy fee	0.00
F	Miscellaneous fixed assets	1.15
G	Erection / installation charges	0.00
H	Preliminary expenses	0.50
I	Pre-operative expenses	2.00
J	Provision for contingencies	
	a. buildings (@2%)	0.56
	b. Plant & Machinery (10%)	4.61
	c. Other fixed assets	0.00
K	Working capital	9.49
G	Provision for Soft Interventions	10.72
H	IA Fees	20.00
I	TA Fees (75% of SI+HI)	9.58
	Total	185.71

10.2 Means of Finance

Means of finance is mainly confined to SFURTI Grant and Promoter's equity. Promoters are willing to contribute on their own and are not taking any unsecured loans for the project. Thus the details of means of finance are given as below:

		Total
I.	Gol Grant under SFURTI	149.36
II.	State Contribution if any	0.00
III.	Promoters Equity	
	Own Sources	0.00
	Unsecured loans	0.00
Total		149.36

As per the guidelines 100% grant is considered for implementation of SI plan. For Hard interventions 75% grant is considered. Remaining 25% will be brought by IA through SPVs as their contribution. IA fee is coming to Rs. 20.00 lakhs which is within maximum cap of Rs. 20.00 lakhs. TA fees are calculated as 8% of SI+HI and are coming to Rs.9.58 lakhs. Thus the total project cost is coming to 185.71 lakhs in which Gol grant is 149.36 lakhs, which is with in maximum cap for minor cluster i.e. Rs. 150 lakhs.

10.3 Project Phasing

As indicated, project will be implemented in 3 years of time. While first year concentration will be more on implementation of soft interventions and initiation of HI, the second year will not only completion of SI but also completion of CFCs. By third Year, there will not be any SI and only strengthening of established CFCs will be given priority. Accordingly the following phasing has been suggested:

Sl.No	Particulars	1st Year	2nd Year	3rd Year	Total
	Cost of the project				
A	Land (Lease)	0.00	0.00	0.00	0.00
	land Development	2.00	0.00	0.00	2.00
B	Building & other Civil Works				0.00
	Civil Works	14.00	14.00	0.00	28.00
C	Plant and machinery				
	a. indigenous	0.00	73.68	18.42	92.10
	b. import				

D	Lease Deposit & Electricity Deposit	5.00	0.00	0.00	5.00
E	Technical consultancy fee	0.00	0.00	0.00	0.00
F	Miscellaneous fixed assets	0.00	1.15	0.00	1.15
G	Erection / installation charges	0.00	0.00	0.00	0.00
H	Preliminary expenses	0.00	0.25	0.25	0.50
I	Pre-operative expenses	0.00	1.00	1.00	2.00
J	Provision for contingencies				
	a. buildings (@2%)	0.00	0.56	0.00	0.56
	b. Plant & Machinery (10%)	0.00	3.68	0.92	4.61
	c. Other fixed assets	0.00	0.00	0.00	0.00
K	Working capital	0.00	0.00	9.49	9.49
G	Provision for Soft Interventions	10.00	0.72	0.00	10.72
H	IA Fees	6.60	6.70	6.70	20.00
I	TA Fees (75% of SI+HI)	3.19	3.19	3.19	9.58
	Total	40.79	104.94	39.98	185.71

	Means of Finance	1st Year	2nd Year	3rd Year	Total
I.	Gol Grant under SFURTI	35.544	81.358	32.458	149.36
II.	State Contribution if any	0.00	0.00	0.00	0.00
III.	Promoters Equity	5.25	23.58	7.52	36.35
	Own Sources	0.00	0.00	0.00	0.00
	Unsecured loans	0.00	0.00	0.00	0.00
Total		40.79	104.94	39.98	185.71

CHAPTER 11
PLAN FOR CONVERGENCE OF INITIATIVES
11.1 convergence initiatives:

Coir industry in Kumta region is mainly controlled by Karnataka Coir Federation, which is having 4 units, other than one unit run by a private society. At present these units are depending on manual charkhas for spinning which can produce not even 5 KG per day. Thus the total production of 5 units is not crossing 300 Kgs per day. Thus there is a need to leverage Coir Udyami Yojana, to expand their yarn making facilities by purchasing one fully automatic double head spinning machine per unit. Thus each unit require Rs. 5.00 lakh for purchase of machinery, civil alterations and working capital.

There are no defibering units active within the cluster regions, in spite of reasonable production of coconut. Thus it is planned to provide mobile defibering machines for at least 5 artisans all major area of concentration. The cost of such defibering machine is Rs. 2.00 lakh. The objective is to propel local artisans establish their own defiibering units after using such mobile machines. Even the purchase of such machines will be covered under Coir Udyami Yojana.

The common convergence activities planned and their tentative estimates are given as below:

S.No	Activity	Number of firms/artisans targeted	Tentative project Cost (In Rs.)	Scheme contribution	Bank Loan	Promoter Contribution
1	Expansion of existing 5 production units with automatic spinning machines (one each) under Coir Udyami Yojana	5	5 Nos. x Rs. 5,00,000 = Rs.25,00,000	10,00,000	13,75,000	1,25,000
2	Providing mobile defibering units to artisans	5	5 Nos. x Rs. 2,00,000 = Rs.10,00,000	4,00,000	5,50,000	50,000
	Total		35,00,000	14,00,000	19,25,000	1,75,000

CHAPTER - 12
Enhanced project cost with convergence of schemes

Overall project cost which is including grant under SFURTI, Stakeholder contribution, and co-funding by Coir Board (Coir Udyami Yojana), Bank Loan is given as below. A component wise break up is give as per the format.

(Rs. In lakhs)

S.No	Component	Total	Grant under SFURTI	Bank Finance	State Contribution	Grant from other schemes (CUY)	Stakeholder Contribution
1	Soft Interventions	10.72	10.72	0.00	0.00	0.00	0.00
2	Hard Interventions (under Core SFURTI)	145.41	109.06	0.0	0.0	0.0	36.35
3	Convergence For expansion of 5 existing units with auto spinning under CUY	25.00	0.00	13.75	0.00	10.00	1.25
4 A	Purchase of mobile defibering units by 5 artisans under CUY	10.00	0.00	5.50	0.00	4.00	0.50
5	IA Fees	20.00	20.00	0	0	0	0
6	Technical Agency Fees	9.58	9.58	0	0	0	0
	Total	220.71	149.36	19.25	0.0	14.00	38.1

Thus out of a total of 329.51 lacs as project cost, SFURTI contribution is coming to 65%, Stake Holders contribution is coming to 18% and remaining 17% is shared by Grant under Coir Udyami Yojana, besides bank loan.

CHAPTER – 13
PROJECT TIMELINE

The project implementation schedule with details of activities to be undertaken are given in the following chart based on the project phasing as given in the chapter – 8.

Project Activity	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1. Preparation and submission of DPR for proposed HI under SFURTI												
2. Implementation of trainings/ SDPs under SI												
3. Capacity building initiatives for Self Governance under SI												
4. Market Promotion Activities under SI												
5. Civil construction of planned HIs under Core SFURTI												
6. Erection of machinery and cabling												
7. Initiation of commercial production of CFCs												
8. Convergence initiatives												
9 Exit from the cluster by TA and IA												

CHAPTER – 14

DETAILED BUSINESS PLAN

It is to be mentioned that no income is expected from any of the soft interventions for SPV. The add on components like convergence initiatives are not included in business plan, as it is too early to assess the production levels and their marketing capability.

The production capacity of Geo Textile making unit is 300 meters per day. Similarly the production capacity of handicrafts is 100 per day. Both the capacities mentioned are at 100% utilisation. Both the units are expected to reach 60% capacity utilisation in the first year, 65% in the second year and reach a capacity of 85% by 6th year.

14.1 Product Mix:

The focus products of the CFC are geo textiles and handicrafts which will be made from the yarn made within CFC by using 6 automatic spinning units. The price of per meter of geo textiles is kept at Rs. 100.

14.2 Manpower Cost:

The man power includes 7 skilled and 10 unskilled workers, who will be administered by manager for whom a provision has been made in the budget. One manager, accounts assistant, sales executive and a security guard each are also provisioned in the budget.

The total wages for plant is estimated at 19.05 lakhs and for administrative staff the salaries are coming to Rs. 6.15 lakhs, which are inclusive of 25% fringe benefits as per enforcement directorate norms.

(Details of manpower given in annexed financial estimates)

14.3 Utility and other overheads:

Power: The project requires 60 HP power and is expected to cost an amount of Rs. 8.17 lakhs in the first year of operation.

Water: Water of 20 gallons is required per day for industrial purpose for pith wash. So a charge of Rs. 2.40 lakhs is considered for the first year.

Preliminary expenses of 0.50 lakhs are considered for salaries during construction and power deposit, while **pre-operative expenses** were considered at Rs. 2.00 lakh for other admin costs.

Admin expenses are considered at 2% on sales, repairs and maintenance as 3% of sales and sales expenses as 3% on sales.

14.4 Depreciation

A depreciation of 3.34% on buildings and 4.75% on plant and machinery considered as per the Government Norms. While Straight line method is used for profit and loss account statement, WDV method is used for tax calculations. Total depreciation per year is coming to Rs. 5.92 lakhs per annum.

14.5 Working Capital

Since 100% of capacity is used for direct marketing, the total working capital is coming to Rs. 9.49 lakhs.

14.6 Financial Projections

Profitability Statement: Given as below:

Year Ending 31st March	2016	2017	2018	2019	2020	2021
Production Capacity Utilization	0.60	0.65	0.70	0.75	0.80	0.85
Sales as percentage of installed capacity	0.60	0.65	0.70	0.75	0.80	0.85
Sales/ Total Income						
Gross Domestic Sales	99.00	107.25	115.50	123.75	132.00	140.25
Less: Excise Duty	0.00	0.00	0.00	0.00	0.00	0.00
Net Domestic Sales	99.00	107.25	115.50	123.75	132.00	140.25
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	99.00	107.25	115.50	123.75	132.00	140.25
Other Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	99.00	107.25	115.50	123.75	132.00	140.25
COST OF PRODUCTION- SALES						
Raw material Consumed	25.50	28.05	30.86	33.94	37.33	41.07
Consumables, Stores and spares 7% on sales)	6.93	7.51	8.09	8.66	9.24	9.82
Power, Fuel and other utilities (Variable)	4.90	5.31	5.72	6.13	6.53	6.94
Power, Fuel and other utilities (Fixed)	3.27	3.54	3.81	4.08	4.36	4.63
Water	2.40	2.52	2.65	2.78	2.92	3.06

Factory salaries & Wages (variable)	19.05	19.05	19.05	19.05	19.05	19.05
Factory salaries & Wages (fixed)	6.15	6.15	6.15	6.15	6.15	6.15
Repair and maintenance	2.97	3.22	3.47	3.71	3.96	4.21
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	5.92	5.92	5.92	5.92	5.92	5.92
Sub Total	77.09	81.27	85.70	90.43	95.46	100.85
Add: Opening Stock in process	0.00	0.00	0.00	0.00	0.00	0.00
Less: Closing stock in process	0.00	0.00	0.00	0.00	0.00	0.00
COST OF PRODUCTION	77.09	81.27	85.70	90.43	95.46	100.85
Add: Opening stock of finished goods	0.00	0.00	0.00	0.00	0.00	0.00
Less: Closing stock of finished goods	0.00	0.00	0.00	0.00	0.00	0.00
Cost of sales	77.09	81.27	85.70	90.43	95.46	100.85
Selling Packing & Distribution Expenses	2.97	3.22	3.47	3.71	3.96	4.21
Administrative & Misc. Expenses	1.98	2.15	2.31	2.48	2.64	2.81
Sub Total	82.04	86.63	91.48	96.61	102.06	107.86
Profit Before Interest and Tax (PBIT)	16.96	20.62	24.02	27.14	29.94	32.39
Interest on Bank Loan	0.00	0.00	0.00	0.00	0.00	0.00
Interest on unsecured loan	0.00	0.00	0.00	0.00	0.00	0.00
Interest on bank borrowing	0.00	0.00	0.00	0.00	0.00	0.00
Operating Profit	16.96	20.62	24.02	27.14	29.94	32.39
Preliminary expenses written off	0.00	0.00	0.00	0.00	0.00	0.00
Non Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Profit Before Tax (PBT)	16.96	20.62	24.02	27.14	29.94	32.39

14.8 Break Even Analysis

The project will reach breakeven in the first year of operation. During the first year the variable expenses are coming to Rs. 59.35 lakhs with a contribution of Rs. 39.65 lakhs thus leaving a breakeven of 51.17%. The breakeven will show a declining trend and by 6th year it will reach to 40.08 which is significant.

(Please refer annexure 13 for detailed BE analysis)

14.9 IRR Calculation

Both pre and post-tax IRR were calculated to assess the viability of the project. The average IRR before tax is coming to 15.87 with an NPV of Rs. 72.93 lakhs at 7% discount rate. The average IRR post tax is coming to 11.19 with NPV of Rs. 31.95 lakhs. Since there is no bank lending the IRR appears to be on very positive side showing the viability of the project.

(Please refer annexure 12 for detailed IRR analysis)

Conclusions:

The above financial statements indicate that the proposed facilities are viable, provided at least 60% capacity utilization is ensured. Any drop in sale charges more than 10% and increase in expenditure cost by 10% will make the unit a non-viable proposition.

Note: The detailed financial statements are given as annexure 1 to 13.

CHAPTER – 15**PROPOSED IMPLEMENTATION FRAMEWORK****13.1 Role of implementing agency & Coir Federation**

Following are the expected role of implementing agency

- Appointment and monitoring of the performance of CDA
- Selection of relevant beneficiaries for each activity balancing all the areas of concentration and stakeholders
- Micro planning of each activity in to sub activities and make a plan, besides sticking to time lines
- Acquisition of all clearances, documents, NOCs for land, power, water, construction from concerned line departments with the help of TA. .
- Preparation of quarterly progress reports, expenditure statements on timely basis with the help of TA.
- Leveraging of Central and State Schemes for add on activities with due help from TA
- Capacitate its executive members for strong self-governance

13.2 Details of strategic partners and other project stakeholders

TA needs to help the IA in not only preparation of DSR and subsequent DPR but also in identification of competent CDA, implementation of SI and HI as per the plan. They also expected to help IA in framing proper O&M framework for CFC maintenance.

Coir Board is required to release the funds on time once the yearly action plan has been submitted. It also needs to provide technical help wherever required since coir sector comes under its fold.

CCRI and other coir board affiliated institutions play a crucial role in organising the training programs like on advanced practices in spinning, mat making, pith block making. FICEA can also play a crucial role in supporting manufacturing firms for export of yarn and mats.

Coir Board

The Coir Board will act as the Nodal Agency. The agency will not only provide financial assistance in the form of grant in aid but also act as apex monitoring agency to oversee the progress of the proposed CFC through its regional office at Bengaluru. The nodal agency will also appraise the implementation and progress of the CFC to the Scheme Steering Committee headed by Secretary, Ministry of MSME.

Commissioner of Industries (CoI)

As state level apex agency for industrial development, they can help the IA/ SPV in dovetailing state schemes with specific reference to establishment of hard interventions.

Cluster Coordination Committee (CCC)

A CCC will be formed preferably chaired by District Magistrate, with nominated members from Commissioner of Industries, Coir Board local office, NABARD, SPV and a related Technical Institution. The CCC will play the role of an advisor in technical, financial, marketing and management mechanisms for smooth functioning of CFC. It will monitor the progress of the CFC on monthly/ quarterly basis and suggest corrective actions wherever required. It will be a catalyst committee between SPV and other concerned Central/ State institutions for smooth coordination.

13.3 Structure and composition of SPV

The Proposed Common Facilities will be managed by Special Purpose Vehicle. The name SPVs and its details are given as below:

S.No	Name of the SPV	Number of Members
1	Kumta Coir Cluster Society Limited, Heravatta, Kumta Block, Uttara Kannada District, Karnataka <u>Contact Person</u> Mr. Narayan Nayak 09964691110	7 members (upgrading to 15)

The SPV will oversee the following functions in their respective sub clusters:

- Establish, operate and maintain all common facilities as mentioned in the DPR.
- Collection of user charges from SPV members and other users of the facilities so as to meet the recurring expenses and future expansions
- Preparation and submission of progress reports to KVIC through TA

The management of the CFC will be a three tier structure for smooth and uninterrupted operations and is as follows:

The Management Committee: It is the main governing body for each SPV which is ably assisted by Technical and Secretarial staff. At present each SPV is having 3 executive namely President, Secretary and Treasurer. While the President will oversee the entire operations, the other members are entrusted with specific responsibility like marketing, technical, finance, Public relations etc. based on his past experience and qualifications.

The technical staff: The Common Facility will have its own technical staff who will work on full time basis. The technical staff is headed by an experienced plant in charge on deputation from federation.

The Secretarial Staff: A competent person will be appointed as the assistant/ NDA who will look after day to day administrative operations of CFC.

CHAPTER – 16

EXPECTED IMPACT

The expected impact is given at sub cluster level since each one is unique in its dynamics and production levels. The sub cluster wise impact is given as below:

16.1 At Enterprise Level

Number of direct beneficiary firms: 5 manufacturing firms along with its 40 workers besides 455 artisans.

a) Likely range of outputs:

- At least 150 workers, artisans will be trained in geotextile, advanced 2 ply yarn making, handicrafts making
- At least 2 firms will start export marketing and 10 house hold units direct marketing by becoming producers
- Banks will support at least 20 potential house hold units, and manufacturers by providing term loans/ working capital
- At least 10 to 15 house hold units will be linked to Coir Udyami Yojana

b) Indirect beneficiary firms:

Strengthening of forward and backward linkages and local institutions, provision of linkages with public and private support institutions, strengthening of local infrastructure through public-private partnerships would benefit at least 80% of the existing cluster enterprises indirectly, in 3 years of intervention.

14.2 Sub Cluster Level

- Strengthening of SPV for establishment and management of proposed hard interventions
- Establishment of geo textile cum non-woven making unit
- Strong linkages with related institutions and BDSPs like CCRI, FICEA, Banks, Coir Board and DIC
- Increase in productivity by 50 to 60%, turnover by 50 to 60%, employment by 30%

The performance indicators at cluster level are given as below:

S. No	Indicator	Present Status	Post Intervention
1	Total Production (in MT/ No.s)	378 MT yarn, 75000 mats	450 MT of fibre, 94,500 sq. meters geo textile, 21,000 units of handicrafts.
2	Total Turnover (Rs. In lakhs)	170	300
3	Investments (Rs. In lakhs)	70	162 lakhs (including CFCs)
4	Profitability (in Percentage)	7% to 10%	14% to 17%
5	Employment – Direct & Indirect (in Nos.)	500	600
6	Capacity Utilization (in %)	30 to 50	60 to 70
7	Artisan income (Rs. in Thousands)	4000 to 6000	8000 to 10000
8	Direct Marketing by artisans (In nos.)	0	15
9	Export marketing by Manufacturers	0	2
10	Beneficiaries under Coir Udyami Yojana	0	15

Annexure - I				
Cost of the Project and Means of Finance				
				Rs.In lakhs
Sl.No	Particulars	Already incurred	To be incurred	Total Cost
A	Land	-	-	-
	land Development	-	2.00	2.00
B	Building & other Civil Works	-	28.00	28.00
C	Plant and machinery			
	a. indigenious	-	92.10	92.10
	b.import	-	-	-
D	Lease Deposit & Electricity Deposit	-	5.00	5.00
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	1.15	1.15
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	0.50	0.50
I	Pre-operative expenses	-	2.00	2.00
J	Provision for contingencies			
	a.buildings (@2%)	-	0.56	0.56
	b.Plant & Machinery (5%)	-	4.61	4.61
	c.Other fixed assets	-	-	-
K	Working capital	-	9.49	9.49
	Total :	-	145.41	145.41
MEANS OF FINANCE				
				Rs.In Lakhs
Sl.No.	Particulars	amount already raised	amount proposed to be raised	Total
	Equity			
A	Equity from spv@25%	-	-	36.35
D	Term loans (0%)	-	-	-
E	Unsecured loans and deposits	-	-	-
	Quasi Equity			
E	Interest free unsecured loans	-	-	-
F	Subsidy : central govt. (75%)	-	-	109.06
G	Subsidy : state govt.	-	-	-
	Total	-	-	145.41

Annexure - II										
S.No.	Name of the machinery	capacity	hp	qty	Rate	Total Basic Price	Tax (5% Vat)/ CST (14.5% or 2% VAT)	Insurance (1% or actuals)	Freight Charges (2% or actuals)	Total Amount
1.Defibering and spinning unit										
1	Mobile dehusking machine			4	50,000	200000	11000	2000	4000	217000
2	Mobile Defibering Machine		5	1	200000	200000	11000	2000	4000	217000
3	Automatic Double head spinning machine unit	25 KG per day	6	6	300000	1800000	99000	18000	36000	1953000
2.Geo textile										
4	Netting Plant with automatic shuttle type netting plant, netting, weaving power loom of 2.5 M including bobbin stands, tension rollers, with motors and panel	450 SMT per Day	28	1	4000000	4000000	500000	40000	80000	4620000
5	4 head winding machine		7	1	600000	600000	75000	6000	12000	693000
6	2 Head Pirn Winding Machine		5	1	500000	500000	62500	5000	10000	577500
7	Picking shaft		0	6	50000	300000	15000	3000	6000	324000
4. Handicrafts										
8	Stitching Machine		1	10	10000	100000	5500	1000	2000	108500
5. Others										
9	Miscellaneous		3	1	250000	250000	0	0	0	250000
10	Electrical cabling			1	250000	250000	0	0	0	250000
	Sub Total - 1		55							9210000

Annexure - III
Detailed Workings

1. Civil Works

	Description	Quantity (SFT/ Nos)	Rate (In Rs.)	Amount
	General			
	For Furniture unit			
1	Building	2000	900	18,00,000
2	Renovation of existing shed	2000	500	10,00,000
	Total			28.00

Annexure III (Contd.)

2 Misc Fixed Assets

		Items	Qty	Rate	Amount	Final Amount after ST/ VAT
a	Communication & Teaching Equipment	Computers	1	27500	27500	27500
		UPS (1KVA)	1	4000	4000	4000
		Printer	1	16100	16100	16100
		FAX Machine	1	7500	7500	7500
c	Furniture & Fixture				0	30000
d	Fire Service					30000
	Total					115100

Annexure III (Contd.)

3 PRELIMINARY & PRE-OPERATIVE EXPENSES

	S.No	Details	Quantity	Amount Rs. lakhs
	1	Admn, Maintenance & Stationery, Electricity, Insurance and Bank Charges	LS	1.00
	2	Travelling Conveyance	LS	1.00
	3	Electricity Connection Charges	LS	0.00
	TOTAL =			2.00

DEPOSITS				
	1	Preliminary expenses		0.50
	TOTAL			0.50
Grand Total				2.50

Annexure -IV										
Inputs										
										(Rs.in lakhs)
YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fibre from Other Centers @ 17/- per KG 500KG Per Day	25.50	28.05	30.86	33.94	37.33	41.07	43.12	45.28	47.54	49.92
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power & Diesel	8.17	8.85	9.53	10.21	10.89	11.57	11.57	11.57	11.57	11.57
Water	2.40	2.52	2.65	2.78	2.92	3.06	3.22	3.38	3.55	3.72
Total	36.07	39.42	43.03	46.93	51.14	55.70	57.91	60.23	62.66	65.21
Total Cost	36.07	39.42	43.03	46.93	51.14	55.70	57.91	60.23	62.66	65.21
COST COMPONENTS AS % OF SALES										
Cost Component		Sales								
Admn. Expenses		2.00%								
Repairs & Maintenance		3.00%								
Selling Expenses		3.00%								

Annexure IV (contd...) Salaries & Wages

Particulars	No.	Salary/ month	Annual Wages & Salaries
		Rs.	Rs. lakhs
Plant In charge	0	20000	0.00
Operators	3	15000	5.40
Store Keeper	0	10000	0.00
Skilled Labour	7	6000	5.04
Unskilled labour	10	4000	4.80
	20		15.24
Add: Fringe Benefits			3.81
Total			19.05
ADMINISTRATIVE SALARIES			
Manager	1	20000	2.40
Sales Executive	1	10000	1.20
Accts/ Admin/ Assts	1	8000	0.96
Security	1	3000	0.36
	4		4.92
Add: Fringe Benefits			1.23
Total			6.15
TOTAL	24		25.20

ANNEXURE- V
BASIC ASSUMPTIONS FOR PROFITABILITY

REVENUE PROJECTIONS

YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Capacity Utilization (%)	60%	65%	70%	75%	80%	85%	85%	85%	85%	85%	100%
I. Geotextile											
Installed Capacity (In Sq. Feet)	135000	135000	135000	135000	135000	135000	135000	135000	135000	135000	135000
Sale Capacity (In meters)	81000	87750	94500	101250	108000	114750	114750	114750	114750	114750	135000
Sale cost per meter(Rs/Meter)	100	100	100	100	100	100	100	100	100	100	100
Revenue(Rs lakhs)	81.00	87.75	94.50	101.25	108.00	114.75	114.75	114.75	114.75	114.75	135.00
II. Handicrafts											
Installed Capacity (No. Nos)	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000
Production (Nos.)	18000	19500	21000	22500	24000	25500	25500	25500	25500	25500	30000
Sale cost per Meter	100	100	100	100	100	100	100	100	100	100	100
Revenue(Rs lakhs)	18.00	19.50	21.00	22.50	24.00	25.50	25.50	25.50	25.50	25.50	30.00
TOTAL REVENUE	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25	165.00

ANNEXURE - VI										
PROJECTED PROFITABILITY STATEMENT										
Year Ending 31st March	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Production Capacity Utilisation	0.60	0.65	0.70	0.75	0.80	0.85	0.85	0.85	0.85	0.85
Sales as percentage of installed capacity	0.60	0.65	0.70	0.75	0.80	0.85	0.85	0.85	0.85	0.85
Sales/ Total Income										
Gross Domestic Sales	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25
Less: Excise Duty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Domestic Sales	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25
Other Operational Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25
COST OF PRODUCTION- SALES										
Raw material Consumed	25.50	28.05	30.86	33.94	37.33	41.07	43.12	45.28	47.54	49.92
Consumables, Stores and spares 7% on sales)	6.93	7.51	8.09	8.66	9.24	9.82	9.82	9.82	9.82	9.82
Power, Fuel and other utilities (Variable)	4.90	5.31	5.72	6.13	6.53	6.94	6.94	6.94	6.94	6.94
Power, Fuel and other utilities (Fixed)	3.27	3.54	3.81	4.08	4.36	4.63	4.63	4.63	4.63	4.63
Water	2.40	2.52	2.65	2.78	2.92	3.06	3.22	3.38	3.55	3.72
Factory salaries & Wages (variable)	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
Factory salaries & Wages (fixed)	6.15	6.15	6.15	6.15	6.15	6.15	6.15	6.15	6.15	6.15
Repair and maintenance	2.97	3.22	3.47	3.71	3.96	4.21	4.21	4.21	4.21	4.21
Depreciation	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92
Sub Total	77.09	81.27	85.70	90.43	95.46	100.85	103.06	105.37	107.81	110.36

Add: Opening Stock in process	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Less: Closing stock in process	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COST OF PRODUCTION	77.09	81.27	85.70	90.43	95.46	100.85	103.06	105.37	107.81	110.36
Add: Opening stock of finished goods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Less: Closing stock of finished goods	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cost of sales	77.09	81.27	85.70	90.43	95.46	100.85	103.06	105.37	107.81	110.36
Selling Packing & Distribution Expenses	2.97	3.22	3.47	3.71	3.96	4.21	4.21	4.21	4.21	4.21
Administrative & Misc. Expenses	1.98	2.15	2.31	2.48	2.64	2.81	2.81	2.81	2.81	2.81
Sub Total	82.04	86.63	91.48	96.61	102.06	107.86	110.07	112.39	114.82	117.37
Profit Before Interest and Tax (PBIT)	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
Interest on Bank Loan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on unsecured loan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on bank borrowing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating Profit	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
Preliminary expenses written off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non Operational Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Profit Before Tax (PBT)	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
Provision for taxation	1.47	3.22	5.21	6.79	7.97	9.03	8.66	8.57	8.13	7.34
Profit After Tax	15.49	17.40	18.82	20.35	21.97	23.36	21.52	19.30	17.30	15.54
Retained Earnings	15.49	17.40	18.82	20.35	21.97	23.36	21.52	19.30	17.30	15.54
Net Cash Accruals	21.41	23.32	24.74	26.27	27.89	29.28	27.44	25.22	23.23	21.46
PBIDT/ total income (%)	17.13	19.23	20.80	21.93	22.68	23.09	21.52	19.87	18.13	16.31
Operating Profit/ Total Income (%)	17.13	19.23	20.80	21.93	22.68	23.09	21.52	19.87	18.13	16.31
Net Profit/ Total Income (%)	15.65	16.22	16.29	16.44	16.64	16.65	15.34	13.76	12.34	11.08
Raw material cost/ cost of production (%)	33.08	34.52	36.00	37.53	39.11	40.72	41.84	42.97	44.10	45.23
Cost of production/ net sales (%)	77.87	75.77	74.20	73.07	72.32	71.91	73.48	75.13	76.87	78.69
Cost of sales/ Net sales (%)	77.87	75.77	74.20	73.07	72.32	71.91	73.48	75.13	76.87	78.69

ANNEXURE – VII											
PROJECTED CASH FLOW STATEMENT (Rs. In Lacs)											
DETAILS	Const. Period	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
A. SOURCES OF FUNDS											
1. PBT with interest added back	0.00	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
2. Add Depreciation											
other non cash expenses	0.00	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92
3. Increase in Equity Share Capital	36.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Increase in term loan	0.00										
4. Increase in Subsidy	109	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Increase in current liabilities		9.49	0.49	1.50	0.50	0.50	0.51	1.02	0.03	0.03	0.03
TOTAL SOURCES	145.41	32.38	27.04	31.44	33.56	36.36	38.82	37.13	33.81	31.38	28.83
B. DISPOSITION OF FUNDS											
1. Increase in capital expenditure	132.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Preliminary & Pre op expenses	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Increase in Current Assets		24.75	2.06	2.06	2.06	2.06	2.06	0.00	0.00	0.00	0.00
4. Repayments of Term Loans		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Taxation	0.00	1.47	3.22	5.21	6.79	7.97	9.03	8.66	8.57	8.13	7.34
TOTAL APPLICATION	135.42	26.22	5.29	7.27	8.85	10.03	11.09	8.66	8.57	8.13	7.34
C. NET SURPLUS/ DEFICIT	9.99	6.16	21.75	24.17	24.71	26.33	27.72	28.47	25.25	23.25	21.49
D. ADD : OPENING CASH BALANCE	0.00	9.99	16.15	37.91	62.08	86.79	113.12	140.84	169.31	194.55	217.81
E. CLOSING CASH BALANCE	9.99	16.15	37.91	62.08	86.79	113.12	140.84	169.31	194.55	217.81	239.30

ANNEXURE - VIII											
PROJECTED BALANCE SHEET (Rs. In Lacs)											
DETAILS	Const. Period	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
LIABILITIES											
1. Share Capital	36.35	36.35	36.35	36.35	36.35	36.35	36.35	36.35	36.35	36.35	36.35
2. Reserves & Surplus	0.00	15.49	32.89	51.71	72.05	94.02	117.38	138.90	158.19	175.50	191.04
3. subsidy (Central +State)	109.06	109.06	109.06	109.06	109.06	109.06	109.06	109.06	109.06	109.06	109.06
4. Term Loans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 Working Capital		9.49	9.99	11.49	11.99	12.49	12.99	14.02	14.04	14.07	14.10
5 Current Liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL LIABILITIES	145.41	170.40	188.29	208.60	229.45	251.92	275.78	298.33	317.65	334.98	350.55
ASSETS											
1. Gross Fixed Assets	132.92	132.92	132.92	132.92	132.92	132.92	132.92	132.92	132.92	132.92	132.92
2. Less : Accm. depreciation	0.00	5.92	11.85	17.77	23.69	29.61	35.54	41.46	47.38	53.31	59.23
3. Net Fixed Assets	132.92	126.99	121.07	115.15	109.22	103.30	97.38	91.46	85.53	79.61	73.69
4. Current Assets	0.00	24.75	26.81	28.88	30.94	33.00	35.06	35.06	35.06	35.06	35.06
5. Cash & Bank Balance	9.99	16.15	37.91	62.08	86.79	113.12	140.84	169.31	194.55	217.81	239.30
6. Prelim. expenses not w/o	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
TOTAL ASSETS	145.41	170.40	188.29	208.60	229.45	251.92	275.78	298.33	317.65	334.98	350.55

ANNEXURE - IX											
CALCULATION OF MARGIN FOR WORKING CAPITAL & ASSESSMENT OF WORKING CAPITAL											
										(Rs.lacs)	
As per Nayak Committee method (If working capital is upto Rs. 5 crore)											
Partuculars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Gross Sales (Incl. job income)	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25	
Total working capital requirement (25% of gross sales)	24.75	26.81	28.88	30.94	33.00	35.06	35.06	35.06	35.06	35.06	
Marging money for working capital (5% of gross sales)	4.95	5.36	5.78	6.19	6.60	7.01	7.01	7.01	7.01	7.01	
Permissable bank borrowing (20% of gross sales)	19.80	21.45	23.10	24.75	26.40	28.05	28.05	28.05	28.05	28.05	
As per second method of lending											
Particulars	No. of months	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Current Assets											
1. Raw materials	1.00	2.00	2.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00
2. Consumables, Stores and spares	1.00	0.58	0.63	0.67	0.72	0.77	0.82	0.82	0.82	0.82	0.82
3. Stock in process (Month's cost of production)	0.10	0.64	0.68	0.71	0.75	0.80	0.84	0.86	0.88	0.90	0.92
4. Finished Goods (Months cost of sales)	0.50	3.21	3.39	3.57	3.77	3.98	4.20	4.29	4.39	4.49	4.60
5. Export's recievables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Recievables other than exports	0.50	4.13	4.47	4.81	5.16	5.50	5.84	5.84	5.84	5.84	5.84
Total Current Assets (A)		10.56	11.16	12.77	13.40	14.04	14.70	15.81	15.93	16.05	16.18
Current Liabilities											

1. Creditors for purchases	0.50	1.06	1.17	1.29	1.41	1.56	1.71	1.80	1.89	1.98	2.08	
		0.00										
Total Cuurent Liabilities (B)		1.06	1.17	1.29	1.41	1.56	1.71	1.80	1.89	1.98	2.08	
Working Capital Gap (A-B)		9.49	9.99	11.49	11.99	12.49	12.99	14.02	14.04	14.07	14.10	
Less : Bank Borrowing for working capital		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Margin money for working capital		9.49	9.99	11.49	11.99	12.49	12.99	14.02	14.04	14.07	14.10	
RECOMMENDED METHOD		NAYAK COMMITTEE METHOD										
Particulars		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Total current assets		24.75	26.81	28.88	30.94	33.00	35.06	35.06	35.06	35.06	35.06	
Total current Liabilities		1.06	1.17	1.29	1.41	1.56	1.71	1.80	1.89	1.98	2.08	
Working Capital Gap		23.69	25.64	27.59	29.52	31.44	33.35	33.27	33.18	33.08	32.98	
Margin Money for Working Capital		4.95	5.36	5.78	6.19	6.60	7.01	7.01	7.01	7.01	7.01	
Less: Margin Money for Working Capital or WC financed by way WCTL whichever is higher		4.95	5.36	5.78	6.19	6.60	7.01	7.01	7.01	7.01	7.01	
Borrowing for Working Capital		19.80	21.45	23.10	24.75	26.40	28.05	28.05	28.05	28.05	28.05	

ANNEXURE - X
ESTIMATION OF DEPRECIATION

a) Apportionment of Pre-operatives

(Rs.lacs)

Particulars	Actual Cost	Contingencies	Pre-Operatives	Detailed Engg.Ser	Total Cost
1. Buildings	28.00	1.19	0.46	1.15	30.81
2. Plant and Machinery	92.10	3.92	1.52	3.80	101.34
3. Misc Fixed Assets	1.15	0.05	0.02	0.05	1.27
Total	121.25	5.17	2.00	5.00	133.42

b) Estimation of Depreciation - St. Line basis

Particulars	Total Cost	Depn. Rate (%)	Amount
1. Land	0.00	0.00	0.00
2. Buildings	30.81	3.34	1.03
3. Plant and Machinery	101.34	4.75	4.81
4. Misc. Fixed Assets	1.27	6.33	0.08
Total	133.42		5.92

c) Estimation of Depreciation - WDV Method

(Rs.lacs)

Particulars	Buildings	Plant & Mach.	Others	Total
Rate of Depreciation (%)	10.00	15.00	10.00	
I YEAR - Cost	30.81	101.34	1.27	133.42
- Depreciation	3.00	15.00	0.13	18.13
II YEAR - WDV	27.81	86.34	1.14	115.29
- Depreciation	3.00	13.00	0.11	16.11
III YEAR - WDV	24.81	73.34	1.03	99.18
- Additions	0.00	0.00	0.00	0.00
- Total	24.81	73.34	1.03	99.18
- Depreciation	2.00	11.00	0.10	13.10
IV YEAR - WDV	22.81	62.34	0.93	86.08
- Additions	0.00	0.00	0.00	0.00
- Total	22.81	62.34	0.93	86.08
- Depreciation	2.00	9.00	0.09	11.09
V YEAR - WDV	20.81	53.34	0.84	74.99
- Additions	0.00	0.00	0.00	0.00
- Total	20.81	53.34	0.84	74.99
- Depreciation	2.00	8.00	0.08	10.08

VI YEAR - WDV	18.81	45.34	0.76	64.91
- Additions	0.00	0.00	0.00	0.00
- Total	18.81	45.34	0.76	64.91
- Depreciation	2.00	7.00	0.08	9.08
VII YEAR - WDV	16.81	38.34	0.68	55.83
- Additions	0.00	0.00	0.00	0.00
- Total	16.81	38.34	0.68	55.83
- Depreciation	2.00	6.00	0.07	8.07
VIII YEAR - WDV	14.81	32.34	0.61	47.76
- Additions	0.00	0.00	0.00	0.00
- Total	14.81	32.34	0.61	47.76
- Depreciation	1.00	5.00	0.06	6.06
IX YEAR - WDV	13.81	27.34	0.55	41.70
- Additions	0.00	0.00	0.00	0.00
- Total	13.81	27.34	0.55	41.70
- Depreciation	1.00	4.00	0.05	5.05
X YEAR - WDV	12.81	23.34	0.50	36.65
- Additions	0.00	0.00	0.00	0.00
- Total	12.81	23.34	0.50	36.65
- Depreciation	1.00	4.00	0.05	5.05
X YEAR - WDV	11.81	19.34	0.45	31.60
- Additions	0.00	0.00	0.00	0.00
- Total	11.81	19.34	0.45	31.60
- Depreciation	1.00	3.00	0.04	4.04

ANNEXURE - XI											
COMPUTATION OF TAXATION (Rs.lacs)											
Details	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
1. Profit Before Tax	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88	
2. Add: St. Line Depreciation	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	
3. Less: WDV Depreciation	18.13	16.11	13.10	11.09	10.08	9.08	8.07	6.06	5.05	5.05	
4. Gross Taxable Income	4.75	10.43	16.85	21.97	25.78	29.23	28.03	27.73	26.30	23.75	
5. Carry forward loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6. Net Taxable Income	4.75	10.43	16.85	21.97	25.78	29.23	28.03	27.73	26.30	23.75	
7. Income Tax @ 30%	1.43	3.13	5.05	6.59	7.73	8.77	8.41	8.32	7.89	7.13	
8. Surcharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9. Total income tax (including surcharge)	1.43	3.13	5.05	6.59	7.73	8.77	8.41	8.32	7.89	7.13	
10. Education Cess @ 3%	0.04	0.09	0.15	0.20	0.23	0.26	0.25	0.25	0.24	0.21	
11. Total income tax (Incl. surcharge & Education Cess)	1.47	3.22	5.21	6.79	7.97	9.03	8.66	8.57	8.13	7.34	

ANNEXURE - XII											
CALCULATION OF INTERNAL RATE OF RETURN & NPV											
IRR before tax											
	Const. Period	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Out Flows											
Capital Investment	-144.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		9.49	0.49	1.50	0.50	0.50	0.51	1.02	0.03	0.03	0.03
Total outflows	-144.91	9.49	0.49	1.50	0.50	0.50	0.51	1.02	0.03	0.03	0.03
Inflows											
Profit before tax	0.00	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
Add Depreciation and non cash expenses	0.00	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92
Add: Preliminary & Preop Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add : Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add : Salvage Value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.60
Total Inflows	0.00	22.88	26.54	29.95	33.06	35.86	38.31	36.10	33.79	31.35	60.40
Net cash flows	-144.91	13.39	26.05	28.45	32.56	35.36	37.81	35.08	33.76	31.33	60.37
NPV before tax(Rs. in lakhs)	72.93		Discount Rate taken =		7.00%						
Before - Tax IRR	15.87%										
IRR after tax											

	Const. Period	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Out Flows											
Capital Investment	-144.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		9.49	0.49	1.50	0.50	0.50	0.51	1.02	0.03	0.03	0.03
Total outflows	-144.91	9.49	0.49	1.50	0.50	0.50	0.51	1.02	0.03	0.03	0.03
Inflows											
Profit after tax	0.00	15.49	17.40	18.82	20.35	21.97	23.36	21.52	19.30	17.30	15.54
Add Depreciation and non cash expenses	0.00	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92
Add: Preliminary & Preop Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add : Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add : Salvage Value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.60
Total Inflows	0.00	21.41	23.32	24.74	26.27	27.89	29.28	27.44	25.22	23.23	53.06
Net cash flows	-144.91	11.92	22.83	23.24	25.77	27.39	28.77	26.42	25.19	23.20	53.03
NPV after tax(Rs. in lakhs)	31.95		Discount Rate taken =		7.00%						
Post - Tax IRR	11.19%										

ANNEXURE - XIII										
BREAK EVEN POINT (Installed Capacity) (Rs. In Lacs)										
DETAILS	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Production Capacity Utilisation	60.00%	65.00%	70.00%	75.00%	80.00%	85.00%	85.00%	85.00%	85.00%	85.00%
A. Variable Expenses										
1. Raw material consumed	25.50	28.05	30.86	33.94	37.33	41.07	43.12	45.28	47.54	49.92
2. Consumable Spares	6.93	7.51	8.09	8.66	9.24	9.82	9.82	9.82	9.82	9.82
3. Power, Fuel & other utilities (Variable Cost)	4.90	5.31	5.72	6.13	6.53	6.94	6.94	6.94	6.94	6.94
4. Factory Salaries & Wages (Variable)	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
5. Other variable expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Selling, Packaging & distribution expenses (Variable)	2.97	3.22	3.47	3.71	3.96	4.21	4.21	4.21	4.21	4.21
7. Interest on bank borrowing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Variable Cost	59.35	63.13	67.17	71.49	76.12	81.09	83.14	85.29	87.56	89.94
B.Fixed Expenses										
1. Power, Fuel & other utilities (Fixed Cost)	3.27	3.54	3.81	4.08	4.36	4.63	4.63	4.63	4.63	4.63
2. Factory Salaries & Wages (fixed)	6.15	6.15	6.15	6.15	6.15	6.15	6.15	6.15	6.15	6.15
3. Repairs & Maintenance	2.97	3.22	3.47	3.71	3.96	4.21	4.21	4.21	4.21	4.21
4. Depreciation	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92
5. Administrative & Misc. Expenses	1.98	2.15	2.31	2.48	2.64	2.81	2.81	2.81	2.81	2.81
6. Interest on term loans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7. Interest on unsecured loans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

8. Lease rentals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	20.29	20.97	21.66	22.34	23.03	23.71	23.71	23.71	23.71	23.71
C.Sales	99.00	107.25	115.50	123.75	132.00	140.25	140.25	140.25	140.25	140.25
D.Contribution	39.65	44.12	48.33	52.26	55.88	59.16	57.11	54.96	52.69	50.31
E.Break Even Point (B/D)	51.17%	47.54%	44.82%	42.76%	41.21%	40.08%	41.52%	43.15%	45.00%	47.13%
F.Cash Break Even	36.24%	34.12%	32.56%	31.42%	30.61%	30.07%	31.15%	32.37%	33.76%	35.36%
G.BREAK EVEN SALES	50.66	50.99	51.76	52.91	54.40	56.21	58.23	60.52	63.12	66.10

ANNEXURE - XIV										
	RETURN ON CAPITAL EMPLOYED									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Return										
Operating Profit	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease Rentals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total A	16.96	20.62	24.02	27.14	29.94	32.39	30.18	27.86	25.43	22.88
Net Fixed Assets	132.92	126.99	121.07	115.15	109.22	103.30	97.38	91.46	85.53	79.61
Current Asets less creditors	0.49	1.50	0.50	0.50	0.51	1.02	0.03	0.03	0.03	0.00
Total B	133.41	128.49	121.57	115.65	109.73	104.33	97.40	91.48	85.56	79.61
ROCE	12.71	16.05	19.76	23.46	27.28	31.04	30.99	30.46	29.72	28.74
ROCE for Optimal Year	23.46									
Average ROCE for 10 Years	25.02									