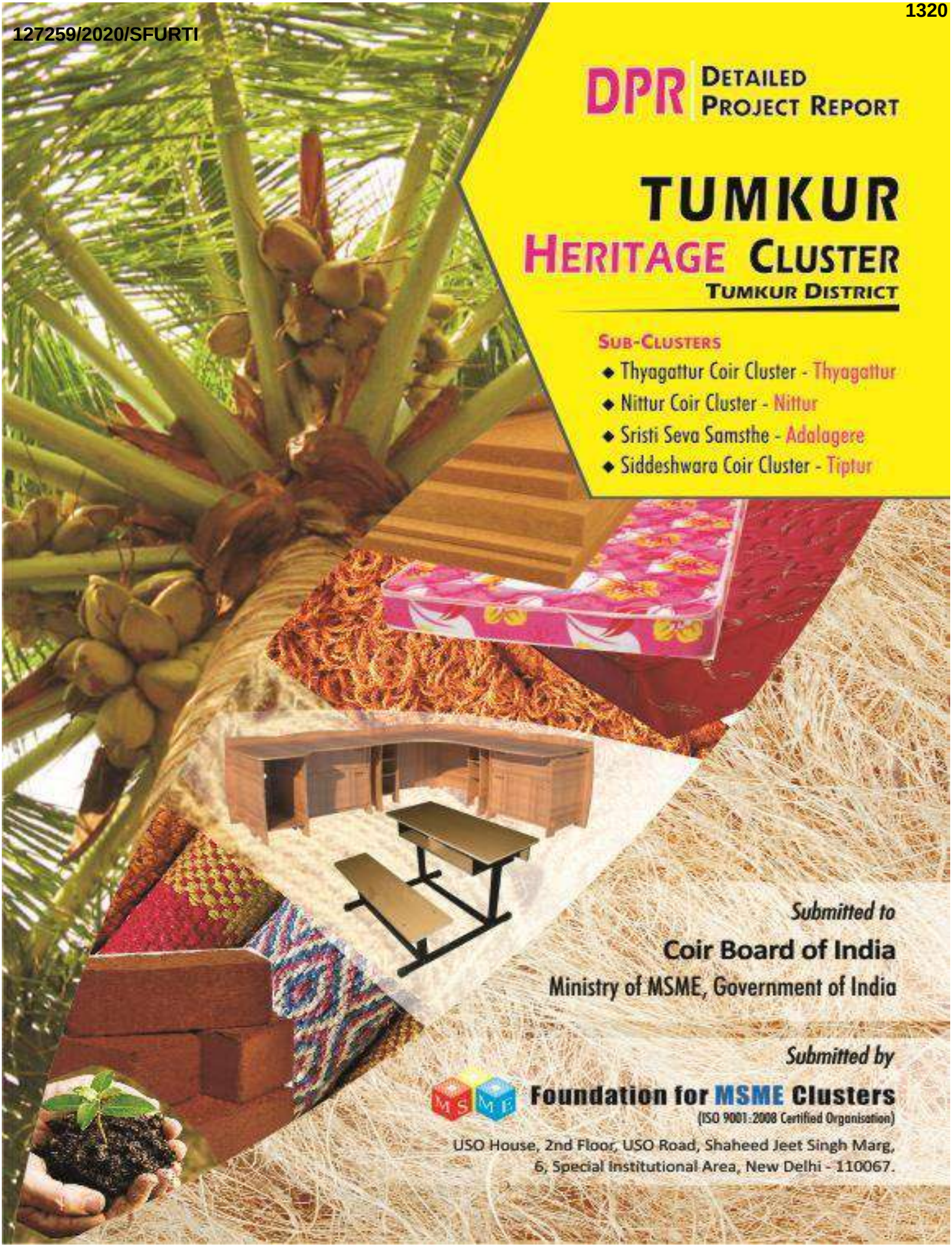

DPR Detailed Project Report

TUMKUR HERITAGE CLUSTER

Tumkur District

Sub-Clusters

- Thyagattur Coir Cluster - Thyagattur
- Nittur Coir Cluster - Nittur
- Sristi Seva Samsthe - Adalagere
- Siddeshwara Coir Cluster - Tiptur

Submitted to

Coir Board of India

Ministry of MSME, Government of India

Submitted by

Foundation for MSME Clusters

(ISO 9001:2008 Certified Organisation)

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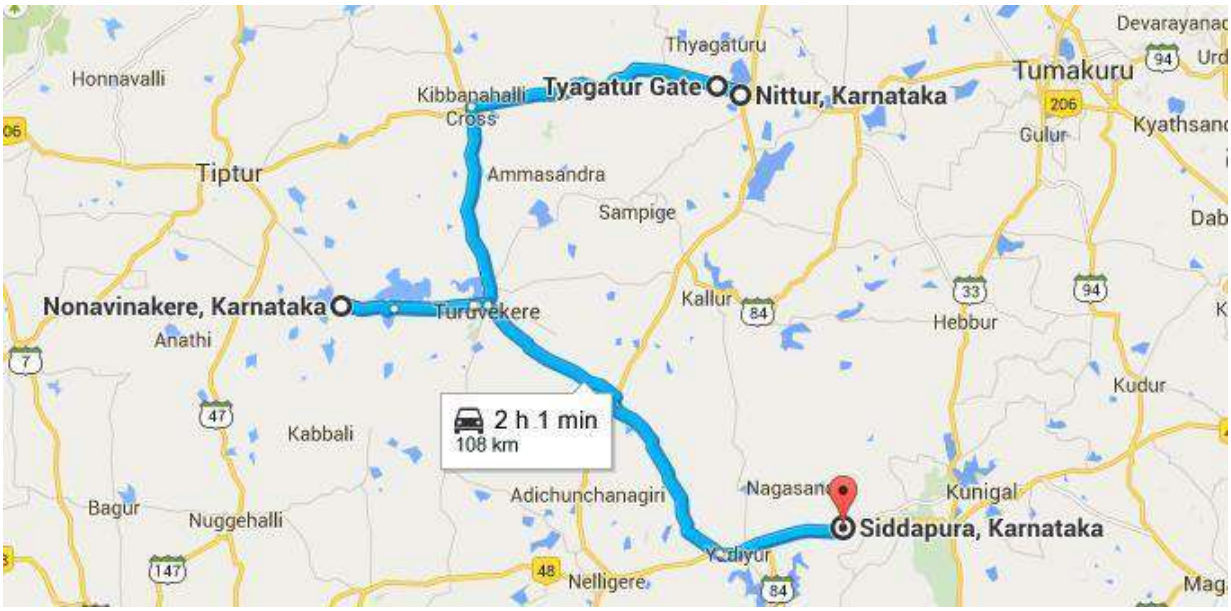
Table of Contents

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

JUSTIFICATIONS FOR TUMKUR TO BE A HERITAGE CLUSTER



Tumkur is a multi-product cluster with 6 major areas of concentration i.e. Nittur, Thyagattur, Adalagere, Tiptur, Kunigal and Mallasandra. The focus products proposed to be made ranges from high end value added products like Geo Textiles, Curled Coir, in Nittur and Tyagattur, geo textiles in Tiptur, eco-friendly pith block and manure to intermediary product of curled coir in Adalgere. This multi-product nature warrants different machinery, infrastructure requirement and thus cannot be made under one roof.

There are more than **100 major coir product units besides existence of more than 5000 artisans.** As per studies conducted during DSR stage, it was recommended that all of the above may be considered as separate sub clusters due to its the vast range of products made and being proposed, huge size and unique area specific dynamics. However as of now, only the first four mentioned are actively participating in the SFURTI project. These four sub clusters together constitute the Tumkur Heritagecluster.

It is justified that Tumkur be considered as a heritage cluster because:

a) **Product Diversification**: The type and range of the products in each of the sub clusters are different depending on at what stage of development each one stands. The clusters of Nittur and Thyagattur are quite developed and are producing products like coir ply boards. They want to further advance into pith blocks and coir modular furniture respectively. On the other hand in Tiptur and Adalagere, the activities are confined to defibering and yarn spinning

Tiptur cluster is opting to invest for coir geo textile while Adalagere desire to expand its defibering and spinning activities.

b) **Cluster Needs:** In Adalagere and Nittur, there is more number of household units and hence any cluster development activity should be formed taking this into account, where in there is great demand for manure making and curled rope. In Thyagattur and Tiptur, there is an abundance of fiber yarn with which geo textiles can be made and federation is having orders worth of 2 million square meters, and thus a geo textile unit would adequately absorb this skill.

c) **Difference in type of interventions**: As the clusters of Tiptur and Adalagere are not that advanced, they are in need of more number of soft interventions at the initial stage as opposed to Nittur and Thyagattur that are highly advanced and can initiate hard interventions faster, without the need of too many softinterventions.

d) **Geographic spread:** Of the four identified areas of concentration, Adalagere, Tiptur, Nittur and Thyagattur are villages falling in a 150 km radius from Tumkur town .As shown in the map, while Nittur and Thyagattur are situated close to each other, Nonavinekere and Tiptur are located at more than an hour's distance from all the other areas. Hence commuting from one point to another on a regular basis will entail substantial time andresources

e) **Huge size of cluster:** As mentioned, there are more than 100 units spread around Tumkur cluster employing more than 5000 artisans and workers. Within each of the four areas, there are on average 10-15 units of various sizes, employing at least 20 employees per unit. Each of these areas constitutes a substantial investment (both human and capital) and production base in the coir industry of the district. Hence this warrants that they be recognized as legitimate sub clusters bythemselves.

Considering all the above aspects, it may not be viable to establish a Common Facility Centre for the cluster as a whole. Besides the logistical difficulties, such an arrangement will fail to address the unique sub cluster dynamics, requirements and development problems of each of the four identified areas of concentration. Hence it is justified that Tumkur be considered as a Heritage cluster, with specialized allocation of funds and resources for each sub cluster.

PART - I

Chapter1

CLUSTERPROFILE

Background

After Kerala, Karnataka is the second largest coconut producing state in the country. The total production of nuts was 1525.3 million in the year 2006 and it has increased to 3784.6 million nuts during the year 2013-14 (CDB report). There is a huge demand of coir products in domestic as well as in international markets. Coir products are the major livelihoods source for the people of Kerala, Karnataka and Tamil Nadu. Maximum of the house-holds are involved in producing coir products like coir fibres, yarn, mats and mating. Since, coconut husk is the raw material and its availability is galore that's why manufacturing coir products are the major livelihood source in theregion.

In this context, in the district of Tumkur of the state of Karnataka, coir producers joined hands to develop industry in cluster mode for providing a platform to all coir product manufacturers to avail and access to more amenities with reference to raw materials, machineries and markets. Accordingly they approached Coir Board to be considered under SFURTI, and based on their consent; a Diagnostic Survey Report has been made by EDII in the year 2013. Subsequently the Coir Board has appointed M/s Foundation for MSME Clusters to prepare a Detailed Project Report under revamped SFURTIguidelines.

Regional Setting of theCluster

Tumkur coir cluster has been divided in to six sub-clusters as given in the table below.

Table-1: Details of Sub-clusters under Tumkur Cluster

Sl. No.	Name of the Sub-Cluster	Location	Distance from Tumkur	No. of Units
1	Tumkur Coir Cluster Pvt.ltd.	Mallasandra	5 KM	8
2	Shrushti Seva Samasthe	Adalgere	40 KM	15
3	Kunigal Coir Cluster	Kunigal	30 KM	5
4	Coir Cluster Dev. Project	Nittur	33 KM	11
5	Siddeshwara Coir Cluster	Siddapura	150 KM	9

6	Thyagatur Coir Cluster	Thyagatur	38 KM	6

There are almost 54 manufacturing units in Tumkur cluster dividing in to six sub-clusters. Apart from that there are around 3000 household units involved in manufacturing coir products. The household units mainly use traditional equipment's like "Charkas" to produce fibre and yarn. Their investment is very much low (maximum Rs.10, 000/-) as they procure the raw materials very easily and they don't have to pay much for it. As they use traditional equipment's to produce fibres and yarns the production is also very low. All most all products of these households units are consumed mainly in the local markets. In some cases the household units produces on daily wage basis for Rs.150-200/- per one shift (i.e. 8hrs per day).

Location

Tumkur district is an important district of the state of Karnataka. It is situated at 70 km to the north-west of the State capital Bangalore. There are 10 Taluks in the District. They are: Tumkur, Koratagere, Sira, Gubbi, Pavagada, Turuvakere, Kunigal, Madhugiri, Tiptur and Chikkanayakanahalli. Tumkur is well connected with road and rail from the state capital Bangalore. All the Taluks are also very well connected through internal roads.

Figure: 1 Taluk Map of Tumkur District

Mallasandra Sub-Cluster

Tyagattur Sub-Cluster

Kunigal Sub-Cluster

Adalgere Sub-Cluster

Nittur Sub-Cluster

Siddapura Sub- Cluster

Evolution of theCluster

Tumkur cluster is a very old cluster. The first unit M/s Thengina Narina Kushal Kaigarika Sahakar Sangha (TNKKSS) was established in the year 1966 at Thyagatur and was registered under Directorate of Industries and Commerce, Govt.of Karnataka in the year 2004 as Cooperative Society. This unit manufactures Coir Fibre, coir curl rope and other products like Yarn, Mats and Matting. The commercial success of the unit has propelled other enthusiastic local people to establish units gradually. Today there are 54 units in the cluster operating across six sub-clusters. With the help of Coir Board, theses sub-clusters have been clubbed in umbrella i.e. Tumkur Heritage Cluster. Stake holders of Tumkur cluster have proposed 6 CFCs, one each in six sub-clusters.

However based on the assessment of FMC team members and after thorough survey, it has been found that the SPVs of Mallasandra and Kunigal are not showing keen interest and thus dropped from SFURTI Scheme.

Demography and growthtrends

In 2011, Tumkur had population of 2,678,980 of which male and female were 1,350,594 and 1,328,386 respectively. Population Density of Tumkur district as per 2011 census is 253 people per sq.km. With regards to Sex Ratio in Tumkur, it stood at 984 per 1000 male compared to 2001 census figure of 967.The below table depicts the demography of Tumkur district.

Table 2: Demography of Tumkur District

Description	2011 Census
Actual Population	**2,678,980**
Male	1,350,594
Female	1,328,386
Population Growth	**3.65%**
Area Sq. Km	10,597
Sex Ratio (Per 1000)	**984**
Child Sex Ratio(0-6)	959
Average Literacy	**74.14**
Male Literacy	82.81
Female Literacy	67.38
Total Child Population	**2,65,742**
Male population (0-6 Yrs.)	135,671
Female population (0-6 Yrs.)	130,071
Literates	**1,813,391**
Male literates	1,006,024
Female literates	807,367

(Source: http://www.census2011.co.in/census/district/267-tumkur.html)

Growth Trends of Tumkur District

Iron is obtained in large quantities from Tumkur district. Lime Stone, Graphite, Quartz, Silversand, Corundum, Dolomite, Clay, Soap Stone are the major mineral resources available in the district. The Industrial Scenario of Tumkur district is as perbelow:

Table 3: Industrial Scenario of Karnataka

Sl. No.	Head	Unit	Particulars
1.	Registered Industrial Unit	No.	23,804
2.	Total Industrial Unit	No.	26,152
3.	Registered Medium and Large Unit	No.	33
4.	Estimated Avg.no.of daily workers employed in Small Scale Industries	No.	132235
5.	Employment in Large and Medium Industries	No.	7204
6.	No.of Industrial Areas	No.	7

(Source:http://dcmsme.gov.in/dips/Tumkur%20Dist%20 (corrected).pdf)

The Year wise trend of Industrial growth of Tumkur district is as per below:

(Table 4: Year wise trend of units registered)

Sl No.	Year	Number of Registered Units	Employment	Investment (in lakhs)
1	2007-08	604	4190	2819
2	2008-09	707	5016	5759
3	2009-10	784	5508	6838
4	2010-11	865	6588	71151
5	2011-12	947	4850	6762

(Source: http://dcmsme.gov.in/dips/Tumkur%20Dist%20 (corrected).pdf)

The number of registered units has been increased since the year 2007-08.So that the employment. There has been also an increase in investment.

Socio-EconomicAspects

The education level of most of the house hold unit involved in coir production is up to elementary level. Their economic level is not so high. The per day income of most of the house hold units is Rs.150/- to Rs.200/- per day in case of skilled and Rs.70/- to Rs.100/- in case of semi/unskilled.

Human DevelopmentAspect

The major human development aspect of Tumkur district as per below:

a) The per capita income of Tumkur district was 9005 in 1990-1991 and it has increased to 20077 during the year2007-2008.

b) Compound Annual Growth Rate (CAGP) was 5.4 in the year 1990-1999 and it has decreased to 3.2 during the period 1999-2008 and again increased to 4.5 during the year 1999-2008.

c) The Gross Domestic Product of the district is 3.3 with Bangalore division and 4.9 without Bangaloredivision.

d) So far as Human Development Index is concerned, Tumkur district ranked 15th with 0.630 in the year2001.

(Source:http://cmdr.ac.in/editor_v51/assets/mono-60.pdf)

Key EconomicsActivities

Apart from coir the major economic activities of Tumkur district is Agriculture. Themajor crops are Paddy, Ragi, Maize, Cereals and minor millets. Ragi is a major crop cultivated extensively in the district. This crop occupies one third of whole cultivated land of the district. Rice-unhusked rice or paddy is grown in all taluks of the district. Rice is the most important crops than Ragi and mainly grown under tanks and canals.Important Commercial grown is groundnut. Coconut and Arecanut are the plantations crops grown in the District. Cereals are grown in 2, 42,760 Hectares; Pulses are grown in 60,134 Hectares; Food grains are grown in 3,02,894 Hectares and Oil seeds are grown in 1,64,432Hectares.

Infrastructure

Power: Bangalore Electricity Supply Company Limited (BESCOM) is responsible for supply of electricity in Tumkur. In order to deal with the increasing population and industrialization in the area, major public investments in power generation and transmission is being introduced. In the rural level, consistent effort to enhance biogas based projects are also being made.

Water: There are no perennial rivers in the district. The minor rivers originate from watersheds and empty into the reservoirs and tanks in the district. There are 1462 minor irrigation tanks in the district irrigating 57,132 hectares of land. The Hemavathy project

which is on verge of completion is expected to irrigate 237,000 acres of land in WATER Tumkur district.

Education: Tumkur has 3897 primary schools, 569 High schools & 132 Pre-university colleges.In higher education segments, the district has 69 general colleges, 1 medical college, 6 engineering colleges, 10 ITIs, 1 dental college, 2 law colleges and 1 polytechnic.

Health: Tumkur has close to 75 primary health centres along with 10 major hospitals. Dispensaries and drug shops are also available in plenty in the district. The district has been a centre for various healthcare initiatives at Government level like Tuberculosis control programme, polio immunization programme, etc.

(Source:http://www.bounteouskarnataka.com/DP-PDF/TumkurDistrictProfile.pdf)

Chapter2

CLUSTER PRODUCT AND PRODUCTIONPROCESS

Product Profile

There are 54 units in Tumkur cluster and maximum of the units produces coconut fibre, yarn, pith, pith blocks and curled coir. At one unit at Thyagatur, Gubbi, high end products like coir plywood and needle felt coir are being produced.Coir pith in this area is not used properly as there is no value addition. The pith is sold to nurseries at a throw away price for want of storage space. This is a huge loss to the manufacturers as they could not recover the reasonable price of pith. Moreover, they are using DG set for running the units as electricity supply is very erratic and continuous power is never made available. Therefore the cluster members are very eager to get a remunerative price for the pith. This will happen only if they can use the pith very productively than giving away to nurseries at throw away price.There are about 26 fibre extraction and curling units in Tumkur district. Approximately, each unit has 20 workers (15 women and 5 men). The units belong to private individuals, society andgovernment.

Abundant raw material is available in this district, but the same is not utilized fully due to various bottlenecks. One of the bottlenecks is the collection of raw material which involves lot of transportation cost. They propose to form a cooperative society like the milk union and overcome the difficulties. Again here assistance from state and central governments as well as Coir Board is necessary, including financial. Earlier the manufacturers were getting the raw material on cheap rates, but the advent of Tamil Nadu manufactures at Tumkur has created a spurt in the price of husks. Now 1000 husks are available at Rs. 600/- plus transportations. Large numbers of farmers are benefitted due to hike in husk rates, but the pressure is on manufacturers has mounted for realizing the remunerative price for fiber and pith. The best alternative is to start value addition to fiber and pith. Therefore units from this district would like to go not only for enhancing the production capacities of fiber but also value addition to both fiber andpith.

ProductionProcess

De-Fibreing: In maximum of the units, de-Fibreing is done by mechanized process.In this process, the brown Fibre is received. The products obtained from this process is Fibre and coir pith.

Figure 3:Production Process

Crusher

Soaking

Feedingthehusk

Delivery offibre

Coir Pith: Most of the units are in to fibre making which results in production of more than 40 Tons of pith as by product.The coir pith is a material left after the extraction of coir fiber from coconut husk. Extraction of 1kg fiber generates 2 KGs of coir pith.Till recently coir pith was considered as a pollutant and a problematic waste material of coir industry. It is now converted into an environmentally friendly soil conditioner in horticulture as a superior natural alternative to peat moss. It can be converted into organic nature for soil improvement and higher yield.

Fibre: All most all the units of Tumkur cluster manufacture fibre by mechanized process.

White Fibre – extracted from retted green husk, which are retted for a period of 6-10months. During retting, bacterial action makes the husk soft and makes it easy toextractFibre.ThewhiteFibreisspunintocoiryarnforfurtherprocessing

Into finished products like door mats, mattings, carpets, etc. for export and internalconsumption.

Brown Fibre - including bristle and mattress Fibre - extracted from un retted coconut husk by mechanical process. A thick and long variety, bristle Fibre is used for brush making. Brown fibre is used for making ropes, stuffing, upholstery, cushioning, curled coir and rubberized coir mattresses.

Coir Yarn: Coir Yarn is also being manufactured in all most every units of the cluster. In some units it is produced in traditional process, where as in some units it is being produced in mechanizedprocess.

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

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

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

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

The automatic spinning machine units are capable of production of yarns of runnage varying from 50 to 300 meters/kg and twists from 10 to 30 twists/feet. Coir fibre in the form of bales is the raw material for the unit. These Fibres are soaked in water for one hour and are cleaned in the willowing machine. Pith content and the hard bits are removed in the process. Manual attention is also required to remove the hard bits to the fullest extent. These cleaned Fibres are passed in to the feeder of silvering machine where the fibres are paralleled and drawn by draw rollers. These paralleled fibres are twisted and taken on to drum.

Dyeing of coir fibre/yarn is essential for improving the marketability and aesthetic value of coir products and according to customer taste. Further, bleaching of coir Fibre/yarn is essential for improving the colour.

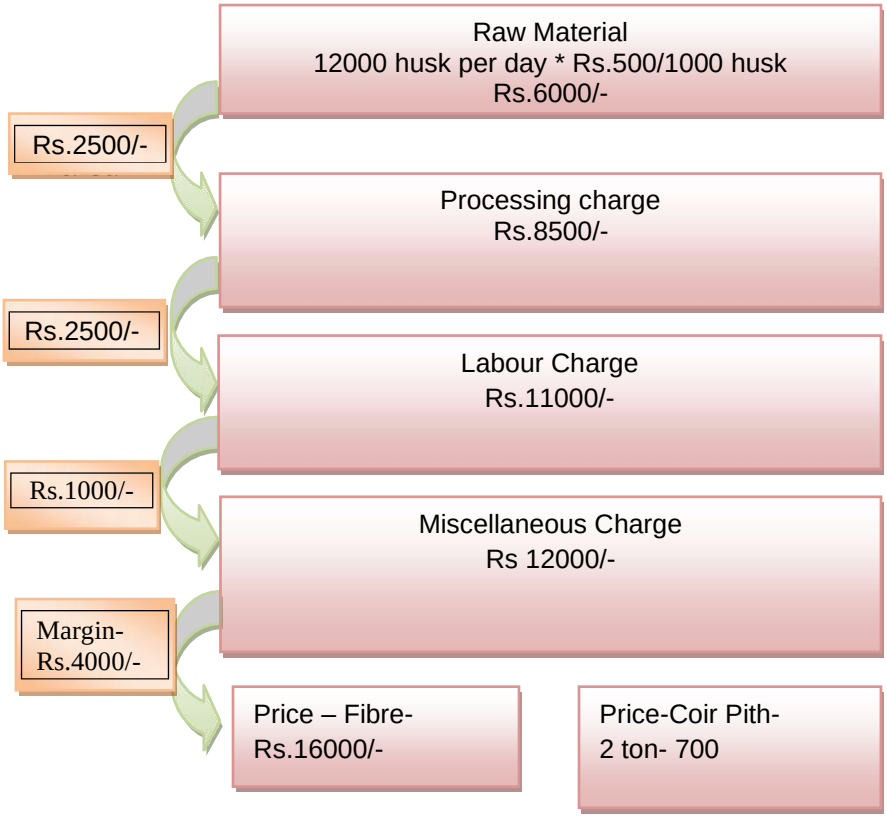
Curled Coir: There are an estimated 40 units which are making curled coir, used for manufacture of upholstery and mattress.

Analysis of production Process

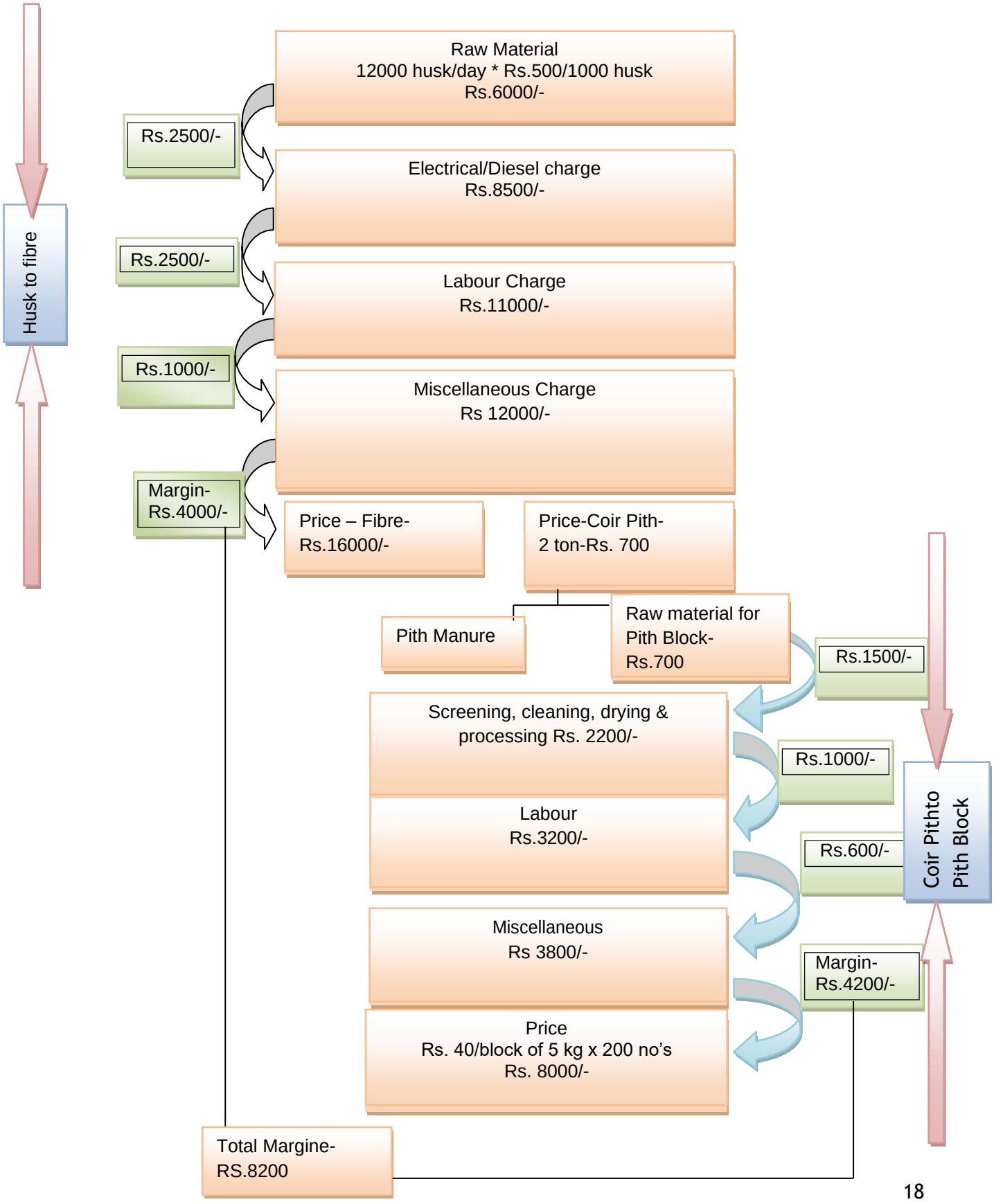
- *One unit in the cluster at Tiptur (Siddapura sub-cluster) produces high quality pith mixed with chemicals which is of exportquality.*
- *There is no quality check of husk during the purchase that leads to quality issues of finishedproducts.*
- *Very little emphasis is given for product diversification in to geo-textile, pith manure and pith blocks, particle boards which are having good demand and give more price realisation to stakeholders.*

Value Chain Analysis

Figure 4: Value Chain- Husk to Fibre



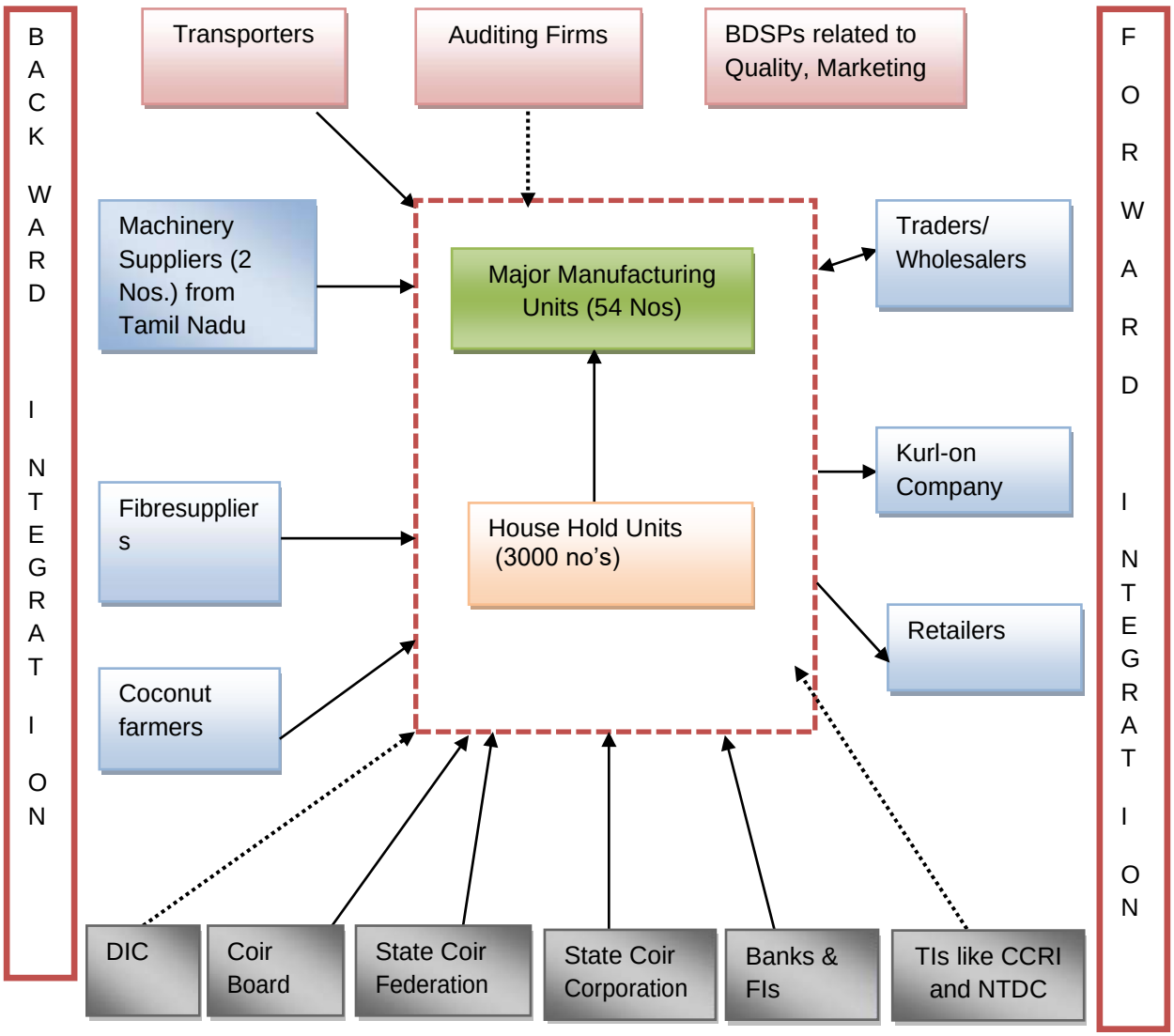
Value Chain Post CFC: Figure 5: Value Chain-Husk- Fibre-Pith Block



Analysis of value chain:

At present the profit margin is Rs.4000 after selling fibre in the market (as per the Figure4) after incurring all costs. No value addition to pith is done in maximum of the units and it is sold in a minimum price. If CFC is established and there will be some value addition to pith, Pith blocks can be produced and there will be an increase in the profit margin upto 50% (as per the Figure 5).

Cluster Maps highlighting Backward and ForwardLinkages



Index:

1. Dotted square box around core clusterfirms indicate poor inter-firmlinkage
2. Dotted arrow represents weaklinkages
3. Solid arrow represents stronglinkages
4. Lack of arrow represents absence of any linkages
5. Double sided arrow represents two way linkages

PrincipalStakeholders

There are about 54 manufacturing units and approximately 3000 house hold units in the cluster. The manufacturing units procure raw materials from coconut farmers. Some local traders supplies raw materials to these manufacturing units and in returns they procure the finish products.

Backward Linkages

Coconut farmers supplies raw materials to the manufacturing units as well as household units. Some trader's situated at Tumkur and its nearby areas supplies fibres to the manufacturing unit's. Machineries like modernized rat machines, automatic spinning machine, curling machines are purchased from two suppliers from Tamil Nadu. Maintenance of these machines is done by the owners of the manufacturing units with the help of local mechanics.

Forward Linkages

The finished products are sold to the local traders/wholesalers from Tumkur and Bangalore, who supplies raw materials. Products like yarn and curling are sold to the local retailers. 20% of the manufacturing units supplies fibres to Kurl-on. One unit at Thyagatur, Gubbi, high end products like coir plywood and needle felt coir is produced which are being supplied to outside states. There are no direct exports as the quality of cluster products is not matching international standards.

Other Support Institutions

Other major support institution is Coir board which imparts skill development training to the workers of the units. Apart from Coir board other support institutions are State Coir Federation and Coir Corporation which procures the finished products like mats for marketing. Maximum of the units have direct access to State Bank of India (SBI) for loans.

Chapter3

MARKET ASSESSMENT AND DEMANDANALYSIS

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.

1.1 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 handwoven 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 hydroponic growing medium.

Domestic and Global markets forcoir

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 workout 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, powerloom 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 focusing further to import more coir pith/ grow bags for horti/ agriculture requirements. The coir handloom products export has shown marginal increase by quantity but no increase by value comparing lastyear.

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)

Programs to promote CoirProducts

Programs for coir industry aims at increased utilisation of coconut husk for production of coirfibre,growthofthedomesticmarket,strengtheningofresearchanddevelopmentto

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 defibering, 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 labor friendly. Some of the common attributes are it provides excellent insulation against temperature andsound.

Major associations involved in coirpromotion

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. It voices the problems and difficulties being faced by the coir industry in general and the exporters inparticular.

(Source: Indian Mirror.com)

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 isadverse.*
- *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 directmarketing.*
- *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 facilitiesaccordingly.*

Chapter4

SWOT and need gapAnalysis

ClusterSWOT

The SWOT analysis of Tumkur Cluster is based upon the status of the Cluster, Production Process and Market Analysis.

Strength

- Good quality brown fibre and pith are manufactured in thecluster.
- Availability of raw materials like husk and pith isgalore
- Availability of skilledmanpower
- Committed and experienced 1st and 2nd generationentrepreneurs
- Strong market linkages for marketing of fibre and curled coir
- Maintaining high quality in making ofyarn
- Majority of the units opened accounts in localbanks
- Strong linkages with coir board resulted in establishment of CFC at Gubbi
- Strong internal road connectivity with good logisticssupport
- Use of semi advanced machinery in fibre extraction

Weakness

- Competition is very high among different units of thecluster
- There is lack of cooperation and trust building among owners of major production units.
- No value addition of fibre and pith is done.
- Diversification of different products is lacking in thecluster.
- There has been no linkage with any technical institute in thecluster.
- Lack of understanding about modern technology in pith block, curled coir, geo textiles is found in thecluster.
- Proper maintenance of machines is not done as expert mechanics are not found at the unitlevel.
- Quality of husk is being compromised at some units resulting badreputation.
- Uninterrupted power supply has been a major problem in thecluster.

- Bank and financial institutions are reluctant to provide loans to the coir industries.
- Lack of awareness among producers on different Public SupportSchemes.

Opportunity

- Coir fibre and coir pith industry isbooming.
- There has been an increase in demand of the coirpith-block.
- Sophisticated machineries are available for manufacturing coir and coirpith.
- Technical Institutes related to Coir have invented advanced machinery across the valuechain.
- Presence of coir board as major support institution

Threats

- There is unhealthy competition from syntheticproducts.
- Machinery cost are getting higher day byday
- Outside manufacturers are purchasing husk at a higher price through local agents resulting in increase in price of rawmaterials.
- Lack of dissemination of information from academics/technicalinstitutions.
- Lack of support from Banks and other financialinstitutions.
- Lack of high capacity storage facilities during rainyseason.

Need GapAnalysis

Based upon the above SWOT analysis of the cluster, area wise need gap analysis is inferred and mentioned asbelow:

Technology

Except three major units all other units in the cluster are using outdated technology for yarn and curled coir making resulting in less productivity. Efforts for upgrading technology is found to be low in the cluster, may be due to capital intensive nature. Proper maintenance of machinery is a major problem found in the cluster. There is a need for up gradation of technology. Product diversification in lieu with market demand is alsosuggested.

Marketing

The market for this cluster is restricted to local traders/wholesalers and retailers. Kurl-on purchase fibres from some major units in Gubbi, Thygatur and Nittur. Apart from that product like yarn, mats, curling are being consumed at local markets. Coir Pith is being sold at Rs.2/- per kg to nurseries. One unit at Tiptur does some value addition with pith by mixing fertilizers and supplies it to some other states. There is a need to organise exposure visits to places like Alappuzha to understand better marketing techniques. There is also a need to take few of the vibrant manufacturers to international fairs so as to sensitise them in international market requirements and procedures.

Finance

As it is mentioned the main supporting financial institution for the cluster is State Bank of India (SBI). No other major financial institutions like Banks are providing loans to the units as they don't have proper documents to avail loans. There is a need to create awareness among cluster units on book keeping and financial management by organising EDPs (Entrepreneurship Development Programme). There is also a need to organise an awareness workshop on Public Support Schemes with the help of NABARD, KVIC, MSMEDI, and localDIC.

Linkage with otherInstitutions

At present the cluster is having linkages with Coir Board, Coir Federation and Coir Corporation. There is a need to establish linkage with CCTRI (Central Coir Training and Research Institute) for quality up gradation and new technology, for export market promotion there is a need to establish linkage with FICEA (Federation of Indian Coir Exports Association), for leveraging NMCP (National Manufacturing Competitions Programme) there is need to establish linkage with MSME-DI. To avail schemes like Rural Mart and UPNRM (Umbrella Programme for Natural Resource Management) linkages with NABARD is suggested. Linkages with Banks will also help in availing loans and benefits under CGTSME (Credit Guarantee Fund Trust for Micro and Small Enterprises).

Suggested Market Plan for theCluster

Business model of CFCs: Thyagatur & Tiptur Sub Clusters are proposing geo textiles, fibre and curled coir which can be marketed through their 30 outlets. They also had a tie up with State PWD and NHAI for sale of Geo-textiles.

4.3.3 Curled coir:

The CFC is estimated to produce 500 MT of curled coir which has good demand in domestic markets from mattress making units. The segment wise estimated distribution of curled coir is given as below:

Shrushti Seva Samasthe – Adalagere				**Estimated consumption**
	Curled Coir			
		Potential Customers		
Market Channel	**Local**	1	Kurlon – Bangalore	300 MT
		2	Duroflex – Bangalore	
		3	Restolex – Bangalore	
	Pan India	1	Century Ply – Hyderabad	200 MT
		2	RUBCO Group, Kottayam, Kerala	
	Total			500 MT

4.4.4 Geo Textiles:

The Thyagattur and Tiptur sub clusters are estimated to produce 10 lakh Sq. meters of geo-textiles, KSCCL is already having tie up with State PWD department, NHAI, Hatti Gold Fileds Private Limited, to supply more than 1.5 millio square meters of geo textiles as such no issues in marketing are envisaged. KSCCL Already making 3 lakh square meters of such textiles and supplying to above institutions successfully and gained their confidence. Now, it is also planning to supply the same to Kerala and Maharashtra State Road construction departments.

	Coir Geo Textiles			Estimated consumption
		Potential Customers		
Market Channel	Local	1	Karnataka State R&B Department	1 million Sq. Meters
		2	Hatti Gold Mines Company Limited	
		3	Karnataka Rural Road Development Agency	
		4	Corporates and Residential Welfare Associations for to prevent water leakage	
		5	Major Gram panchayats to prevent lake bed erosion	
		6	Local Nurseries	
	Pan India	4	Kerala State R&B Department	0.3 Million Sq. meters
		5	Maharashtra State R&B Department	
	Total			**1.30 million Sq. Meters**

(Covering oflakebeds)

(Covering ofroads)

CHAPTER – 5

PROFILE OF THE IMPLEMENTING AGENCY

InstitutionalStructure

The Karnataka State Coir Co-Operative Federation was established in the year 1961 with the main objective of developing coir industry through co-operative movement in Karnataka state. This Federation is having 72 primary coir Co-operative societies as its affiliated member societies. There are more than 17 production centre where in all coir products are manufactured apart from this as per the customer demand, new varieties of coir products are also manufactured and sold. The Federation is also having 14 sales outlets and 3 Mobile sales van wherein different types of coir mats, matting cushions, rubberized mattresses, pillows etc. are display andsold.

The Federation is having godown facilities for storage and security of coir products at Bangalore and Arsikere. The Main manufacturing activities are coir fibre (Brown fibre and green husk fibre). Mats Matting, Geo-textiles, Curled coir required for Rubberized coir industry and other value added products. The Federation has provided employment to about 1500 unskilled persons in rural area out of which 90% are women. The main objective of the Federation is asfollows:-

- To assist and support primary coir Co-operativesocieties.
- To provideTraining.
- Supply of raw- materials
- Marketing of coir products
- Technicalguidance

GovernanceStructure

The Organisational structure reflects Board of Directors, headed by President with 11 more members. At present Shri M.K. Puttaraju is the President of the federation. The Board of Directors is ably assisted by Office Staff headed by Managing Director.

OperationalProfile

The regular operations are take care by office 48 member office staff, headed by Managing Director, who will not only take care of HO operations but also field offices and sales outlets. The federation has 5 sales managers, 15 Coir Supervisors of grade I and II based on their seniority, 2 depot managers, other than supportstaff.

Management Profile

The Board of Directors will take care of overall administration, while Managing Director along with staff will be take care the operational part. Each member of the federation has been entrusted with a specific task like marketing, input procurement, finance, training, mat procurement, product/ quality up gradation. The Board of Directors has been supported by Secretarial staff, which will take care of operational management at ground level, besides sales operations. Dr. H.R. Arun Kumar is present Managing Director of the Federation who has vast experience in textile and coir industry. He has taken lot of interest and initiatives for the development of the Karnataka Coir Industry. The Federation is having 16 production centres, several retail show rooms, and two mobile sales vans spread across the state, with each one headed by an official of Superintendent/ Supervisor rank person.

FinancialPosition

The Federation is aiming for 6crore sales turnover during the current year. The Federation is having a Fixed Asset of Rs.2, 54, 50,670 and Paid-Up Share Capital is Rs. 329.22 lakhs out of which, share capital from state government is Rs.329.00 lakhs.

SPV: Coir Industrial Co-operative Society Ltd.

Major products of the cluster till now:

Sl. No.	Products	2013-14		2014-15		2016-17	
		Quantity	Value (Rs. Cr)	Quantity	Value (Rs. Cr)	Quantity	Value (Rs. Cr)
1	Coir Fibre	1000T	1.30	1250 T	1.60	1600T	1.90
2	Coir Yarn	500T	0.8	700 T	0.12	1000 T	0.1
3	Dutch Mats	2000 Sq.ft.	0.05	23000 Sq.ft.	0.06	25500 Sq.ft.	0.75
4	Mattings	800 m^2	0.01	1000 m^2	0.015	1200 m^2	0.018

CHAPTER – 6

PROJECT CONCEPT AND STRATEGY FRAMEWORK

Project Rationale, frame work andstrategy

There are 6 sub clusters in TUMKUR District. However considering the vibrancy only 4 sub clusters have been considered under SFURTI barring Mallasandra and Kunigal. All the four sub clusters (Nittur, Thyagattur, Tiptur and Adalagere) have unique issues with specific reference to hard interventions. There is a need to stress on soft interventions at the initial stage so as to improve the capacities of sub clusters which will propel them to establish and run requisite hard interventions in a sustainable way.

Hard interventions will be addressed, only after the implementation few of important basic level soft interventions as second phase preferably in the 3rd quarter of first year, so as to make the project a sustainable venture. Once the soft and hard interventions are completed based on the additional requirement, leveraging of other public support schemes may be planned.

Few of the revised soft interventions suggested are 2 week training program on 2 ply yarn and curled coir making (2 programs), one week training program on geo textiles (One No.), one week training program on pith manure making and its applications (2nos.), one day workshop on application of geo textiles in civil engineering, creation web portal, one day awareness workshop on water harvesting techniques, plantation of trees in CFC sites.

Project Objective

Major objectives of implementing SFURTI in the cluster are:

- The address the issues of each sub cluster based on their requirement, need and products manufactured, which ultimately strengthen the cluster perse.
- To improve the aggregate cluster production by introducing part mechanisation and upgradation of existingequipment.
- To improve the social capital of the cluster by capacitating the IA andSPVs.
- To establish requisite Common Facilities for value addedproducts

- To strengthen linkages of cluster firms with support institutions and relevant BDSPs so as to make the proposed interventionssustainable
- 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 andFIs

Focus Products/Services

The major focus product in all the sub clusters is given in the following table:

S.No	Name of Sub Cluster	Focus products
1	Thyagattur	Geo Textiles
2	Nittur	Coir Fibre and Curled Coir Rope
3	Tiptur	Geo Textiles
4	Adalgere	Fibre, Curled Coir, Pith Manure

Part – II

Chapter –7

PROJECTINTERVENTIONS

SoftInterventions

As indicated in the previous chapter, most of the soft intervention activities were now revised and more importance is now given to training on geo textiles, greening of CFCs and creating awareness on water harvestingtechniques.

The sub cluster specific interventions are given as below:

Details of softinterventions

Training Programmes & SDPS				
1	2 week training program on 2 Ply Yarn and Curled Coir Making (2 Nos)	Q1-Q2	50 house hold units, and workers in manufacturing units	50 artisans trained in making of 2 ply yarn and curled coir
2	One week training program on geo textiles	Q2-Q3	25artisans and major manufacturers	25 participants will be trained in making of geo textiles
3	One week training on pith manure making and its applications	Q3 – Q4	50 artisans	50 artisans trained in manure making
4	One day awareness workshop on application of geo-textiles in Civil Engineering	Q4	30 Officials of PWD, RDPR, State Engineering Department	Participants to understand importance of geo textiles in civil constructions.
4. Marketing				
5	Creation of cluster level Website	Q5-Q6	All cluster firms and artisans	For promotion of products through e-commerce
6	Tree Plantation in 4 CFCs	Q2 – Q4	All cluster firms	For greening of CFCs as part of Swatch Bharat Abhiyan

HardInterventions

Tiptur Sub Cluster

Geo-textiles making unit and its backward integration (2 ply yarn) making facility.

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. Six Geo textile power looms will be purchased at a cost of Rs.41 lakhs, each. As a backward integration 8 two ply spinning yarn making machines will also be purchased which will make 150 KG of yarn used for geo textile unit, and meet the gapproduction.

The capacity of each power loom is 400 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.

Adalgere Sub Cluster

At present in cluster there is no pith manure making facility due to its capital intensive nature. Thus the cluster firms as of now are either dumping the pith or selling to farmers at through away prices. An estimated 5 to 8 tons of pith is going too made within proposed CFC itself from its common fibre making plat as by product. Thus a common pith manure making unit is planned in the cluster, with a production capacity of 2 MT of manure per day.

There are 10 units in the sub cluster who are making an estimated 1500 KG of fibre per day. However there is a demand supply gap of 1500 KG, which is required for house hold units in order to make mats and 2 Ply Yarn. Other than the above, the proposed common curled coir making unit also require 1000 KG per day. Thus there is a requirement to the tune of 2500 KG per day in the cluster. This has propelled the SPV to plan for establishment of a common fibre making unit of 2500 KG per daycapacity.

At present all the units are selling fibre without any value addition like curled coir which has good local demand from Kurlon. Even a plant is proposed by Tiptur coir cluster, which also require huge quantities of curled coir. Keeping above facts in mid the SPV is contemplating to establish a curled coir making unit. The proposed capacity of the unit is 1000 KG per day at 100% capacity utilisation.

(Bailing press)

Total machinery cost is coming to Rs. 123.46 lakhs. One of the members of SPV is having 2.5 acres land, which is sufficient for the CFC and he will give it on lease. The entire produce will be sold on common brand basis, since the output quantity is limited. **SPV will take care of market and production activities.**

Nittur SubCluster

At present most of the units are making fibre in manual methods and there is a need to establish a mechannsed fibre extraction unit. Similarly there is a huge demand for curled coir from nearby mattress making units like Kurlon. Thus a common Fibre Extraction cum curled coir making unit is planned in the cluster, with a production capacity of 1000 KGs of fibre and 300 KGs of curled rope per day. 3 acres (survey No- 43/1,43/3 & 44) of land is already available in the name of Karnataka State coir co-operative federation limited, Heruru village, Gubbi Taluk, Tumakur District. The proposed machinery will cost Rs. 129.64 lakhs.

Thyagattur Sub Cluster

Coir Federation has already established a geo textile unit in Kumta of Uttar Kannad which is running on full capacity and there is a greater demand from local PWD departments and NHAI for federation. This is the reason why Federation has planned to establish a Geo Textile making unit in the subcluster.

Thus a common Geo Textile unit is planned in the cluster, with a production capacity of 450 Square meters per day.3 acres of land (survey No- 43/1,43/3 & 44)is already available in the name of Karnataka State coir co-operative federation limited, Heruru village, Kasabahobli, Gubbi Taluk, Tumkur district. Power and ground water are already available in the land. The proposed machinery cost is Rs. 62.79 lakhs. SPV will establish and run the unit and marketing will be done on common brand basis.

Chapter –8

SOFTINTERVENTIONS

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

Commoninterventions

Proposed Program: One day awareness workshop on geo textiles for civil applications

Course outline: Officials of PWD, State Engineering department - awareness on various applications of geotextiles.

Duration: One day

Batch Size: 30 officials and 30 artisans

Trainers and their details: Faculty from Coirfed

Training delivery method: Not applicable as it is only an awareness program **Details of infrastructure required**: Will be done at a hotel inTumkur **Availability of Infrastructure**: Available in hotel.

Cost of training program:

Interface with bankers	
Venue Cost	25000
Local TA/ DA	10000
Refreshments 70 persons @ Rs. 200 per head	14000
Photo & Video expenses	6000
Literature & Others	20000
Total	**75000**

Proposed Program: Creation of Web Portal for E Commerce

Course outline: For promotion of products through e commerce **Duration:** Continuous dynamicwebsite

Batch Size: Not applicable

Trainers and their details: Notapplicable

Training delivery method: Notapplicable

Details of infrastructure required: Not applicable

Availability of Infrastructure: Not applicable

Method of selection of consultant: selection of consultant will be done in bidding process.

Cost of program: 2.00 lakhs as BDSP fees

Proposed Program: 2 week training program on 2 Ply Yarn and Courld Coir (2Nos)

Course outline: 50 artisans trained in 2 Ply Yarn and Curled Coir making

Duration: 2 weeks

Batch Size: 25

Trainers and their details: Master trainer of Coirfed has vast experience in conducting such programs and he will organise the 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: Meeting Hall of Coirfed will be used for the training purpose

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 beneficiaries (Rs. 1000 per beneficiary)	25000
Stifund for participants 25 persons @ Rs. 200 per head x 10 days	50000
Refreshments 30 persons @ Rs. 200 per head x 10 days	60000
Faculty Fees	20000
Photo & Video expenses	10000
Literature & Misc. expenses	10000
Total	175000
For 2 Nos	350000

Proposed Program: One week training program on Geo Textiles and its applications

Course outline: 35 artisans trained in geo textilemaking

Duration: One week

Batch Size: 30

Trainers and their details: Karnataka Coir Cooperative Federation It has vast experience in conducting such programs and already established one CFC for Geo Textiles at Kumta. Their trainer will be used for training.

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: Venue (preferably Coirfed campus), LCD, Projector, Tables andChairs

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.

Venue Cost	0
travel expenses for beneficiaries (Rs. 1000 per beneficiary)	30000
Stifund for participants 30 persons @ Rs. 200 per head x 10 days	60000
Refreshments 35 persons @ Rs. 200 per head x 10 days	70000
Faculty Fees	20000
Photo & Video expenses	10000
Literature & Misc. expenses	10000
Total	200000

Proposed Program: One week training program on pith manure making

Course outline: 30 artisans, 2Nos

Duration:One week

Batch Size: 30

Trainers and their details: Master trainer of CCRI/ Coirfed will give the training

Training delivery method: Class room as well as practical sessions on machinery.

Details of infrastructure required: Venue, Tables and Chairs

Availability of Infrastructure: Venue (preferably at Coirfed Hall) LCD, Projector, Tables and Chairs

Method of selection of trainer: As per the norms, selection of trainers has to be done in bidding process.

Venue Cost	0
travel expenses for beneficiaries (Rs. 1000 per beneficiary)	25000
Stifund for participants 25 persons @ Rs. 200 per head x 10 days	50000
Refreshments 30 persons @ Rs. 200 per head x 10 days	60000
Faculty Fees	20000
Photo & Video expenses	10000
Literature & Misc. expenses	10000
Total	175000
For 2 Nos	350000

8.3.3Proposed Program: Plantation of Trees at CFCs of 4 sub clusters

As per Swatch Bharat Abhiyan, at least 250 saplings will be planted at the sites of each of the 4 CFCs planned. Thus a total of 1000 sapplings are required, which will cost Rs. 8 per sppling, thus total coming to Rs. 8000. It also requires land dugging and preparation including manure, for which cost is expected Rs. 55000 per CFC, thus totaling to Rs. 120000.

Thus the total cost of plantation of sapplings is estimated at Rs. 1.28 lakhs.

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

Sno.	Name of activity	Timeline	GOI Grant	State Contribution	SH contribution	Total required Fund
A. Common cluster level interventions						
1	One day awareness workshop on geo textiles for civil applications	Q2-Q3	0.75	0.00	0	0.75
2	Creation of dynamic webportal	Q4-Q6	2.00	0	0	2.00
3	2 week training program on 2 Ply Yarn and Curled Coir (2 Nos)	Q2-Q3	3.50	0	0	3.50
4	One week training program on Geo Textiles and its Applications	Q3-Q4	2.00	0	0	2.00
5	One week training program on pith manure making (2 Nos)	Q3-Q5	3.50	0	0	3.50
6	Plantation of Trees at CFCs of 4 sub clusters	Q3-Q4	1.28	0	0	1.28
	TOTAL		**13.03**	**0**	**0**	**13.03**

Chapter –9

HARDINTERVENTIONS

Tiptur Sub Cluster

Geo Textiles making Unit:

Proposedintervention

Tumkur is one of the major coir production centres in Karnataka with a production of 50000 MT of fibre. In spite of such huge production little emphasis has been given for making of value added products like geo textiles, which has good demand from State Rural Road mission, besides hutti and kolar gold mines, PWD departmentas of Kerala and Maharashtra. There is a demand supply gap of for Coir Geo Textiles to the tune of 3 million square meters per annum. Thus keeping this gap in mind the SPV has planned a Coir Geo Textile Making unit. The geo textiles will be sold to State Road and Flood preventions departments, besides gold mines, irrigation department to prevent soil erosion and collapse of river beds. They can also be used in corporate offices and residential colonies for leakage of water in washrooms.

Landdetails

3 acres (survey No- 43/1,43/3 & 44) of land is already available in the name of Karnataka State coir co-operative federation limited, Heruru village, Gubbi Taluk, Tumakur District.. Ground water facilities are already available in theland.

Proposed capacities

450 Square meters per hour capacity machine line, which comes to 2800 Square meters per day based on one shift of operation. The plant is expected to run 300 days and thus the total capacity is coming to 720000 Sq. meters per annum at 100% capacity utilisation.

Details of Proposed equipment's/ machines:

S.No.	Name of the machinery	qty	Total Amount (Including GST, Freight etc.)
1	Fully auto looms 4 shaft, matting & geo-textile weaving machine	6	24684000
2	cop winding	1	154880
3	spool winding	1	369050
4	2 Ply Spinning with Auto Feeder	10	5103780
5	Panel Board with cabling	1	733260
	Sub Total – 1		**31044970**

Master Plan/ Detailed engineeringdrawings

A detailed master plan along with civil estimates are given as **annexure – 58**

Project Cost

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

(Rs. In lakhs)

Sl.No	Particulars	Already incurred	To be incurred	Total Cost
A	Land	-	-	-
	land Development	-	-	-
B	Building & other Civil Works	-	73.80	73.80
C	Plant and machinery			
	a. indigenous	-	310.45	310.45
	b.import	-	-	-
D	Lease Deposit & Electricity Deposit	-	-	-
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	-	-
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	-	-
I	Pre-operative expenses	-	-	-
J	Provision for contingencies			
	a. buildings (@2%)	-	-	-
	b. Plant & Machinery (5%)	-	-	-
	c. Other fixed assets	-	-	-
K	Working capital	-	0.00	0.00
	Total :	**-**	384.25	384.25

Operation and maintenancemodel

Production basis: To make the facility more sustainable, entire capacity will be sold on common brand basis, where SPV itself will by the raw material and sell the geo textiles directly to clients. In this option, the SPV is expected to sell at the rate of Rs. 110 per meter.

The unit is expected to generate revenue of Rs. 475.20 lakhs and production costs of Rs. 434.83 lakhs, thus giving Rs. 18.080 lakhs as surplus in the first year ofoperation.

BusinessPlan

T9.2 he business plans of each sub cluster are given in the detailed business plan Chapter (No:14).

Implementationschedule

The civil construction is expected to be complete in third quarter of the first year of the project implementation. Purchase and erection of machinery will be done by fourth quarter of 1styear and plant is expected to start its commercial operations by middle of second year. It is expected to reach breakeven in the first year of operation.

Any other information pertaining to theproject

The facility will be mainly used by major manufacturers and the plant capacity is also designed in such a way to meet their requirements.

Adalgere SubCluster

ProposedFacilities:

Pith Manure making facility:

At present in cluster there is no pith manure making facility due to its capital intensive nature. Moreover the production of pith by individual unit is not large enough to make either manure or blocks. Thus the cluster firms as of now are either dumping the pith or selling to farmers at through away prices. An estimated 5 to 8 tons of pith is going to made within proposed CFC itself from its common fibre making plat as by product. Thusan estimated 20 to 30 MT of pith is generated per day in the sub cluster, which is substantial. Thus a common pith manure making unit is planned in the cluster, with a production capacity of 2 MT of manure per day.

Common fibre making unit:

There are 10 units in the sub cluster who are making an estimated 1500 KG of fibre per day. However there is a demand supply gap of 1500 KG, which is required for house hold units in order to make mats and 2 Ply Yarn. Other than the above, the proposed common curled coir making unit also require 1000 KG per day. Thus there is a requirement to the tune of 2500 KG per day in the cluster. This has propelled the SPV to plan for establishment of a common fibre making unit of 2500 KG per daycapacity.

Curled Coir Rope making unit:

At present all the units are selling fibre without any value addition like curled coir which has good local demand from Kurlon. Even a plant is proposed by Tiptur coir cluster, which also require huge quantities of curled coir. Keeping above facts in mind the SPV is contemplating to establish a curled coir making unit. The proposed capacity of the unit is 1000 KG per day at 100% capacity utilisation.

Land details

1.32 acres of commercially converted land is available on lease,bearing survey no 98 with the society. The address of the land is Sagaranahalli Village, Gubbi taluk, Tumkur District. This land is sufficient for all the 3 planned facilities.

Proposedcapacities

a) Pith Manure: 600 MT per annum capacity. Very difficult to assess per day as the

processing time varies from 6 to 9months.

b) Fibre making: 2500 KG per Day, out of which 1500 KG will sold as it is and remaining 1000 KG will be used for curled coirmaking.

c) Curled Coir making: 1000 KG per day is the capacity of such facility at 100% utilisation, thus comes to 300 MT perannum.

Details of Proposed equipment's/ machines

S.No.	Name of the machinery	Total Amount
1. Pith Manure		
1	Testing equipment's	540000
2. Common Processing Coir Fiber Centre		
1	Turbo Beater with Feeder	1155600
2	Beater Cleaner with auto Feeder	1447200
3	Fibre Screener	321840
4	Pith Screener	278640
5	Bailing Press (Hydraulic) 50 KG Cap.	550800
6	Conveyor 25feet x 10 = 250 Feet	1447200
3. Curled Coir Rope		
1	Curled Coir Machine with Auto Feeder	2916000
4. Other		
1	Loader (BULL)	1306800
2	Transport Vehicle (TATA 1108)	1296000
3	Bore-well and Fittings	300000
4	Machine Installation and fittings	486000
5	Electrical cabling	300000
	Sub Total - 1	**12346080**

Master Plan/ Detailed engineeringdrawings

A detailed master plan along with civil estimates are given as **annexure – 59**

Project Cost

The combined project cost including civil estimates for all 3 facilities are given below:

Sl.No	Particulars	Already incurred	To be incurred	Total Cost
A	Land	-	-	-
	land Development	-	2.00	2.00
B	Building & other Civil Works	-	25.56	25.56
C	Plant and machinery	-		
	a. indigenous	-	123.46	123.46
	b. import	-	-	-
D	Lease Deposit & Electricity Deposit	-	12.00	12.00
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	1.86	1.86
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	0.40	0.40
I	Pre-operative expenses	-	2.00	2.00
J	Provision for contingencies	-		
	a. buildings (@2%)	-	0.51	0.51
	b. Plant & Machinery (5%)	-	6.17	6.17
	c. Other fixed assets	-	-	-
K	Working capital	-	10.25	10.25
	Total :	-	184.22	184.22

Operation and maintenance model

Pith manure and curled coir will be sold on common brand basis, where as 60% of the fibre will be sold to artisans at less than market price to artisans so as to make 2 ply yarn and mats, remaining 40% will used for curled coir making, thus serve as backward integration.

All the 3 facilities expected to generate aggregate revenue of Rs. 85.50 lakhs and production costs of Rs. 68.97 lakhs, thus giving Rs. 14.57 lakhs as surplus in the first year of operation.

Business Plan

The business plans of each sub cluster are given in the detailed business plan Chapter (No: 14).

Implementation schedule

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

other information pertaining to the project

The facility will be mainly used by major manufacturers and the plant capacity is also designed in such a way to meet their requirements. However a provision will be made in the bylaws that even any house hold unit can also use the facility if required.

Nittur SubCluster

Proposedinterventions

The Federation which is the IA and deemed SPV is going to establish a Geo Textile making facility in nearby Tyagattur and Tiptur for which they require more than 500 KG of fibre besides they also require more than 700 KGs per day for their other facilities situated in Tumkur & Hassan Region. Thus a common fibre extraction cum curled coir rope making unit is planned in the cluster, with a production capacity of 1000 KGs of fibre and 300 KGs of curled rope per day. The proposed facility will work one shift (8 hours) per day for 300days.

Landdetails

3 acres (survey No- 43/1,43/3 & 44) of land is already available in the name of Karnataka State coir co-operative federation limited, Heruru village, Gubbi Taluk, Tumakur District. Ground water facilities are already available in theland.

Proposedcapacities

The production capacity of fibre per annum at 100% capacity is 300 MT and that of curled Coir is 540 MT which were calculated based on the machine capacities.

Details of Proposed equipment's/ machines

S.No.	Name of the machinery	Total Amount
1.Defibering and curled coir making unit		
1	Conveyor Belt including 1 buster and 1 beater, 2 screeners, 1 bundle press with motor starter, cabling and wiring	4501200
2	Curling machine with auto feeder	5408700
3	Hecklers	290400
4	Winding Curling Machine	150645
5	Bull for transportation	1815000
6	Electrification	798600
	Total	**12964545**

Master Plan/ Detailed engineering drawings

A detailed master plan along with civil estimates are given as **annexure – 60**

Project Cost

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

Rs.In lakhs

Sl.No	Particulars	Already incurred	To be incurred	Total Cost
A	Land	-	-	-
	land Development	-	-	-
B	Building & other Civil Works	-	20.00	20.00
C	Plant and machinery			
	a. indigenous	-	129.65	129.65
	b.import	-	-	-
D	Lease Deposit & Electricity Deposit	-	-	-
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	-	-
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	-	-
I	Pre-operative expenses	-	-	-
J	Provision for contingencies			
	a.buildings (@2%)	-	0.40	0.40
	b.Plant& Machinery (5%)	-	6.48	6.48
	c.Other fixed assets	-	-	-
K	Working capital	-	8.09	8.09
	Total :	-	164.62	164.62

Operation and maintenancemodel

The entire operation of CFC will be under the control of Karnataka State Coir Federation and will sell the production common brand basis.

The unit is expected to generate revenue of Rs. 81.12 lakhs and production costs of Rs. 60.96 lakhs, thus giving Rs. 15.72lakhs as surplus in the first year of operation.

BusinessPlan

The business plans of each sub cluster are given in the detailed business plan Chapter (No: 14).

Implementationschedule

The civil construction is expected to be complete this quarter of the first year of the project implementation. Purchase and erection of machinery will be done by fourth quarter of 1st year and plant is expected to start its commercial operations by middle of second year. It is expected to reach breakeven in the first year of operation.

Any other information pertaining to theproject

The facility will be mainly used by major manufacturers and the plant capacity is also designed in such a way to meet their requirements. However a provision will be made in the by-laws that even any house hold unit can also use the facility if required.

Thyagattur Sub Cluster

Proposedintervention

Geo Textile Making unit

The Federation had already established a Geo Textile unit under SFURTI in Kumta of Uttar Kannada District, which is running at full capacity as there is a huge demand from state PWD, National Highway Authority etc. Since Tumkur is one of the major fibre and ran producing regions, the federation has planned for a Geo Textile Making unit, by considering its proximity toBangalore.

Thus a common Geo Textile unit is planned in the cluster, with a production capacity of 450 Square Meters per day. The proposed facility will work 2 shifts(16 hours) per day for 300 days.

Landdetails

3 acres (survey No- 43/1,43/3 & 44) of land is already available in the name of Karnataka State coir co-operative federation limited, Heruru village, Gubbi Taluk, Tumakur District.. Ground water facilities are already available in theland.

Proposedcapacities

The facility is expected to make 450 Sq. Meters of Geo Textiles per day.

Proposed equipment's/ machinesetc.

Details of machines for both the facilities are given as below:

S.No.	Name of the machinery	Total Amount
1.Geo Textileunit		
1	Auto Looms along with cap winding, spool winding and inspection m/c	4719000
2	Dyeing Facility with oven	350900
3	Electrification	1210000
	Sub Total - 1	**6279900**

Master Plan/ Detailed engineeringdrawings

A detailed master plan along with civil estimates are given as **annexure – 61**

Project Cost

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

Sl.No	Particulars	Already incurred	To be incurred	Total Cost
A	Land	-	-	-
	land Development	-	-	-
B	Building & other Civil Works	-	70.00	70.00
C	Plant and machinery			
	a. indigenous	-	62.80	62.80
	b.import	-	-	-
D	Lease Deposit & Electricity Deposit	-	-	-
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	3.91	3.91
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	-	-
I	Pre-operative expenses	-	-	-
J	Provision for contingencies			
	a.buildings (@2%)	-	1.40	1.40
	b.Plant& Machinery (5%)	-	3.14	3.14
	c.Other fixed assets	-	-	-
K	Working capital	-	31.20	31.20
	Total :	-	172.45	172.45

Operation and maintenancemodel

Production basis: To make the facility more sustainable, entire capacity will be sold on common brand basis, where SPV itself will acquire. In this option, the SPV is expected to sell particle board at the rate of Rs. 100 per squaremeter.

The unit is expected to generate revenue of Rs. 81.00 lakhs and production costs of Rs. 64.42lakhs, thus giving Rs. 12.01lakhs as surplus in the first year of operation.

BusinessPlan

The business plans of each sub cluster are given in the detailed business plan Chapter (No: 14).

Implementationschedule

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

Chapter –10

PROJECT COST AND MEANS OF FINANCE

ProjectCost

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 of all the 4 sub clusters put together are given. Following table shows the aggregate cost of project:

Sl.No	Particulars	Already incurred	To be incurred	Total Cost
A	Land	-	-	-
	land Development	-	2.00	2.00
B	Building & other Civil Works	-	189.36	189.36
C	Plant and machinery			
	a. indigenous	-	626.36	626.36
	b.import	-	-	-
D	Lease Deposit &Electricity Deposit	-	12.00	12.00
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	5.77	5.77
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	0.40	0.40
I	Pre-operative expenses	-	2.00	2.00
J	Provision for contingencies		-	
	a. buildings (@2%)	-	3.61	3.61
	b. Plant & Machinery (5%)	-	14.51	14.51
K	Working capital	-	49.55	49.55

	Total -1	-	905.54	905.54
	Cost of SI		13.03	13.03
	Cost of TA (7.5% of HI on grant + SI)		50.06	50.06
	Cost of IA		20.00	20.00
	Total Project Cost		**988.62**	**988.62**

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:

Sl.No.	Particulars	amount already raised	amount proposed to be raised	Total
	Equity			
A	Equity from spv@25.31%	-	-	251.09
B	Share premium	-	-	-
C	Preference Share Capital	-	-	-
	Debt			
D	Term loans (0%)	-	-	-
E	Unsecured loans and deposits	-	-	-
	Quasi Equity			
E	Interest free unsecured loans	-	-	-
F	Subsidy: central govt. (74.69%)	-	-	737.52
G	Subsidy : state govt.	-	-	
	Total	-	-	988.62

As per the guidelines 100% grant is considered for implementation of SI plan. For Hard interventions 74.69% grant is considered. IA through SPVs as their contribution will bring remaining25.31%.IAfeeiscomingtoRs.20.00lakhswhichiswithinmaximumcapofRs. 20.00 lakhs. **TA fees are calculated as 7.5% of SI+HI and are coming to Rs. 50.06**

lakhs. Thus the total project cost is coming to 988.62 lakhs in which GoI grant is 737.52 lakhs, which is within maximum cap for Heritage Cluster i.e. Rs. 800 lakhs.

ProjectPhasing

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 beensuggested:

Rs.In lakhs					
	Aggregate Project Cost				
Sl.No	Particulars	1st Year	2nd Year	3rd Year	Total Cost
I. Hard Interventions					
A	Land				
	Land Development	2.00	0.00	0.00	2.00
B	Building & other Civil Works	132.55	56.81	0.00	189.36
C	Plant and machinery				0.00
	a. Indigenous	377.26	250.10	0	626.36
	b. Import				0.00
D	Lease Deposit & Electricity Deposit	12.00	0.00	0.00	12.00
E	Technical consultancy fee	0.00	0.00	0.00	0.00
F	Miscellaneous fixed assets	0.00	5.77	0.00	5.77
G	Erection / installation charges	0.00	0.00	0.00	0.00
H	Preliminary expenses	0.13	0.13	0.13	0.40
I	Pre-operative expenses	0.67	0.67	0.67	2.00
J	Provision for contingencies				0.00
	a.buildings (@2%)	0.00	3.61	0.00	3.61
	b.Plant& Machinery (5%)	0.00	10.41	4.10	14.51
	c.Other fixed assets				0.00
K	Working capital			49.55	49.55
	Total for Hard Interventions	513.45	332.58	59.51	905.54
II. Provision for Soft Interventions		11.03	2	0	13.03
III. IA Fees		6.6	6.7	6.7	20.00
IV. TA Fees (SI + HI)		16.69	16.69	16.69	50.06

Total (I+II+III+IV)		547.77	357.97	82.89	988.63
Aggregate Means of Finance					
Sl.No.	Particulars				Total
	Equity				
A	Equity from SPV	225.92	146.34	26.18	398.44
B	Share premium	0.00	0.00	0.00	0.00
C	Preference Share Capital	0.00	0.00	0.00	0.00
	Debt	0.00	0.00	0.00	0.00
D	Term loans (0%)	0.00	0.00	0.00	0.00
E	Unsecured loans and deposits	0.00	0.00	0.00	0.00
	Quasi Equity	0.00	0.00	0.00	0.00
E	Interest free unsecured loans	0.00	0.00	0.00	0.00
F	Subsidy : central govt.	321.85	211.63	56.71	590.19
G	Subsidy : state govt.	0	0	0	0
	Total	547.77	357.97	82.89	988.63

Chapter -11

PLAN FOR CONVERGENCE OFINITIATIVES

Out of the 4 sub clusters in Tumkur Heritage Cluster, Nittur, Thyagattur and Tiptur are having sufficient existing and proposed facilities under Core SFURTI to make requisite products. However in the case of Adalagere, there is a good scope for making of pith blocks which can be considered as long term objective. Considering the huge production of coconut husk in the region, individual artisans and ITI graduates can be encouraged to set up their one defibering and yarn making units with advanced machineries. Thus there are common convergence initiatives at cluster level and individual initiatives at sub cluster stage with specific reference to Adalagere.

Common Issues and convergenceinitiatives:

During the survey it was observed that there are many house hold artisans and also ITI graduates who have zeal to establish their own defibering, and yarn making units. These artisans once capacitated with planned SDPs, need to be encouraged to apply under Coir Udyami Yojana and PMEGP Scheme. Thus in the second and third year atleast 50 capable artisans will be targeted to be covered under such schemes.

Nittur and Thyagattur sub clusters are making high end products like Geo textile which have good exportable demand. However, they lack awareness on international markets and client requirements. Thus there is a need to expose at least 15 major manufacturers to international fairs like Art and Craft Design Fair organised in Edinburg, UK again in the month of August every year. Market Development Assistance Scheme of MoMSME can be leveraged for suchparticipations.

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	Establishment of defibering/ yarn making units by artisans& ITI graduates under Coir Udyami Yojana	50	50 Nos. x Rs. 5,00,000 = Rs.1,25,00,000	50,00,000	68,75,000	6,25,000
2	International Exposure visit under MDA	15	Program 15 batch @ Rs. 15,00,000	7,50,000	0	7,50,000
	Total		**1,40,00,000**	**57,50,000**	**68,75,000**	**13,75,000**

Sub Cluster Specific Convergence initiatives

Adalagere

There are 10 units which are making more than 2000 KG of pith per day at present and after establishment of defibering unit as CFC, more than 2000 to 3000 Kgs pith will be made. Thus an estimated 5 MT of pith will remain idle. Thus the SPV is contemplating to establish a common pith block making unit under UPNRM Scheme of NABARD. The proposed facility is planned in third year of project phase. The detailed costing is given asbelow:

S. No	Name of the Activity	Bank Loan	Grant by NABARD	Stake Holders Contribution	Total Cost
1	**Common Facility Centre for Pith block Making** 1. Civil Cost 1000 SFT @ Rs. 800 per SFT = Rs. 8.00lakhs 2.Plant & Machinery Cost = Rs. 50.00lakhs 3. Working Capital Costs =Rs. 5.00 lakhs 4. Total = Rs. 63.00 lakhs	15.75	31.50	15.75	63.00

Revenue generation mechanism: The SPV itself will make pith blocks, and sell on its common brand name, and pass on profit margins to concerned members on pro rata basis.

Chapter - 12

ENHANCED PROJECT COST WITH CONVERGENCE OF SCHEMES

Overall project cost which is including grant under SFURTI, Stakeholder contribution, and co-founding by MoMSME (MDA Scheme), Coir Board (Coir Udyami Yojana), and KVIC (PMEGP Scheme) as grant, which 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	NABARD Contribution	Grant from other schemes (PMEGP, CUY, MDA)	Stakeholder Contribution
1	Soft Interventions	13.03	13.03	0.00	0.00	0.00	0.00
2	Hard Interventions (under Core SFURTI)	905.94	654.43	0.00	0.00	0.00	251.10
3	Convergence under common umbrella (establishment of new units and international expo visits)	140.00	0	68.75	0.00	57.50	13.75
4 A	Establishment of pith block making unit at Adlagere	63.00	0.00	15.75	31.50	0.00	15.75
5	IA Fees	20.00	20.00	0	0	0	0
6	Technical Agency Fees	50.06	50.06	0	0	0	0
	Total	**1192.03**	**737.52**	**84.5**	**31.5**	**57.5**	**280.6**

Thus out of a total of 1192.03 lacs as project cost, SFURTI contribution is coming to 62%, Stake Holders contribution is coming to 23.50% and remaining 14.5% is shared by Grant under various schemes, 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 Trust Building activities under SI												
3. Implementation of trainings/ SDPs under SI												
4. Capacity building initiatives for Self Governance under SI												
5. Market Promotion Activities under SI												
6. Civil construction of planned HIs under Core SFURTI												
7. Erection of machinery and cabling												
8. Initiation of commercial production of CFCs												
9. Convergence initiatives												
10 Exit from the cluster by TA and IA												

Chapter – 14

Detailed Business Plan

A sub cluster wise detailed business plan has been prepared ad given as below:

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.

Tyagattur Sub Cluster

The production capacity of Geo Textiles making unit is 450 Square meters per day. The capacity mentioned is 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 6thyear.

Product Mix:

The focus products of the CFC are Geo Textile which will be made from the yarn thus making it eco-friendly. The price of 1 Sq. meter of Geo Textile is Rs. 110.

Manpower Cost:

The man power includes 2 operators. The unit also require 5 skilled workers and 10 unskilled workers.

The administrative staff will have one overall manager, one assistant, one marketing officer besides 1 securityguard.

The total wages for plant is estimated at 15.00 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)

Utility and other overheads:

Power: The project requires 20 HP power and is expected to cost an amount of Rs. 3.31 lakhs in the first year of operation.

Water: Water of 10 gallons is required per day for industrial purpose for pith wash. So a charge of Rs. 1.20 lakhs is considered for the first year.

Preliminary expenses of 0.90 lakhs are considered for salaries during construction and power deposit, while **pre-operative expenses** were considered at Rs. 3.00 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% onsales.

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. 5.75 lakhs perannum.

Working Capital

Since 100% of capacity is used for direct marketing, the total working capital is coming to Rs. 31.21 lakhs.

Financial Projections

Profitability Statement: Given as below:

Year Ending 31st March	2016	2017	2018	2019	2020	2021
Production Capacity Utilisation	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	81.00	87.75	94.50	101.25	108.00	114.75
Less: Excise Duty	0.00	0.00	0.00	0.00	0.00	0.00
Net Domestic Sales	81.00	87.75	94.50	101.25	108.00	114.75
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	81.00	87.75	94.50	101.25	108.00	114.75
Other Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	**81.00**	**87.75**	**94.50**	**101.25**	**108.00**	**114.75**

COST OF PRODUCTION- SALES						
Raw material Consumed	24.30	26.33	28.35	30.38	32.40	34.43
Consumables, Stores and spares 7% on sales)	5.67	6.14	6.62	7.09	7.56	8.03
Power, Fuel and other utilities (Variable)	1.98	2.15	2.32	2.48	2.65	2.81
Power, Fuel and other utilities (Fixed)	1.32	1.43	1.54	1.65	1.76	1.87
Water	2.40	2.52	2.65	2.78	2.92	3.06
Factory salaries & Wages (variable)	15.00	15.00	15.00	15.00	15.00	15.00
Factory salaries & Wages (fixed)	6.15	6.15	6.15	6.15	6.15	6.15
Repair and maintenance	2.43	2.63	2.84	3.04	3.24	3.44
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	5.75	5.75	5.75	5.75	5.75	5.75
Sub Total	**65.01**	**68.11**	**71.21**	**74.32**	**77.43**	**80.55**
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	**65.01**	**68.11**	**71.21**	**74.32**	**77.43**	**80.55**
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	**65.01**	**68.11**	**71.21**	**74.32**	**77.43**	**80.55**
Selling Packing &Distribution Expenses	2.43	2.63	2.84	3.04	3.24	3.44
Administrative & Misc. Expenses	1.62	1.76	1.89	2.03	2.16	2.30
Sub Total	69.06	72.49	75.93	79.38	82.83	86.29
Profit Before Interest and Tax (PBIT)	**11.94**	**15.26**	**18.57**	**21.87**	**25.17**	**28.46**
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	11.94	15.26	18.57	21.87	25.17	28.46
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)	**11.94**	**15.26**	**18.57**	**21.87**	**25.17**	**28.46**
Provision for taxation	0.09	1.75	3.40	5.05	6.38	8.03
Profit After Tax	**11.85**	**13.51**	**15.17**	**16.82**	**18.79**	**20.43**

Break EvenAnalysis

The project will reach breakeven in the first year of operation. During the first year the variable expenses are coming to Rs. 49.38 lakhs with a contribution of Rs. 31.62 lakhs thus leaving a breakeven of 54.64%. The breakeven will show a declining trend and by 6th year it will reach to 38.24 which is significant.

(Please refer annexure 56 for detailed BE analysis)

IRRCalculation

Both pre and post-tax IRR were calculated to assess the viability of the project. The average IRR before tax is coming to 7.5 with an NPV of Rs. 05.0 lakhs at 7% discount rate. The average IRR post tax is coming to 5.00 with NPV of Rs. 3.5 lakhs. Since there is no bank lending the IRR appears to be on very positive side showing the viability of theproject.

(Please refer annexure 55 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 20% and increase in expenditure cost by 10% will make the unit a non-viableproposition.

Note: The detailed financial statements are given as annexure 43 to 57.

Nittur SubCluster

The production capacity of coir fibre is 1000 KGs per day based on machinery capacity. Similarly the production capacity of Curled Coir is 1800 KGs per day. All the capacities mentioned are at 100% utilisation. All the units are expected to reach 60% capacity utilisation in the first year, 62% in the second year and reach a capacity of 85% by 10thyear.

ProductMix:

The focus products of the CFC are fiber and curled coir. The price of fiber considered is Rs. 11 per KG and that of curled coir is Rs. 17 per KG.

ManpowerCost:

The man power includes three operators, 5 skilled workers and 8semi-skilled workers.The administrative staff will have one manager, one assistant, besides one security guards.

The total wages for plant is estimated at 16.05 lakhs and for administrative staff the salaries are coming to Rs. 6.15lakhs, which are inclusive of 25% fringe benefits as per enforcement directorate norms.

(Details of manpower given in annexed financial estimates)

Utility and otheroverheads:

Power: The project requires 40 HP power and is expected to cost an amount of Rs. 3.61 lakhs in the first year of operation.

Water: Water of 10 gallons is required per day for industrial purpose for pith wash. So a charge of Rs. 1.20 lakhs is considered for the first year.

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

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. 7.14 lakhs perannum.

WorkingCapital

Since both the products are made by coir federation and used as backward integration, the working capital requirement is low and is coming to Rs.8.09lakhs.

FinancialProjections

Profitability Statement: Given as below:

Year Ending 31st March	2016	2017	2018	2019	2020	2021
Production Capacity Utilisation	0.65	0.67	0.69	0.72	0.75	0.77
Sales as percentage of installed capacity	0.65	0.67	0.69	0.72	0.75	0.77
Sales/ Total Income						
Gross Domestic Sales	81.12	83.62	86.11	89.86	93.60	96.10
Less: Excise Duty	0.00	0.00	0.00	0.00	0.00	0.00
Net Domestic Sales	81.12	83.62	86.11	89.86	93.60	96.10
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	81.12	83.62	86.11	89.86	93.60	96.10
Other Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	**81.12**	**83.62**	**86.11**	**89.86**	**93.60**	**96.10**

COST OF PRODUCTION- SALES						
Raw material Consumed	19.50	20.10	20.70	21.60	22.50	23.10
Consumables, Stores and spares 7% on sales)	5.68	5.85	6.03	6.29	6.55	6.73
Power, Fuel and other utilities (Variable)	0.97	0.99	1.02	1.07	1.11	1.14
Power, Fuel and other utilities (Fixed)	0.64	0.66	0.68	0.71	0.74	0.76
Water	2.40	2.52	2.65	2.78	2.92	3.06
Factory salaries & Wages (variable)	16.05	16.05	16.05	16.05	16.05	16.05
Factory salaries & Wages (fixed)	6.15	6.15	6.15	6.15	6.15	6.15
Repair and maintenance	2.43	2.51	2.58	2.70	2.81	2.88
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	7.14	7.14	7.14	7.14	7.14	7.14
Sub Total	**60.96**	**61.98**	**63.01**	**64.49**	**65.97**	**67.02**
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	**60.96**	**61.98**	**63.01**	**64.49**	**65.97**	**67.02**
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	**60.96**	**61.98**	**63.01**	**64.49**	**65.97**	**67.02**
Selling Packing &Distribution Expenses	2.43	2.51	2.58	2.70	2.81	2.88
Administrative & Misc. Expenses	1.62	1.67	1.72	1.80	1.87	1.92
Sub Total	65.02	66.16	67.31	68.98	70.65	71.82
Profit Before Interest and Tax (PBIT)	**16.10**	**17.46**	**18.80**	**20.88**	**22.95**	**24.27**
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	16.10	17.46	18.80	20.88	22.95	24.27
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)	**16.10**	**17.46**	**18.80**	**20.88**	**22.95**	**24.27**
Provision for taxation	0.38	1.73	2.76	4.33	5.59	6.62
Profit After Tax	**15.72**	**15.73**	**16.04**	**16.55**	**17.36**	**17.66**

Break EvenAnalysis

The project will reach breakeven in the first year of operation. During the first year the variable expenses are coming to Rs. 44.63 lakhs with a contribution of Rs. 36.49 lakhs

thus leaving a breakeven of 49.30%. The breakeven will show a declining trend and by 6th year it will reach to 40.82 which is significant.

(Please refer annexure 41 for detailed BE analysis)

IRRCalculation

Both pre and post-tax IRR were calculated to assess the viability of the project. The average IRR before tax is coming to 11.97 with an NPV of Rs. 45.86 lakhs at 7% discount rate. The average IRR post tax is coming to 8.54 with NPV of Rs. 13.56 lakhs. Since there is no bank lending the IRR appears to be on positive side showing the viability of the project.

(Please refer annexure 40 for detailed IRRanalysis)

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 29 to42.

Tiptur SubCluster

The production capacity of geo textiles making unit is 2800 Square meters per day based on a shift of operation. The capacity mentioned is at 100% utilisation. The facility is expected to reach 60% capacity utilisation in the first year, 65% in the second year and reach a capacity of 85% by 6thyear.

ProductMix:

The only focus product is a geo textile. The price of per square metere of coir geo textile is Rs 110.

ManpowerCost:

The man power includes a plant in-charge who will take care of production that will be supported by 4 operators. A store in-charge to take care of go down facility is also provisioned in the estimates. It requires60 skilled workers and 30 unskilled workers.

The administrative staff will have one manager, one accounts officer, one marketing officers besides 2 security guards.

The total wages for plant is estimated at Rs. 102 lakhs and for administrative staff the salaries are coming to Rs. 11.40 lakhs, which are inclusive of 25% fringe benefits as per enforcement directorate norms.

(Details of manpower given in annexed financial estimates)

Utility and otheroverheads:

Power: The project requires 167 HP power and is expected to cost an amount of Rs. 35.64 lakhs in the first year of operation.

Water:5 gallons of water is required for day and during the first year, the cost is coming to Rs. 20.00 lakhs.

No Preliminary expensesand **pre-operative expenses** were considered as Federation is expected to take care of thesame.

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

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.17.17 lakhs perannum.

WorkingCapital

The entire working capital requirement for the plant will be taken care by Federation from its own sources of funds as such no working capital required under grant.

FinancialProjections

12.7.1 Profitability Statement: Given as below:

Year Ending 31st March	2020	2021	2022	2023	2024	2025
Production Capacity Utilisation	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	475.20	514.80	554.40	594.00	633.60	673.20
Less: Excise Duty	0.00	0.00	0.00	0.00	0.00	0.00
Net Domestic Sales	475.20	514.80	554.40	594.00	633.60	673.20
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	475.20	514.80	554.40	594.00	633.60	673.20
Other Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	**475.20**	**514.80**	**554.40**	**594.00**	**633.60**	**673.20**
COST OF PRODUCTION- SALES						
Raw material Consumed	210.60	228.15	245.70	263.25	280.80	298.35
Consumables, Stores and spares (5% on sales)	23.76	25.74	27.72	29.70	31.68	33.66
Power, Fuel and other utlities (Variable)	21.38	23.17	24.95	26.73	28.51	30.29
Power, Fuel and other utlities (Fixed)	14.26	15.44	16.63	17.82	19.01	20.20
Water	20.00	21.00	22.05	23.15	24.31	25.53
Factory salaries & Wages (variable)	102.00	102.00	102.00	102.00	102.00	102.00
Factory salaries & Wages (fixed)	11.40	11.40	11.40	11.40	11.40	11.40
Repair and maintenance	14.26	15.44	16.63	17.82	19.01	20.20
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	17.17	17.17	17.17	17.17	17.17	17.17
Sub Total	**434.83**	**459.51**	**484.25**	**509.04**	**533.88**	**558.79**
Add: Opening Stock in process	0.00	1.45	1.53	1.61	1.70	1.78
Less: Closing stock in process	1.45	1.53	1.61	1.70	1.78	1.86
COST OF PRODUCTION	**433.38**	**459.43**	**484.17**	**508.96**	**533.80**	**558.70**
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	**433.38**	**459.43**	**484.17**	**508.96**	**533.80**	**558.70**
Selling Packing &Distribution Expenses	14.26	15.44	16.63	17.82	19.01	20.20
Administrative & Misc. Expenses	9.50	10.30	11.09	11.88	12.67	13.46
Sub Total	457.14	485.17	511.89	538.66	565.48	592.36
Profit Before Interest and Tax (PBIT)	**18.06**	**29.63**	**42.51**	**55.34**	**68.12**	**80.84**
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	18.06	29.63	42.51	55.34	68.12	80.84
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)	**18.06**	**29.63**	**42.51**	**55.34**	**68.12**	**80.84**
Provision for taxation	-5.80	0.25	6.39	11.90	17.39	22.25
Profit After Tax	**23.86**	**29.39**	**36.12**	**43.45**	**50.73**	**58.59**

Break EvenAnalysis

The project will reach breakeven in the first year of operation. During the first year the variable expenses are coming to Rs.372.00 lakhs with a contribution of Rs. 103.20 lakhs thus leaving a breakeven of 64.52%. The breakeven will show a declining trend and by 6th year it will reach to 46.19 which is significant.

(Please refer annexure 13 for detailed BE analysis)

IRRCalculation

Both pre and post-tax IRR were calculated to assess the viability of the project. The average IRR before tax is coming to 14.21 with an NPV of Rs. 83.51 lakhs at 10% discount rate. The average IRR post tax is coming to 10.91 with NPV of Rs. 16.45 lakhs. Since there is no bank lending the IRR appears to be on 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 20% and increase in expenditure cost by 20% will make the unit a non-viable proposition.

Note: The detailed financial statements are given as annexure 1to 14

AdalagereSubCluster

The production capacity of fibre is 2500 KG per day, out of which 1500 KG is sold to local artisans for making of yarn and mats, remaining 1000 KG will be utilised as back ward integration to common curled coir making facility. Similarly the production capacity of pith manure making unit is 600 MT per annum. It is difficult to assess the per day production of

Manure since it is a long term process. The production capacity of curled coir is 1 MT per day. All 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.

ProductMix:

The focus products of the CFC are fiber, pith manure and curled coir. The price of fiber to be sold to artisans is kept at Rs. 11 per KG, pith manure is Rs. 6.00 per KG, and curled coir is Rs. 19 per KG.

ManpowerCost:

The man power includes a plant in-charge who will take care of production that will be supported by 4operators;the unit require 10 skilled workers and 10 semi killed workers.

The administrative staff will have one assistant, one marketing officer besides 2 security guards.

The total wages for plant is estimated at 28.20 lakhs and for administrative staff the salaries are coming to Rs. 4.13 lakhs, which are inclusive of 25% fringe benefits as per enforcement directorate norms.

(Details of manpower given in annexed financial estimates)

Utility and otheroverheads:

Power: The project requires 162 HP power and is expected to cost an amount of Rs. 10.36 lakhs in the first year of operation.

Water: Water of 30 gallons is required per day for industrial purpose for pith wash. So a charge of Rs. 3.60 lakhs is considered for the first year.

Preliminary expenses of 0.40 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 1% on sales, repairs and maintenance as 3% of sales and sales expenses as 2% onsales.

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. 7.77 lakhs perannum.

WorkingCapital

Since 100% of capacity is used for direct marketing, the total working capital is coming to Rs. 9.98 lakhs.

FinancialProjections

Profitability Statement: Given as below:

Year Ending 31st March	2016	2017	2018	2019	2020	2021
Production Capacity Utilisation	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	85.50	92.63	99.75	106.88	114.00	121.13
Less: Excise Duty	0.00	0.00	0.00	0.00	0.00	0.00
Net Domestic Sales	85.50	92.63	99.75	106.88	114.00	121.13
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	85.50	92.63	99.75	106.88	114.00	121.13
Other Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	**85.50**	**92.63**	**99.75**	**106.88**	**114.00**	**121.13**
COST OF PRODUCTION- SALES						
Raw material Consumed	6.48	7.13	7.84	8.62	9.49	10.44
Consumables, Stores and spares (3% on sales)	2.57	2.78	2.99	3.21	3.42	3.63
Power, Fuel and other utilities (Variable)	8.20	8.88	9.56	10.25	10.93	11.61
Power, Fuel and other utilities (Fixed)	5.46	5.92	6.38	6.83	7.29	7.74
Water	3.60	3.78	3.97	4.17	4.38	4.59
Factory salaries & Wages (variable)	28.20	28.20	28.20	28.20	28.20	28.20
Factory salaries & Wages (fixed)	4.13	4.13	4.13	4.13	4.13	4.13

Repair and maintenance	2.57	2.78	2.99	3.21	3.42	3.63
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	7.77	7.77	7.77	7.77	7.77	7.77
Sub Total	**68.97**	**71.36**	**73.83**	**76.38**	**79.02**	**81.75**
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	**68.97**	**71.36**	**73.83**	**76.38**	**79.02**	**81.75**
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	**68.97**	**71.36**	**73.83**	**76.38**	**79.02**	**81.75**
Selling Packing &Distribution Expenses	1.71	1.85	2.00	2.14	2.28	2.42
Administrative & Misc. Expenses	0.86	0.93	1.00	1.07	1.14	1.21
Sub Total	71.53	74.14	76.82	79.59	82.44	85.38
Profit Before Interest and Tax (PBIT)	**13.97**	**18.48**	**22.93**	**27.29**	**31.56**	**35.74**
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	13.97	18.48	22.93	27.29	31.56	35.74
Preliminary expenses written off	0.24	0.24	0.24	0.24	0.24	0.24
Non Operational Income	0.00	0.00	0.00	0.00	0.00	0.00
Profit Before Tax (PBT)	**13.73**	**18.24**	**22.69**	**27.05**	**31.32**	**35.50**
Provision for taxation	-0.84	1.49	4.11	6.08	8.02	9.93
Profit After Tax	**14.57**	**16.75**	**18.58**	**20.97**	**23.30**	**25.57**

Break EvenAnalysis

The project will reach breakeven in the first year of operation. During the first year the variable expenses are coming to Rs. 47.15 lakhs with a contribution of Rs. 38.35 lakhs thus leaving a breakeven of 45.57%. The breakeven will show a declining trend and by 6th year it will reach to 37.77 which is significant.

(Please refer annexure 27 for detailed BE analysis)

IRRCalculation

Both pre and post-tax IRR were calculated to assess the viability of the project. The average IRR before tax is coming to 13.44 with an NPV of Rs. 68.23 lakhs at 7% discount rate. The average IRR post tax is coming to 09.68 with NPV of Rs. 26.08 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 26 for detailed IRRanalysis)

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 20% and increase in expenditure cost by 10% will make the unit a non-viable proposition.

Note: The detailed financial statements are given as annexure 15 to28.

Chapter –15

PROPOSED IMPLEMENTATIONFRAMEWORK

Role of implementingagency

Following are the expected role of implementing agency

- Appointment and monitoring of the performance ofCDA
- Selection of relevant beneficiaries for each activity balancing all the areas of concentration andstakeholders
- Micro planning of each activity in to sub activities and make a plan, besides sticking to timelines
- 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 ofTA.
- Leveraging of Central and State Schemes for add on activities with due help fromTA
- Capacitate its executive members for strongself-governance

Details of strategic partners and other projectstakeholders

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 beard 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.

Structure and composition of SPVs

The Proposed Common Facilities will be managed by Special Purpose Vehicles for each sub cluster. The name of sub cluster wise SPVs and their details are given as below:

S.No	Name of the sub cluster	Name of the SPV	Number of Members
1	Thyagattur	Karnataka State coir Co-operative Fedration Limited. **Contact Person and details:** Mr.Dr.Arunkumar, Managing Director 09448045269	29 members
2	Nittur	Karnataka State coir Co-operative Fedration Limited. **Contact Person and details:** Mr.Dr.Arunkumar, Managing Director	29 members

		09448045269	
3	Tiptur	Karnataka State coir Co-operative Fedration Limited. **Contact Person and details:** Mr.Dr.Arunkumar, Managing Director 09448045269	29 members
4	Adalagere	Sristi Seva Samasthe **Contact Person and details:**Mr A.B Devanand, President 09972473412	15 members

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

- Establish, operate and maintain all common facilities as mentioned in theDPR.
- Collection of user charges from SPV members and other users of the facilities so as to meet the recurring expenses and futureexpansions
- Preparation and submission of progress reports to Coir Board throughTA

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 and will be assisted by skilled and unskilled employees to run the proposed hard interventions.

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:

Thyagattur Sub Cluster

at EnterpriseLevel

Number of direct beneficiary firms: 10 manufacturing firms along with its 140 workers besides 350 artisans.

a) Likely range ofoutputs:

- Atleast 30 artisans will be trained in Geo Textiles and manure making which may increase their wages by 15 to20%.
- Banks will support at least 20 potential house hold units, and manufacturers by providing term loans/ workingcapital
- At least 40 units will be benefitted under Public Support Schemes like CLCSS, TUFS, CGTMSE
- At least 10 to 15 house hold units will be linked to Coir UdyamiYojana

b) Indirect beneficiaryfirms:

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.

Sub ClusterLevel

- Strengthening of SPV for establishment and management of proposed hard interventions
- Establishment of CFC for Geo Textilesmaking
- Strong linkages with related institutions andBDSPslike CCRI, FICEA, NIFT and Banks, Coir Board andDIC
- Increase in productivity by 20 to 30%, turnover by 30 to 35%, employment by80%

The performance indicators at cluster level are given as below:

S.No	Indicator	Present Status	Post Intervention
1	Total Production (in MT/ Nos)	4500 MTof fibre&3150 MT curled rope 1200 MTof yarn	5000 MT of fibre, 3300 MT of curled rope, 1200 MT of yarn, 9500 MT of Geo Textiles
1	Total Turnover (Rs. In lakhs)	585+598+420= 1603	**650+627+420+120= 1817**
2	Investments (Rs. In lakhs)	500	**750 (including CFCs)**
3	Profitability (in Percentage)	7% to 10%	**14% to 17%**
4	Employment – Direct & Indirect (in Nos.)	500	**600**
5	Capacity Utilization (in %)	40 to 50	**60 to 70**
6	Artisan income (Rs. in Thousands)	4000 to 6000	8000 to 10000
7	Direct Marketing by artisans (In nos.)	0	10
8	Export marketing by Manufacturers	0	2
9	Beneficiaries under Coir Udyami Yojana	0	10 to 15
10	Artisans to be covered under social benefit schemes (Jandhan + Pradhan Mantri SurakshaBheema Yojana + Atal Pension Yojan + Prdhan Mantri JeevanJyothiBheemaYoujana)	0	500 Nos

Nittur SubCluster

at EnterpriseLevel

Number of direct beneficiary firms: 10 manufacturing firms along with its 100 workers besides 400 artisans.

a) Likely range ofoutputs:

- Atleast 30 artisans will be trained in Pith block and manure making which may increase their wages by 15 to20%.

- At least 5 firms will start export marketing and 15 house hold units direct marketing by becomingproducers
- Banks will support at least 20 potential house hold units, and manufacturers by providing term loans/ workingcapital
- At least 40 units will be benefitted under Public Support Schemes like CLCSS, TUFS,CGTMSE
- At least 10 to 15 house hold units will be linked to Coir UdyamiYojana

b) Indirect beneficiaryfirms:

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.

Sub ClusterLevel

- Strengthening of SPV for establishment and management of proposed hard interventions
- Establishment of CFC for Coir Fibre and curled Coir Ropemaking
- StronglinkageswithrelatedinstitutionsandBDSPslike CCRI, FICEA, NIFT and Banks, Coir Board andDIC
- Increase in productivity by 10 to 15%, turnover by 20 %, employment by 30%

The performance indicators at cluster level are given asbelow:

S.No	Indicator	Present Status	Post Intervention
1	Total Production (in MT/ Nos)	4500 MT of fibre& 3150 MT curled rope 1200 MT of yarn	4900 MT of fibre, 3800 MT of curled rope, 1200 MT of yarn, 50 MT of manure
1	Total Turnover (Rs. In lakhs)	585+598+420 = 1600	**700+640+420+60+8 = 1828**

2	Investments (Rs. In lakhs)	500	**650 (including CFCs)**
3	Profitability (in Percentage)	7% to 10%	**14% to 17%**
4	Employment – Direct & Indirect (in Nos.)	500	**600**
5	Capacity Utilization (in %)	40 to 50	**60 to 70**
6	Artisan income (Rs. in Thousands)	4000 to 6000	8000 to 10000
7	Direct Marketing by artisans (In nos.)	0	10
8	Export marketing by Manufacturers	0	2
9	Beneficiaries under Coir Udyami Yojana	0	10 to 15
10	Artisans to be covered under social benefit schemes (Jandhan + Pradhan Mantri SurakshaBheema Yojana + Atal Pension Yojan + Prdhan Mantri Jeevan JyothiBheemaYoujana)	0	500 Nos

Tiptur SubCluster

at EnterpriseLevel

Number of direct beneficiary firms: 10 manufacturing firms along with its 200 workers besides 800 artisans.

a) Likely range ofoutputs:

- At least 30 workers, artisans will be trained in advanced geo textilemaking
- Banks will support at least 20 potential house hold units, and manufacturers by providing term loans/ workingcapital
- At least 10 house hold units will be linked to Coir UdyamiYojana

b) Indirect beneficiaryfirms:

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.

Sub ClusterLevel

- Strengthening of SPV for establishment and management of proposed hard interventions
- Establishment of a Geo Textile makingcentre
- Strong linkages with related institutions and BDSPs like CCRI, FICEA, NIFT and Banks, Coir Board andDIC
- Increase in productivity by 100%, turnover by 200%, employment by 100%

The performance indicators at cluster level are given asbelow:

S.No	Indicator	Present Status	Post Intervention
1	Total Production (in MT/ Nos)	4500 MT of fibre + 20000 Meters of curled rope	4500 MT of fibre, 20000 meters of curled rope, 720000 tSquare meters of Geo Textiles
2	Total Turnover (Rs. In lakhs)	585+380 = 965	585+380+ 400 = 1365
3	Investments (Rs. In lakhs)	800	**1200 (including CFCs)**
4	Profitability (in Percentage)	7% to 10%	**14% to 17%**
5	Employment – Direct & Indirect (in Nos.)	800	**1000**
6	Capacity Utilization (in %)	30 to 50	**60 to 70**
7	Artisan income (Rs. in Thousands)	4000 to 6000	8000 to 10000
9	Direct Marketing by artisans (In nos.)	0	20
10	Export marketing by Manufacturers	0	2
11	Beneficiaries under Coir Udyami Yojana	0	10 to 15
12	Artisans to be covered under social benefit schemes (Jandhan + Pradhan Mantri SurakshaBheema Yojana + Atal Pension Yojan + Prdhan Mantri JeevanJyothiBheemaYoujana)	0	1000 Nos

Adalagere Sub Cluster

at EnterpriseLevel

Number of direct beneficiary firms: 15 manufacturing firms along with its 160 workers besides 325 artisans.

a) Likely range ofoutputs:

- At least 90 workers, artisans will be trained in pith manure and block making, 2 ply yarn and matmaking
- At least 4 firms will start export marketing and 15 house hold units direct marketing by becomingproducers
- Banks will support at least 20 potential house hold units, and manufacturers by providing term loans/ workingcapital
- At least 40 units will be benefitted under Public Support Schemes like CLCSS, TUFS,CGTMSE
- At least 10 to 15 house hold units will be linked to Coir UdyamiYojana

b) Indirect beneficiaryfirms:

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.

Sub ClusterLevel

- StrengtheningofSPV for establishment and management of proposed hard interventions
- Establishment of an pith block manure makingcentre
- Strong linkages with related institutions and BDSPs like CCRI, FICEA, NIFT and Banks, Coir Board andDIC
- Increase in productivity by 40 to 50%, turnover by 50 to 60%, employment by 50%

The performance indicators at sub cluster level are given as below:

S.No	Indicator	Present Status	Post Intervention
1	Total Production (in MT/ Nos)	2500 MT of fibre	2500 MT of fibre, 210 MT of curled rope + 420 MT of pith manure +315 MT of fibre
2	Total Turnover (Rs. In lakhs)	325	**325+ 34.65 +25.20 + 39.90 = 425**
3	Investments (Rs. In lakhs)	300	**500 (including CFCs)**
4	Profitability (in Percentage)	7% to 10%	**14% to 17%**
5	Employment – Direct & Indirect (in Nos.)	500	**700**
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	30
9	Export marketing by Manufacturers	0	7
10	Beneficiaries under Coir Udyami Yojana	0	10 to 15
11	Artisans to be covered under social benefit schemes (Jandhan + Pradhan Mantri SurakshaBheema Yojana + Atal Pension Yojan + Prdhan Mantri JeevanJyothiBheemaYoujana)	0	500 Nos

Cluster levelIndicators

Based on the above, aggregate cluster level indicators are given in the following table:

S.No	Indicator	Present Status	Post Intervention
1	Total Production (in MT/ Nos)	16000 MT of fibre and 8300 MT of curled rope, 2400 MT of yarn, 50 MTof manure	**17000 MT of fibre, 9300 MT of curled rope,2400 MT Yarn,3 lakh pith blocks, 100 MT of manure,90000 Sq. meters of Geo Textiles,**
1	Total Turnover (Rs. In lakhs)	7170	8400
2	Investments (Rs. In lakhs)	2100	3450 (including CFCs)
3	Profitability (in Percentage)	7% to 10%	14% to 17%
4	Employment – Direct & Indirect (in Nos.)	2000	2500
5	Capacity Utilization (in %)	30 to 50	60 to 70
6	Artisan income (Rs. in Thousands)	4000 to 6000	**8000 to 10000**
7	Direct Marketing by artisans (In nos.)	0	**60**
8	Export marketing by Manufacturers	0	**10**
9	Beneficiaries under Coir Udyami Yojana	0	**60**
10	Artisans to be covered under social benefit schemes (Jandhan + Pradhan Mantri SurakshaBheema Yojana + Atal Pension Yojan + Prdhan Mantri JeevanJyothi BheemaYoujana)	0	**2000 Nos**

Annexure's 1 – 13

Financial Statements of Tiptur Sub Custer

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	-	-	-
B	Building & other Civil Works	-	73.80	73.80
C	Plant and machinery			
	a. indigenous	-	310.45	310.45
	b.import	-	-	-
D	Lease Deposit &Electricity Deposit	-	-	-
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	-	-
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	-	-
I	Pre-operative expenses	-	-	-
J	Provision for contingencies			
	a.buildings @ 2%	-	-	-
	b.Plant & Machinery @ 5%	-	-	
	c.Other fixed assets	-	-	-
K	Working capital	-	-	-
	Total :	-	384.25	384.25

MEANS OF FINANCE

				Rs.In Lakhs
Sl.No.	Particulars	Amount already raised	Amount proposed to be raised	Total
	Equity			
A	Equity from spv@29.50%	-	-	113.35
B	Share premium	-	-	-
C	Preference Share Capital	-	-	-
	Debt			
D	Term loans (0%)	-	-	-
E	Unsecured loans and deposits	-	-	-
	Quasi Equity			
F	Interest free unsecured loans	-	-	-
G	Subsidy : central govt. (70.5%)	-	-	270.90
H	Subsidy : state govt.	-	-	
	Total	-	-	384.25

Annexure - II: Details of Machinery										
S.No.	**Name of the machinery**	**capacity**	**hp**	**qty**	**Rate**	**Total Basic Price**	**GST**	**Insurance (1% or actuals)**	**FrieightCharges (2% or actuals)**	**Total Amount**
1	Fully auto looms 4 shaft,matting& geotextile weaving machine	450 Sq. meters per day per machine	150	6	3400000	20400000	3672000	204000	408000	24684000
2	cop winding		2	1	128000	128000	23040	1280	2560	154880
3	spool winding		2	1	305000	305000	54900	3050	6100	369050
4	2 Ply Spinning with Auto Feeder	25 KG per machine per day	8	10	421800	4218000	759240	42180	84360	5103780
5	Panel Board with cabling			1	606000	606000	109080	6060	12120	733260
	Sub Total - 1		**162**							**31044970**

		Annexure – III	
		Detailed Workings	
Description	**Quantity (SFT/ Nos)**	**Rate (In Rs.)**	**Amount**
General			
For Spinning Unit			
Shed	9000	820	73,80,000
			-
			-
Total			**73.80**

COST COMPONENTS AS % OF SALES

Cost Component	Sales
Admn. Expenses	2.00%
Repairs&Maintenance	3.00%
Selling Expenses	3.00%

DETAILS OF MANPOWER REQUIRED					
Particulars		**No.**	**Salary/ month**		**Annual Wages & Salaries**
			Rs.		**Rs. lakhs**
Plant Incharge		1	40000		4.80
Operators		4	15000		7.20
Store Keeper		1	10000		1.20
Skilled Labour		60	7000		50.40
Unskilled labour		30	5000		18.00
		96			**81.60**
Add: Fringe Benefits	**@25%**				**20.40**
Total					**102.00**
ADMINISTRATIVE SALARIES					

Manager		1	25000		3.00
Marketing Officer		1	20000		2.40
Accts/ Admin/ Assts		1	15000		1.80
Security		2	8000		1.92
		5			**9.12**
Add: Fringe Benefits	**@25%**				**2.28**
Total					**11.40**
TOTAL		**101**			**113.40**

ANNEXURE- V										
BASIC ASSUMPTIONS FOR PROFITABILITY										
REVENUE PROJECTIONS										
YEAR	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Capacity Utilization (%)	60%	65%	70%	75%	80%	85%	85%	85%	85%	85%
I. Geotextile										
Installed Capacity (In Sq. meter)	720000	720000	720000	720000	720000	720000	720000	720000	720000	720000

Sale Capacity (In Sq. meters)	432000	468000	504000	540000	576000	612000	612000	612000	612000	612000
Sale cost per meter(Rs/ Sq. Meter)	110	110	110	110	110	110	110	110	110	110
Revenue(Rs lakhs)	**475.20**	**514.80**	**554.40**	**594.00**	**633.60**	**673.20**	**673.20**	**673.20**	**673.20**	**673.20**
TOTAL REVENUE	**475.20**	**514.80**	**554.40**	**594.00**	**633.60**	**673.20**	**673.20**	**673.20**	**673.20**	**673.20**

ANNEXURE - VI										
PROJECTED PROFITABILITY STATEMENT										
Year Ending 31st March	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
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	475.20	514.80	554.40	594.00	633.60	673.20	673.20	673.20	673.20	673.20
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	475.20	514.80	554.40	594.00	633.60	673.20	673.20	673.20	673.20	673.20
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	475.20	514.80	554.40	594.00	633.60	673.20	673.20	673.20	673.20	673.20
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	**475.20**	**514.80**	**554.40**	**594.00**	**633.60**	**673.20**	**673.20**	**673.20**	**673.20**	**673.20**
COST OF PRODUCTION- SALES										
Raw material Consumed	210.60	228.15	245.70	263.25	280.80	298.35	298.35	298.35	298.35	298.35
Consumables, Stores and spares (5% on sales)	23.76	25.74	27.72	29.70	31.68	33.66	33.66	33.66	33.66	33.66
Power, Fuel and other utlities (Variable)	21.38	23.17	24.95	26.73	28.51	30.29	30.29	30.29	30.29	30.29

Power, Fuel and other utlities (Fixed)	14.26	15.44	16.63	17.82	19.01	20.20	20.20	20.20	20.20	20.20
Water	20.00	21.00	22.05	23.15	24.31	25.53	26.80	28.14	29.55	31.03
Factory salaries & Wages (variable)	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00
Factory salaries & Wages (fixed)	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40
Repair and maintenance	14.26	15.44	16.63	17.82	19.01	20.20	20.20	20.20	20.20	20.20
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17
Sub Total	**434.83**	**459.51**	**484.25**	**509.04**	**533.88**	**558.79**	**560.06**	**561.40**	**562.81**	**564.29**
Add: Opening Stock in process	0.00	1.45	1.53	1.61	1.70	1.78	1.86	1.87	1.87	1.88
Less: Closing stock in process	1.45	1.53	1.61	1.70	1.78	1.86	1.87	1.87	1.88	1.88
COST OF PRODUCTION	**433.38**	**459.43**	**484.17**	**508.96**	**533.80**	**558.70**	**560.06**	**561.40**	**562.81**	**564.28**
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	**433.38**	**459.43**	**484.17**	**508.96**	**533.80**	**558.70**	**560.06**	**561.40**	**562.81**	**564.28**
Selling Packing &Distribution Expenses	14.26	15.44	16.63	17.82	19.01	20.20	20.20	20.20	20.20	20.20
Administrative & Misc. Expenses	9.50	10.30	11.09	11.88	12.67	13.46	13.46	13.46	13.46	13.46
Sub Total	457.14	485.17	511.89	538.66	565.48	592.36	593.72	595.06	596.47	597.94
Profit Before Interest and Tax (PBIT)	**18.06**	**29.63**	**42.51**	**55.34**	**68.12**	**80.84**	**79.48**	**78.14**	**76.73**	**75.26**
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	18.06	29.63	42.51	55.34	68.12	80.84	79.48	78.14	76.73	75.26
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)	**18.06**	**29.63**	**42.51**	**55.34**	**68.12**	**80.84**	**79.48**	**78.14**	**76.73**	**75.26**
Provision for taxation	-5.80	0.25	6.39	11.90	17.39	22.25	23.37	23.58	24.07	24.23
Profit After Tax	**23.86**	**29.39**	**36.12**	**43.45**	**50.73**	**58.59**	**56.11**	**54.56**	**52.66**	**51.02**

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	113.35	113.35	113.35	113.35	113.35	113.35	113.35	113.35	113.35	113.35	113.35
2. Reserves & Surplus	0.00	23.86	53.25	89.37	132.82	183.55	242.13	298.24	352.80	405.46	456.49
3. subsidy (Central +State)	270.90	270.90	270.90	270.90	270.90	270.90	270.90	270.90	270.90	270.90	270.90
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		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	**384.25**	**408.11**	**437.50**	**473.62**	**517.07**	**567.79**	**626.38**	**682.49**	**737.05**	**789.71**	**840.74**
ASSETS											
1. Gross Fixed Assets	384.25	384.25	384.25	384.25	384.25	384.25	384.25	384.25	384.25	384.25	384.25
2. Less :Accm. depreciation	0.00	17.17	34.34	51.50	68.67	85.83	103.00	120.16	137.33	154.49	171.66
3. Net Fixed Assets	384.25	367.08	349.91	332.75	315.58	298.42	281.25	264.09	246.92	229.76	212.59
4. Current Assets	0.00	118.80	128.70	138.60	148.50	158.40	168.30	168.30	168.30	168.30	168.30
5. Cash & Bank Balance	0.00	-77.77	-41.12	2.27	52.98	110.98	176.83	250.10	321.83	391.66	459.85
6. Prelim. expenses not w/o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ASSETS	**384.25**	**408.11**	**437.50**	**473.62**	**517.07**	**567.79**	**626.38**	**682.49**	**737.05**	**789.71**	**840.74**

\ANNEXURE - XII											
CALCULATION OF INTERNAL RATE OF RETURN & NPV											
IRR before tax								**(Rs.in lacs)**			
	Const. Period	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Out Flows											
Capital Investment	-384.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total outflows	-384.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inflows											
Profit before tax	0.00	18.06	29.63	42.51	55.34	68.12	80.84	79.48	78.14	76.73	75.26
Add Depreciation and non cash expenses	0.00	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17
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	86.25
Total Inflows	0.00	35.23	46.80	59.68	72.51	85.28	98.00	96.65	95.31	93.90	178.67
Net cash flows	**-384.25**	**35.23**	**46.80**	**59.68**	**72.51**	**85.28**	**98.00**	**96.65**	**95.31**	**93.90**	**178.67**
NPV before tax(Rs. in lakhs)	**83.51**		**Discount Rate taken =**		**10.00%**						
Before - Tax IRR	**14.21%**										
IRR after tax								**(Rs.in lacs)**			

	Const. Period	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Out Flows											
Capital Investment	-384.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total outflows	-384.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inflows											
Profit after tax	0.00	23.86	29.39	36.12	43.45	50.73	58.59	56.11	54.56	52.66	51.02
Add Depreciation and non cash expenses	0.00	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17
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	86.25
Total Inflows	0.00	41.03	46.55	53.29	60.61	67.89	75.75	73.27	71.73	69.83	154.44
Net cash flows	**-384.25**	**41.03**	**46.55**	**53.29**	**60.61**	**67.89**	**75.75**	**73.27**	**71.73**	**69.83**	**154.44**
NPV after tax(Rs. in lakhs)	**16.45**		**Discount Rate taken =**		**10.00%**						
Post - Tax IRR	**10.91%**										

ANNEXURE - XIV										
BREAK EVEN POINT (Installed Capacity)										
										(Rs. In Lacs)
DETAILS	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
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	210.60	228.15	245.70	263.25	280.80	298.35	298.35	298.35	298.35	298.35
2. Consumable Spares	23.76	25.74	27.72	29.70	31.68	33.66	33.66	33.66	33.66	33.66
3. Power, Fuel & other utlities (Variable Cost)	21.38	23.17	24.95	26.73	28.51	30.29	30.29	30.29	30.29	30.29
4. Factory Salaries & Wages (Variable)	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00	102.00
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)	14.26	15.44	16.63	17.82	19.01	20.20	20.20	20.20	20.20	20.20
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	372.00	394.50	417.00	439.50	462.00	484.50	484.50	484.50	484.50	484.50
B.Fixed Expenses										
1. Power, Fuel & other utlities (Fixed Cost)	14.26	15.44	16.63	17.82	19.01	20.20	20.20	20.20	20.20	20.20
2. Factory Salaries & Wages (fixed)	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40
3. Repairs & Maintenance	14.26	15.44	16.63	17.82	19.01	20.20	20.20	20.20	20.20	20.20
4. Depreciation	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17
5. Administrative & Misc. Expenses	9.50	10.30	11.09	11.88	12.67	13.46	13.46	13.46	13.46	13.46
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	66.59	69.75	72.92	76.09	79.25	82.42	82.42	82.42	82.42	82.42

C.Sales	475.20	514.80	554.40	594.00	633.60	673.20	673.20	673.20	673.20	673.20
D.Contribution	103.20	120.30	137.40	154.50	171.60	188.70	188.70	188.70	188.70	188.70
E.Break Even Point (B/D)	64.52%	57.98%	53.07%	49.25%	46.19%	43.68%	43.68%	43.68%	43.68%	43.68%
F.Cash Break Even	47.88%	43.71%	40.58%	38.14%	36.18%	34.58%	34.58%	34.58%	34.58%	34.58%
G.BREAK EVEN SALES	306.61	298.48	294.22	292.52	292.63	294.04	294.04	294.04	294.04	294.04

ANNEXURE - XV

RETURN ON CAPITAL EMPLOYED

	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Return										
Operating Profit	18.06	29.63	42.51	55.34	68.12	80.84	79.48	78.14	76.73	75.26
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	**18.06**	**29.63**	**42.51**	**55.34**	**68.12**	**80.84**	**79.48**	**78.14**	**76.73**	**75.26**
Net Fixed Assets	384.25	367.08	349.91	332.75	315.58	298.42	281.25	264.09	246.92	229.76
Current Asets less creditors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total B	384.25	367.08	349.91	332.75	315.58	298.42	281.25	264.09	246.92	229.76
ROCE	4.70	8.07	12.15	16.63	21.59	27.09	28.26	29.59	31.08	32.76
ROCE for Optimal Year	**16.63**									
Average ROCE for 10 Years	**21.19**									

Annexure's 15 – 28

Financial Statements of Adalagere Sub Cluster

ANNEXURE - 15 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	-	25.56	25.56
C	Plant and machinery			
	a. indigenous	-	123.46	123.46
	b. import	-	-	-
D	Lease Deposit & Electricity Deposit	-	12.00	12.00
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	1.86	1.86
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	0.40	0.40
I	Pre-operative expenses	-	2.00	2.00
J	Provision for contingencies			
	a. buildings (@2%)	-	0.51	0.51
	b. Plant & Machinery (5%)	-	6.17	6.17
	c. Other fixed assets	-	-	-
K	Working capital	-	10.25	10.25
	Total :	-	184.22	184.22

MEANS OF FINANCE

Rs.In Lakhs

Sl.No.	Particulars	amount already raised	amount proposed to be raised	Total
	Equity			
A	Equity from spv@25%	-	-	46.05
B	Share premium	-	-	-
C	Preference Share Capital	-	-	-
D	Term loans (0%)	-	-	-
E	Unsecured loans and deposits	-	-	-
	Quasi Equity			
F	Interest free unsecured loans	-	-	-
G	Subsidy: central govt. (75%)	-	-	138.16
H	Subsidy : state govt.	-	-	
	Total	-	-	184.22

	Annexure – 16 Details of Machinery									
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. Pith Manure										
1	Testing equipment's			1	500000	500000	25000	5000	10000	540000
2. Common Processing Coir Fibre Centre										
1	Turbo Beater with Feeder	30000 Husk per hour per M/c (2500 Kg Fibre& 5000 Kg Pith)	54	1	1070000	1070000	53500	10700	21400	1155600
2	**Beater Cleaner with auto Feeder**		62	1	1340000	1340000	67000	13400	26800	1447200
3	**Fibre Screener**	**700 Kg Fibre Per hour**	3	1	298000	298000	14900	2980	5960	321840
4	**Pith Screener**	**1000 Kg Pith per hour**	3	1	258000	258000	12900	2580	5160	278640
5	Bailing Press (Hydraulic) 50 KG Capacity	25 Bundles Per Day (8hrs)	5	1	510000	510000	25500	5100	10200	550800
6	Conveyor 25feet x 10 = 250 Feet		10	1	1340000	1340000	67000	13400	26800	1447200
3. Curled Coir Rope										
7	Curled Coir Machine with Auto Feeder	350 Kg per machine	15	3	900000	2700000	135000	27000	54000	2916000
4. Other										
8	Loader (BULL)		0	1	1210000	1210000	60500	12100	24200	1306800
9	Transport Vehicle (TATA 1108)	3 Ton	0	1	1200000	1200000	60000	12000	24000	1296000
10	Bore well and Fittings		5	1	400000	400000	20000		8000	300000
11	Machine Installation and fittings		0	1	450000	450000	22500	4500	9000	486000
12	Electrical cabling		0	1	760000	760000	38000		15200	300000
	Sub Total - 1		**157**	**14**						**12346080**

Annexure - 17

Detailed Workings

1. Civil Works

	Description	Quantity (SFT/ Nos)	Rate (In Rs.)	Amount
	General			
	For Spinning Unit			
1	Shed &Godown	3200	800	25,56,000
	Total			**25.56**

Annexure III (Contd.)

2 Misc. FixedAssets

		Items	Qty	Rate	Amount	Final Amount after ST/ VAT
a	**Communication & Teaching Equipment**	Computers	1	30000	30000	30000
		UPS (1KVA)	1	15000	15000	15000
		Printer	1	11000	11000	11000
b	Furniture & Fixture				0	80000
c	Fire Service					50000
d						-
e	Others					-
	Total					**186000**
	Rounded					**186000**
	In Lakhs					**1.86**

	Annexure 17 (Contd.)						
3	**PRELIMINARY & PRE-OPERATIVE EXPENSES**						
	S.No	**Details**				**Quantity**	**Amount**
							Rs. lakhs
	1	Admn, Maintenance & Stationery, Electricity, Insurance and Bank Charges				LS	0.80
						LS	
	2	Travelling Conveyance				LS	1.00
	3	Electricity Connection Charges				LS	0.20
						LS	0.00
		TOTAL =					**2.00**
DEPOSITS							
	1	Preliminary expenses					0.40
							0.00
		TOTAL					**0.40**
Grand Total							**2.40**

Annexure -18

Inputs

(Rs.in lakhs)

YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Husk as Raw materials, (6000Nos per day x 300 days x Rs. 0.60 per No)	6.48	7.13	7.84	8.62	9.49	10.44	10.96	11.51	12.08	12.69
Power & Diesel	13.66	14.80	15.94	17.08	18.22	19.35	19.35	19.35	19.35	19.35
Water	3.60	3.78	3.97	4.17	4.38	4.59	4.82	5.07	5.32	5.58
Total	**23.74**	**25.71**	**27.75**	**29.87**	**32.08**	**34.39**	**35.14**	**35.93**	**36.75**	**37.62**
Total Cost	**23.74**	**25.71**	**27.75**	**29.87**	**32.08**	**34.39**	**35.14**	**35.93**	**36.75**	**37.62**

COST COMPONENTS AS % OF SALES

Cost Component	Sales
Admn. Expenses	1.00%
Repairs & Maintenance	3.00%
Selling Expenses	2.00%

Annexure – 18 (Contd...) DETAILS OF MANPOWER REQUIRED					
Particulars		**No.**	**Salary/ month**		**Annual Wages & Salaries**
			Rs.		**Rs. lakhs**
Plant In charge		1	15000		1.80
Operators		4	12000		5.76
Store Keeper		0	10000		0.00
Skilled Labour		10	7500		9.00
Simi skilled labour		10	5000		6.00
		25			**22.56**
Add: Fringe Benefits	**@25%**				**5.64**
Total					**28.20**
ADMINISTRATIVE SALARIES					
Manager		0	15000		0.00
Marketing Officer		1	10000		1.20
Accts/ Admin/ Assets		1	7500		0.90
Security		2	5000		1.20
		4			**3.3**
Add: Fringe Benefits	**@25%**				**0.83**
Total					**4.13**
TOTAL		**29**			**32.33**

Annexure – 18A

I. Power Requirement Details							
	Component	**Requirement in HP**	**Working hours/ Annum**	**HP/ Annum**	**Units per annum**	**Rs./ HP**	**Total (Rs. In lakhs)**
1	For Factory	157	2400.00	376800	282600	7.50	21.20
2	Power for Admin Block	5	2400.00	12000	9000	7.50	0.68
3	Power for water works	0	2400.00	0	0	7.50	0.00
	Total	162					21.87
II. Diesel for DG Set							
	Requirement per day In litres	Rate/ Litre	No. of days	Litres per day			Total
	Diesel	60.00	300.00	5.00			0.90
	Power & Fuel requirement						22.77

ANNEXURE- 19

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 A.Fiber (Direct Sale)											
Installed Capacity (In KGs)	750000	750000	750000	750000	750000	750000	750000	750000	750000	750000	750000
Quantity used for direct sale (in KGs)	450000	450000	450000	450000	450000	450000	450000	450000	450000	450000	450000
Actual Sale capacity (In Kgs)	270000	292500	315000	337500	360000	382500	382500	382500	382500	382500	450000
Sale cost (Rs/KG)	11	11	11	11	11	11	11	11	11	11	11
Revenue(Rs lakhs)	**29.70**	**32.18**	**34.65**	**37.13**	**39.60**	**42.08**	**42.08**	**42.08**	**42.08**	**42.08**	**49.50**
I B.Fiber (For curled coir CFC)											
Installed Capacity (In Kgs)	750000	750000	750000	750000	750000	750000	750000	750000	750000	750000	750000
Quantity used for CFC (In KGs)	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000
Actual Capacity (In Kgs)	450000	487500	525000	562500	600000	637500	637500	637500	637500	637500	750000
Service fees per KG (Rs/KG)	0	0	0	0	0	0	0	0	0	0	0
Revenue(Rs lakhs)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
II. Pith Manure (Common Brand)											
Installed Capacity (In Kgs)	600000	600000	600000	600000	600000	600000	600000	600000	600000	600000	600000
Production Capacity (In Kgs)	360000	390000	420000	450000	480000	510000	510000	510000	510000	510000	600000
Sale cost per KG In Rs.	6	6	6	6	6	6	6	6	6	6	6
Revenue(Rs lakhs)	**21.60**	**23.40**	**25.20**	**27.00**	**28.80**	**30.60**	**30.60**	**30.60**	**30.60**	**30.60**	**36.00**

III. Curled Coir Rope (Common Brand)											
Installed Capacity (No. Kgs)	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000
Production Capacity (In Kgs)	180000	195000	210000	225000	240000	255000	255000	255000	255000	255000	300000
Sale cost per KG	19	19	19	19	19	19	19	19	19	19	19
Revenue(Rs lakhs)	**34.20**	**37.05**	**39.90**	**42.75**	**45.60**	**48.45**	**48.45**	**48.45**	**48.45**	**48.45**	**57.00**
TOTAL REVENUE	**85.5**	**92.6**	**99.8**	**106.9**	**114.0**	**121.1**	**121.1**	**121.1**	**121.1**	**121.1**	**142.5**

ANNEXURE - 20

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	85.50	92.63	99.75	106.88	114.00	121.13	121.13	121.13	121.13	121.13
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	85.50	92.63	99.75	106.88	114.00	121.13	121.13	121.13	121.13	121.13
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	85.50	92.63	99.75	106.88	114.00	121.13	121.13	121.13	121.13	121.13
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	**85.50**	**92.63**	**99.75**	**106.88**	**114.00**	**121.13**	**121.13**	**121.13**	**121.13**	**121.13**
COST OF PRODUCTION- SALES										
Raw material Consumed	6.48	7.13	7.84	8.62	9.49	10.44	10.96	11.51	12.08	12.69
Consumables, Stores and spares (3% on sales)	2.57	2.78	2.99	3.21	3.42	3.63	3.63	3.63	3.63	3.63
Power, Fuel and other utilities (Variable)	8.20	8.88	9.56	10.25	10.93	11.61	11.61	11.61	11.61	11.61
Power, Fuel and other utilities (Fixed)	5.46	5.92	6.38	6.83	7.29	7.74	7.74	7.74	7.74	7.74
Water	3.60	3.78	3.97	4.17	4.38	4.59	4.82	5.07	5.32	5.58
Factory salaries & Wages (variable)	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20
Factory salaries & Wages (fixed)	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13
Repair and maintenance	2.57	2.78	2.99	3.21	3.42	3.63	3.63	3.63	3.63	3.63
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77
Sub Total	**68.97**	**71.36**	**73.83**	**76.38**	**79.02**	**81.75**	**82.50**	**83.29**	**84.12**	**84.99**
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	**68.97**	**71.36**	**73.83**	**76.38**	**79.02**	**81.75**	**82.50**	**83.29**	**84.12**	**84.99**
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	**68.97**	**71.36**	**73.83**	**76.38**	**79.02**	**81.75**	**82.50**	**83.29**	**84.12**	**84.99**
Selling Packing & Distribution Expenses	1.71	1.85	2.00	2.14	2.28	2.42	2.42	2.42	2.42	2.42
Administrative & Misc. Expenses	0.86	0.93	1.00	1.07	1.14	1.21	1.21	1.21	1.21	1.21
Sub Total	71.53	74.14	76.82	79.59	82.44	85.38	86.14	86.93	87.75	88.62
Profit Before Interest and Tax (PBIT)	**13.97**	**18.48**	**22.93**	**27.29**	**31.56**	**35.74**	**34.99**	**34.20**	**33.37**	**32.50**
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	13.97	18.48	22.93	27.29	31.56	35.74	34.99	34.20	33.37	32.50
Preliminary expenses written off	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
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)	**13.73**	**18.24**	**22.69**	**27.05**	**31.32**	**35.50**	**34.75**	**33.96**	**33.13**	**32.26**
Provision for taxation	-0.84	1.49	4.11	6.08	8.02	9.93	10.02	10.39	10.45	10.49
Profit After Tax	**14.57**	**16.75**	**18.58**	**20.97**	**23.30**	**25.57**	**24.73**	**23.57**	**22.68**	**21.77**
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retained Earnings	14.57	16.75	18.58	20.97	23.30	25.57	24.73	23.57	22.68	21.77
Net Cash Accruals	22.58	24.76	26.59	28.98	31.32	33.58	32.75	31.58	30.70	29.78
PBIDT/ total income (%)	16.34	19.95	22.98	25.53	27.69	29.51	28.89	28.24	27.55	26.83
Operating Profit/ Total Income (%)	16.34	19.95	22.98	25.53	27.69	29.51	28.89	28.24	27.55	26.83
Net Profit/ Total Income (%)	17.04	18.09	18.63	19.62	20.44	21.11	20.42	19.46	18.73	17.97
Raw material cost/ cost of production (%)	9.40	9.99	10.62	11.29	12.01	12.77	13.28	13.81	14.36	14.93
Cost of production/ net sales (%)	80.66	77.05	74.02	71.47	69.31	67.49	68.11	68.76	69.45	70.17
Cost of sales/ Net sales (%)	80.66	77.05	74.02	71.47	69.31	67.49	68.11	68.76	69.45	70.17

ANNEXURE - 21											
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	13.73	18.24	22.69	27.05	31.32	35.50	34.75	33.96	33.13	32.26
2. Add Depreciation											
other noncash expenses	0.00	8.01	8.01	8.01	8.01	8.01	8.01	8.01	8.01	8.01	8.01
3. Increase in Equity Share Capital	46.05	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	138	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		10.25	0.49	0.49	0.49	0.50	0.50	0.04	0.04	0.05	0.05
TOTAL SOURCES	**184.22**	**31.99**	**26.74**	**31.19**	**35.56**	**39.83**	**44.02**	**42.80**	**42.02**	**41.19**	**40.32**
B. DISPOSITION OF FUNDS											
1. Increase in capital expenditure	171.57	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	2.40	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		21.38	1.78	1.78	1.78	1.78	1.78	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	-0.84	1.49	4.11	6.08	8.02	9.93	10.02	10.39	10.45	10.49
TOTAL APPLICATION	**173.97**	**20.54**	**3.27**	**5.89**	**7.86**	**9.80**	**11.71**	**10.02**	**10.39**	**10.45**	**10.49**
C. NET SURPLUS/ DEFICIT	10.25	11.45	23.47	25.30	27.70	30.03	32.30	32.79	31.62	30.74	29.83
D. ADD : OPENING CASH BALANCE	0.00	10.25	21.71	45.18	70.48	98.18	128.21	160.51	193.30	224.92	255.66
E. CLOSING CASH BALANCE	10.25	21.71	45.18	70.48	98.18	128.21	160.51	193.30	224.92	255.66	285.49

ANNEXURE - 22											
PROJECTED BALANCE SHEET (Rs. In Lacs)											
DETAILS	**Const. Period**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
LIABILITIES											
1. Share Capital	46.05	46.05	46.05	46.05	46.05	46.05	46.05	46.05	46.05	46.05	46.05
2. Reserves & Surplus	0.00	14.57	31.32	49.90	70.87	94.17	119.74	144.47	168.04	190.72	212.49
3. subsidy (Central +State)	138.16	138.16	138.16	138.16	138.16	138.16	138.16	138.16	138.16	138.16	138.16
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		10.25	10.74	11.23	11.73	12.22	12.73	12.77	12.81	12.86	12.90
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	**184.22**	**209.04**	**226.28**	**245.35**	**266.81**	**290.61**	**316.68**	**341.46**	**365.07**	**387.80**	**409.61**
ASSETS											
1. Gross Fixed Assets	171.57	171.57	171.57	171.57	171.57	171.57	171.57	171.57	171.57	171.57	171.57
2. Less: Accm. depreciation	0.00	7.77	15.54	23.32	31.09	38.86	46.63	54.41	62.18	69.95	77.73
3. Net Fixed Assets	171.57	163.80	156.02	148.25	140.48	132.70	124.93	117.16	109.38	101.61	93.84
4. Current Assets	0.00	21.38	23.16	24.94	26.72	28.50	30.28	30.28	30.28	30.28	30.28
5. Cash & Bank Balance	10.25	21.71	45.18	70.48	98.18	128.21	160.51	193.30	224.92	255.66	285.49
6. Prelim. expenses not w/o	2.40	2.16	1.92	1.68	1.44	1.20	0.96	0.72	0.48	0.24	0.00
TOTAL ASSETS	**184.22**	**209.04**	**226.28**	**245.35**	**266.81**	**290.61**	**316.68**	**341.46**	**365.07**	**387.80**	**409.61**

ANNEXURE - 23
CALCULATION OF MARGIN FOR WORKING CAPITAL & ASSESSMENT OF WORKING CAPITAL

(Rs. Lacs)

As per Nayak Committee method (If working capital is up to Rs. 5 crore)

Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Gross Sales (Incl. job income)	85.50	92.63	99.75	106.88	114.00	121.13	121.13	121.13	121.13	121.13
Total working capital requirement (25% of gross sales)	21.38	23.16	24.94	26.72	28.50	30.28	30.28	30.28	30.28	30.28
Margin money for working capital (5% of gross sales)	4.28	4.63	4.99	5.34	5.70	6.06	6.06	6.06	6.06	6.06
Permissible bank borrowing (20% of gross sales)	17.10	18.53	19.95	21.38	22.80	24.23	24.23	24.23	24.23	24.23

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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2. Consumables, Stores and spares	1.00	0.21	0.23	0.25	0.27	0.29	0.30	0.30	0.30	0.30	0.30
3. Stock in process (Month's cost of production)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Finished Goods (Months cost of sales)	1.00	5.75	5.95	6.15	6.37	6.58	6.81	6.88	6.94	7.01	7.08
5. Export's receivables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Receivables other than exports	0.50	3.56	3.86	4.16	4.45	4.75	5.05	5.05	5.05	5.05	5.05
Total Current Assets (A)		**10.52**	**11.04**	**11.56**	**12.09**	**12.62**	**13.16**	**13.22**	**13.29**	**13.36**	**13.43**
Current Liabilities											
1. Creditors for purchases	0.50	0.27	0.30	0.33	0.36	0.40	0.43	0.46	0.48	0.50	0.53
Total Current Liabilities (B)		0.27	0.30	0.33	0.36	0.40	0.43	0.46	0.48	0.50	0.53
Working Capital Gap (A-B)		**10.25**	**10.74**	**11.23**	**11.73**	**12.22**	**12.73**	**12.77**	**12.81**	**12.86**	**12.90**
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		10.25	10.74	11.23	11.73	12.22	12.73	12.77	12.81	12.86	12.90

ANNEXURE – 24

ESTIMATION OF DEPRECIATION

a) Apportionment of Pre-operatives (Rs. Lacs)

Particulars	Actual Cost	Contin-gencies	Pre-Ope-ratives	Detailed Engg.Ser	Total Cost
1. Buildings	25.56	1.13	0.34	2.03	29.06
2. Plant and Machinery	123.46	5.47	1.64	9.82	140.39
3. Misc. Fixed Assets	1.86	0.08	0.02	0.15	2.11
Total	**150.88**	**6.68**	**2.00**	**12.00**	**171.57**

b) Estimation of Depreciation - St. Line basis

Particulars	Total Cost	Depn. Rate (%)	Amount
1. Land	0.00	0.00	0.00
2. Buildings	29.06	3.34	0.97
3. Plant and Machinery	140.39	4.75	6.67
4. Misc. Fixed Assets	2.11	6.33	0.13
Total	**171.57**		**7.77**

c) Estimation of Depreciation - WDVMethod

(Rs. Lacs)

Particulars	Buildings	Plant & Mach.	Others	Total
Rate of Depreciation (%)	**10.00**	**15.00**	**10.00**	
I YEAR – Cost	29.06	140.39	2.11	171.57
- Depreciation	3.00	21.00	0.21	24.21
II YEAR – WDV	26.06	119.39	1.90	147.36
- Depreciation	3.00	18.00	0.19	21.19
III YEAR – WDV	23.06	101.39	1.71	126.17
- Additions	0.00	0.00	0.00	0.00
- Total	23.06	101.39	1.71	126.17
- Depreciation	2.00	15.00	0.17	17.17
IV YEAR – WDV	21.06	86.39	1.54	109.00
- Additions	0.00	0.00	0.00	0.00
- Total	21.06	86.39	1.54	109.00
- Depreciation	2.00	13.00	0.15	15.15
V YEAR – WDV	19.06	73.39	1.39	93.85
- Additions	0.00	0.00	0.00	0.00
- Total	19.06	73.39	1.39	93.85
- Depreciation	2.00	11.00	0.14	13.14
VI YEAR – WDV	17.06	62.39	1.25	80.71
- Additions	0.00	0.00	0.00	0.00

- Total	17.06	62.39	1.25	80.71
- Depreciation	2.00	9.00	0.13	11.13
VII YEAR – WDV	15.06	53.39	1.12	69.58
- Additions	0.00	0.00	0.00	0.00
- Total	15.06	53.39	1.12	69.58
- Depreciation	2.00	8.00	0.11	10.11
VIII YEAR – WDV	13.06	45.39	1.01	59.47
- Additions	0.00	0.00	0.00	0.00
- Total	13.06	45.39	1.01	59.47
- Depreciation	1.00	7.00	0.10	8.10
IX YEAR – WDV	12.06	38.39	0.91	51.37
- Additions	0.00	0.00	0.00	0.00
- Total	12.06	38.39	0.91	51.37
- Depreciation	1.00	6.00	0.09	7.09
X YEAR – WDV	11.06	32.39	0.82	44.28
- Additions	0.00	0.00	0.00	0.00
- Total	11.06	32.39	0.82	44.28
- Depreciation	1.00	5.00	0.08	6.08
X YEAR – WDV	10.06	27.39	0.74	38.20
- Additions	0.00	0.00	0.00	0.00
- Total	10.06	27.39	0.74	38.20
- Depreciation	1.00	4.00	0.07	5.07

ANNEXURE - 25											
COMPUTATION OF TAXATION (Rs. Lacs)											
Details		**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
1. Profit Before Tax		120.00	115.54	134.66	153.77	172.86	191.95	189.66	189.46	189.25	189.03
2. Add: St. Line Depreciation		21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84
3. Less: WDV Depreciation		67.31	58.28	50.25	43.23	38.21	33.18	28.17	24.15	22.13	19.12
4. Gross Taxable Income		74.53	79.11	106.25	132.38	156.50	180.62	183.33	187.15	188.96	191.75
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		74.53	79.11	106.25	132.38	156.50	180.62	183.33	187.15	188.96	191.75
7. Income Tax @ 30%		22.36	23.73	31.88	39.71	46.95	54.19	55.00	56.15	56.69	57.53
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)		22.36	23.73	31.88	39.71	46.95	54.19	55.00	56.15	56.69	57.53
10. Education Cess @ 3%		0.67	0.71	0.96	1.19	1.41	1.63	1.65	1.68	1.70	1.73
11. Total income tax (Incl. surcharge & Education Cess)		**23.03**	**24.44**	**32.83**	**40.91**	**48.36**	**55.81**	**56.65**	**57.83**	**58.39**	**59.25**

ANNEXURE - 26											
CALCULATION OF INTERNAL RATE OF RETURN & NPV											
IRR before tax											**(Rs.in lacs)**
Const. Period		**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Out Flows											
Capital Investment	-644.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		123.37	10.99	9.50	10.50	9.50	10.50	0.05	0.00	0.00	0.00
Total outflows	-644.97	123.37	10.99	9.50	10.50	9.50	10.50	0.05	0.00	0.00	0.00
Inflows											
Profit before tax	0.00	120.00	115.54	134.66	153.77	172.86	191.95	189.66	189.46	189.25	189.03
Add Depreciation and non-cash expenses	0.00	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84
Add: Preliminary &Preop Expenses	0.00	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
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	133.57
Total Inflows	0.00	142.64	138.19	157.30	176.41	195.51	214.60	212.30	212.10	211.89	345.24
Net cash flows	**-644.97**	**19.27**	**127.19**	**147.80**	**165.91**	**186.01**	**204.10**	**212.26**	**212.10**	**211.89**	**345.23**
NPV before tax(Rs. in lakhs)	**330.52**		**Discount Rate taken =**		**10.00%**						
Before - Tax IRR	**19.06%**										
IRR after tax								**(Rs.in lacs)**			

Const. Period		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Out Flows											
Capital Investment	-644.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		123.37	10.99	9.50	10.50	9.50	10.50	0.05	0.00	0.00	0.00
Total outflows	-644.97	123.37	10.99	9.50	10.50	9.50	10.50	0.05	0.00	0.00	0.00
Inflows											
Profit after tax	0.00	96.97	91.10	101.83	112.86	124.51	136.14	133.01	131.63	130.86	129.78
Add Depreciation and non-cash expenses	0.00	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84
Add: Preliminary &Preop Expenses	0.00	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
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	133.57
Total Inflows	0.00	119.61	113.74	124.47	135.50	147.15	158.79	155.65	154.27	153.50	285.99
Net cash flows	**-644.97**	**-3.76**	**102.75**	**114.97**	**125.00**	**137.65**	**148.29**	**155.61**	**154.27**	**153.50**	**285.98**
NPV after tax(Rs. in lakhs)	**95.13**		**Discount Rate taken =**		**10.00%**						
Post - Tax IRR	**12.82%**										

ANNEXURE - 27										
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	804.60	871.65	938.70	1005.75	1072.80	1139.85	1139.85	1139.85	1139.85	1139.85
2. Consumable Spares	131.04	141.96	152.88	163.80	174.72	185.64	185.64	185.64	185.64	185.64
3. Power, Fuel & other utilities (Variable Cost)	23.20	25.13	27.06	29.00	30.93	32.86	32.86	32.86	32.86	32.86
4. Factory Salaries & Wages (Variable)	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50
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)	39.31	42.59	45.86	49.14	52.42	55.69	55.69	55.69	55.69	55.69
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	1080.65	1163.83	1247.01	1330.19	1413.37	1496.55	1496.55	1496.55	1496.55	1496.55
B. Fixed Expenses										
1. Power, Fuel & other utilities (Fixed Cost)	15.47	16.75	18.04	19.33	20.62	21.91	21.91	21.91	21.91	21.91
2. Factory Salaries & Wages (fixed)	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80
3. Repairs & Maintenance	39.31	42.59	45.86	49.14	52.42	55.69	55.69	55.69	55.69	55.69
4. Depreciation	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84	21.84
5. Administrative & Misc. Expenses	26.21	28.39	30.58	32.76	34.94	37.13	37.13	37.13	37.13	37.13
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	131.63	138.38	145.13	151.88	158.62	165.37	165.37	165.37	165.37	165.37

C. Sales	1310.40	1419.60	1528.80	1638.00	1747.20	1856.40	1856.40	1856.40	1856.40	1856.40
D. Contribution	229.75	255.77	281.79	307.81	333.83	359.85	359.85	359.85	359.85	359.85
E. Break Even Point (B/D)	57.29%	54.10%	51.50%	49.34%	47.52%	45.96%	45.96%	45.96%	45.96%	45.96%
F. Cash Break Even	47.78%	45.56%	43.75%	42.24%	40.97%	39.89%	39.89%	39.89%	39.89%	39.89%
G.BREAK EVEN SALES	750.74	768.04	787.36	808.20	830.20	853.12	853.12	853.12	853.12	853.12

ANNEXURE - 28										
		RETURN ON CAPITAL EMPLOYED								
	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Return										
Operating Profit	120.80	116.34	135.46	154.57	173.66	192.75	190.46	190.26	190.05	189.83
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	**120.80**	**116.34**	**135.46**	**154.57**	**173.66**	**192.75**	**190.46**	**190.26**	**190.05**	**189.83**
Net Fixed Assets	513.60	491.76	469.91	448.07	426.23	404.38	382.54	360.69	338.85	317.01
Current Assets less creditors	10.99	9.50	10.50	9.50	10.50	0.05	0.00	0.00	0.00	0.00
Total B	524.59	501.26	480.41	457.57	436.73	404.43	382.54	360.70	338.86	317.01
ROCE	23.03	23.21	28.20	33.78	39.76	47.66	49.79	52.75	56.09	59.88
ROCE for Optimal Year	**33.78**									
Average ROCE for 10 Years	**41.41**									

Annexure's 29 – 42

Financial Statements of Nittur Sub Cluster

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	-	-	-
B	Building & other Civil Works	-	20.00	20.00
C	Plant and machinery			
	a. indigenous	-	129.65	129.65
	b.import	-	-	-
D	Lease Deposit &Electricity Deposit	-	-	-
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	-	-
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	-	-
I	Pre-operative expenses	-	-	-
J	Provision for contingencies			
	a.buildings (@2%)	-	0.40	0.40
	b.Plant& Machinery (5%)	-	6.48	6.48
	c.Other fixed assets	-	-	-
K	Working capital	-	8.09	8.09
	Total :	-	164.62	164.62

MEANS OF FINANCE

				Rs.In Lakhs
Sl.No.	Particulars	amount already raised	amount proposed to be raised	Total
	Equity			
A	Equity from spv@29.51%	-	-	48.58
B	Share premium	-	-	-
C	Preference Share Capital	-	-	-
	Debt			
D	Term loans (0%)	-	-	-
E	Unsecured loans and deposits	-	-	-
	Quasi Equity			
E	Interest free unsecured loans	-	-	-
F	Subsidy: central govt. (70.49%)	-	-	116.04
G	S	-	-	
	Total	-	-	164.62

Annexure - II

S.No.	Name of the machinery		hp	qty	Rate	Total Basic Price	GST	Insurance (1% or actuals)	Freight Charges (2% or actuals)	Total Amount
1.Defibering and spinning unit										
1	Conveyor Belt including 1 buster and 1 beater, 2 screeners, 1 bundle press with motor starter, cabling and wiring		**3**	**1**	**3720000**	3720000	669600	37200	74400	4501200
2	Curling machine with auto feeder		**18**	**6**	**745000**	4470000	804600	44700	89400	5408700
3	Hecklers		**10**	**2**	**120000**	240000	43200	2400	4800	290400
4	Winding Curling Machine		**9**	**3**	**41500**	124500	22410	1245	2490	150645
7	Bull for transportation		0	1	1500000	1500000	270000	15000	30000	1815000
8	Electrification		0	1	660000	660000	118800	6600	13200	798600
	Sub Total - 1		**0**							**12964545**

Annexure -IV

Inputs

(Rs.in lakhs)

YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Coconut Husk (2000 KG of husk per day x Rs. 5 per KG)	19.50	20.10	20.70	21.60	22.50	23.10	23.70	24.30	24.90	25.50
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power & Diesel	1.61	1.66	1.71	1.78	1.86	1.91	1.96	2.00	2.05	2.10
Water	2.40	2.52	2.65	2.78	2.92	3.06	3.22	3.38	3.55	3.72
Total	**23.51**	**24.28**	**25.05**	**26.16**	**27.27**	**28.07**	**28.87**	**29.68**	**30.50**	**31.33**
Total Cost	**23.51**	**24.28**	**25.05**	**26.16**	**27.27**	**28.07**	**28.87**	**29.68**	**30.50**	**31.33**

DETAILS OF MANPOWER REQUIRED					
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		5	6000		3.60
Unskilled labour		8	4000		3.84
		16			**12.84**
Add: Fringe Benefits	**@25%**				**3.21**
Total					**16.05**
ADMINISTRATIVE SALARIES					
Manager		1	30000		3.60
Sales Executive		0	10000		0.00
Accts/ Admin/ Assets		1	8000		0.96
Security		1	3000		0.36
		3			**4.92**
Add: Fringe Benefits	**@25%**				**1.23**
Total					**6.15**
TOTAL		**19**			**22.20**

Detailed Workings

Description	Quantity (SFT/ Nos)	Rate (In Rs.)	Amount
General			
For Furniture unit			
Building	2000	1000	20,00,000
		0	-
Sewerage			-
Total			**20.00**

ANNEXURE- V

BASIC ASSUMPTIONS FOR PROFITABILITY

REVENUE PROJECTIONS

YEAR	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Capacity Utilization (%)	65%	67%	69%	72%	75%	77%	79%	81%	83%	85%	100%
I. Fiber											
Installed Capacity (In Kgs)	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000	300000
Sale Capacity (In meters)	195000	201000	207000	216000	225000	231000	237000	243000	249000	255000	300000
Sale cost per meter(Rs/Meter)	11	11	11	11	11	11	11	11	11	11	11
Revenue(Rs lakhs)	**21.45**	**22.11**	**22.77**	**23.76**	**24.75**	**25.41**	**26.07**	**26.73**	**27.39**	**28.05**	**33.00**
II. Curled Coir											
Installed Capacity (in KGs)	540000	540000	540000	540000	540000	540000	540000	540000	540000	540000	540000
Production (Nos.)	351000	361800	372600	388800	405000	415800	426600	437400	448200	459000	540000
Sale cost per Meter	17	17	17	17	17	17	17	17	17	17	17
Revenue(Rs lakhs)	**59.67**	**61.51**	**63.34**	**66.10**	**68.85**	**70.69**	**72.52**	**74.36**	**76.19**	**78.03**	**91.80**
TOTAL REVENUE	**81.12**	**83.62**	**86.11**	**89.86**	**93.60**	**96.10**	**98.59**	**101.09**	**103.58**	**106.08**	**124.80**

ANNEXURE - VI										
PROJECTED PROFITABILITY STATEMENT										
Year Ending 31st March	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Production Capacity Utilisation	0.65	0.67	0.69	0.72	0.75	0.77	0.79	0.81	0.83	0.85
Sales as percentage of installed capacity	0.65	0.67	0.69	0.72	0.75	0.77	0.79	0.81	0.83	0.85
Sales/ Total Income										
Gross Domestic Sales	81.12	83.62	86.11	89.86	93.60	96.10	98.59	101.09	103.58	106.08
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	81.12	83.62	86.11	89.86	93.60	96.10	98.59	101.09	103.58	106.08
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	81.12	83.62	86.11	89.86	93.60	96.10	98.59	101.09	103.58	106.08
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	**81.12**	**83.62**	**86.11**	**89.86**	**93.60**	**96.10**	**98.59**	**101.09**	**103.58**	**106.08**
COST OF PRODUCTION- SALES										
Raw material Consumed	19.50	20.10	20.70	21.60	22.50	23.10	23.70	24.30	24.90	25.50
Consumables, Stores and spares 7% on sales)	5.68	5.85	6.03	6.29	6.55	6.73	6.90	7.08	7.25	7.43
Power, Fuel and other utilities (Variable)	0.97	0.99	1.02	1.07	1.11	1.14	1.17	1.20	1.23	1.26
Power, Fuel and other utilities (Fixed)	0.64	0.66	0.68	0.71	0.74	0.76	0.78	0.80	0.82	0.84
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)	16.05	16.05	16.05	16.05	16.05	16.05	16.05	16.05	16.05	16.05
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	2.43	2.51	2.58	2.70	2.81	2.88	2.96	3.03	3.11	3.18
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
Sub Total	**60.96**	**61.98**	**63.01**	**64.49**	**65.97**	**67.02**	**68.07**	**69.13**	**70.20**	**71.28**
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	**60.96**	**61.98**	**63.01**	**64.49**	**65.97**	**67.02**	**68.07**	**69.13**	**70.20**	**71.28**
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	**60.96**	**61.98**	**63.01**	**64.49**	**65.97**	**67.02**	**68.07**	**69.13**	**70.20**	**71.28**
Selling Packing &Distribution Expenses	2.43	2.51	2.58	2.70	2.81	2.88	2.96	3.03	3.11	3.18
Administrative & Misc. Expenses	1.62	1.67	1.72	1.80	1.87	1.92	1.97	2.02	2.07	2.12
Sub Total	65.02	66.16	67.31	68.98	70.65	71.82	73.00	74.19	75.38	76.58
Profit Before Interest and Tax (PBIT)	**16.10**	**17.46**	**18.80**	**20.88**	**22.95**	**24.27**	**25.59**	**26.90**	**28.21**	**29.50**
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	16.10	17.46	18.80	20.88	22.95	24.27	25.59	26.90	28.21	29.50
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)	**16.10**	**17.46**	**18.80**	**20.88**	**22.95**	**24.27**	**25.59**	**26.90**	**28.21**	**29.50**
Provision for taxation	0.38	1.73	2.76	4.33	5.59	6.62	7.33	8.36	9.07	9.47
Profit After Tax	**15.72**	**15.73**	**16.04**	**16.55**	**17.36**	**17.66**	**18.26**	**18.55**	**19.14**	**20.03**
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retained Earnings	15.72	15.73	16.04	16.55	17.36	17.66	18.26	18.55	19.14	20.03
Net Cash Accruals	22.86	22.87	23.18	23.69	24.50	24.80	25.40	25.69	26.28	27.17
PBIDT/ total income (%)	19.85	20.88	21.83	23.23	24.52	25.26	25.96	26.61	27.23	27.81
Operating Profit/ Total Income (%)	19.85	20.88	21.83	23.23	24.52	25.26	25.96	26.61	27.23	27.81

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	16.10	17.46	18.80	20.88	22.95	24.27	25.59	26.90	28.21	29.50
2. Add Depreciation											
other non-cash expenses	0.00	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
3. Increase in Equity Share Capital	48.58	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	116	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		8.09	0.14	0.14	0.21	0.21	0.15	0.15	0.15	0.15	0.15
TOTAL SOURCES	**164.62**	**31.33**	**24.74**	**26.09**	**28.23**	**30.30**	**31.56**	**32.88**	**34.19**	**35.49**	**36.79**
B. DISPOSITION OF FUNDS											
1. Increase in capital expenditure	158.03	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	0.00	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		20.28	0.62	0.62	0.94	0.94	0.62	0.62	0.62	0.62	0.62
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	0.38	1.73	2.76	4.33	5.59	6.62	7.33	8.36	9.07	9.47
TOTAL APPLICATION	**158.03**	**20.66**	**2.35**	**3.39**	**5.27**	**6.52**	**7.24**	**7.96**	**8.98**	**9.69**	**10.09**

C. NET SURPLUS/ DEFICIT	6.59	10.67	22.39	22.70	22.96	23.78	24.32	24.92	25.21	25.80	26.70
D. ADD : OPENING CASH BALANCE	0.00	6.59	17.26	39.64	62.34	85.31	109.08	133.40	158.32	183.53	209.33
E. CLOSING CASH BALANCE	6.59	17.26	39.64	62.34	85.31	109.08	133.40	158.32	183.53	209.33	236.03

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	48.58	48.58	48.58	48.58	48.58	48.58	48.58	48.58	48.58	48.58	48.58
2. Reserves & Surplus	0.00	15.72	31.45	47.48	64.03	81.39	99.04	117.30	135.85	154.99	175.02
3. subsidy (Central +State)	116.04	116.04	116.04	116.04	116.04	116.04	116.04	116.04	116.04	116.04	116.04
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		8.09	8.23	8.38	8.59	8.81	8.95	9.10	9.25	9.39	9.54
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	**164.62**	**188.42**	**204.29**	**220.48**	**237.24**	**254.81**	**272.61**	**291.02**	**309.71**	**329.00**	**349.18**
ASSETS											
1. Gross Fixed Assets	158.03	158.03	158.03	158.03	158.03	158.03	158.03	158.03	158.03	158.03	158.03

2. Less : Accm.dpreciation	0.00	7.14	14.28	21.42	28.56	35.70	42.84	49.98	57.12	64.26	71.40
3. Net Fixed Assets	158.03	150.89	143.75	136.61	129.47	122.33	115.19	108.05	100.91	93.77	86.63
4. Current Assets	0.00	20.28	20.90	21.53	22.46	23.40	24.02	24.65	25.27	25.90	26.52
5. Cash & Bank Balance	6.59	17.26	39.64	62.34	85.31	109.08	133.40	158.32	183.53	209.33	236.03
6. Prelim. expenses not w/o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ASSETS	**164.62**	**188.42**	**204.29**	**220.48**	**237.24**	**254.81**	**272.61**	**291.02**	**309.71**	**329.00**	**349.18**

ANNEXURE - IX										
CALCULATION OF MARGIN FOR WORKING CAPITAL & ASSESSMENT OF WORKING CAPITAL										
										(Rs. Lacs)
As per Nayak Committee method (If working capital is up to Rs. 5 crore)										
Particulars	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Gross Sales (Incl. job income)	81.12	83.62	86.11	89.86	93.60	96.10	98.59	101.09	103.58	106.08
Total working capital requirement (25% of gross sales)	20.28	20.90	21.53	22.46	23.40	24.02	24.65	25.27	25.90	26.52
Margin money for working capital (5% of gross sales)	4.06	4.18	4.31	4.49	4.68	4.80	4.93	5.05	5.18	5.30
Permissible bank borrowing (20% of gross sales)	16.22	16.72	17.22	17.97	18.72	19.22	19.72	20.22	20.72	21.22
As per second method of lending										
Particulars	**No. of months**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Current Assets										
1. Raw materials	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2. Consumables, Stores and spares	1.00	0.47	0.49	0.50	0.52	0.55	0.56	0.58	0.59	0.60
3. Stock in process (Month's cost of production)	0.10	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.58
4. Finished Goods (Months cost of sales)	0.50	2.54	2.58	2.63	2.69	2.75	2.79	2.84	2.88	2.92
5. Export's receivables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Receivables other than exports	0.50	3.38	3.48	3.59	3.74	3.90	4.00	4.11	4.21	4.32
Total Current Assets (A)		**8.90**	**9.07**	**9.24**	**9.49**	**9.74**	**9.92**	**10.09**	**10.26**	**10.43**

Current Liabilities										
1. Creditors for purchases	0.50	0.81	0.84	0.86	0.90	0.94	0.96	0.99	1.01	1.04
		0.00								
Total Current Liabilities (B)		0.81	0.84	0.86	0.90	0.94	0.96	0.99	1.01	1.04
Working Capital Gap (A-B)		**8.09**	**8.23**	**8.38**	**8.59**	**8.81**	**8.95**	**9.10**	**9.25**	**9.39**
Less : Bank Borrowing for working capital		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Margin money for working capital		8.09	8.23	8.38	8.59	8.81	8.95	9.10	9.25	9.39
RECOMMENDED METHOD		**NAYAK COMMITTEE METHOD**								
Particulars		**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Total current assets		20.28	20.90	21.53	22.46	23.40	24.02	24.65	25.27	25.90
Total current Liabilities		0.81	0.84	0.86	0.90	0.94	0.96	0.99	1.01	1.04
Working Capital Gap		19.47	20.07	20.67	21.56	22.46	23.06	23.66	24.26	24.86
Margin Money for Working Capital		4.06	4.18	4.31	4.49	4.68	4.80	4.93	5.05	5.18
Less: Margin Money for Working Capital or WC financed by way WCTL whichever is higher		4.06	4.18	4.31	4.49	4.68	4.80	4.93	5.05	5.18
Borrowing for Working Capital		16.22	16.72	17.22	17.97	18.72	19.22	19.72	20.22	20.72

ANNEXURE - XI											
COMPUTATION OF TAXATION											
											(Rs. Lacs)
Details		**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
1. Profit Before Tax		16.10	17.46	18.80	20.88	22.95	24.27	25.59	26.90	28.21	29.50
2. Add: St. Line Depreciation		7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
3. Less: WDV Depreciation		22.00	19.00	17.00	14.00	12.00	10.00	9.00	7.00	6.00	6.00
4. Gross Taxable Income		1.24	5.60	8.94	14.02	18.09	21.41	23.73	27.04	29.35	30.64
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		1.24	5.60	8.94	14.02	18.09	21.41	23.73	27.04	29.35	30.64
7. Income Tax @ 30%		0.37	1.68	2.68	4.21	5.43	6.42	7.12	8.11	8.80	9.19
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)		0.37	1.68	2.68	4.21	5.43	6.42	7.12	8.11	8.80	9.19
10. Education Cess @ 3%		0.01	0.05	0.08	0.13	0.16	0.19	0.21	0.24	0.26	0.28
11. Total income tax (Incl. surcharge & Education Cess)		**0.38**	**1.73**	**2.76**	**4.33**	**5.59**	**6.62**	**7.33**	**8.36**	**9.07**	**9.47**

ANNEXURE - XII											
CALCULATION OF INTERNAL RATE OF RETURN & NPV											
IRR before tax								**(Rs.in lacs)**			
	Const. Period	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Out Flows											
Capital Investment	-166.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		8.09	0.14	0.14	0.21	0.21	0.15	0.15	0.15	0.15	0.15
Total outflows	-166.12	8.09	0.14	0.14	0.21	0.21	0.15	0.15	0.15	0.15	0.15
Inflows											
Profit before tax	0.00	16.10	17.46	18.80	20.88	22.95	24.27	25.59	26.90	28.21	29.50
Add Depreciation and non-cash expenses	0.00	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
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	34.53
Total Inflows	0.00	23.24	24.60	25.94	28.02	30.09	31.41	32.73	34.04	35.35	71.17

Net cash flows	**-166.12**	**15.15**	**24.45**	**25.80**	**27.80**	**29.87**	**31.27**	**32.59**	**33.90**	**35.20**	**71.02**
NPV before tax(Rs. in lakhs)	**45.86**		**Discount Rate taken =**		**7.00%**						
Before - Tax IRR	**11.97%**										
IRR after tax								**(Rs.in lacs)**			
	Const. Period	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Out Flows											
Capital Investment	-166.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		8.09	0.14	0.14	0.21	0.21	0.15	0.15	0.15	0.15	0.15
Total outflows	-166.12	8.09	0.14	0.14	0.21	0.21	0.15	0.15	0.15	0.15	0.15
Inflows											
Profit after tax	0.00	15.72	15.73	16.04	16.55	17.36	17.66	18.26	18.55	19.14	20.03
Add Depreciation and non-cash expenses	0.00	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
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	34.53
Total Inflows	0.00	22.86	22.87	23.18	23.69	24.50	24.80	25.40	25.69	26.28	61.70
Net cash flows	**-166.12**	**14.77**	**22.72**	**23.03**	**23.47**	**24.28**	**24.65**	**25.25**	**25.54**	**26.13**	**61.55**
NPV after tax(Rs. in lakhs)	**13.16**		**Discount Rate taken =**		**7.00%**						
Post - Tax IRR	**8.54%**										

ANNEXURE -XIII										
BREAK EVEN POINT (Installed Capacity)										
										(Rs. In Lacs)
DETAILS	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Production Capacity Utilisation	**65.00%**	**67.00%**	**69.00%**	**72.00%**	**75.00%**	**77.00%**	**79.00%**	**81.00%**	**83.00%**	**85.00%**
A. Variable Expenses										
1. Raw material consumed	19.50	20.10	20.70	21.60	22.50	23.10	23.70	24.30	24.90	25.50
2. Consumable Spares	5.68	5.85	6.03	6.29	6.55	6.73	6.90	7.08	7.25	7.43
3. Power, Fuel & other utilities (Variable Cost)	0.97	0.99	1.02	1.07	1.11	1.14	1.17	1.20	1.23	1.26
4. Factory Salaries & Wages (Variable)	16.05	16.05	16.05	16.05	16.05	16.05	16.05	16.05	16.05	16.05
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)	2.43	2.51	2.58	2.70	2.81	2.88	2.96	3.03	3.11	3.18
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	44.63	45.51	46.39	47.70	49.02	49.90	50.78	51.66	52.54	53.42
B.Fixed Expenses										
1. Power, Fuel & other utilities (Fixed Cost)	0.64	0.66	0.68	0.71	0.74	0.76	0.78	0.80	0.82	0.84

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	2.43	2.51	2.58	2.70	2.81	2.88	2.96	3.03	3.11	3.18
4. Depreciation	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14
5. Administrative & Misc. Expenses	1.62	1.67	1.72	1.80	1.87	1.92	1.97	2.02	2.07	2.12
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	17.99	18.13	18.28	18.50	18.71	18.86	19.00	19.15	19.29	19.44
C.Sales	81.12	83.62	86.11	89.86	93.60	96.10	98.59	101.09	103.58	106.08
D.Contribution	36.49	38.11	39.73	42.15	44.58	46.19	47.81	49.43	51.04	52.66
E.Break Even Point (B/D)	49.30%	47.58%	46.01%	43.88%	41.98%	40.82%	39.74%	38.74%	37.79%	36.91%
F.Cash Break Even	29.73%	28.85%	28.04%	26.94%	25.96%	25.37%	24.81%	24.29%	23.81%	23.35%
G.BREAK EVEN SALES	39.99	39.79	39.62	39.43	39.29	39.23	39.19	39.16	39.15	39.15

ANNEXURE - XIV										
		RETURN ON CAPITAL EMPLOYED								
	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Return										
Operating Profit	16.10	17.46	18.80	20.88	22.95	24.27	25.59	26.90	28.21	29.50
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	**16.10**	**17.46**	**18.80**	**20.88**	**22.95**	**24.27**	**25.59**	**26.90**	**28.21**	**29.50**
Net Fixed Assets	158.03	150.89	143.75	136.61	129.47	122.33	115.19	108.05	100.91	93.77
Current Assets less creditors	0.14	0.14	0.21	0.21	0.15	0.15	0.15	0.15	0.15	0.00
Total B	158.17	151.03	143.96	136.82	129.61	122.47	115.33	108.19	101.05	93.77
ROCE	10.18	11.56	13.06	15.26	17.70	19.82	22.19	24.87	27.91	31.46
ROCE for Optimal Year	**15.26**									
Average ROCE for 10 Years	**19.40**									

Annexure's 43 – 56

Financial Statements of Thyagattur Sub Cluster

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	-	-	-
B	Building & other Civil Works	-	70.00	70.00
C	Plant and machinery			
	a. indigenous	-	62.80	62.80
	b.import	-	-	-
D	Lease Deposit &Electricity Deposit	-	-	-
E	Technical consultancy fee	-	-	-
F	Miscellaneous fixed assets	-	3.91	3.91
G	Erection / installation charges	-	-	-
H	Preliminary expenses	-	-	-
I	Pre-operative expenses	-	-	-
J	Provision for contingencies			
	a.buildings (@2%)	-	1.40	1.40
	b.Plant& Machinery (5%)	-	3.14	3.14
	c.Other fixed assets	-	-	-
K	Working capital	-	31.21	31.21
	Total :	-	172.46	172.46
MEANS OF FINANCE				
				Rs. In Lakhs
Sl.No.	Particulars	amount already raised	amount proposed to be raised	Total

	Equity			
A	Equity from spv@25%	-	-	43.11
B	Share premium	-	-	-
C	Preference Share Capital	-	-	-
	Debt			
D	Term loans (0%)	-	-	-
E	Unsecured loans and deposits	-	-	-
	Quasi Equity			
E	Interest free unsecured loans	-	-	-
F	Subsidy: central govt. (75%)	-	-	129.34
G	Subsidy : state govt.	-	-	
	Total	-	-	172.46

					Annexure - II					
S.No.	**Name of the machinery**		**Hp**	**qty**	**Rate**	**Total Basic Price**	**GST**	**Insurance (1% or actuals)**	**Freight Charges (2% or actuals)**	**Total Amount**
1.Geo Textileunit										
1	Auto Looms along with cap winding, spool winding and inspection m/c		10	1	39,00,000	3900000	702000	39000	78000	4719000
2	Dyeing Facility with oven		5	1	290000	290000	52200	2900	5800	350900
8	Electrification		0	1	1000000	1000000	180000	10000	20000	1210000
	Sub Total - 1		**15**							**6279900**

Annexure - III Detailed Workings

Description	Quantity (SFT/ No's)	Rate (In Rs.)	Amount
General			
For Furniture unit			
Building	3000	1000	30,00,000
Drying Yard	4000	1000	40,00,000
Sewerage			-
Total			**70.00**

Annexure III (Contd.)					
Misc. Fixed Assets					
	Items	**Qty**	**Rate**	**Amount**	**Final Amount after ST/ VAT**
Communication & Teaching Equipment	Computers	1	27500	27500	27500

	UPS (1KVA)	0	4000	0	0
	Printer	1	16100	16100	16100
	FAX Machine	0	7500	0	7000
Furniture & Fixture				0	250000
Fire Service					90000
					-
Others					-
Total					**390600**
Rounded					**390600**
In Lakhs					**3.91**

Annexure -IV										
Inputs										
										(Rs.in lakhs)
YEAR	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
2 Ply Yarn Fibber 300 KGs per day x 300 days x Rs. 45 per KG at 100%)	24.30	26.33	28.35	30.38	32.40	34.43	34.43	34.43	34.43	34.43
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power & Diesel	3.31	3.58	3.86	4.13	4.41	4.69	4.69	4.69	4.69	4.69
Water	2.40	2.52	2.65	2.78	2.92	3.06	3.22	3.38	3.55	3.72
Total	**30.01**	**32.43**	**34.85**	**37.29**	**39.73**	**42.17**	**42.33**	**42.49**	**42.66**	**42.83**
Total Cost	**30.01**	**32.43**	**34.85**	**37.29**	**39.73**	**42.17**	**42.33**	**42.49**	**42.66**	**42.83**

DETAILS OF MANPOWER REQUIRED					
Particulars		**No.**	**Salary/ month**		**Annual Wages & Salaries**
			Rs.		**Rs. lakhs**
Plant In charge		0	20000		0.00
Operators		2	15000		3.60
Store Keeper		0	10000		0.00
Skilled Labour		5	6000		3.60
Unskilled labour		10	4000		4.80
		17			**12.00**
Add: Fringe Benefits	**@25%**				**3.00**
Total					**15.00**
ADMINISTRATIVE SALARIES					
Manager		1	20000		2.40
Sales Executive		1	10000		1.20
Accts/ Admin/ Assets		1	8000		0.96
Security		1	3000		0.36
		4			**4.92**
Add: Fringe Benefits	**@25%**				**1.23**
Total					**6.15**
TOTAL		**21**			**21.15**

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%
I. Geotextile										
Installed Capacity (In Sq. Feet)	135000	135000	135000	135000	135000	135000	135000	135000	135000	135000
Sale Capacity (In meters)	81000	87750	94500	101250	108000	114750	114750	114750	114750	114750
Sale cost per meter(Rs/Meter)	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**
TOTAL REVENUE	**81.00**	**87.75**	**94.50**	**101.25**	**108.00**	**114.75**	**114.75**	**114.75**	**114.75**	**114.75**

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	81.00	87.75	94.50	101.25	108.00	114.75	114.75	114.75	114.75	114.75
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	81.00	87.75	94.50	101.25	108.00	114.75	114.75	114.75	114.75	114.75
Export Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Sales	81.00	87.75	94.50	101.25	108.00	114.75	114.75	114.75	114.75	114.75
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	**81.00**	**87.75**	**94.50**	**101.25**	**108.00**	**114.75**	**114.75**	**114.75**	**114.75**	**114.75**
COST OF PRODUCTION- SALES										
Raw material Consumed	24.30	26.33	28.35	30.38	32.40	34.43	34.43	34.43	34.43	34.43
Consumables, Stores and spares 7% on sales)	5.67	6.14	6.62	7.09	7.56	8.03	8.03	8.03	8.03	8.03
Power, Fuel and other utilities (Variable)	1.98	2.15	2.32	2.48	2.65	2.81	2.81	2.81	2.81	2.81
Power, Fuel and other utilities (Fixed)	1.32	1.43	1.54	1.65	1.76	1.87	1.87	1.87	1.87	1.87
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)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
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	2.43	2.63	2.84	3.04	3.24	3.44	3.44	3.44	3.44	3.44
Other Variable Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Sub Total	**65.01**	**68.11**	**71.21**	**74.32**	**77.43**	**80.55**	**80.70**	**80.87**	**81.03**	**81.21**
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	**65.01**	**68.11**	**71.21**	**74.32**	**77.43**	**80.55**	**80.70**	**80.87**	**81.03**	**81.21**
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	**65.01**	**68.11**	**71.21**	**74.32**	**77.43**	**80.55**	**80.70**	**80.87**	**81.03**	**81.21**
Selling Packing &Distribution Expenses	2.43	2.63	2.84	3.04	3.24	3.44	3.44	3.44	3.44	3.44
Administrative & Misc. Expenses	1.62	1.76	1.89	2.03	2.16	2.30	2.30	2.30	2.30	2.30
Sub Total	69.06	72.49	75.93	79.38	82.83	86.29	86.44	86.60	86.77	86.95
Profit Before Interest and Tax (PBIT)	**11.94**	**15.26**	**18.57**	**21.87**	**25.17**	**28.46**	**28.31**	**28.15**	**27.98**	**27.80**
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	11.94	15.26	18.57	21.87	25.17	28.46	28.31	28.15	27.98	27.80
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)	**11.94**	**15.26**	**18.57**	**21.87**	**25.17**	**28.46**	**28.31**	**28.15**	**27.98**	**27.80**
Provision for taxation	0.09	1.75	3.40	5.05	6.38	8.03	7.99	8.56	8.52	8.77
Profit After Tax	**11.85**	**13.51**	**15.17**	**16.82**	**18.79**	**20.43**	**20.32**	**19.58**	**19.46**	**19.03**
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retained Earnings	11.85	13.51	15.17	16.82	18.79	20.43	20.32	19.58	19.46	19.03
Net Cash Accruals	17.60	19.26	20.92	22.58	24.54	26.19	26.07	25.34	25.21	24.78
PBIDT/ total income (%)	14.74	17.39	19.65	21.60	23.31	24.80	24.67	24.53	24.38	24.23
Operating Profit/ Total Income (%)	14.74	17.39	19.65	21.60	23.31	24.80	24.67	24.53	24.38	24.23
Net Profit/ Total Income (%)	14.63	15.40	16.05	16.62	17.40	17.81	17.71	17.07	16.96	16.58

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	11.94	15.26	18.57	21.87	25.17	28.46	28.31	28.15	27.98	27.80
2. Add Depreciation											
other non-cash expenses	0.00	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
3. Increase in Equity Share Capital	43.11	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	129	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		31.21	1.78	2.80	1.81	1.81	2.81	0.03	0.03	0.03	0.04
TOTAL SOURCES	**172.46**	**48.90**	**22.79**	**27.12**	**29.43**	**32.73**	**37.02**	**34.09**	**33.93**	**33.76**	**33.59**
B. DISPOSITION OF FUNDS											
1. Increase in capital expenditure	142.74	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	0.00	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		20.25	1.69	1.69	1.69	1.69	1.69	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	0.09	1.75	3.40	5.05	6.38	8.03	7.99	8.56	8.52	8.77
TOTAL APPLICATION	**142.74**	**20.34**	**3.43**	**5.08**	**6.73**	**8.07**	**9.71**	**7.99**	**8.56**	**8.52**	**8.77**
C. NET SURPLUS/ DEFICIT	29.71	28.56	19.36	22.04	22.70	24.66	27.31	26.10	25.37	25.25	24.82
D. ADD : OPENING CASH BALANCE	0.00	29.71	58.27	77.63	99.67	122.37	147.03	174.34	200.44	225.81	251.06
E. CLOSING CASH BALANCE	29.71	58.27	77.63	99.67	122.37	147.03	174.34	200.44	225.81	251.06	275.88

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	43.11	43.11	43.11	43.11	43.11	43.11	43.11	43.11	43.11	43.11	43.11
2. Reserves & Surplus	0.00	11.85	25.36	40.53	57.35	76.14	96.58	116.90	136.48	155.94	174.97
3. subsidy (Central +State)	129.34	129.34	129.34	129.34	129.34	129.34	129.34	129.34	129.34	129.34	129.34
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		31.21	32.99	35.80	37.60	39.41	42.22	42.25	42.28	42.32	42.35
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	**172.46**	**215.51**	**230.81**	**248.78**	**267.41**	**288.01**	**311.25**	**331.60**	**351.22**	**370.71**	**389.78**
ASSETS											
1. Gross Fixed Assets	142.74	142.74	142.74	142.74	142.74	142.74	142.74	142.74	142.74	142.74	142.74
2. Less : Accm.dpreciation	0.00	5.75	11.51	17.26	23.01	28.77	34.52	40.27	46.02	51.78	57.53
3. Net Fixed Assets	142.74	136.99	131.24	125.49	119.73	113.98	108.23	102.47	96.72	90.97	85.21
4. Current Assets	0.00	20.25	21.94	23.63	25.31	27.00	28.69	28.69	28.69	28.69	28.69
5. Cash & Bank Balance	29.71	58.27	77.63	99.67	122.37	147.03	174.34	200.44	225.81	251.06	275.88
6. Prelim. expenses not w/o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL ASSETS	**172.46**	**215.51**	**230.81**	**248.78**	**267.41**	**288.01**	**311.25**	**331.60**	**351.22**	**370.71**	**389.78**

ANNEXURE - IX

CALCULATION OF MARGIN FOR WORKING CAPITAL & ASSESSMENT OF WORKING CAPITAL

Particulars	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	
Gross Sales (Incl. job income)	81.00	87.75	94.50	101.25	108.00	114.75	114.75	114.75	114.75	114.75	
Total working capital requirement (25% of gross sales)	20.25	21.94	23.63	25.31	27.00	28.69	28.69	28.69	28.69	28.69	
Margin money for working capital (5% of gross sales)	4.05	4.39	4.73	5.06	5.40	5.74	5.74	5.74	5.74	5.74	
Permissible bank borrowing (20% of gross sales)	16.20	17.55	18.90	20.25	21.60	22.95	22.95	22.95	22.95	22.95	
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	2.00	4.00	4.00	5.00	5.00	5.00	6.00	6.00	6.00	6.00	6.00
2. Consumables, Stores and spares	2.00	0.95	1.02	1.10	1.18	1.26	1.34	1.34	1.34	1.34	1.34
3. Stock in process (Month's cost of production)	0.39	2.11	2.21	2.31	2.42	2.52	2.62	2.62	2.63	2.63	2.64
4. Finished Goods (Months cost of sales)	2.00	10.84	11.35	11.87	12.39	12.91	13.43	13.45	13.48	13.51	13.54
5. Export's receivables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Receivables other than exports	2.00	13.50	14.63	15.75	16.88	18.00	19.13	19.13	19.13	19.13	19.13
Total Current Assets (A)		**31.39**	**33.21**	**36.03**	**37.86**	**39.68**	**42.51**	**42.54**	**42.57**	**42.60**	**42.64**
Current Liabilities											
1. Creditors for purchases	0.10	0.20	0.22	0.24	0.25	0.27	0.29	0.29	0.29	0.29	0.29
		0.00									

Total Current Liabilities (B)		0.20	0.22	0.24	0.25	0.27	0.29	0.29	0.29	0.29	0.29
Working Capital Gap (A-B)		**31.21**	**32.99**	**35.80**	**37.60**	**39.41**	**42.22**	**42.25**	**42.28**	**42.32**	**42.35**
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		31.21	32.99	35.80	37.60	39.41	42.22	42.25	42.28	42.32	42.35

ANNEXURE – XI											
COMPUTATION OF TAXATION											
											(Rs. Lacs)
Details		**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
1. Profit Before Tax		11.94	15.26	18.57	21.87	25.17	28.46	28.31	28.15	27.98	27.80
2. Add: St. Line Depreciation		5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
3. Less: WDV Depreciation		17.40	15.36	13.33	11.29	10.27	8.24	8.21	6.19	6.17	5.16
4. Gross Taxable Income		0.29	5.65	10.99	16.33	20.65	25.97	25.85	27.71	27.56	28.39
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		0.29	5.65	10.99	16.33	20.65	25.97	25.85	27.71	27.56	28.39
7. Income Tax @ 30%		0.09	1.69	3.30	4.90	6.20	7.79	7.76	8.31	8.27	8.52
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)		0.09	1.69	3.30	4.90	6.20	7.79	7.76	8.31	8.27	8.52
10. Education Cess @ 3%		0.00	0.05	0.10	0.15	0.19	0.23	0.23	0.25	0.25	0.26
11. Total income tax (Incl. surcharge & Education Cess)		**0.09**	**1.75**	**3.40**	**5.05**	**6.38**	**8.03**	**7.99**	**8.56**	**8.52**	**8.77**

ANNEXURE – XII											
CALCULATION OF INTERNAL RATE OF RETURN & NPV											
IRR before tax								**(Rs.in lacs)**			
	Const. Period	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Out Flows											
Capital Investment	-173.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in WC Gap		31.21	1.78	2.80	1.81	1.81	2.81	0.03	0.03	0.03	0.04
Total outflows	-173.96	31.21	1.78	2.80	1.81	1.81	2.81	0.03	0.03	0.03	0.04
Inflows											
Profit before tax	0.00	11.94	15.26	18.57	21.87	25.17	28.46	28.31	28.15	27.98	27.80
Add Depreciation and non-cash expenses	0.00	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
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	39.62
Total Inflows	0.00	17.69	21.01	24.32	27.62	30.92	34.21	34.06	33.90	33.73	73.18
Net cash flows	**-173.96**	**-13.52**	**19.23**	**21.52**	**25.82**	**29.12**	**31.41**	**34.03**	**33.87**	**33.70**	**73.14**
NPV before tax(Rs. in lakhs)	**5.20**		**Discount Rate taken =**		**7.00%**						
Before - Tax IRR	**7.50%**										

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	24.30	26.33	28.35	30.38	32.40	34.43	34.43	34.43	34.43	34.43
2. Consumable Spares	5.67	6.14	6.62	7.09	7.56	8.03	8.03	8.03	8.03	8.03
3. Power, Fuel & other utilities (Variable Cost)	1.98	2.15	2.32	2.48	2.65	2.81	2.81	2.81	2.81	2.81
4. Factory Salaries & Wages (Variable)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
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)	2.43	2.63	2.84	3.04	3.24	3.44	3.44	3.44	3.44	3.44
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	49.38	52.25	55.12	57.98	60.85	63.71	63.71	63.71	63.71	63.71
B.Fixed Expenses										
1. Power, Fuel & other utilities (Fixed Cost)	1.32	1.43	1.54	1.65	1.76	1.87	1.87	1.87	1.87	1.87
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	2.43	2.63	2.84	3.04	3.24	3.44	3.44	3.44	3.44	3.44
4. Depreciation	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
5. Administrative & Misc. Expenses	1.62	1.76	1.89	2.03	2.16	2.30	2.30	2.30	2.30	2.30

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	17.28	17.72	18.17	18.62	19.07	19.51	19.51	19.51	19.51	19.51
C.Sales	81.00	87.75	94.50	101.25	108.00	114.75	114.75	114.75	114.75	114.75
D.Contribution	31.62	35.50	39.38	43.27	47.15	51.04	51.04	51.04	51.04	51.04
E.Break Even Point (B/D)	54.64%	49.93%	46.14%	43.03%	40.44%	38.24%	38.24%	38.24%	38.24%	38.24%
F.Cash Break Even	36.45%	33.72%	31.53%	29.74%	28.24%	26.96%	26.96%	26.96%	26.96%	26.96%
G.BREAK EVEN SALES	44.26	43.81	43.60	43.57	43.67	43.88	43.88	43.88	43.88	43.88
ANNEXURE – XIV										
		RETURN ON CAPITAL EMPLOYED								
	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Return										
Operating Profit	11.94	15.26	18.57	21.87	25.17	28.46	28.31	28.15	27.98	27.80
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	**11.94**	**15.26**	**18.57**	**21.87**	**25.17**	**28.46**	**28.31**	**28.15**	**27.98**	**27.80**
Net Fixed Assets	142.74	136.99	131.24	125.49	119.73	113.98	108.23	102.47	96.72	90.97
Current Assets less creditors	1.78	2.80	1.81	1.81	2.81	0.03	0.03	0.03	0.04	0.00
Total B	144.53	139.80	133.04	127.29	122.54	114.01	108.26	102.51	96.76	90.97
ROCE	8.26	10.91	13.96	17.18	20.54	24.96	26.15	27.46	28.92	30.56
ROCE for Optimal Year	**17.18**									
Average ROCE for 10 Years	**20.89**									