

# **MODEL**

## **DETAILED PROJECT REPORT**

**A RUBBER PROCESSING UNIT,**  
**under**  
**UTTAR POORVA TRANSFORMATIVE INDUSTRIALIZATION SCHEME**  
**(UNNATI), 2024**



उद्योग संवर्धन और आंतरिक व्यापार विभाग  
**DEPARTMENT FOR  
PROMOTION OF INDUSTRY AND  
INTERNAL TRADE**



DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE  
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## Table of Contents

1. Introduction	5
a. About the project	5
b. Scenario in the Northeast	5
c. National Profile and Geographic Analysis	5
d. Sector Overview	6
2. Investor's Background	7
3. Company Profile	7
4. Typical Usage of Processed Rubber Items	7
a. Smoked Rubber Sheets	7
b. Latex Concentrates	8
c. Centrifuged Latex	8
d. Crumb Rubber	8
5. Details of finished products and market potential	8
a. Domestic Market	8
b. Overseas Market	9
a. Primary Raw Material	9
b. Quantity Requirement	9
c. Breakdown by Product Line	10
d. Procurement Plan	10
7. Proposed location and Site Plan	10
a. Procurement Plan	10
b. Details of Utilities	10
c. Electrical Power	11
d. Water Requirement	11
e. Transportation System	12



f. Waste Management practice	12
8. Plant, Machinery & Equipment	13
a. List of machinery	13
b. Estimated Investment	13
c. Installation and Unit Setup	13
9. Process Flow of Production	14
a. Smoked Rubber Sheets	14
b. Latex and Centrifuged Latex	14
c. Crumb Rubber	15
10. Cost of the Project	16
11. Proposed Means of Finance	18
12. Implementation Schedule with time chart	19
13. Projected Financial Analysis	20
j. Balance Sheet	23
14. Projected Employment Details	24
15. Statutory Clearances Required	24



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## 1. Introduction

### a. About the project

The proposed project aims to establish a Rubber Processing Unit in ABC City, located in the Northeast Region (NER). The unit will focus on processing natural rubber procured primarily from Tripura, India's largest rubber-producing state. The processed products include:

- Smoked Rubber Sheets: For use in the automotive, footwear, and industrial sectors.
- Latex Concentrates: Primarily catering to the medical and adhesive industries.
- Centrifuged Latex: For high-quality dipped goods and adhesive products.
- Crumb Rubber: For manufacturing reclaimed rubber products and road construction.

This project aligns with the government's UNNATI 2024 initiative, aiming to enhance industrialization in NER through financial incentives and support. It is strategically positioned to utilize the abundant raw materials of Tripura while serving demand across Northeast India and beyond.

### b. Scenario in the Northeast

The Northeast Region (NER) of India holds significant potential for rubber manufacturing, primarily driven by abundant natural rubber cultivation in Tripura, Assam, and Meghalaya. Despite this advantage, the region's share in the national rubber-based manufacturing output remains disproportionately low due to limited industrial capacity and market linkages. Key Highlights are:

1. Production Potential:
  - Tripura accounts for nearly 85% of the natural rubber produced in the Northeast, making it the primary supplier of raw rubber in the region.
  - Emerging processing hubs in Assam and Meghalaya have shown a growing interest in diversifying into rubber sheets, crumb rubber, and latex-based products.
2. Industrial Constraints:
  - Lack of advanced manufacturing facilities for value-added products such as adhesive-grade latex or reclaimed rubber.
  - Higher transportation costs due to the challenging terrain and limited connectivity with major consumption centers.
3. Demand for Finished Products:
  - Rising demand for crumb rubber in infrastructure projects, particularly in road construction.
  - Significant need for latex gloves and other dipped goods in the healthcare and adhesive industries, driven by pandemic-induced awareness.

### c. National Profile and Geographic Analysis

Kerala and Tripura are the two leading natural rubber producing states in India, although Kerala has more well-established rubber processing ecosystem, contributing significantly to domestic consumption and exports. In contrast, Tripura's rubber industry is at a less mature stage, with highly untapped potential for value addition and market linkages. Key Comparisons between Kerala and Tripura are:

1. Production and Processing Capacity:
  - Kerala: Contributes nearly 75% of India's total natural rubber production and has a strong network of processing units specializing in RSS, latex, and industrial rubber goods.
  - Tripura: Contributes approximately 8-10% of the total production but lacks sufficient processing units, leading to the export of raw rubber to other states for value addition.



2. Market Linkages:
  - Kerala benefits from robust domestic and international market linkages, with Cochin Port facilitating seamless exports.
  - Tripura faces logistical challenges, relying on Kolkata Port for exports and land routes for domestic distribution.
3. Exports:
  - Kerala dominates exports of high-value products such as centrifuged latex, rubber threads, and footwear components.
  - Tripura's exports are limited to raw rubber, with minimal presence in value-added categories.
4. Opportunities for Tripura:
  - Leverage proximity to Southeast Asian markets (via Bangladesh) to boost exports of processed rubber.
  - Develop processing clusters under UNNATI and similar schemes to achieve scalability and competitiveness.

#### d. Sector Overview

The Indian rubber industry is witnessing a shift towards diversified product demand, beyond traditional natural rubber sheets and RSS. Emerging sectors such as healthcare, automotive, and construction are driving demand for additional rubber products. Demand drivers for products derived from natural rubber:

1. Healthcare and Medical Equipment:
  - Increased demand for latex gloves, catheters, and dipped products due to heightened awareness of hygiene and safety.
  - India's healthcare sector is expected to grow at a CAGR of 22%, creating opportunities for latex-based products.
2. Automotive Industry:
  - As one of the largest consumers of natural and synthetic rubber, the automotive sector drives demand for tires, gaskets, and other components.
  - With a projected growth rate of 10% annually, this sector presents significant opportunities for manufacturers.
3. Infrastructure Development:
  - Crumb rubber usage in road construction is increasing under government initiatives like Bharatmala Pariyojana.
  - Rubberized asphalt provides durability and environmental benefits, making it a preferred choice for large-scale infrastructure projects.
4. Emerging Products Beyond Natural Rubber and Smoked Sheets:
  - Reclaimed Rubber: Cost-effective and sustainable, reclaimed rubber is gaining traction for use in footwear, mats, and industrial parts.
  - Rubber Threads: High elasticity and durability make these threads essential for textiles and consumer goods.
  - Foam Rubber: Used extensively in furniture, bedding, and packaging materials, foam rubber is experiencing a surge in demand due to e-commerce growth.



## 2. Investor's Background

Name	To be filled by the applicant
DOB	To be filled by the applicant
PAN	To be filled by the applicant
Address	To be filled by the applicant
Academic Qualification	To be filled by the applicant
Experience in business	To be filled by the applicant
Functional Responsibility in Unit	To be filled by the applicant
Name of associate concern (if any)	To be filled by the applicant
Nature of association (if any)	To be filled by the applicant
Net Worth	To be filled by the applicant

## 3. Company Profile

Name of the Unit	To be filled by the applicant
Constitution	To be filled by the applicant
PAN	To be filled by the applicant
Registered Office address	To be filled by the applicant
Activity	To be filled by the applicant
Loan details	To be filled by the applicant
Director	To be filled by the applicant
Unit Registration	To be filled by the applicant
Unit Location	To be filled by the applicant
Category of Project (Manufacturing/Service)	To be filled by the applicant
Zone	To be filled by the applicant
District	To be filled by the applicant
State	To be filled by the applicant

## 4. Typical Usage of Processed Rubber Items

### a. Smoked Rubber Sheets

Common Usage:



- Used in repairing and patching tires in rural workshops.
- Flooring mats and cushioning in homes or small enterprises.

**Industrial Usage:**

- Primary raw material in automotive tires, conveyor belts, and molded rubber goods.
- Integral in heavy-duty machinery, sealing gaskets, and footwear manufacturing.

**b. Latex Concentrates**

**Common Usage:**

- Domestic adhesives for crafting and small-scale projects.
- Used in household dipped goods such as gloves and balloons.

**Industrial Usage:**

- Manufacturing medical-grade items like surgical gloves, condoms, and catheters.
- Adhesive production for packaging, furniture, and construction.

**c. Centrifuged Latex**

**Common Usage:**

- Preferred for creating high-durability foams in household mattresses and cushions.
- Carpet backing for residences and small-scale enterprises.

**Industrial Usage:**

- High-durability applications such as industrial conveyor belts and foam padding for transportation.
- Integral in adhesive formulations and technical dipped goods.

**d. Crumb Rubber**

**Common Usage:**

- Low-cost material for paving small private pathways or driveways.
- Used as an infill for artificial turf in sports facilities and playgrounds.

**Industrial Usage:**

- Road construction (rubberized asphalt) and insulation products.
- Reclaimed rubber products for footwear and low-cost industrial machinery parts.

**5. Details of finished products and market potential**

**a. Domestic Market**

The domestic market for processed rubber products is fueled by strong demand from automotive, healthcare, construction, and other industries.

**Smoked Rubber Sheets:**

- India's automotive tire industry accounts for over 65% of natural rubber consumption, indicating consistent demand for RSS.
- Industrial machinery and conveyor belt manufacturers in cities like Pune, Chennai, and Delhi NCR are key consumers.

**Latex Concentrates:**

- India's healthcare industry saw a 20% growth in demand for latex gloves and dipped goods during the pandemic, with sustained growth expected.





- Adhesive industries in urban centers like Mumbai and Bengaluru represent a steady demand base.

**Centrifuged Latex:**

- Growing demand for foam products (mattresses and cushions) driven by India's burgeoning furniture and interior decor markets.
- Adhesive manufacturers are major buyers in the domestic industrial sector.

**Crumb Rubber:**

- Infrastructure projects such as Bharatmala Pariyojana drive demand for rubberized asphalt in road construction.
- Increasing focus on eco-friendly solutions boosts crumb rubber usage in reclaimed rubber products.

**b. Overseas Market**

India's processed rubber exports grew by 18% year-on-year in FY 2021-22, reflecting strong demand in global markets.

**Smoked Rubber Sheets:**

- Export demand from Europe and North America for use in automotive and heavy machinery sectors.
- ASEAN countries, particularly Malaysia and Thailand, import RSS for blending with their domestic production.

**Latex Concentrates:**

- Strong export demand from Southeast Asia for medical-grade gloves and adhesives.
- Growing interest in latex products from Africa and the Middle East due to expanding healthcare infrastructure.

**Centrifuged Latex:**

- Europe and Japan import centrifuged latex for high-quality dipped goods and adhesive products.
- Steady demand from luxury furniture manufacturers in South Korea and Australia.

**Crumb Rubber:**

- Key markets in the Middle East and Africa for road infrastructure projects.
- Europe increasingly demands crumb rubber for sustainable industrial applications and green construction materials.

**6. Details of Raw Materials with required quantity**

**a. Primary Raw Material**

Source: The primary raw material for the proposed Rubber Processing Unit is natural rubber, which will be sourced predominantly from Tripura.

**b. Quantity Requirement**

Annual Requirement as per product line:

- Natural Rubber (Sheet and Latex Form): 600 MT/year
- Additional Inputs (Chemicals for Processing): 25 MT/year



**c. Breakdown by Product Line**

- Natural Rubber Sheets (RSS): 300 MT/year
- Latex Concentrates: 120 MT/year
- Centrifuged Latex: 90 MT/year
- Crumb Rubber: 90 MT/year

**d. Procurement Plan**

Supplier Partnerships: Long-term agreements with local rubber farmers' cooperatives in Tripura to ensure consistent supply.

Transportation: Rubber will be transported to the plant through established logistics networks connecting Agartala and other rubber-growing areas to the proposed site.

Government Subsidies: Leverage schemes like UNNATI for procurement-related subsidies and logistics incentives.

**7. Proposed location and Site Plan**

Sl. No.	Particulars	Details
1	Land Area	To be filled by applicant
2	Status of Legal title & Possession	To be filled by applicant
3	if leased, Period of lease	To be filled by applicant
4	Coordinates of location	To be filled by applicant
5	Details of CLU	To be filled by applicant
6	Connectivity to roads <ul style="list-style-type: none"><li>i. State Highway (in Km.)</li><li>ii. National Highway (in Km.)</li></ul>	To be filled by applicant
7	Availability of Water	To be filled by applicant
8	Availability of Power	To be filled by applicant

**a. Procurement Plan**

Proposed Region: ABC City, located in the Northeast Region, strategically selected for its proximity to Tripura's rubber plantations and major industrial centers like Guwahati.

Site Area: 2 acres of land to accommodate manufacturing, storage, and administrative operations.

**b. Details of Utilities**

- Electricity:** Required load is 200 kW, sourced from the state electricity board.
- Water:** Estimated consumption of 30 KL/day for processing and cleaning.



- iii. **Transportation:** Necessary for regular dispatch during procurement and distribution.
- iv. **Waste Management:** Effluent Treatment Plant for water recycling and rubber waste disposal.

**c. Electrical Power**

Power availability is one of the main factors for the successful operation of every organization/ establishment. The Adventure Tourism will need power load of around XX KW to operate the entirely including provision for general lighting. As the power requirement is reasonable and to have uninterrupted power at the Adventure Tourism unit, it has proposed to have one of diesel generating set of XX KVA as standby arrangement in case of power cut from grid supply. Estimate of requisite load is being enclosed separately.

**i. Construction Phase**

KW	Quarter of the Year
To be filled by the applicant	To be filled by the applicant

**ii. Steady Phase**

KW	Quarter of the Year
To be filled by the applicant	To be filled by the applicant

**iii. Peak Phase**

KW	Quarter of the Year
To be filled by the applicant	To be filled by the applicant

**d. Water Requirement**

The water required for an adventure tourism unit will be sourced from Local Municipal authority. Also, water requirement shall be met from ground water. The per day water requirement of the adventure tourism unit has been estimated at XX liters in the following manner:

**iv. Domestic consumption**

Per Day	UOM
	Liter

**v. Utilities**

Per Day	UOM
	Liter

**vi. Engineering**



Per Day	UOM
	Liter

**e. Transportation System**

The transportation system for an adventure tourism unit in the North Eastern region includes internal shuttles (electric carts, mini-vans) for guest mobility, and external pick-up/drop-off services (mini-buses, SUVs) from nearby cities or transport hubs. Staff commuting is facilitated by buses or shared vans, while equipment is transported using pick-up trucks or utility vehicles. An on-site ambulance or emergency vehicle is essential for safety. Initial vehicle purchase costs range from ₹33 lakh to ₹82 lakh, with monthly operational expenses (fuel, maintenance, driver salaries) between ₹45,000 and ₹1 lakh, ensuring smooth operations and enhanced guest experience.

**Local Infrastructure**

The area is well equipped with roadways and airways. The availability of uninterrupted power and water is another added benefit for the unit. The area has a total population of approximately XXXX people and the proximity of the neighbouring states is favourable.

**f. Waste Management practice**

The waste management system is designed to handle by-products and residues generated during the production of natural rubber sheets, latex concentrates, centrifuged latex, and crumb rubber. The practice aligns with the scale and scope of production, ensuring compliance with environmental regulations and sustainable operations. Types of Waste Generated at a Rubber processing units are:

- Rubber Residues: Scraps and off-cuts from the sheeting and shredding processes.
- Effluent Waste: Contaminated water from washing, latex processing, and cleaning operations.
- Smoke Emissions: Fumes generated during the smoking of rubber sheets.
- Chemical Waste: Residues from ammonia and preservatives used in latex processing.

Waste Treatment and Disposal Practices areas follows:

- i. Effluent Treatment Plant (ETP)
  - A dedicated ETP recycles 80% of the water will be used in processing.
  - Sludge generated during treatment has to be safely disposed of in compliance with CPCB guidelines.
- ii. Rubber Scrap Recycling
  - Off-cuts and waste rubber are shredded and sold to crumb rubber manufacturers or reused within the facility for low-grade applications.
- iii. Air Pollution Control Measures
  - The smokehouse is equipped with chimneys and scrubbers to reduce particulate matter emissions.
  - Periodic air quality monitoring ensures compliance with regional norms.
- iv. Chemical Waste Management
  - Safe storage and neutralization of ammonia residues before disposal.
  - Maintaining in-house disposal units for hazardous waste removal.



## 8. Plant, Machinery & Equipment

The plant will be equipped to process multiple products, ensuring flexibility and scalability.

### a. List of machinery

- i. Smoked Rubber Sheet Production:
  - Roller Machines for sheeting
  - Smoke House for drying and curing
  - Hydraulic Press
- ii. Latex and Centrifuged Latex:
  - Centrifuge Machine
  - Latex Storage Tanks
  - Stirrer and Emulsifier Units
- iii. Crumb Rubber Production:
  - Shredder Machine
  - Cracker Mill
  - Granulator

### b. Estimated Investment

Below is the detailed breakdown of the overall cost of plant, machinery, and equipment, at Rs. 65 lakhs.

Equipment	Purpose	Quantity	Unit Cost (Rs. Lakhs)	Total Cost (Rs. Lakhs)
Roller Machines	Rubber sheeting	2	10.00	20.00
Smoke House	Drying and curing rubber sheets	1	12.00	12.00
Centrifuge Machine	Latex concentration	1	15.00	15.00
Shredder Machine	Crumb rubber processing	1	6.00	6.00
Granulator	Size reduction for crumb rubber	1	5.00	5.00
ETP unit	Effluent treatment	1	7.00	7.00
<b>Gross total estimated investment (without GST)</b>			<b>Rs. 65 lakhs</b>	

### c. Installation and Unit Setup

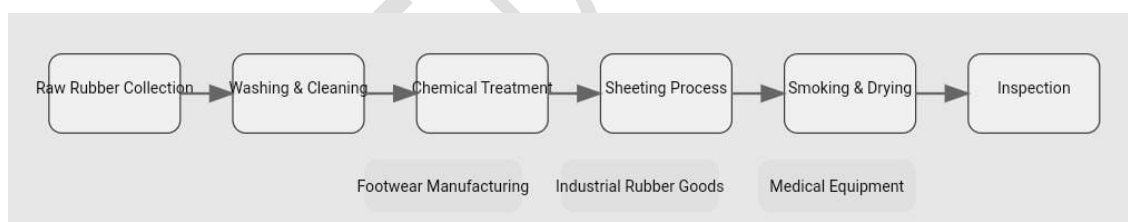
Installation will be completed within 3 months after procurement of plant and machinery, with technical supervision in the presence of equipment suppliers. Trial runs will be conducted for one month before commencement of commercial operations.



## 9. Process Flow of Production

### a. Smoked Rubber Sheets

- i. Collection of Raw Rubber:
  - Harvested latex coagulated into slabs or lumps is collected from suppliers (primarily Tripura).
  - The raw rubber is transported to the processing unit.
- ii. Washing and Cleaning:
  - Coagulated rubber slabs are washed thoroughly to remove dirt, debris, and residual impurities.
  - Water is passed through a filtration system to ensure cleanliness.
- iii. Chemical Treatment:
  - Small amounts of formic acid or ammonia are added to stabilize the rubber and prevent further degradation.
- iv. Sheeting Process:
  - The cleaned rubber is fed into a rolling mill, where it is flattened into uniform sheets of the desired thickness.
  - Multiple passes through the rollers improve texture and consistency.
- v. Smoking and Drying:
  - Sheets are stacked in a smoke house and exposed to controlled heat and smoke from burning wood.
  - This process lasts 48–72 hours to enhance durability and eliminate excess moisture.
- vi. Inspection and Grading:
  - Dried sheets are inspected for quality, graded based on thickness and elasticity, and packed for sale.

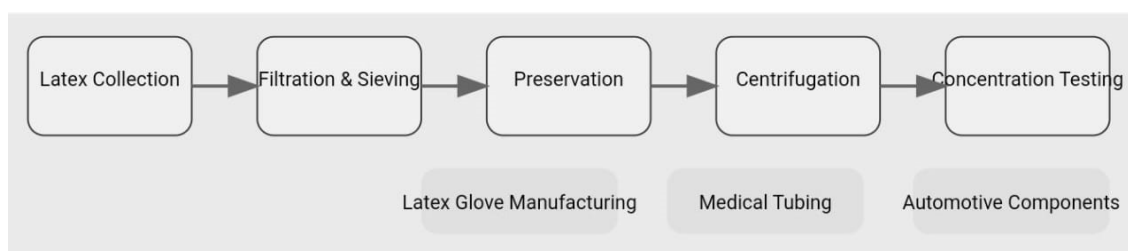


### b. Latex and Centrifuged Latex

- i. Latex Collection:
  - Fresh field latex is collected in drums from plantations in Tripura.
  - The latex is transported in refrigerated containers to prevent premature coagulation.
- ii. Filtration and Sieving:
  - The latex is filtered through fine mesh to remove impurities such as bark and dirt.
- iii. Preservation:
  - Ammonia is added to the latex to stabilize it and prevent coagulation during storage.
- iv. Centrifugation:
  - The latex is placed in a high-speed centrifuge to separate water from rubber particles.
  - This increases the dry rubber content (DRC) to 60% or more.
- v. Testing for Concentration:

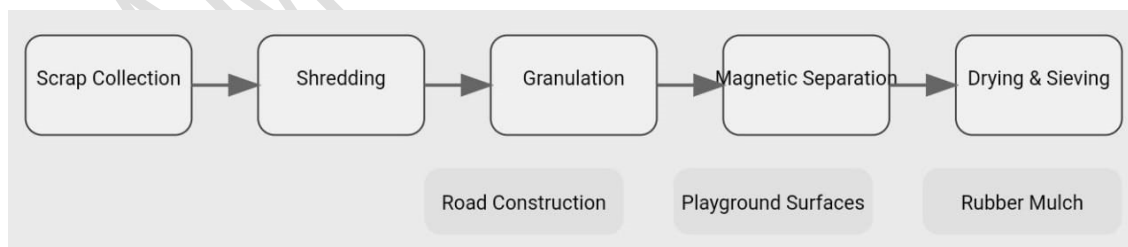


- The concentrated latex is tested for viscosity, DRC, and other properties to meet industrial standards.
- vi. Storage and Packaging:
- The finished latex is transferred to storage tanks or packaged in barrels for transportation to buyers.



#### c. Crumb Rubber

- Rubber Scrap Collection:
  - End-of-life tires and other rubber waste are collected from suppliers.
  - Scrap is sorted to separate unsuitable materials.
- Shredding:
  - The rubber waste is fed into a shredder machine, breaking it into smaller pieces of 2-3 inches.
- Granulation:
  - The shredded rubber is processed through a granulator to produce smaller granules of uniform size.
- Magnetic Separation:
  - A magnetic separator removes metallic contaminants like steel wires embedded in rubber waste.
- Drying and Sieving:
  - Granules are dried in a rotary dryer to remove residual moisture.
  - They are then sieved to achieve the desired size distribution (e.g., 1-5 mm).
- Packaging:
  - The crumb rubber is packed into bulk bags for shipment to buyers, including road construction firms and manufacturers of reclaimed rubber products.





## 10. Cost of the Project

Particulars	Amount (Rs. In Lacs)
Land Development	35.00
Civil Construction	100.00
Interiors and Furniture	10.00
Plant and Machinery	65.00
Utility Installation	20.00
Miscellaneous Equipment	15.00
Transportation Expenses	15.00
Preoperative Expenses	10.00
Working Capital	20.00
Contingency Fund	10.00
Total Project Cost	300.00/-

### a. Land details

The promoter Company own a plot of land measuring **X** bigha covered by **dag no. XXX** of **patta no. XX** of **XXXX** town, District: **XXX**, **XXXX** whereon present project is taken up. The site has already been developed by the promoter himself at his own cost. The location is within the heart of **XXX** town and cluster of Agriculture & Allied Industry. As we know, **XXX** town itself is known as Agriculture capital of **XXX**, people from distance places also visit the town to get avail cold storage facilities.

### b. Building and civil works details

The total cost of civil work has been estimated to be Rs **XX** lakhs, which includes technical civil work and non-technical civil work. Cost of civil work comprises of the cost of process building, Raw material warehouse, Finished goods warehouse, transformer house & Utility building

### c. Plant and machinery/equipment's details

Sl. No.	Particulars	Qty.	Rate (INR)	GST (18%)	Amount (INR)
1	Projection Systems (Standard)	2	1500000	540000	3540000
2	Projection Systems (Imax+3D)	1	2500000	450000	2950000
3	Dolby Sound Systems	3	1000000	540000	3540000
4	HVAC Systems	3	500000	270000	1770000
5	Diesel Generators	2	400000	144000	944000





6	Cooking infrastructure	10	150000	270000	1770000
7	Durable items	20	50000	180000	1180000
8	Furniture for Food Court	50	20000	180000	1180000
9	Cleaning items & equipment	20	10000	36000	236000
10	Total cost of purchases		₹ 14,500,000	₹ 2,610,000	₹ 17,110,000

**a. Pre-operative expenses details**

Rs. 24 lakhs. (Approx.)

**Working Capital details**

**I) Operation costs: - (Annual)**

Sl. No.	Item	Month	Rate (Rs. Lakhs)	Total (Lakh)
1	Utilities & Maintenances	1	1.17	14.10
2	Insurance Premiums	1	0.12	1.44
3	Marketing & Advertising	1	1.12	13.50
4	Consumables & Supplies	1	0.90	10.80
5	Vehicle & Transportation Costs	1	0.35	4.20
6	Licenses, Permits & Compliances	1	0.12	1.44
7	Misc. Expenses	1	0.50	6.00
<b>GRAND TOTAL</b>				<b>51.48</b>

**II) Utilities (Per Annum)**

Sl. No.	Item	Total (Rs.) Lakh
1	Electricity & Water Bills	4.20
2	Internet & Communication	0.60
3	Routine maintenances & Repair	6.00
<b>GRAND TOTAL</b>		<b>10.26</b>

**iii) Salary & Wages (Per Annum)**



Sl. No.	Designation	No.	Wages/Month (Approx.)	Total/Annum
1	CEO & Business Head	1	2,00,000	2,50,000
2	Marketing Manager	1	1,00,000	1,00,000
3	Programmes Manager	2	75,000	1,50,000
4	Finance Manager	1	1,00,000	1,00,000
5	Relationship Manager	1	1,00,000	1,00,000
6	Operations Manager	1	1,00,000	1,00,000
7	Operations Executive	2	1,00,000	2,00,000
8	IT & Systems Executive	2	50,000	1,00,000
9	Accounts Executive	2	25,000	50,000
10	Site helper	5	20,000	1,00,000
11	On-premises Doctor	1	1,50,000	1,50,000
12	Location Caretaker	3	30,000	90,000
13	Infrastructure Captain	1	50,000	50,000
14	Mechanic/Electricity helper	4	25,000	1,00,000
15	Housekeeping	10	10,000	1,00,000
GRAND TOTAL				<b>17,40,000</b>

**Note: Every year increment @ 5% has been considered towards financial calculation.**

a. **Working Capital limit:** i + ii + iii = 51.48+10.26+107.76 = **169.50 Rs.**

#### 11. Proposed Means of Finance

Particulars	Amount (in INR Lakhs)	Percentage
Promoter's Contribution	75.00	25.00 %
Equity among Partners Shareholders	75.00	25.00 %
Term Loan form Banks/Financial Institutions	150.00	50.00 %
Total cost of Project	<b>INR 300.00 Lakhs</b>	100.0



## 12. Implementation Schedule with time chart

Activities	Starting Month	Ending Month
Arrangement of land	To be filled by applicant	To be filled by applicant
Single window clearance	To be filled by applicant	To be filled by applicant
Land development	To be filled by applicant	To be filled by applicant
Building and Civil Works	To be filled by applicant	To be filled by applicant
Order and delivery of Equipment	To be filled by applicant	To be filled by applicant
Power arrangement	To be filled by applicant	To be filled by applicant
Manpower arrangement	To be filled by applicant	To be filled by applicant
Procurement of Sound systems	To be filled by applicant	To be filled by applicant
Trial run through soft launch	To be filled by applicant	To be filled by applicant
Commercial Operation Begins	To be filled by applicant	To be filled by applicant



### 13. Projected Financial Analysis

a. Installed Service capacity		Selling Price per unit	Maximum Capacity	Daily Earnings	
Smoked Rubber Sheets		350	150	52500	
Latex Concentrates		250	150	37500	
Centrifugal Latex		150	150	30000	
Overall Earnings Per Annum				₹ 42,000,000	
No. of days of operation per annum	350				
Per day operation in Hrs	12				
<b>b. SCHEDULE OF PRODUCTION AND SALES</b>					
<b>RAW MATERIALS AND CONSUMABLES REQUIRED</b>					
Item	Quantity	Unit	Rate	Amount	
Water				₹ 1,000,000	
Electricity				₹ 1,500,000	
Food				₹ 2,500,000	
<b>c. Cost of Raw Material Consumed/Annum</b>				₹ 5,000,000.00	
Parameters	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Capacity Utilization	70%	75%	80%	85%	90%
Total production capacity per annum (in MT)	42,000,000	46,200,000	50,820,000	55,902,000	61,492,200
Revenue as per Capacity Utilized	29400000	34650000	40656000	47516700	55342980
<b>d. BREAK UP PRODUCTION AS PER UTILIZED CAPACITY</b>					
ITEMS	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Capacity Utilization	70%	75%	80%	85%	90%
Service	29400000	31500000	33600000	35700000	37800000
<b>TOTAL PRODUCTION</b>	₹ 29,400,000	₹ 31,500,000	₹ 33,600,000	₹ 35,700,000	₹ 37,800,000
<b>Sales Details</b>					
Items	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Service	29,400,000	31,500,000	33,600,000	35,700,000	37,800,000



Considering GST RATE@18%	5292000	5670000	6048000	6426000	6804000
GROSS Sales Price	₹ 34,692,000	₹ 37,170,000	₹ 39,648,000	₹ 42,126,000	₹ 44,604,000
<b>e. COST OF PRODUCTION</b>					
<b>Items</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Capacity utilization</b>	75%	80%	85%	90%	95%
Consumables	₹ 3,750,000	₹ 4,000,000	₹ 4,250,000	₹ 4,500,000	₹ 4,750,000
Direct Labor & Wages	20880000	21924000	23020200	24171210	25379771
Consumable Stores	52500	56000	59500	63000	66500
Repairs & Maintenance	37500	40000	42500	45000	47500
Other Expenses	1125000	1200000	1275000	1350000	1425000
<b>COST OF PRODUCTION</b>	<b>₹ 25,845,000</b>	<b>₹ 27,220,000</b>	<b>₹ 28,647,200</b>	<b>₹ 30,129,210</b>	<b>₹ 31,668,771</b>
<b>f. PROJECTED PROFITABILITY STATEMENT</b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Capacity Utilized</b>	75%	80%	85%	90%	95%
<b>A. Sales</b>					
Gross Sales	34692000	37170000	39648000	42126000	44604000
Less: GST	5292000	5670000	6048000	6426000	6804000
<b>NET SALES</b>	<b>₹ 29,400,000</b>	<b>₹ 31,500,000</b>	<b>₹ 33,600,000</b>	<b>₹ 35,700,000</b>	<b>₹ 37,800,000</b>
<b>B. Cost of Production</b>					
Consumables	3750000	4000000	4250000	4500000	4750000
Direct Labour & Wages	20880000	21924000	23020200	24171210	25379770.5
Consumable Stores	52500	56000	59500	63000	66500
Repairs & Maintenance	37500	40000	42500	45000	47500
Other Manufacturing Exp.	1125000	1200000	1275000	1350000	1425000
<b>Total Cost of Production (C)</b>	<b>₹ 25,845,000</b>	<b>₹ 27,220,000</b>	<b>₹ 28,647,200</b>	<b>₹ 30,129,210</b>	<b>₹ 31,668,771</b>
<b>g. Gross Profit (A-C)</b>	<b>8847000</b>	<b>9950000</b>	<b>11000800</b>	<b>11996790</b>	<b>12935229.5</b>
<b>Interest Expenses</b>					
Interest Expenses (Term Loan) @10.5% /Annum for 10 yr.	3409751	2790662	2103348	1340290	493139
Interest Expenses (WC Loan) @10.5% /Annum	0	0	0	0	0
Selling, General & Administrative Exp.	350000	402500	462875	532306.25	612152.1875



<b>Profit before Taxation</b>	<b>₹ 5,087,249</b>	<b>₹ 6,756,838</b>	<b>₹ 8,434,577</b>	<b>₹ 10,124,194</b>	<b>₹ 11,829,938</b>
Provision for Taxation	1526175	2027051	2530373	3037258	3548981
<b>Profit After Taxation</b>	<b>₹ 3,561,074</b>	<b>₹ 4,729,786</b>	<b>₹ 5,904,204</b>	<b>₹ 7,086,936</b>	<b>₹ 8,280,957</b>
<b>h. DEBT SERVICE COVERAGE RATIO (COMPANY AS A WHOLE)</b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Profit After Tax</b>	<b>₹ 3,561,074</b>	<b>₹ 4,729,786</b>	<b>₹ 5,904,204</b>	<b>₹ 7,086,936</b>	<b>₹ 8,280,957</b>
Add: - Interest Expenses (Term Loan) @12% /Annum for 10yrs	3409751	2790662	2103348	1340290	493139
Interest Expenses (WC Loan) @12% /Annum for 10 yrs	0	0	0	0	0
Depreciation	6099400	5292990	4596692	3995073	3474908
<b>Total (A)</b>	<b>3274251</b>	<b>4678790</b>	<b>5338345</b>	<b>5997684</b>	<b>6669998</b>
Interest Expenses (Term Loan) @12% /Annum for 10yrs	3409751	2790662	2103348	1340290	493139
Interest Expenses (WC Loan) @12% /Annum for 10 yrs	0	0	0	0	0
Term Loan Repayment	635019	708503	790490	881964	984024
<b>Total Debt Payment (B)</b>	<b>4044770.0</b>	<b>3499165.5</b>	<b>2893838.3</b>	<b>2222253.7</b>	<b>1477163.4</b>
<b>DSCR (A/B)</b>	<b>0.65</b>	<b>1.13</b>	<b>1.57</b>	<b>2.30</b>	<b>3.85</b>
<b>Cash Inflow</b>	<b>₹ 2,639,232</b>	<b>₹ 3,970,287</b>	<b>₹ 4,547,855</b>	<b>₹ 5,115,720</b>	<b>₹ 5,685,974</b>
<b>i. BREAK EVEN ANALYSIS</b>					
	<b>1<sup>st</sup> year</b>	<b>2<sup>nd</sup> year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
A. Net Sales	29400000	31500000	33600000	35700000	37800000
B. Variable Expenses	1000000	1500000	2000000	2500000	3000000
Raw Materials Consumed	3750000	4000000	4250000	4500000	4750000
Consumables Stored	52500	56000	59500	63000	66500
Repairs & Maintenance	37500	40000	42500	45000	47500
Other Manufacturing Exp.	1125000	1200000	1275000	1350000	1425000
	<b>4965000</b>	<b>5296000</b>	<b>5627000</b>	<b>5958000</b>	<b>6289000</b>
C. Contribution (A-B)	24435000	26204000	27973000	29742000	31511000
<b>D. Fixed Expenses</b>					
Direct Labour & Wages	20880000	21924000	23020200	24171210	25379770.5
Selling, General & Administration	350000.0	402500.0	462875.0	532306.3	612152.2
	<b>21230000</b>	<b>22326500</b>	<b>23483075</b>	<b>24703516</b>	<b>25991923</b>
<b>Breakeven Sales at Operating Capacity</b>	<b>0.83</b>	<b>0.83</b>	<b>0.83</b>	<b>0.83</b>	<b>0.83</b>



j. **Balance Sheet**

	1st Year	2nd Year	3rd Year	4th Year	5th Year
<b>Liabilities</b>					
Capital	25845000	27220000	28647200	30129210	31668771
Revenue Reserves	34692000	37170000	39648000	42126000	44604000
<b>Net Worth</b>	<b>60537000</b>	<b>64390000</b>	<b>68295200</b>	<b>72255210</b>	<b>76272771</b>
Term Loan	35000000	35000000	35000000	35000000	35000000
Working Capital Limit	8500000	8500000	8500000	8500000	8500000
<b>Current Liabilities</b>					
Creditors	6805000	7161800	7532303	7917193	1979298
Liability for expenses	0	0	0	0	0
<b>Total</b>	<b>₹ 110,842,000</b>	<b>₹ 115,051,800</b>	<b>₹ 119,327,503</b>	<b>₹ 123,672,403</b>	<b>₹ 121,752,069</b>
<b>Assets</b>					
<b>Fixed Assets</b>					
Gross block	14500000	14500000	14500000	14500000	14500000
Depreciation	6099400	5292990	4596692	3995073	3474908
<b>Net Fixed Assets</b>	<b>8400600</b>	<b>9207010</b>	<b>9903309</b>	<b>10504927</b>	<b>11025092</b>
Non Current asset/investments	92256168	91310103	92802739	95978155	92967403
<b>Current assets</b>					
Inventory	7546000	10564400	12073600	12073600	12073600
Debtors	0	0	0	0	0
Security Deposits	0	0	0	0	0
Loans and Advances	0	0	0	0	0
Cash & Bank Balance	2639232	3970287	4547855	5115720	5685974
<b>Total</b>	<b>₹ 110,842,000</b>	<b>₹ 115,051,800</b>	<b>₹ 119,327,503</b>	<b>₹ 123,672,402</b>	<b>₹ 121,752,069</b>



#### 14. Projected Employment Details

Type of Employment	Number of Employees	Projected Cost (in Lakhs)
Skilled	5	696000
Semi-skilled	10	696000
Un-skilled	20	696000
<b>Total Personnel</b>	<b>35</b>	<b>INR 20,88,000.00</b>

#### 15. Statutory Clearances Required

Item	Status
Business Entity Deed	To be filled by applicant
Lease deed registration	To be filled by applicant
PAN	To be filled by applicant
GST Registration	To be filled by applicant
UDYAM	To be filled by applicant
Trade License	To be filled by applicant
Pollution Control Board	To be filled by applicant
Electricity and Power	To be filled by applicant
Fire and Safety	To be filled by applicant
Water and Sanitation	To be filled by applicant