

COCONUT BASED INDUSTRIAL PARK AT KUTTIYADI, KOZHIKODE DISTRICT



COCONUT PRODUCTION IN INDIA

- 90% of world coconut production is from Asia Pacific region (mainly Philippines, Indonesia, India and Sri Lanka).
- Indian production - 1572 Cr. nuts/year.
- India ranks second in production & productivity of coconut is 8300 nuts/ hectare.
- Present utilization :

–raw nut	–	50%
–Copra	–	35%
–Tender nut	–	11%
–Seed purpose	–	2%
–Industrial Application	–	2%

KERALA SCENARIO

- Cultivated in 7.88 lakh hectares (42% in India).
- Annual production – 580 Cr. nuts (37% of National production).
- In India, Kerala is the largest producer, followed by Tamil Nadu and Karnataka.
- Main source of income to more than 3.5 million families in the State.
- Extensively used as food ingredient and coconut oil.

PRODUCTION DETAILS IN 4 LEADING DISTRICTS (2009-10)

District	Area (Ha.)	% share	Production (Lakh nuts)	% share	Productivity (Nuts / Ha.)
Kozhikode	119166	15.3	8680	15.32	7284
Malappuram	108380	13.92	10630	18.76	9808
Thrissur	77509	9.95	5380	9.49	6941
TVM	71376	9.17	5910	10.43	8280

PRODUCTION & EXPORT SCENARIO

	KERALA	SRI LANKA
Area (Ha.)	7,78,618	3,95,000
Production	56,670 Million	2619 Million
Exports: 2010-11 (other than coir & coir products)	USD 94 Million (All India)	USD 247 Million

KUTTIYADI COCONUT PARK PROPOSAL

- The State Govt. is keen to promote Coconut based Industrial Parks for value addition in the sector.
- KSIDC is establishing a Coconut based Industrial Park at Kuttiyadi.
- Will create the supporting infrastructure and allot individual plots for new Coconut based units.

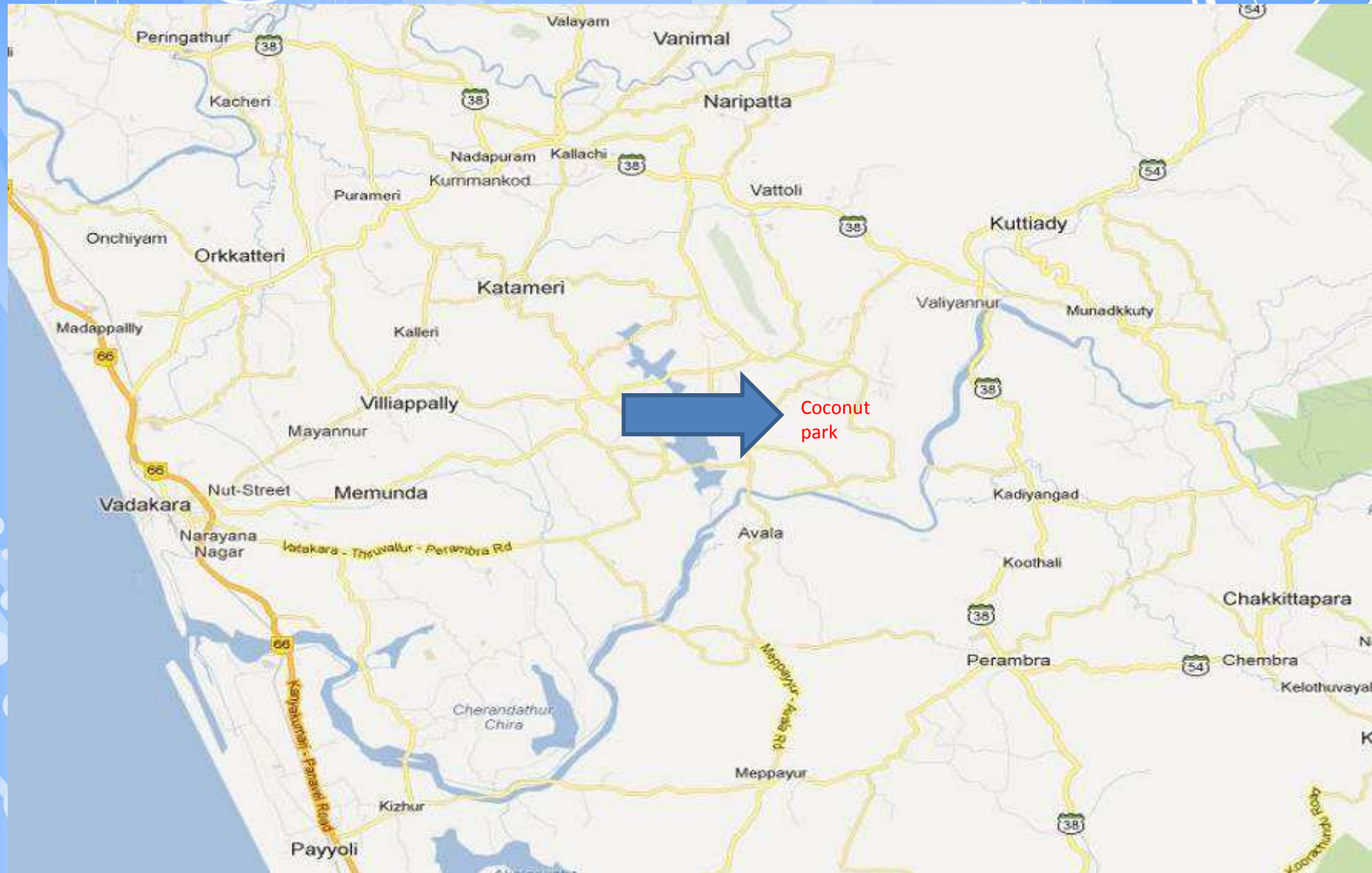
OBJECTIVE OF THE PARK

- To set up world-class facility to house processing units with high standards of safety & hygiene.
- Units to cater to export & domestic markets.
- Fully developed plots to accommodate units.
- Supporting infrastructure to facilitate growth of coconut based industries in the State.

KUTTIYADI PARK DETAILS

- Area - 115 Acres .
- Location – Velom village, Vadakara Taluk, Kozhikkode District.
- Nearest Airport – Kozhikode - 75kms.
- Nearest Railway Station – Vadakara - 21 kms.
- Nearest Sea Port – Mangalore - 200 kms.
- Locational Advantage- Heartland of coconut cultivation in the state

COCUNUT BASED INDUSTRIAL PARK, KUTTIYADI



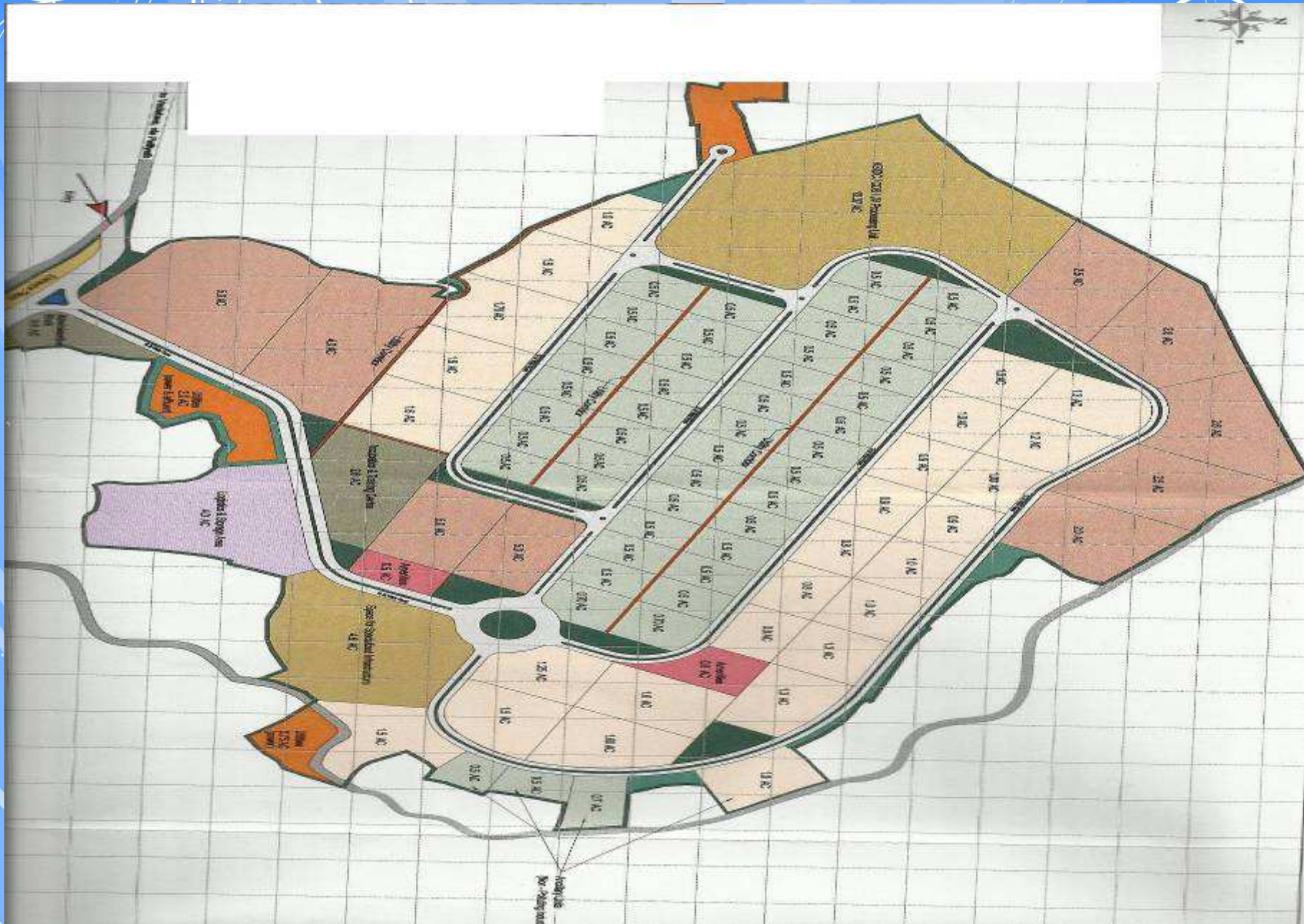
PRESENT STATUS

- Land taken in possession.
- Feasibility Report and Master Plan prepared.
- Tender documents being prepared for civil construction
- Steps initiated for creation of other infrastructure support.
- Technology Development Centre to be established.

INFRASTRUCTURE PROPOSED

- Water supply system –Initial capacity -1MLD, from Kuttiyadi River - 1.5 KM away.
- Access Road – 4.5 KM long Panchayath road to be widened.
- Internal roads - to be developed as per Master plan
- Power – 6MVA; Initially 11KV feeder from Kuttiyadi sub-station is proposed.
- Effluent treatment Plant: about 2.5 lakhs Litres capacity is proposed
- Rain Water Harvesting – Rain water harvesting along with road drains

MASTER PLAN BASED LAND USE



FACILITIES PROPOSED

- The Park will be divided into 3 Zones.
- Zoning proposed as follows:
 - Area for units producing coconut water based items
 - Area for kernel based units
 - Area for coconut wood & charcoal based units
- Individual plots of 50 cents to 5 Acres shall be developed for allotment to units.
- Technology Demonstration & Common Facility Centre.
- Power & Water Supply arrangements.

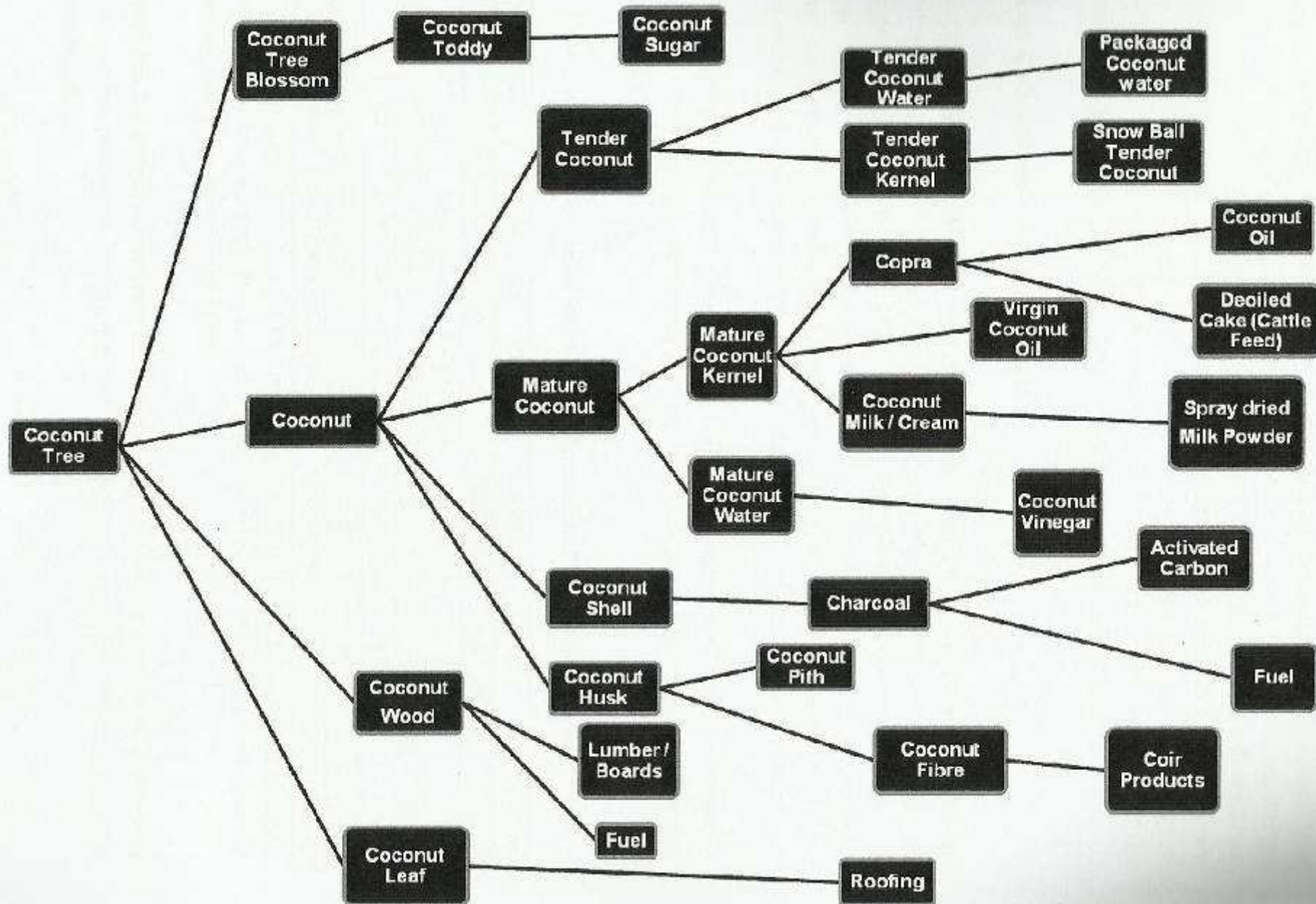
TECHNOLOGY DEMONSTRATION CENTRE

- Technical support to first generation entrepreneurs until they stabilize their operations.
- Pilot plants.
- Quality control & testing lab :
 - Raw material testing
 - In Process testing
 - Finished product testing
 - Testing of other ingredients
- Mandatory quality control checks are required at various stages of processing and testing of the final product including its shelf life.
- Centralized testing and quality control facilities will help the units to comply with high quality standards.
- CDB support by way of grant

ADVANTAGES OF THE PARK

- Attract processing units.
- Enhance income level of people.
- Employment generation.
- Enhance utilization of different parts of coconut tree in a scientific manner.
- Export revenue for the country.

COCONUT VALUE CHAIN



PRODUCT LINES

- Coconut water based products (Tender Coconut Water, Water based beverages, Vinegar, Nata-de-Coco, etc).
- Kernel based products (Desiccated Coconut, Coconut Milk, Spray Dried Milk Powder, Cream, Virgin Coconut Oil, Chips, Coconut Oil, etc).
- Shell based products (Shell Powder, Shell Charcoal, Activated Carbon, Handicrafts, etc).
- Coconut husk (Coir & Coir products).

PROJECT IDEAS

Virgin Coconut Oil

- Virgin Coconut Oil (VCO) - 1200Kg/day is extracted from fresh coconut meat without chemical processes.
- It is rich in medium chain fatty acids, particularly lauric acid and also rich in minerals, vitamins, antioxidants etc.
- It is widely used in soaps, lotions, creams and lip balms.
- Installed capacity : 1200Kg/day.
- Project cost : Rs.180 Lakhs.
- Raw material requirement: 20000 coconut/day.
- Technology : Central Food Technological Research Institute and will getting the same from the Coconut Development Board, Govt. of India, Cochin.

COCONUT SHELL ACTIVATED CARBON

- Extensively used in the process of refining and bleaching of vegetable oils and chemical solutions, water purification, recovery of solvents, recovery of gold etc.
- The unit adopts steam activation process to produce good quality activated carbon.
- The coconut shell charcoal is activated by reaction with steam at a temperature of 900°C -1100°C under controlled atmosphere in a rotary kiln.
- Activated carbon manufactured from coconut shell is considered superior to those obtained from other sources.
- Anticipated growth : 20%.
- Installed capacity : 10 Tonnes/day.
- Project cost : Rs. 600 Lakhs.
- Raw material requirement: 9,00,000 coconut shells/day

SPRAY DRIED COCONUT MILK POWDER

- Available in convenient and ready to use packs with same freshness of a fresh coconut milk.
- Longer shelf life; convenient to use.
- Can be used in place of fresh coconut milk for food preparations / beverages in households and food industries by dissolving it in water.
- CFTRI, Mysore has developed the technology for spray dried coconut milk powder which is available to entrepreneurs at a total know-how fee of Rs.5 lakhs.
- Spray dried coconut milk powder has a good market potential in India and in international market.
-
- Installed capacity : 1 Tonne/day.
- Project cost : Rs. 350 Lakhs.
- Raw material requirement: 20,000 coconuts/day.

COCONUT MILK & MILK CREAM

- Coconut cream is the processed milk extracted from fresh matured coconuts.
- This is an instant product, which can either be used directly or diluted with water to make various preparations such as curries, sweets, desserts, puddings, etc. It can also be used in the manufacture of bakery products and for flavouring food stuffs.
- Processed and packed coconut cream has a shelf life of six months.
- Technology developed by the RRL, Thiruvananthapuram.
- Installed capacity : 2.5 Tonnes/day.
- Project cost : Rs. 150 Lakhs.
- Raw material requirement: 10,000 coconuts/day.

NATA-DE-COCO

- Nata-de-coco is a cellulosic white to creamy yellow substance formed by acetobacter Xylinium, on the surface of sugar enriched coconut water / coconut milk.
- It is popularly used as a dessert.
- It is also used as an ingredient in other food products, such as ice cream, fruit cocktails, etc.
- Installed capacity : 2 Tonnes/day.
- Project cost : Rs. 50 Lakhs.
- Raw material requirement: 10,000 Litre of matured coconut water/day.
- Technology available from the Coconut Development Board.

PRESERVATION & PACKING OF TENDER COCONUT WATER

- Is a sterile, nutritious & thirst quenching health drink.
- Processing and packing of tender coconut water with a capacity of 10,000 tender nuts per day, yielding 2000 litres of tender coconut water.
- Tender coconut water enjoys a great potential as a health drink in India and international market.
- Project cost : Rs.90 lakhs.
- Technology: The Coconut Development Board in collaboration with Defence Food Research Laboratory, Mysore has developed the technology for packing tender coconut water in pouches/aluminium cans.
- Technology Transfer fee Rs.3.5 lakhs.

COCONUT SHELL CHARCOAL

- Superior in quality compared to wood charcoal; higher calorific value than other agro wastes.
- Used widely as domestic and industrial fuel.
- Used to produce activated carbon.
- Manufactured by burning shells of fully matured nuts in limited supply of air sufficient only for carbonisation, but not for complete destruction.
- Installed capacity : one tonne/day
- Project cost : Rs.30 Lakhs
- Raw material requirement: 30000 Coconut shells
- Technology : Available from the Coconut Development Board.

FINANCIAL SUPPORT FROM KSIDC

- Term Loan assistance for medium & large scale units.
- Equity participation for large scale projects, considering merits of the case.

The background is a vibrant blue with a subtle pattern of vertical stripes. It is adorned with intricate white decorative elements, including swirling lines, delicate leaves, and small circular dots, primarily concentrated in the upper corners. The overall aesthetic is clean and modern.

THANK YOU