TAMIL NADU RURAL TRANSFORMATION PROJECT

Business Plan for Arecanut Plate Manufacturing unit

1. Village Panchayat:	AA	
2. Block:	BB	
3. District:	DD	
4. Applicant:	Mr. AAA	
5. Activity:	Arecanut plate manufacturing	
6. Classification:	MSME	
7.Sector classification (TNRTP)	Manufacturing - Nano Category	
8. Purpose of Note:		
To recommend for sanction of the following limits: Term Loan/Working		
Capital Demand Loan/Composite Loan (Rs. In Lakhs)		
9. Nature of Facility	Term Ioan – Composite Ioan	
10. Purpose	For expansion of existing Arecanut plate	
	manufacturing unit.	
11. Limit required	Rs.4.50 lakhs.	
12. Margin	10% of the project cost of Rs 5.00 lakhs i.e Rs.0.50 Lakhs	

Introduction: (Details of Promoter name, age, qualification and experience, activity to be financed, existing or new unit, any existing facilities with Banks etc. The present request for loan and purpose.)

Mr. AAA, aged 45 years is from AA village, BB Block, CC Taluk, DD District. He has been running a Arecanut manufacturing unit for the past nine years and has good experience in the line of activity. The present request is for term loan – composite loan of Rs. 4.50 Lakhs under TNRTP Matching Grant Programme for purchase of additional dyes, construction of shed for storage of raw materials, as well as working capital for smooth conduct of day to day operations.

About the product:

Areca leaf plates are a better alternative to Plastics/Polymer based products and also paper based products about which the entire world is worried about. A complete natural process is followed for manufacturing these plates.

Advantages of Areca Plates:

- 1. Eco-friendly, Bio-degradable and Compostable.
- 2. Trees are not cut down. The areca palm tree shed the sheath, which is the primary raw material for the Arecanut plates.

- 3. No Chemicals, bleaching, PE (Poly Ethylene) coating, Wax coating at any stage.
- 4. Light weight, sturdy and non-crushable.
- 5. Microwave and fridge healthy.
- 6. Holds liquid items for 4 hours without leakage.
- 7. Suitable for hot, cold and wet foods.

I. Profile of the Entrepreneur

Name	AAA
Spouse Name	
Age	45 Years
Education	SSLC
Aadhaar Card No	86XXXX111111
Pan Number	AW1111111Y
Address	
Phone No	Nil
Mobile No	911111111
Email ID	Nil
No of years experience in business	9 Years
Trainings attended	One week – EDI through
	RUDSET
Spouse's occupation	House wife.
If Special category	Most Backward Class

II. Enterprise Profile

Name of the Enterprise	SPT Enterprises	
Legal form of Enterprise	Sole Proprietorship	
Registration No	222222222(Part-I)	
Registration Date	01.02.21	
Registered with whom	District Industrial Centre	
GST No (if available)	Nil	
Udhayam Registration(if available)	Yet to be done.	

III. Bank Linkage Details

Whether the enterprise has separate	Yes
bank account	
If any bank credit availed	Yes
Name of the bank and Branch Details	With ABC BANK
Nature of the bank facility	Term Loan
Limit Sanctioned	Presently the account is closed
Balance outstanding as on date	0

IV. Enterprise Nature

Type of Enterprise	Manufacturing
Product to be produced:	Arecanut plates
Service to be offered:	1. Retail Sales 2. Export Sales 3. Wholesale Supply
Present	The unit is located in a central place in the village, well connected to the road and easy approach to the consumers.
Demand	There is good demand in the domestic market as well as export market for arecanut plates. It is stated that the entire production will be consumed in the domestic as well as export market. Further there are one or two similar units in the nearby village panchayats. Hence there is no dearth for demand for the product. The product can also be marketed directly in retail stores and to consumers who purchase in bulk.
Current Supply	The capacity of the unit is production of 2000 Numbers of plates at 100% capacity with one shift of 8 hours and 300 days per annum. Initial production in the I year is assumed at 50% of the installed capacity. The raw material i.e. the areca palm tree sheath is available in Karnataka, Tamilnadu – Chinna salem and is available through aggregators. No issues are envisaged in the production and supply.

V. TECHNICAL FEASIBILITY:

Location / Infrastructure:	
1. Location Brief on Location – Whether well connected to market by road etc., 2. Land Extent of Land, sq.ft.	The unit is located in a central place in the village, well connected to the Madurai-Tiruchy Main road and easy approach to the consumers as well as suppliers of raw materials. The business is proposed to be run in own premises. The required land space
Panchayat approval, own/leased	of 100 sq. mts is available. Panchayat approval for the proposed activity is obtained.
3. Building Approved plan from local body, sq,ft, whether sufficient for the proposed activity	The applicant has already constructed a shed to house the existing machines. Approval/License from Village Panchayat is obtained (approval no.1111111). Now he propose to construct a shed for storage of rawmaterials for uninterrupted supply even during rainy season.
4. Power Whether required power connection is available	The required power for running the unit will be around 6 HP per day. The required three phase connection has been obtained. The power consumption is expected to be 700 units per month at Rs.6.30 per unit.
5. Water Whether adequate water is available.	Around 1000 liters of water is required every day. Adequate water resource is available at the site to be drawn through bore well.
6. Approval Pollution control Board/GST/FSSAI approvals or any other approval is required. Present Status	Board approval. Follow up is being

7. Materials Needed

Quantity / Cost / Availability / Delivery Time to be discussed.

- a. Raw materials:
- b. Equipment :
- c. Technology :

Raw-materials

The areca palm tree, shed the sheath, which is the primary raw material used in the areca plates manufacturing process.

The sheath connects the leaf part and the stem of the areca tree.

The sheaths have to be properly stored. A minimum quantity of 40000 sheaths(two lorry loads of 20000 Nos each) to be procured for smooth and continuous production more particularly during the rainy season as supply will not be available during this season. Each sheath is at a cost of Rs.3.50 per piece. The raw material is to be sourced from Tumkur District, Karnataka directly from farm, Advance payment has to be made. Delivery is expected to be within a week's time from the placement of order.

Equipment:

The applicant is already having the required machines (i.e. two units of 5 hand operated machines). He requires six dyes for making export quality plates.

1. 6 Dyes for export quality plates each costing Rs.40000/-

The Dyes are to be procured from Bio world machine supplier, Salem.

Technology:

The applicant has necessary experience for operating the machine. Further he underwent training in BBBSET, Madurai. The required technological support will be provided by the supplier itself.

8.Cost of capital assets:

Details of equipment/machinery with

1.Construction of Shed - 1,00,000/-

cost of individual item required along with quotations.	2.Dyes – (6 Nos at Rs.40,000/- Each) - 2,40,000/-	
9. Cost of working capital for one operating cycle a. raw-materials, b. Semi-finished goods, c. finished goods, d. receivables outstanding e.Total working capital needs	The working capital requirement is arrived at Rs.1.60 lakhs as per Annexure A.	
(The value of raw-materials, semi-finished goods, finished goods, receivables outstanding to be arrived)		
OR		
25% of projected annual sales turnover if necessary. (The projected annual sales should be reasonable and acceptable)	The assessment has been done as per holding levels detailed in annexure A.	
10.Skills Requirements: skilled labour available / Not available If not available: whether people can be trained? If so, training period and training facility?	of activity for nine years and has the required skills to run the unit. The unit has two sets of five machines each. Two	
11.Production Process:		
a.Production Plan/cycle (operating cycle may be one- day / week / month or one year as per the activity selected):	 The areca sheaths will be soaked in the freshwater for 20 minutes. Using a soft brush, the sheaths are scrubbed to remove dust and the sand particles. 	
	 The next step is to drain the water in the sheath. After 	

draining the water, the sheath is pressed in the areca leaf plate making machine.

- This leaf plate making machine consists of two pressing heads upper and lower. The upper head is fixed to an upper channel while the lower pressing head moves up and down.
- Both the pressing heads contain a heating coil inside. When the device is turned on, it heats the pressing head.
- The areca sheath is placed between the hot pressing heads and tightly pressed to get the required shape of the plate.
- No chemical or any synthetic binders/adhesives are used in the areca plates manufacturing process.
- The contents of the plates are as it is what they were in the Areca sheath. The plate does not release any of its constituents to the food, whether hot or cold.
- After pressing the areca sheath into a plate, the next step is to grade the palm leaf plates manually.
- After grading, the palm plates' edges are sanded to give a smooth and beautiful finish, followed by cleaning on the plate surface. This process removes all the dirt and dust from the plates. Plates are left to dry, and before packing, it is ensured that it is free of moisture.

 The plates are packed in shrink wrap or gunny bag, then labelled and send it to customers.
The operating cycle is assumed at 89 days for the unit as detailed in Annexure A.

VI. COMMERCIAL FEASIBILITY:

Marketing strategy :	
a. Direct to customers :	There is considerable scope and demand
b. Bulk to Institutions :	for Arecanut plates. The entire
c. Through Retailers /	production is expected to be consumed
Wholesalers:	by the Export market through agents as
d. Through Online:	well as in the wholesale market. It is
	proposed to allocate a small counter for
	direct sales to customers also. Focus will
	also be on supply to local retailers.
e. Pricing & Discounts :	The average price of one piece is Rs.4/
	Bulk supply and immediate cash
	payment will be encouraged with a
	discount in price.
f. Market promotion	The marketing strategy will be to export
strategies:	first quality white areca plates through
	agent M/s. BBBB Company, in Madurai
	and the second quality will be sold in the
	domestic whole sale market.
g. Physical and digital	While the payments are also accepted by
connectivity:	way of cash, digital payments will be
	encouraged with appropriate equipment
	installed and cost will be borne by the
	applicant.
h. Risks and risk mitigation	Market risk – The unit is one of the two
planned:	units working in the village and nearby
	areas. Further the quality of the product
	will be superior due to high quality raw
	materials procured specially for export.

VII. ENVIRONMENT ASSESSMENT

To be entered as per the required Category of the enterprise proposed: (Green / Orange / Red) - Not classified in any category **Environment** | **Environment** Greening Support needed Issue Guidelines Measures or identified mitigation identified measures (for Implement Implement green, **Integrated** orange and the the (Please tick) red mitigation greening categories) measures measures Electricity NA NA To ensure Water **Exploitation** adequate of local measures resources for Proper disposal (water and of waste water energy) Dust/air ensure NA NA То adequate Waste pollutants generation measures and disposal Proper for disposal of dust and waste Areca leaf wastage to be used as Bio Fertilizer. Worker and Safety Safety NA NA Community measures masks, safety gadgets gloves, chappals to be provided.

Whether the activity proposed is in the negative list: No

VIII. FINANCIAL VIABILITY

1. Cost of the project and Means of the proj	ect:
a. Cost of the Project:	(Rs in lakhs)
i.Fixed capital	Machineries – 2.40
Cost of all the equipment's	Construction
/machinery/construction(excluding land	of shed - 1.00
cost)	
ii.Working capital	Working capital 1.60
iii.Pre-operative expenses	Nil
Total cost of the project (i + ii + iii)	5.00
b. Means of the project:	
i. Loan from financial Institution / Bank (95% or 90%):	4.50
ii. Margin money -Borrower's contribution (5% or 10%):	0.50
Total means of the project (i + ii)	5.00
c. Matching grant from the project**	1.50
Whether the entrepreneur has the sufficient	Yes. The applicant has
means to bring in the margin money and has	deposit to the extent of
enough buffer to manage any cost escalations	Rs.0.50 lakhs in the Bank.

^{**}Matching Grant is @30% of the total cost of the project (excluding preoperative expenses, land cost, lease). As Matching Grant will be kept in a "Subsidy Reserve Fund" account of the bank as a back-ended grant, it is not shown under the Means of the project. The matching grant to be adjusted as below:

	(R	s in Lakh	ıs)
Loan initially disbursed by the Bank	-	4.50	
Less 30% matching grant	-	1.50	
Balance principal amount to be repaid by			
_ , , ,	_	3 00	
•			

Upon completion of minimum period of 18 months and upon repayment of principal amount of Rs.3.00 lakhs and the interest portion, the matching grant of Rs.1.50 lakhs can be adjusted to the loan account of the borrower and the loan account can be closed.

IX. Repayment capacity

Particulars	Value in Rs.
Cash surplus from enterprise (as per	32562/-
annexure BB)	
Other income from house hold members	10,000/-
Total income	42,562/-
Total House hold expenses-	20,000/-
Net disposable income	22,562/-
50% of net disposable income	11,281/-
Repayment commitment	8,333/-
Loan repayment period is 54 months for	
Rs.4.50 lakhs.	
Principal repayment P.M. – Rs.8333/-	

50% of net disposable income covers the loan instalment. The repayment capacity is comfortable.

X. Recommendation:

As the proposal is viable and complies with the guidelines in respect of Matching Grant Programme, we may recommend to the concerned Bank.

Assessment of Working Capital

ANNEXURE - A

S.No.	Current Assset	Number of days/Months holding	Quantity required	Rate (Rs)	Value (Rs)
1.	Raw materials (40000 Nos of Sheaths at Rs.3.50 per sheath)	80 days*	40000 Pieces	Rs.3.50 per Piece	1,40,000/-
2.	Finished Goods	2 days	Cost of proper Rs.791500/days* 2days	annum 300	5276/-
3.	Debtors (Export receivables)	7 days	Sales 600000/300 (Export assumed at total sales Lakhs)	Sales 50% of	14000/-
	Total	89 days			1,59,276/- (say Rs.1,60,000/-)

*Sheaths required per day is 500 Nos for producing 1000 plates per day in the I year. Hence the holding level is arrived at 80 days i.e.40000 pieces/500 pieces per day. The applicant has stated that though the supply of raw materials can be within a week's time from the date of order, at times there can be abnormal delay and during the rainy season the procurement is affected and there will not be supply. In order to have a smooth and continuous production throughout the year, the raw materials have to be procured in bulk and stored due to which the RM holding is arrived at 80 days.

Working Capital for One operating cycle of 89 days is Rs. 1,60,000/-. Raw materials is purchased on Advance payment basis.

Annexure B

BASIS & PRESUMPTIONS

- 1. Installed Capacity(100%) is 2000 Pieces i.e. plates based on the following:
 - Per day shift of 8 hours.
 - o 10 hand operated machines with 10 dyes.
 - o 200 plates per dye per day.
- 2. Raw material(Sheath) cost at 100% capacity is arrived at based on the following:
 - o On an average 2 plates can be made from one sheath.

 \circ Number of sheaths required for 2000 plates

per day - 1000

Cost per Sheath -Rs.3.50

Raw material cost per day -Rs.3500/
Raw Material cost per month(25 days) -Rs.87,500/-

o Raw Material Cost per Annum

(at 100% capacity for 300 days) - Rs.10,50,000/-

3. Sales at 100% is arrived at based on the following:

Average selling price per unit is fixed - Rs.4/-

 Sales per day at 100% capacity (2000 Numbers)

(2000 Numbers) - Rs.8000/-• Sales per month (25 days * Rs.8000/-) - Rs.2,00,000/-

Sales per annum

(300 days * Rs.8000/-) -Rs.24,00,000/-

- 4. To start with in the I Year the capacity utilisation will be 50% i.e 1000 pieces per day. In the II year 60% and III Year onwards 70%.
- 5. Packing material is assumed at 1% of Raw material cost.
- 6. Power consumption has been estimated at 700 units at Rs.6.30 per unit.
- 7. It is proposed to employ 3 workers at average of Rs.200/- per day totalling to Rs.600 per day. Total wages per month (25 days) will be Rs.15000/-.
- 8. Interest on Term loan and working capital is assumed at 11% p.a.

- 9. For the purpose of Depreciation, the value of existing machinery is estimated at Rs.5 lakhs, existing dyes Rs.1 lakhs and proposed dyes at Rs.2.40 lakhs. Total machinery and dyes valued at Rs8.40 lakhs.
- 10. Depreciation at 10% on Straight Line method on Rs.8.40 lakhs works out to Rs.84000/- p.a. Depreciation per month Rs.7000/-.
- 11. Other administration and sales expenses including repairs is assumed at 1% of sales.

ANNEXURE BB COMPUTATION OF CASH SURPLUS

Particulars (per month)	Value in Rs.
Sales per month (A) (1000 plates*25 days*Rs.4)	1,00,000
Cost of Sales	
Cost of Raw materials per month(500	43,750
Sheath*Rs.3.50 per sheath*25 days)	
Packing material	438
(1% of RM cost)	
Wages (3 Persons at Rs.200/- each = Rs.600) for	15,000
25 days.	
Power (700 units @ Rs.6.30/- per unit) Rs.4410	4,500
say Rs.4500/-	
Other admin & selling expenses including	1,000
repairs(1% of sales)	
Depreciation (10% of 840000/12)	7,000
Interest @11% on Net loan after Matching Grant	2750
i.e.(Rs.4.50 Lakhs - Rs.1.50 Lakhs = Rs.3 Lakhs)	
Cost of sales per month (B)	74438
Net profit per month	25562
Cash surplus (Net profit + Depreciation)	32,562

Prepared by S. Gopal Ratnam Consultant – BPF TNRTP.