PROJECT REPORT

Of

MELAMINE CROCKERY

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Melamine Crockery**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

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PROJECT AT A GLANCE

1	Name of the Entreprenuer		xxxxxxxxxx	
2	Constitution (legal Status)		xxxxxxxxxx	
3	Father / Spouse Name		xxxxxxxxxxxx	
4	Unit Address	:	xxxxxxxxxxxxxxxxxxxxxxx	
			District : xxxxxxx	
			Pin: xxxxxxx	State: xxxxxxxxxx
			Mobile xxxxxxx	
5	Product and By Product	:	**MELAMINE CROCKERY SET**	
6	Name of the project / business activity proposed :		**MELAMINE CROCKERY BUSINESS UNIT**	
7	Cost of Project	:	Rs.39.78 Lakhs	
8	Means of Finance			
	Term Loan		Rs.28.8 Lakhs	
	Own Capital		Rs.3.98 Lakhs	
	Working capital		Rs.7 Lakhs	
9	Debt Service Coverage Ratio	:	2.40	
10	Pay Back Period	:	5	Years
11	Project Implementation Period	:	5-6	Months
12	Break Even Point	:	25%	
13	Employment	:	9	Persons
14	Power Requirement	:	30.00	HP
15	Major Raw materials	:	Melamine Powder, Decal Paper, Methanol, Packing material	
16	Estimated Annual Sales Turnover (Max Capacity)	:	319.96	Lakhs
17	Detailed Cost of Project & Means of Finance			

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	30.50
Furniture & Fixtures	1.50
Working Capital	7.78
Total	**39.78**

MEANS OF FINANCE

Particulars	Amount
Own Contribution	3.98
Working Capital(Finance)	7.00
Term Loan	28.80
Total	**39.78**

MELAMINE CROCKERY

Introduction: Melamine crockery is a hardwearing and extremely damage resistant alternative to porcelain. Melamine formaldehyde is derived from the polymerization of melamine and formaldehyde. It is a hard thermosetting plastic that is a highly versatile synthetic polymer which exhibits a range of properties such as high structural stability, high resistance to heat and fire than that compared to polypropylene and polyvinyl chloride. Melamine crockery is a thermoset plastic resin made from organic compounds. Its physical properties and appearance has made it a popular material for manufacturing hard wearing products across a number of industries.One of the biggest benefits of melamine is that it is hardwearing. Melamine plays an important role in wide range of flame-resistant materials, due to high nitrogen percentage in upholstery fabrics and firemen uniforms, thermal liners, heat resistant gloves and aprons. This report deals with Melamine crockery set comprising of 4 full plates, 6 Quarter plates, 8 Bowls and 12 Spoons.

Uses & Market Potential: Melamine formaldehyde finds applications in various industries such as construction, furniture, automobile, textile, paper, electrical and household among others. The construction and furniture industry was the major consumer of melamine formaldehyde in

2012.As it is safe to be dropped and almost impossible to chip or crack during normal use, melamine crockery is ideally suited to bustling semi-formal dining environments and outdoor catering. Because of its superior appearance and quality feel, melamine is the trusted alternative to traditional crockery for many weddings and corporate caterers. The strength of the material, it can be dropped and will rarely break, giving it a distinct advantage over traditional crockery ranges. This remarkable property of melamine crockery makes it the perfect choice for any establishment where accidents might be expected to happen, such as pubs, care homes, schools and hospitals, or even mobile catering units.

Raw material: Major raw materials are as follows:

1. Melamine Powder
2. Decal Paper
3. Methanol
4. Packing material

Machinery requirements: Major machines & equipments are as follows:

S No.	Description	Qty.	Amount
1.	Melamine Crockery making machine	1	2660000
2.	Scrap Grinder	1	50000
3.	Profile Dies	4	300000
4.	Other equipments & hand tools	Ls	40000
	Total Amount		**3050000**

Manufacturing Process: At first, the raw material is procured from the authorized vendor and stored in the inventory. The first step is to mix the melamine powder with methanol and water in required composition. The average composition of melamine powder is (40%), water (40%), methanol (20%). The mixture is thoroughly mixed and stirred for 10 -15 minutes and allowed to setup. This mixture is used to coat over the surface of cured article for paper pasting.

In the next step, the melamine powder is brought out from the inventory and

weight as per product requirement. The mixture is heated in a baking oven to a temperature of 50°C to remove the moisture content. Place the decal papers on flat plate, use brush to disperse the mixture evenly on each side of papers, which shall then be put at good-ventilation places for drying.
In the next step, the profile dies as per the shape requirement of product are mounted precisely in the machine. After this, the baked powder is precisely placed on the die. The machine closes the punch at desired pressure and allowed to come back at normal pressure conditions. This process is called as curing cycle. Almost 70-80% of the article is cured. At this stage surface of the molded article shows no sign of brightness and is soft in nature.
In the next step, open up mould and make the side with decal decorated paper on the surface of the article.Re-close mould and return to normal pressure and temperature for 2-3 minutes. Special attention shall be paid to the procedure of degassing, which is generally performed 5-10 seconds after re-close of mold.
In the next step, the molded articles are taken out. The burrs and uneven surface is removed using hand grinder or knifes. After this, the articles are quality checked for any defects. The non-uniform pieces are grinded using grinder. After this, the articles are packed and dispatched as per required quantity.

Area: The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500 to 2000Sqft.

Power Requirement: The power consumption required to run all the machinery could be approximated as 30 Hp

Manpower Requirement: There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 9 including 1

Supervisor, 1 Plant operator, 1 unskilled worker, 2 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

Approvals & Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.
- NOC from State Pollution Control Board

Implementation Schedule:

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

FINANCIALS

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	5.73	10.00	14.92	19.99
Add: Additions	3.98	-	-	-	-
Add: Net Profit	6.26	9.27	11.92	16.07	20.76
Less: Drawings	4.50	5.00	7.00	11.00	15.00
Closing Balance	5.73	10.00	14.92	19.99	25.75
CC Limit	7.00	7.00	7.00	7.00	7.00
Term Loan	25.60	19.20	12.80	6.40	-
Sundry Creditors	3.57	4.22	4.69	5.16	5.63
TOTAL :	**41.91**	**40.42**	**39.41**	**38.55**	**38.38**
APPLICATION OF FUND					
Fixed Assets (Gross)	32.00	32.00	32.00	32.00	32.00
Gross Dep.	4.73	8.75	12.18	15.09	17.58
Net Fixed Assets	27.28	23.25	19.82	16.91	14.42
Current Assets					
Sundry Debtors	6.29	7.46	8.49	9.56	10.67
Stock in Hand	5.27	6.19	6.96	7.75	8.56
Cash and Bank	3.07	3.52	4.14	4.34	4.74
TOTAL :	**41.91**	**40.42**	**39.41**	**38.55**	**38.38**

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PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	188.80	223.69	254.58	286.67	319.96
Total (A)	**188.80**	**223.69**	**254.58**	**286.67**	**319.96**
B) COST OF SALES					
Raw Material Consumed	153.09	180.84	200.93	221.02	241.11
Elecricity Expenses	1.83	2.05	2.28	2.51	2.74
Repair & Maintenance	3.78	4.47	6.36	8.60	9.60
Labour & Wages	10.33	10.85	13.02	15.62	18.75
Depreciation	4.73	4.02	3.43	2.92	2.49
Cost of Production	173.75	202.24	226.02	250.67	274.69
Add: Opening Stock /WIP	-	2.72	3.17	3.61	4.07
Less: Closing Stock /WIP	2.72	3.17	3.61	4.07	4.54
Cost of Sales (B)	171.03	201.78	225.58	250.22	274.21
C) GROSS PROFIT (A-B)	17.77	21.90	28.99	36.45	45.74
	9.41%	**9.79%**	**11.39%**	**12.71%**	**14.30%**
D) Bank Interest (Term Loan)	3.12	2.55	1.85	1.14	0.44
ii) Interest On Working Capital	0.77	0.77	0.77	0.77	0.77
E) Salary to Staff	5.04	6.05	7.26	8.71	10.45
F) Selling & Adm Expenses Exp.	1.89	2.24	5.09	5.73	6.40
TOTAL (D+E)	**10.82**	**11.61**	**14.97**	**16.36**	**18.06**
H) NET PROFIT	6.95	10.30	14.02	20.09	27.68
	3.7%	**4.6%**	**5.5%**	**7.0%**	**8.7%**
I) Taxation	0.70	1.03	2.10	4.02	6.92
J) PROFIT (After Tax)	6.26	9.27	11.92	16.07	20.76

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	**I**	**II**	**III**	**IV**	**V**
SOURCES OF FUND					
Own Contribution	3.98	-			
Reserve & Surplus	6.95	10.30	14.02	20.09	27.68
Depriciation & Exp. W/off	4.73	4.02	3.43	2.92	2.49
Increase In Cash Credit	7.00				
Increase In Term Loan	28.80	-	-	-	-
Increase in Creditors	3.57	0.65	0.47	0.47	0.47
TOTAL :	**55.03**	**14.97**	**17.92**	**23.48**	**30.64**
APPLICATION OF FUND					
Increase in Fixed Assets	32.00	-	-	-	-
Increase in Stock	5.27	0.92	0.77	0.79	0.81
Increase in Debtors	6.29	1.16	1.03	1.07	1.11
Repayment of Term Loan	3.20	6.40	6.40	6.40	6.40
Taxation	0.70	1.03	2.10	4.02	6.92
Drawings	4.50	5.00	7.00	11.00	15.00
TOTAL :	**51.96**	**14.51**	**17.31**	**23.28**	**30.24**
Opening Cash & Bank Balance	-	3.07	3.52	4.14	4.34
Add : Surplus	3.07	0.46	0.61	0.20	0.40
Closing Cash & Bank Balance	**3.07**	**3.52**	**4.14**	**4.34**	**4.74**

COMPUTATION OF MAKING OF MELAMINE CROCKERY SET			
Item to be Manufactured Melamine Crockery Set			
Manufacturing Capacity per day		200	Set
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		60,000	Set
Total Production per Annum		60,000	Set
Year		Capacity Utilisation	MELAMINE CROCKERY
I		40%	24,000.00
II		45%	27,000.00
III		50%	30,000.00
IV		55%	33,000.00
V		60%	36,000.00

COMPUTATION OF RAW MATERIAL					
Item Name		Quantity of Raw Material	Unit	Unit Rate	Total CostPer Annum (100%)
Melmaine Powder		2,40,000.00	Kg	120.00	2,88,00,000.00
Decal Paper		6,00,000.00	Pcs	15.00	90,00,000.00
Methanol		2,400.00	Kg	30.00	72,000.00
Packing material		Lumsum			4,00,000.00
Total					**3,82,72,000.00**
Total Raw material in Rs lacs					382.72

Raw Material Consumed	Capacity Utilisation		Amount (Rs.)		
I	40%		153.09		
II	45%		180.84	5% Increase in Cost	
III	50%		200.93	5% Increase in Cost	
IV	55%		221.02	5% Increase in Cost	
V	60%		241.11	5% Increase in Cost	

COMPUTATION OF SALE					
Particulars	**I**	**II**	**III**	**IV**	**V**
Op Stock	-	400.00	450.00	500.00	550.00
Production	24,000.00	27,000.00	30,000.00	33,000.00	36,000.00
	24,000.00	27,400.00	30,450.00	33,500.00	36,550.00
Less : Closing Stock(5 Days)	400.00	450.00	500.00	550.00	600.00
Net Sale	23,600.00	26,950.00	29,950.00	32,950.00	35,950.00
Sale Price per Set	800.00	830.00	850.00	870.00	890.00
Sale (in Lacs)	**188.80**	**223.69**	**254.58**	**286.67**	**319.96**

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(5 Days requirement)	2.72	3.17	3.61	4.07	4.54
Raw Material					
(5 Days requirement)	2.55	3.01	3.35	3.68	4.02
Closing Stock	**5.27**	**6.19**	**6.96**	**7.75**	**8.56**

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	**Amount**	**Margin(10%)**	**Net Amount**
Stock in Hand	5.27		
Less:			
Sundry Creditors	3.57		
Paid Stock	**1.70**	**0.17**	**1.53**
Sundry Debtors	6.29	0.63	5.66
Working Capital Requirement			**7.19**
Margin			0.80
MPBF			**7.19**
Working Capital Demand			**7.00**

BREAK UP OF LABOUR				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		22,000.00	1	22,000.00
Plant Operator		18,000.00	1	18,000.00
Unskilled Worker		14,000.00	1	14,000.00
Helper		10,000.00	2	20,000.00
Security Guard		8,000.00	1	8,000.00
				82,000.00
Add: 5% Fringe Benefit				4,100.00
Total Labour Cost Per Month				86,100.00
Total Labour Cost for the year (In Rs. Lakhs)			6	10.33

BREAK UP OF SALARY				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		18,000.00	1	18,000.00
Accountant cum store keeper		12,000.00	1	12,000.00
Sales		10,000.00	1	10,000.00
Total Salary Per Month				40,000.00
Add: 5% Fringe Benefit				2,000.00
Total Salary for the month				42,000.00
Total Salary for the year (In Rs. Lakhs)			3	5.04

COMPUTATION OF DEPRECIATION				
Description	Land	Plant & Machinery	Furniture	**TOTAL**
Rate of Depreciation		**15.00%**	**10.00%**	
Opening Balance	Leased	-	-	-
Addition	-	30.50	1.50	32.00
	-	30.50	1.50	32.00
		-	-	
TOTAL		30.50	1.50	32.00
Less : Depreciation	-	4.58	0.15	4.73
WDV at end of Ist year	-	25.93	1.35	27.28
Additions During The Year	-	-	-	-
	-	25.93	1.35	27.28
Less : Depreciation	-	3.89	0.14	4.02
WDV at end of IInd Year	-	22.04	1.22	23.25
Additions During The Year	-	-	-	-
	-	22.04	1.22	23.25
Less : Depreciation	-	3.31	0.12	3.43
WDV at end of IIIrd year	-	18.73	1.09	19.82
Additions During The Year	-	-	-	-
	-	18.73	1.09	19.82
Less : Depreciation	-	2.81	0.11	2.92
WDV at end of IV year	-	15.92	0.98	16.91
Additions During The Year	-	-	-	-
	-	15.92	0.98	16.91
Less : Depreciation	-	2.39	0.10	2.49
WDV at end of Vth year	-	13.53	0.89	14.42

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	**Particulars**	**Amount**	**Addition**	**Total**	**Interest**	**Repayment**	**Cl Balance**
I	Opening Balance						
	Ist Quarter	-	28.80	28.80	0.79	-	28.80
	Iind Quarter	28.80	-	28.80	0.79	-	28.80
	IIIrd Quarter	28.80	-	28.80	0.79	1.60	27.20
	Ivth Quarter	27.20	-	27.20	0.75	1.60	25.60
					3.12	3.20	
II	Opening Balance						
	Ist Quarter	25.60	-	25.60	0.70	1.60	24.00
	Iind Quarter	24.00	-	24.00	0.66	1.60	22.40
	IIIrd Quarter	22.40	-	22.40	0.62	1.60	20.80
	Ivth Quarter	20.80		20.80	0.57	1.60	19.20
					2.55	6.40	
III	Opening Balance						
	Ist Quarter	19.20	-	19.20	0.53	1.60	17.60
	Iind Quarter	17.60	-	17.60	0.48	1.60	16.00
	IIIrd Quarter	16.00	-	16.00	0.44	1.60	14.40
	Ivth Quarter	14.40		14.40	0.40	1.60	12.80
					1.85	6.40	
IV	Opening Balance						
	Ist Quarter	12.80	-	12.80	0.35	1.60	11.20
	Iind Quarter	11.20	-	11.20	0.31	1.60	9.60
	IIIrd Quarter	9.60	-	9.60	0.26	1.60	8.00
	Ivth Quarter	8.00		8.00	0.22	1.60	6.40
					1.14	6.40	
V	Opening Balance						
	Ist Quarter	6.40	-	6.40	0.18	1.60	4.80
	Iind Quarter	4.80	-	4.80	0.13	1.60	3.20
	IIIrd Quarter	3.20	-	3.20	0.09	1.60	1.60
	Ivth Quarter	1.60		1.60	0.04	1.60	- 0.00
					0.44	6.40	

Door to Door Period	60	Months
Moratorium Period	6	Months
Repayment Period	54	Months

CALCULATION OF D.S.C.R					
PARTICULARS	**I**	**II**	**III**	**IV**	**V**
CASH ACCRUALS	10.98	13.29	15.35	18.99	23.25
Interest on Term Loan	3.12	2.55	1.85	1.14	0.44
Total	14.10	15.84	17.20	20.13	23.69
REPAYMENT					
Repayment of Term Loan	3.20	6.40	6.40	6.40	6.40
Interest on Term Loan	3.12	2.55	1.85	1.14	0.44
Total	6.32	8.95	8.25	7.54	6.84
DEBT SERVICE COVERAGE RATIO	**2.23**	**1.77**	**2.08**	**2.67**	**3.46**
AVERAGE D.S.C.R.			**2.40**		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	30	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				4,02,840.00
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			**0.54**	
Total cost of Power & Fuel at 100%				4.57
Year		**Capacity**		**Amount**
				(in Lacs)
I		40%		1.83
II		45%		2.05
III		50%		2.28
IV		55%		2.51
V		60%		2.74

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