PROJECT REPORT

Of

MOULDED PLASTIC LUNCH BOX

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Moulded Plastic Lunch Box**.

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.]

SAMADHAN
Nurturing Dreams - Innovative Solutions

Lucknow Office: Sidhivinayak Building , 27/1/B, Gokhlley Marg, Lucknow-226001

Delhi Office : Multi Disciplinary Training Centre, Gandhi Darshan Rajghat, New Delhi 110002

Email : info@udyami.org.in
Contact : +91 7526000333, 444, 555

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	:	**PLASTIC LUNCH BOX**		
6	Name of the project / business activity proposed :		**MOULDED PLASTIC LUNCH BOX UNIT**		
7	Cost of Project	:	Rs.47.22 Lakhs		
8	Means of Finance				
	Term Loan		Rs.36 Lakhs		
	Own Capital		Rs.4.72 Lakhs		
	Working capital		Rs.6.5 Lakhs		
9	Debt Service Coverage Ratio	:	2.33		
10	Pay Back Period	:	5	Years	
11	Project Implementation Period	:	5-6	Months	
12	Break Even Point	:	32%		
13	Employment	:	12	Persons	
14	Power Requirement	:	40.00	HP	
15	Major Raw materials	:	Polypropylene and Colorants		
16	Estimated Annual Sales Turnover (Max Capacity)	:	122.41	Lakhs	
17	Detailed Cost of Project & Means of Finance				

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	38.00
Furniture & Fixtures	2.00
Working Capital	7.22
Total	**47.22**

MEANS OF FINANCE

Particulars	Amount
Own Contribution	4.72
Working Capital(Finance)	6.50
Term Loan	36.00
Total	**47.22**

MOULDED PLASTIC LUNCH BOX

Introduction: A reusable container, usually with a handle, designed for storing and carrying one's lunch. The lunch box, also referred to as a lunch pail or lunch kit, is used to store food to be taken anywhere. A lunch kit comprises the actual "box" and a matching vacuum bottle. However, the latest culture has more often embraced the singular term lunch box, which is now most commonly used. The lunch box has most often been used by school children to take packed lunches or a snack, from home to school. Lunch boxes are often brightly coloured or matte finished depending on the age of the individuals using it. Generally two step lunch box is preferred for extra storage.

Market Potential: Polypropylene is found to be the best to manufacture lunch boxes, as no harmful hazards have been found on it even when used as microwave applicable products. Almost everyone uses lunch boxes, except the variation in the number of sets or layers. The demand for plastic lunch boxes are high, as they are easy washable and safe for use. Moreover, they can be

prepared with attractive colours with the help of master batches and hence a higher demand among school going kids.

Raw material: Major raw materials are as follows:

1. Polypropylene
2. Colourant

Machinery Requirement: Major machines & equipments are as follows:

S No.	Description	Qty.	Amount
1.	Injection moulding machine	1	2000000
2.	Water Pump	1	50000
3.	Dry colour mixer machine	1	250000
4.	Scrap grinder machine	1	300000
5.	Air compressor	1	250000
6.	Chilling Plant/Cooling Tower	1	500000
7.	Dies and other equipments	Ls	450000
	Total Amount		**3800000**

Manufacturing Process: In this injection moulding process, the cold, hard plastic material is loaded into the machine via hopper, plasticized by heating and then injected under pressure into a cold mould, where it sets and is then ejected as the finished products. The three successive main stages that are followed in the procedure of manufacturing:

- Feeding of PP (Raw material in the hopper)
- Injection Moulding Process
- Finishing of the moulded products

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 2500 to 3000Sqft.

Power Requirement: The power consumption required to run all the machinery could be approximated as 40 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 12 including 1 Supervisor, 2 Plant operator, 3 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	-	5.81	10.22	15.30	20.96
Add: Additions	4.72	-	-	-	-
Add: Net Profit	10.59	14.41	16.08	17.66	18.42
Less: Drawings	9.50	10.00	11.00	12.00	12.20
Closing Balance	5.81	10.22	15.30	20.96	27.18
CC Limit	6.50	6.50	6.50	6.50	6.50
Term Loan	32.00	24.00	16.00	8.00	-
Sundry Creditors	0.38	0.44	0.48	0.52	0.55
TOTAL :	**44.69**	**41.16**	**38.27**	**35.97**	**34.23**
APPLICATION OF FUND					
Fixed Assets (Gross)	40.00	40.00	40.00	40.00	40.00
Gross Dep.	5.90	10.93	15.21	18.85	21.96
Net Fixed Assets	34.10	29.08	24.79	21.15	18.04
Current Assets					
Sundry Debtors	3.74	4.43	4.97	5.54	6.12
Stock in Hand	4.16	4.72	5.26	5.83	6.41
Cash and Bank	2.69	2.93	3.24	3.46	3.66
TOTAL :	**44.69**	**41.16**	**38.27**	**35.97**	**34.23**

- - - - -

PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	**I**	**II**	**III**	**IV**	**V**
A) SALES					
Gross Sale	74.81	88.70	99.48	110.72	122.41
Total (A)	**74.81**	**88.70**	**99.48**	**110.72**	**122.41**
B) COST OF SALES					
Raw Material Consumed	16.18	18.68	20.38	22.08	23.78
Elecricity Expenses	2.95	3.25	3.55	3.84	4.14
Repair & Maintenance	7.48	8.87	9.95	11.07	12.24
Labour & Wages	17.89	19.68	23.62	27.16	31.23
Depreciation	5.90	5.03	4.28	3.65	3.11
Cost of Production	50.40	55.51	61.77	67.80	74.50
Add: Opening Stock /WIP	-	3.35	3.79	4.25	4.72
Less: Closing Stock /WIP	3.35	3.79	4.25	4.72	5.22
Cost of Sales (B)	47.06	55.07	61.31	67.32	74.00
C) GROSS PROFIT (A-B)	27.76	33.63	38.17	43.40	48.41
	37.10%	**37.91%**	**38.37%**	**39.20%**	**39.55%**
D) Bank Interest (Term Loan)	3.91	3.19	2.31	1.43	0.55
ii) Interest On Working Capital	0.72	0.72	0.72	0.72	0.72
E) Salary to Staff	7.69	9.22	11.07	13.28	15.94
F) Selling & Adm Expenses Exp.	2.99	3.55	3.98	4.43	4.90
TOTAL (D+E)	**15.30**	**16.68**	**18.07**	**19.86**	**22.10**
H) NET PROFIT	12.46	16.95	20.10	23.55	26.31
	16.7%	**19.1%**	**20.2%**	**21.3%**	**21.5%**
I) Taxation	1.87	2.54	4.02	5.89	7.89
J) PROFIT (After Tax)	10.59	14.41	16.08	17.66	18.42

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	**I**	**II**	**III**	**IV**	**V**
SOURCES OF FUND					
Own Contribution	4.72	-			
Reserve & Surplus	12.46	16.95	20.10	23.55	26.31
Depriciation & Exp. W/off	5.90	5.03	4.28	3.65	3.11
Increase In Cash Credit	6.50				
Increase In Term Loan	36.00	-	-	-	-
Increase in Creditors	0.38	0.06	0.04	0.04	0.04
TOTAL :	**65.96**	**22.03**	**24.42**	**27.23**	**29.46**
APPLICATION OF FUND					
Increase in Fixed Assets	40.00	-	-	-	-
Increase in Stock	4.16	0.57	0.54	0.56	0.58
Increase in Debtors	3.74	0.69	0.54	0.56	0.58
Repayment of Term Loan	4.00	8.00	8.00	8.00	8.00
Taxation	1.87	2.54	4.02	5.89	7.89
Drawings	9.50	10.00	11.00	12.00	12.20
TOTAL :	**63.26**	**21.80**	**24.10**	**27.01**	**29.26**
Opening Cash & Bank Balance	-	2.69	2.93	3.24	3.46
Add : Surplus	2.69	0.23	0.32	0.22	0.20
Closing Cash & Bank Balance	**2.69**	**2.93**	**3.24**	**3.46**	**3.66**

COMPUTATION OF MAKING OF PLASTIC LUNCH BOX			
Item to be Manufactured Plastic Lunch Box			
Manufacturing Capacity per day		1,500	Lunch box
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		4,50,000	Lunch box
Total Production per Annum		4,50,000	Lunch box
Year		Capacity Utilisation	PLASTIC LUNCH BOX
I		50%	2,25,000.00
II		55%	2,47,500.00
III		60%	2,70,000.00
IV		65%	2,92,500.00
V		70%	3,15,000.00

COMPUTATION OF RAW MATERIAL					
Item Name		Quantity of Raw Material	Unit	Unit Rate	Total CostPer Annum (100%)
Polypropylene		35,000.00	Kg	65.00	22,75,000.00
Colorants		4,800.00	Kg	200.00	9,60,000.00
					-
Total					**32,35,000.00**
Total Raw material in Rs lacs					32.35

Raw Material Consumed	Capacity Utilisation		Amount (Rs.)		
I	50%		16.18		
II	55%		18.68	5% Increase in Cost	
III	60%		20.38	5% Increase in Cost	
IV	65%		22.08	5% Increase in Cost	
V	70%		23.78	5% Increase in Cost	

COMPUTATION OF SALE					
Particulars	**I**	**II**	**III**	**IV**	**V**
Op Stock	-	11,250.00	12,375.00	13,500.00	14,625.00
Production	2,25,000.00	2,47,500.00	2,70,000.00	2,92,500.00	3,15,000.00
	2,25,000.00	2,58,750.00	2,82,375.00	3,06,000.00	3,29,625.00
Less : Closing Stock(15 Days)	11,250.00	12,375.00	13,500.00	14,625.00	15,750.00
Net Sale	2,13,750.00	2,46,375.00	2,68,875.00	2,91,375.00	3,13,875.00
Sale Price per Lunch Box	35.00	36.00	37.00	38.00	39.00
Sale (in Lacs)	**74.81**	**88.70**	**99.48**	**110.72**	**122.41**

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(15 Days requirement)	3.35	3.79	4.25	4.72	5.22
Raw Material					
(15 Days requirement)	0.81	0.93	1.02	1.10	1.19
Closing Stock	**4.16**	**4.72**	**5.26**	**5.83**	**6.41**

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	**Amount**	**Margin(10%)**	**Net Amount**
Stock in Hand	4.16		
Less:			
Sundry Creditors	0.38		
Paid Stock	**3.78**	**0.38**	**3.40**
Sundry Debtors	3.74	0.37	3.37
Working Capital Requirement			**6.77**
Margin			0.75
MPBF			**6.77**
Working Capital Demand			**6.50**

BREAK UP OF LABOUR				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		28,000.00	1	28,000.00
Plant Operator		22,000.00	2	44,000.00
Unskilled Worker		14,000.00	3	42,000.00
Helper		10,000.00	2	20,000.00
Security Guard		8,000.00	1	8,000.00
				1,42,000.00
Add: 5% Fringe Benefit				7,100.00
Total Labour Cost Per Month				1,49,100.00
Total Labour Cost for the year (In Rs. Lakhs)			9	17.89

BREAK UP OF SALARY				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		25,000.00	1	25,000.00
Accountant cum store keeper		20,000.00	1	20,000.00
Sales		16,000.00	1	16,000.00
Total Salary Per Month				61,000.00
Add: 5% Fringe Benefit				3,050.00
Total Salary for the month				64,050.00
Total Salary for the year (In Rs. Lakhs)			3	7.69

COMPUTATION OF DEPRECIATION				
Description	Land	Plant & Machinery	Furniture	**TOTAL**
Rate of Depreciation		**15.00%**	**10.00%**	
Opening Balance	Leased	-	-	-
Addition	-	38.00	2.00	40.00
	-	38.00	2.00	40.00
		-	-	
TOTAL		38.00	2.00	40.00
Less : Depreciation	-	5.70	0.20	5.90
WDV at end of Ist year	-	32.30	1.80	34.10
Additions During The Year	-	-	-	-
	-	32.30	1.80	34.10
Less : Depreciation	-	4.85	0.18	5.03
WDV at end of IInd Year	-	27.46	1.62	29.08
Additions During The Year	-	-	-	-
	-	27.46	1.62	29.08
Less : Depreciation	-	4.12	0.16	4.28
WDV at end of IIIrd year	-	23.34	1.46	24.79
Additions During The Year	-	-	-	-
	-	23.34	1.46	24.79
Less : Depreciation	-	3.50	0.15	3.65
WDV at end of IV year	-	19.84	1.31	21.15
Additions During The Year	-	-	-	-
	-	19.84	1.31	21.15
Less : Depreciation	-	2.98	0.13	3.11
WDV at end of Vth year	-	16.86	1.18	18.04

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	**Particulars**	**Amount**	**Addition**	**Total**	**Interest**	**Repayment**	**Cl Balance**
I	Opening Balance						
	Ist Quarter	-	36.00	36.00	0.99	-	36.00
	Iind Quarter	36.00	-	36.00	0.99	-	36.00
	IIIrd Quarter	36.00	-	36.00	0.99	2.00	34.00
	Ivth Quarter	34.00	-	34.00	0.94	2.00	32.00
					3.91	4.00	
II	Opening Balance						
	Ist Quarter	32.00	-	32.00	0.88	2.00	30.00
	Iind Quarter	30.00	-	30.00	0.83	2.00	28.00
	IIIrd Quarter	28.00	-	28.00	0.77	2.00	26.00
	Ivth Quarter	26.00		26.00	0.72	2.00	24.00
					3.19	8.00	
III	Opening Balance						
	Ist Quarter	24.00	-	24.00	0.66	2.00	22.00
	Iind Quarter	22.00	-	22.00	0.61	2.00	20.00
	IIIrd Quarter	20.00	-	20.00	0.55	2.00	18.00
	Ivth Quarter	18.00		18.00	0.50	2.00	16.00
					2.31	8.00	
IV	Opening Balance						
	Ist Quarter	16.00	-	16.00	0.44	2.00	14.00
	Iind Quarter	14.00	-	14.00	0.39	2.00	12.00
	IIIrd Quarter	12.00	-	12.00	0.33	2.00	10.00
	Ivth Quarter	10.00		10.00	0.28	2.00	8.00
					1.43	8.00	
V	Opening Balance						
	Ist Quarter	8.00	-	8.00	0.22	2.00	6.00
	Iind Quarter	6.00	-	6.00	0.17	2.00	4.00
	IIIrd Quarter	4.00	-	4.00	0.11	2.00	2.00
	Ivth Quarter	2.00		2.00	0.06	2.00	-
					0.55	8.00	

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	16.49	19.43	20.36	21.31	21.53
Interest on Term Loan	3.91	3.19	2.31	1.43	0.55
Total	20.39	22.62	22.67	22.74	22.08
REPAYMENT					
Repayment of Term Loan	4.00	8.00	8.00	8.00	8.00
Interest on Term Loan	3.91	3.19	2.31	1.43	0.55
Total	7.91	11.19	10.31	9.43	8.55
DEBT SERVICE COVERAGE RATIO	**2.58**	**2.02**	**2.20**	**2.41**	**2.58**
AVERAGE D.S.C.R.			**2.33**		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	40	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				5,37,120.00
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%				5.91
Year		**Capacity**		**Amount**
				(in Lacs)
I		50%		2.95
II		55%		3.25
III		60%		3.55
IV		65%		3.84
V		70%		4.14

SAMADHAN
Nurturing Dreams - Innovative Solutions

DISCLAIMER

The views expressed in this Project Report are advisory in nature. SAMADHAN assume no financial liability to anyone using the content for any purpose. All the materials and content contained in Project report is for educational purpose and reflect the views of the industry which are drawn from various research material sources from internet, experts, suppliers and various other sources. The actual cost of the project or industry will have to be taken on case to case basis considering specific requirement of the project, capacity and type of plant and other specific factors/cost directly related to the implementation of project. It is intended for general guidance only and must not be considered a substitute for a competent legal advice provided by a licensed industry professional. SAMADHAN hereby disclaims any and all liability to any party for any direct, indirect, implied, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of the Project Report Content, which is provided as is, and without warranties.