PROJECT REPORT

Of

PLASTIC MOULDED TOYS

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Plastic moulded toys**.

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	:	xxxxxxxxxxxxxxxxxxxxxx	
			District : xxxxxxx	
			Pin: xxxxxxx	State: xxxxxxxxxx
			Mobile xxxxxxx	
5	Product and By Product	:	**PLASTIC MOULDED TOYS**	
6	Name of the project / business activity proposed :		**PLASTIC MOULDED TOYS UNIT**	
7	Cost of Project	:	Rs.24.83 Lakhs	
8	Means of Finance			
	Term Loan		Rs.19.35 Lakhs	
	Own Capital		Rs.2.48 Lakhs	
	Working Capital		Rs.3 Lakhs	
9	Debt Service Coverage Ratio	:	2.66	
10	Pay Back Period	:	5	Years
11	Project Implementation Period	:	5-6	Months
12	Break Even Point	:	26%	
13	Employment	:	10	Persons
14	Power Requirement	:	40.00	HP
15	Major Raw materials	:	HDPE Granules, Colour & pigments, Packing material	
16	Estimated Annual Sales Turnover (Max Capacity)	:	172.56	Lakhs
17	Detailed Cost of Project & Means of Finance			

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 500 Sq ft	2.00
Plant & Machinery	18.00
Furniture & Fixtures	1.50
Working Capital	3.33
Total	**24.83**

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.48
Working Capital(Finance)	3.00
Term Loan	19.35
Total	**24.83**

PLASTIC MOULDED TOYS

Introduction: A plastic toy is an item that is used to play, especially one designed for such use. Playing with toys can be an enjoyable means of training children for life in society. Different materials like wood, clay, paper, and plastic are used to make toys. Most of the Indian Toy industry operates through an extensive distribution network in the domestic markets. Big retailers / Large Format Stores such as Big Bazaar, Wall-Mart, etc. However, they also operate on the existing Volume based business model, making price the most sensitive aspect.

Designing of toys: Plastic Toy factories need the work of designers. Clients and toy company employees have a brainstorming session and, after that, designers need to prepare sketches of the toy in question. They include the size, colors, and facial expressions and poses, according to the type of toy (it

can be a figurine, a doll, a car or some plastic article. After the wax model is finished, engineers will determine whether the toy should be manufactured in just one piece or in many of them. To manufacture certain toys, some plastic pieces require other processes, such as tampography, also called pad-printing. This technique transfers a 2-D image into a 3-D object and it allows details like an expressive face to be applied to the plastic piece, think of the Lego, Mega Bloks, Miniland or Playmobile plastic toys with their eyes and smiles.

Advantages of Plastic moulded toys: Plastic toys are far more durable than wooden toys and can be bent, twisted and quite often stamped on before any serious damage happens to them. Of course, it's always best to instill a certain amount of respect for toys in your children, but at least plastic toys can stand up to a bit of rough play. Another bonus of plastic toys over some materials, such as wood, are that plastic toys are washable toys. If the little darlings come in from the garden covered in mud or other delights, you can simply wipe their toys clean while you dunk them in the bath to clean up. There's no need, as with fabric toys, to even put them through a wash in the machine, all it takes is a damp cloth and the toys are as good as new.

Plastic Moulded Toys Market analysis: The existence of toys in India dates back to the Indus Valley Civilization around five thousand years ago. Driven by a huge consumer base, India represents an important market for plastic toys as well. There are a large variety of toys currently available in the market. The diverse product category ranges from traditional plush toys, construction and building toys, dolls, board games and puzzles to high-end electronic toys, educational toys, ride-ons, etc. There are toys which are domestically produced by small, medium and large manufactures and also those that are produced from renowned international brands. Each toy category has inexpensive and high-end versions.

Machines & equipments: Basic machinery requirements are:

1. Blow moulding machine
2. Ultrasonic welding machine
3. Printing machine
4. Tools & dies

Cost of Machines:

S No.	Machine	Unit	Price
1.	Blow moulding machine	1	1200000
2.	Ultrasonic welding machine	1	300000
3.	Printing machine	1	250000
4.	Tools & dies		50000

Raw material: Basic raw material requirements are:

1. HDPE Granules(60-40 Rs/kg)
2. Colours & pigments(100-140 Rs/kg)
3. Packing material

Manufacturing Process:

- First of all, HDPE granules put into the hopper of blow moulding machine, after that raw material through screw barrier shifts towards heater and convert into plastic paste.
- After that we can add colour into the paste as per the requirement (with the help of master patch, it is used to give colour to plastic paste).
- Next In the blow moulding process, the raw plastic material is shaped into a hollow tube with one open end called a parison. The parison is pressed into a cooled metal mould and compressed air is forced into the

parison. When the formed plastic cools down and hardens the metal mould opens and expels the product.

- After finishing of plastic toys they are sent to printing section to create different prints and design on toys & then with the ultrasonic welding machine toys are joined together and assembled.
- Packaging of toys and left over material is sent to crushing section for re processing.

Product Types: This project report is prepared on toys ranging from Rs.5-50 Per toys. And 1 litre Double station Blow Moulding machine.

S No.	Particulars	Selling Price	Raw material cost
1.	5 Rs. Toy	5	2
2.	15 Rs. Toy	15	8
3.	30 Rs. Toy	30	16
4.	40 Rs. Toy	40	24
5.	50 Rs. Toy	50	28

Average selling price is taken as 24 Rs. and raw material cost 13 Rs.

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 800 to 1000Sqft. Civil work will cost around 2 Lac (approx.)

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 10 including 1 Supervisor, 2 Plant operator, 1 unskilled worker, 2 Helper and 1 security Guard. 3 Skilled worker including Accountant, Manager and sales personal each.

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

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

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

FINANCIALS

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Own Contribution	2.48	-			
Reserve & Surplus	4.64	8.55	12.05	17.15	21.10
Depriciation & Exp. W/off	3.05	2.61	2.23	1.91	1.64
Increase In Cash Credit	3.00				
Increase In Term Loan	19.35	-	-	-	-
Increase in Creditors	1.56	0.33	0.36	0.39	0.42
TOTAL :	**34.08**	**11.49**	**14.65**	**19.45**	**23.16**
APPLICATION OF FUND					
Increase in Fixed Assets	21.50	-	-	-	-
Increase in Stock	2.00	0.43	0.47	0.51	0.55
Increase in Debtors	2.83	0.67	0.69	0.75	0.81
Repayment of Term Loan	2.15	4.30	4.30	4.30	4.30
Taxation	-	0.86	1.81	4.29	6.33
Drawings	4.00	5.00	7.00	8.00	9.00
TOTAL :	**32.49**	**11.26**	**14.27**	**17.85**	**20.99**
Opening Cash & Bank Balance	-	1.60	1.83	2.21	3.81
Add : Surplus	1.60	0.23	0.38	1.60	2.17
Closing Cash & Bank Balance	**1.60**	**1.83**	**2.21**	**3.81**	**5.97**

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	3.12	5.82	9.06	13.92
Add: Additions	2.48	-	-	-	-
Add: Net Profit	4.64	7.70	10.24	12.86	14.77
Less: Drawings	4.00	5.00	7.00	8.00	9.00
Closing Balance	3.12	5.82	9.06	13.92	19.70
CC Limit	3.00	3.00	3.00	3.00	3.00
Term Loan	17.20	12.90	8.60	4.30	-
Sundry Creditors	1.56	1.89	2.25	2.64	3.06
TOTAL :	**24.88**	**23.61**	**22.91**	**23.86**	**25.76**
APPLICATION OF FUND					
Fixed Assets (Gross)	21.50	21.50	21.50	21.50	21.50
Gross Dep.	3.05	5.66	7.89	9.81	11.45
Net Fixed Assets	18.45	15.84	13.61	11.69	10.05
Current Assets					
Sundry Debtors	2.83	3.50	4.19	4.94	5.75
Stock in Hand	2.00	2.44	2.91	3.42	3.98
Cash and Bank	1.60	1.83	2.21	3.81	5.97
TOTAL :	**24.88**	**23.61**	**22.91**	**23.86**	**25.76**

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PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	84.96	105.11	125.79	148.28	172.56
Total (A)	**84.96**	**105.11**	**125.79**	**148.28**	**172.56**
B) COST OF SALES					
Raw Material Consumed	46.80	56.70	67.50	79.20	91.80
Elecricity Expenses	2.36	2.66	2.95	3.25	3.55
Repair & Maintenance	8.50	11.25	13.84	16.31	18.98
Labour & Wages	9.83	11.01	12.22	13.68	15.33
Depreciation	3.05	2.61	2.23	1.91	1.64
Cost of Production	70.54	84.22	98.74	114.36	131.29
Add: Opening Stock /WIP	-	0.33	1.49	1.79	2.10
Less: Closing Stock /WIP	0.33	1.49	1.79	2.10	2.45
Cost of Sales (B)	70.21	83.06	98.45	114.04	130.95
C) GROSS PROFIT (A-B)	14.75	22.04	27.34	34.24	41.61
	17.36%	**20.97%**	**21.73%**	**23.09%**	**24.11%**
D) Bank Interest (Term Loan)	2.10	1.71	1.24	0.77	0.30
ii) Interest On Working Capital	0.33	0.33	0.33	0.33	0.33
E) Salary to Staff	4.28	5.14	6.17	7.09	7.80
F) Selling & Adm Expenses Exp.	3.40	6.31	7.55	8.90	12.08
TOTAL (D+E)	**10.11**	**13.49**	**15.29**	**17.09**	**20.51**
H) NET PROFIT	4.64	8.55	12.05	17.15	21.10
	5.5%	**8.1%**	**9.6%**	**11.6%**	**12.2%**
I) Taxation	-	0.86	1.81	4.29	6.33
J) PROFIT (After Tax)	4.64	7.70	10.24	12.86	14.77

Raw Material Consumed	Capacity Utilisation		Amount (Rs.)		
I	40%		46.80		
II	45%		56.70		
III	50%		67.50		
IV	55%		79.20		
V	60%		91.80		

COMPUTATION OF SALE					
Particulars	**I**	**II**	**III**	**IV**	**V**
Op Stock	-	6,000.00	6,750.00	7,500.00	8,250.00
Production	3,60,000.00	4,05,000.00	4,50,000.00	4,95,000.00	5,40,000.00
	3,60,000.00	4,11,000.00	4,56,750.00	5,02,500.00	5,48,250.00
Less : Closing Stock(5 Days)	6,000.00	6,750.00	7,500.00	8,250.00	9,000.00
Net Sale	3,54,000.00	4,04,250.00	4,49,250.00	4,94,250.00	5,39,250.00
Sale Price per toys	24.00	26.00	28.00	30.00	32.00
Sale (in Lacs)	**84.96**	**105.11**	**125.79**	**148.28**	**172.56**

COMPUTATION OF MAKING OF TOYS			
Item to be Manufactured Toys			
Manufacturing Capacity per day		3000	Toys
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		9,00,000	Toys
Total Production per Annum		9,00,000	Toys
Year		Capacity Utilisation	PLASTIC MOULDED TOYS
I		40%	3,60,000.00
II		45%	4,05,000.00
III		50%	4,50,000.00
IV		55%	4,95,000.00
V		60%	5,40,000.00

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(5 Days requirement)	1.22	1.49	1.79	2.10	2.45
Raw Material					
(5 Days requirement)	0.78	0.95	1.13	1.32	1.53
Closing Stock	**2.00**	**2.44**	**2.91**	**3.42**	**3.98**

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	**Amount**	**Margin(10%)**	**Net Amount**
Stock in Hand	2.00		
Less:			
Sundry Creditors	1.56		
Paid Stock	**0.44**	**0.04**	**0.40**
Sundry Debtors	2.83	0.28	2.55
Working Capital Requirement			**2.95**
Margin			0.33
MPBF			**2.95**
Working Capital Demand			**3.00**

BREAK UP OF LABOUR				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		18,000.00	1	18,000.00
Plant Operator		15,000.00	2	30,000.00
Unskilled Worker		8,000.00	1	8,000.00
Helper		8,000.00	2	16,000.00
Security Guard		6,000.00	1	6,000.00
				78,000.00
Add: 5% Fringe Benefit				3,900.00
Total Labour Cost Per Month				81,900.00
Total Labour Cost for the year (In Rs. Lakhs)			7	9.83

BREAK UP OF SALARY				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		15,000.00	1	12,000.00
Accountant cum store keeper		12,000.00	1	12,000.00
Sales		10,000.00	1	10,000.00
Total Salary Per Month				34,000.00
Add: 5% Fringe Benefit				1,700.00
Total Salary for the month				35,700.00
Total Salary for the year (In Rs. Lakhs)			3	4.28

COMPUTATION OF DEPRECIATION					
Description	Land	Building/shed	Plant & Machinery	Furniture	**TOTAL**
Rate of Depreciation		**10.00%**	**15.00%**	**10.00%**	
Opening Balance	Leased		-	-	-
Addition	-	2.00	18.00	1.50	21.50
	-	2.00	18.00	1.50	21.50
		-	-	-	
TOTAL		2.00	18.00	1.50	21.50
Less : Depreciation	-	0.20	2.70	0.15	3.05
WDV at end of Ist year	-	1.80	15.30	1.35	18.45
Additions During The Year	-	-	-	-	-
	-	1.80	15.30	1.35	18.45
Less : Depreciation	-	0.18	2.30	0.14	2.61
WDV at end of IInd Year	-	1.62	13.01	1.22	15.84
Additions During The Year	-	-	-	-	-
	-	1.62	13.01	1.22	15.84
Less : Depreciation	-	0.16	1.95	0.12	2.23
WDV at end of IIIrd year	-	1.46	11.05	1.09	13.61
Additions During The Year	-	-	-	-	-
	-	1.46	11.05	1.09	13.61
Less : Depreciation	-	0.15	1.66	0.11	1.91
WDV at end of IV year	-	1.31	9.40	0.98	11.69
Additions During The Year	-	-	-	-	-
	-	1.31	9.40	0.98	11.69
Less : Depreciation	-	0.13	1.41	0.10	1.64
WDV at end of Vth year	-	1.18	7.99	0.89	10.05

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	**Particulars**	**Amount**	**Addition**	**Total**	**Interest**	**Repayment**	**Cl Balance**
I	Opening Balance						
	Ist Quarter	19.35	-	19.35	0.53	-	19.35
	Iind Quarter	19.35	-	19.35	0.53	-	19.35
	IIIrd Quarter	19.35	-	19.35	0.53	1.08	18.28
	Ivth Quarter	18.28	-	18.28	0.50	1.08	17.20
					2.10	2.15	
II	Opening Balance						
	Ist Quarter	17.20	-	17.20	0.47	1.08	16.13
	Iind Quarter	16.13	-	16.13	0.44	1.08	15.05
	IIIrd Quarter	15.05	-	15.05	0.41	1.08	13.98
	Ivth Quarter	13.98		13.98	0.38	1.08	12.90
					1.71	4.30	
III	Opening Balance						
	Ist Quarter	12.90	-	12.90	0.35	1.08	11.83
	Iind Quarter	11.83	-	11.83	0.33	1.08	10.75
	IIIrd Quarter	10.75	-	10.75	0.30	1.08	9.68
	Ivth Quarter	9.68		9.68	0.27	1.08	8.60
					1.24	4.30	
IV	Opening Balance						
	Ist Quarter	8.60	-	8.60	0.24	1.08	7.53
	Iind Quarter	7.53	-	7.53	0.21	1.08	6.45
	IIIrd Quarter	6.45	-	6.45	0.18	1.08	5.38
	Ivth Quarter	5.38		5.38	0.15	1.08	4.30
					0.77	4.30	
V	Opening Balance						
	Ist Quarter	4.30	-	4.30	0.12	1.08	3.23
	Iind Quarter	3.23	-	3.23	0.09	1.08	2.15
	IIIrd Quarter	2.15	-	2.15	0.06	1.08	1.08
	Ivth Quarter	1.08		1.08	0.03	1.08	0.00
					0.30	4.30	

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	7.69	10.31	12.48	14.77	16.41
Interest on Term Loan	2.10	1.71	1.24	0.77	0.30
Total	9.79	12.02	13.72	15.54	16.71
REPAYMENT					
Repayment of Term Loan	2.15	4.30	4.30	4.30	4.30
Interest on Term Loan	2.10	1.71	1.24	0.77	0.30
Total	4.25	6.01	5.54	5.07	4.60
DEBT SERVICE COVERAGE RATIO	**2.30**	**2.00**	**2.48**	**3.07**	**3.64**
AVERAGE D.S.C.R.			**2.66**		

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		40%		2.36
II		45%		2.66
III		50%		2.95
IV		55%		3.25
V		60%		3.55

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