

PROJECT REPORT

Of

POTTERY PRODUCTS

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Pottery products making unit.**

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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POTTERY



Introduction

Pottery is the process of forming vessels and other objects with clay and other ceramic materials, which are fired at high temperatures to give them a hard, durable form. Major types include earthenware, stoneware and porcelain. The place where such wares are made by a potter is also called a pottery (plural "potteries"). Pottery is made by forming a ceramic (often clay) body into objects of a desired shape and heating them to high temperatures (600-1600 °C) in a bonfire, pit or kiln and induces reactions that lead to permanent changes including increasing the strength and rigidity of the object. Much pottery is purely utilitarian, but much can also be regarded as ceramic art. A clay body can be decorated before or after firing.

Clay-based pottery can be divided into three main groups: earthenware, stoneware and porcelain. These require increasingly more specific clay material, and increasingly higher firing temperatures. All three are made in glazed and unglazed varieties, for different purposes. All may also be decorated by various techniques. In many examples the group a piece belongs to is immediately visually apparent, but this is not always the case.

Pottery originated before the Neolithic period. Pottery objects are made from damp clay mixed with other materials. They are then fired in a special oven called a kiln at high temperatures. Firing makes the clay hard. The potter may then apply a glaze to the surface before firing the object again. The fired glaze makes the surface of the pottery shiny, decorative and water-tight.

Health Benefits of Pottery Products

Pottery has been around for thousands of years and is a therapeutic art form that provides health benefits not only for the mind, but the body as well.

- **Reduce stress:** All forms of art have physical and mental health benefits, and are helpful when it comes to reducing stress and other worries, just like playing real money pokies can be. Creating something unique offers satisfaction and making something from clay means bringing out our creative side. By exploring our creativity we can better connect with ourselves and the environment. Pottery is great for all ages and there is not right or wrong way of creating something from clay.
- **A mood Enhancer:** Creating something is a way for many people to forget their sadness and grief, which ultimately results in improving your mood. We can forget about our stresses and problems even if just for a short time. We can also improve other features of our mental health such as confidence, self-expression and spontaneity.
- **Help with focusing:** Instead of worrying about things in your life rather change your focus to creating something. While you are concentrating on making something you do not allow influences from outside to affect you, and you can focus solely on your art. By focusing on one thing you allow your mind to relax and in turn this will help you focus better in other spheres of your life.
- **Physical benefits:** Not only are there mental benefits, but also physical benefits. Even though pottery is not a strenuous activity it is strengthening to the hands, wrists and arms and offers health benefits for those who suffer with arthritis in their hands.
- **A form of self-expression:** Any type of art is a form of expressing oneself and pottery is no different. Pottery allows you to create things from a lump of clay and as you progress and learn more you will try out new techniques and stretch your imagination as you become more creative with your work. Not only is there creativity in the moulding of the clay, but also once the item has been fired.

Types of pottery products

There are three main types of pottery/ceramic. These are earthenware, stoneware and porcelain.

1. **Earthenware:** Earthenware is clay fired at relatively low temperatures of between 1,000 to 1,150 degrees. This results in a hardened but brittle material which is slightly porous (small holes through which liquid or air can go through), therefore can not be used to contain water.
2. **Stoneware:** Stoneware is made from a particular clay which is fired at a higher temperature of 1,200°C. This results in a more durable material, with a denser, stone-like quality. The finished product will be waterproof and unlike earthenware, does not need to be glazed.
3. **Porcelain:** Porcelain comes from a refined clay which is fired at very high temperatures of approximately 1,200–1,450°C. The result is an extremely hard, shiny material often white and translucent in appearance.

Pottery Products Market Analysis

India along with several other developing countries of Asia is considered as one of the first Asian countries to manufacture as well as export products of pottery. The important markets for pottery products are USA, Mexico, Hong Kong, Japan, Germany, Italy and France. However, the share of global market of India in pottery products is believed to be less than 1%. The important suppliers list includes China, UK, Japan and USA.

The yearly production of pottery products in the Khurja units of Uttar Pradesh is slated to be around ` 85 crore. Out of this about 20% is exported in the international market. Among the pottery products that are exported from India, the most common ones are chemical porcelains, handicraft art ware and more.

In order to improve the overall condition of the India pottery industry, it is important to identify the various requirements of the manufacturing centers, technological development along with advancement of the centers with help structures have also become a necessity. Proper review of the industry, analyzing the need, gap and formulating of a proper plan are also important.

Description of Machinery & Equipment

Following machinery are required for Pottery Products manufacturing process:

- **Potter Wheel (Chak Machine):** A horizontal revolving disc on which wet clay is shaped into pots or other round ceramic objects.
- **Furnance (Bhatti):** Used for millennia to turn objects made from clay into pottery.

With the help of these machines, the work of shaping and drying the products completes. After that product can be sold in market.

Manufacturing Process

1. Raw material i.e. Procurement of soil.
2. Filter the soil & add water into it accordingly.
3. After that mix it properly.
4. Keep that mixed material at the potter wheel.
5. After that different shapes is given to the clay.
6. Now, keep the prepared utensils and pottery products in open field for drying of product.
7. After that keep the products in the furnance.
8. Painting & brushing of product.

Machinery & Equipment's required:

Name	Quantity	Cost
Potter wheel	4	28,000
Bhatti	1	30,000
Total		58,000
GST @ 18%		10,440
Total		68,440

❖ Cost of the machine is other than transportation cost.

Land & Building required:

Land required 500- 1,000 square feet

Approximate rent for the same is Rs. 10,000 per month.

Raw Material Requirement

Clay (Mitti, Soil) is required as the major raw material for the Pottery products. Other requirements for Bhatti are Wood (Lakdi) & Burada etc.

Labour Requirement:

5 Manpower is required for the pottery products unit.

Includes:

2 Skilled Labour

3 Unskilled Labour

Products to be produced

This Project is based on the following Products:

1. **Snail:** On an average 15 Pieces are produced in a single shift of 12 hours. 30-35 KG of Raw material is required for production of 15 Pieces of Snail. Approximate cost of production of 15 Snail is Rs. 900-1000 and it is sold for approx. Rs. 1500.

2. **Flower Box:** On an average 20 Pieces are produced in a single shift of 12 hours. 100 KG of Raw material is required for production of 20 Pieces of Flower Box. Approximate cost of production of 20 Flower Box is Rs. 900-1000 and it is sold for Rs. 2000.
3. **Pot:** On an average 100 Pieces are produced in a single shift of 12 hours. 250 KG of Raw material is required for production of 100 Pieces of Pot. Approximate cost of production of 100 Pot is Rs. 1800-2000 and it is sold for Rs. 2500.

Pottery Product Unit license & registration

For Company:

- Obtain the GST registration.
- Additionally, obtain the Udyog Aadhar registration Number.
- Choice of a Brand Name of the product and secure the name with Trademark if required.

Implementation Schedule

S.N.	Activity	Time Required (in Months)
1	Acquisition Of premises	1
2	Procurement & installation of Plant & Machinery	1
3	Arrangement of Finance	1
4	Requirement of required Manpower	1
	Total time Required (some activities shall run concurrently)	1- 2 Months

Conclusion:

After completion of manufacturing process, product is ready to sell in the market. Compostable Starch Bags are used for daily routine activities. This machine can be installed & one can earn a good Margin of profit by doing this business.

Project Economies

FINANCIAL ASSISTANCE REQUIRED		
Own Capital contribution of Rs. 2.5 Lacs		
(in Lacs)		
<u>COST OF PROJECT</u>	PARTICULARS	AMOUNT
	Building Civil Work	
	Plant & Machinery	0.68
	Furniture & Fixtures and Other Assets	0.32
	Working capital	1.50
	Total	2.50
<u>MEANS OF FINANCE</u>	PARTICULARS	
	Own Contribution	2.50
	Total	2.50

COMPUTATION OF PRODUCTION OF POTTERY PRODUCTS**Items to be Manufactured**

Snail, Flower Box, Pot

Snail

Capacity per Day (12 Hours) 15 Pcs

Production per annum 3600 Pcs

Flower Box

Capacity per Day (12 Hours) 20 Pcs

Production per annum 4800 Pcs

Pot

Capacity per Day (12 Hours) 100 Pcs

Production per annum 24000 Pcs

Production of Snail		
Production	Capacity	Piece
1st year	70%	2,520
2nd year	75%	2,700
3rd year	80%	2,880
4th year	85%	3,060
5th year	90%	3,240

Production of Flower Box		
Production	Capacity	Piece
1st year	70%	3,360
2nd year	75%	3,600
3rd year	80%	3,840
4th year	85%	4,080
5th year	90%	4,320

Production of Pot		
Production	Capacity	piece
1st year	70%	16,800
2nd year	75%	18,000
3rd year	80%	19,200
4th year	85%	20,400
5th year	90%	21,600

Production Cost Of Snail

Year	Capacity Utilisation	Per piece	Amount (Rs. in lacs)
1st year	70%	60.00	1.51
2nd year	75%	60.60	1.64
3rd year	80%	61.21	1.76
4th year	85%	61.82	1.89
5th year	90%	62.44	2.02

Production Cost Of Flower Box

Year	Capacity Utilisation	Per piece	Amount (Rs. in lacs)
1st year	70%	45.00	1.51
2nd year	75%	45.45	1.64
3rd year	80%	45.90	1.76
4th year	85%	46.36	1.89
5th year	90%	46.83	2.02

Production Cost Of Pot

Year	Capacity Utilisation	Per Piece	Amount (Rs. in lacs)
1st year	70%	18.00	3.02
2nd year	75%	18.18	3.27
3rd year	80%	18.36	3.53
4th year	85%	18.55	3.78
5th year	90%	18.73	4.05

Total Raw Material Cost		
Year	Capacity Utilisation	Amount (Rs. in lacs)
1st year	70%	6.05
2nd year	75%	6.54
3rd year	80%	7.05
4th year	85%	7.57
5th year	90%	8.09

<u>COMPUTATION OF SALE OF SNAIL</u>					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	210	225	240	255
Production	2,520	2,700	2,880	3,060	3,240
Less : Closing Stock	210	225	240	255	270
Net Sale	2,310	2,685	2,865	3,045	3,225
sale price per Piece	100.00	101.00	104.00	107.00	110.00
Sales (in Lacs)	2.31	2.71	2.98	3.26	3.55

<u>COMPUTATION OF SALE OF FLOWER BOX</u>					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	280	300	320	340
Production	3,360	3,600	3,840	4,080	4,320
Less : Closing Stock	280	300	320	340	360
Net Sale	3,080	3,580	3,820	4,060	4,300
sale price per Piece	100.00	101.00	104.00	107.00	110.00
Sales (in Lacs)	3.08	3.62	3.97	4.34	4.73

COMPUTATION OF SALE OF POT

Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	1,400	1,500	1,600	1,700
Production	16,800	18,000	19,200	20,400	21,600
Less : Closing Stock	1,400	1,500	1,600	1,700	1,800
Net Sale	15,400	17,900	19,100	20,300	21,500
sale price per Piece	25.00	25.00	26.00	27.00	28.00
Sales (in Lacs)	3.85	4.48	4.97	5.48	6.02

COMPUTATION OF TOTAL SALE

Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	1,890	2,025	2,160	2,295
Production	22,680	24,300	25,920	27,540	29,160
Less : Closing Stock	1,890	2,025	2,160	2,295	2,430
Net Sale	20,790	24,165	25,785	27,405	29,025
Sales (in Lacs)	9.24	10.80	11.92	13.08	14.30

BREAK UP OF LABOUR CHARGES

Particulars	Wages	No of	Total
	Per Month	Employees	Salary
Unskilled	6000	5	30000
Total Salary Per Month			30000
Total Annual Labour Charges	(in Lacs)		3.60

Utility Charges at 100% capacity (per month)

Particulars	value	Description
Power connection required	2	KWH
consumption per day	24	Units
Consumption per month	600	Units
Rate per Unit	7	Rs.
power Bill per month	4200	Rs.

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	70%	75%	80%	85%	90%
<u>SALES</u>					
Gross Sale					
Total	9.24	10.80	11.92	13.08	14.30
Total	9.24	10.80	11.92	13.08	14.30
<u>COST OF SALES</u>					
Raw Mateiral Consumed	6.05	6.54	7.05	7.57	8.09
Elecricity Expenses	0.50	0.55	0.61	0.67	0.74
Depriciation	0.13	0.12	0.10	0.09	0.07
Consumables	0.51	0.59	0.66	0.72	0.79
Repair & maintenace	0.09	0.11	0.12	0.13	0.14
Cost of Production	7.29	7.92	8.54	9.17	9.83
Add: Opening Stock /WIP	-	0.61	0.66	0.71	0.76
Less: Closing Stock /WIP	0.61	0.66	0.71	0.76	0.82
Cost of Sales	6.68	7.86	8.48	9.12	9.78
GROSS PROFIT	2.56	2.94	3.43	3.96	4.52
Rent	1.08	1.11	1.15	1.18	1.22
Selling & adm Exp	0.28	0.32	0.36	0.39	0.43
TOTAL	1.36	1.44	1.50	1.57	1.64
NET PROFIT	1.20	1.50	1.93	2.39	2.87
Taxation					
PROFIT (After Tax)	1.20	1.50	1.93	2.39	2.87

PROJECTED BALANCE SHEET

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
opening balance		3.11	3.61	4.04	4.33
<i>Add:- Own Capital</i>	2.50				
Add:- Retained Profit	1.20	1.50	1.93	2.39	2.87
Less:- Drawings	0.60	1.00	1.50	2.10	2.50
Closing Blance	3.11	3.61	4.04	4.33	4.70
Sundry Creditors	0.30	0.31	0.35	0.38	0.40
TOTAL :	3.41	3.91	4.39	4.71	5.11
<u>Assets</u>					
Fixed Assets (Gross)	1.00	1.00	1.00	1.00	1.00
Gross Dep.	0.13	0.25	0.35	0.44	0.51
Net Fixed Assets	0.87	0.75	0.65	0.57	0.49
Current Assets					
Sundry Debtors	0.69	0.81	0.89	1.09	1.19
Stock in Hand	1.11	1.21	1.30	1.40	1.49
Cash and Bank	0.74	1.14	1.55	1.66	1.93
TOTAL :	3.41	3.91	4.39	4.71	5.11

PROJECTED CASH FLOW STATEMENT

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	2.50				
Net Profit	1.20	1.50	1.93	2.39	2.87
Depreciation & Exp. W/off	0.13	0.12	0.10	0.09	0.07
Increase in Creditors	0.30	0.00	0.05	0.03	0.03
TOTAL :	4.14	1.62	2.08	2.50	2.98
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	1.00				
Increase in Stock	1.11	0.09	0.09	0.10	0.10
Increase in Debtors	0.69	0.12	0.08	0.20	0.10
Drawings	0.60	1.00	1.50	2.10	2.50
Taxation	-	-	-	-	-
TOTAL :	3.41	1.21	1.68	2.39	2.70
Opening Cash & Bank Balance	-	0.74	1.14	1.55	1.66
Add : Surplus	0.74	0.41	0.40	0.11	0.28
Closing Cash & Bank Balance	0.74	1.14	1.55	1.66	1.93

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	0.61	0.66	0.71	0.76	0.82
<u>Raw Material</u>					
	0.50	0.55	0.59	0.63	0.67
Closing Stock	1.11	1.21	1.30	1.40	1.49

COMPUTATION OF WORKING CAPITAL REQUIREMENT	
TRADITIONAL METHOD	
Particulars	Amount
Finished Goods & Raw Material	1.11
Less : Creditors	0.30
Paid stock	0.81
Sundry Debtors	0.69
Total	1.50
Working capital	1.50

COMPUTATION OF DEPRECIATION

Description	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	0.68	0.32	1.00
Total	0.68	0.32	1.00
Less : Depreciation	0.10	0.03	0.13
WDV at end of Year	0.58	0.29	0.87
Additions During The Year	-	-	-
Total	0.58	0.29	0.87
Less : Depreciation	0.09	0.03	0.12
WDV at end of Year	0.49	0.26	0.75
Additions During The Year	-	-	-
Total	0.49	0.26	0.75
Less : Depreciation	0.07	0.03	0.10
WDV at end of Year	0.42	0.23	0.65
Additions During The Year	-	-	-
Total	0.42	0.23	0.65
Less : Depreciation	0.06	0.02	0.09
WDV at end of Year	0.36	0.21	0.57
Additions During The Year	-	-	-
Total	0.36	0.21	0.57
Less : Depreciation	0.05	0.02	0.07
WDV at end of Year	0.30	0.19	0.49
s	-	-	-
Total	0.30	0.19	0.49

Less : Depreciation	0.05	0.02	0.06
WDV at end of Year	0.26	0.17	0.43
Less : Depreciation	0.04	0.02	0.06
WDV at end of Year	0.22	0.15	0.37
Less : Depreciation	0.03	0.02	0.05
WDV at end of Year	0.19	0.14	0.32

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