

**UNIVERSITY OF NIGERIA, NSUKKA**  
**FACULTY OF SOCIAL SCIENCES**  
**DEPARTMENT OF POLITICAL SCIENCE**

**TOPIC:**

**CERAMIC INDUSTRY**

**A BUSINESS PLAN**

**PRESENTED IN PARTIAL FULFILMENT FOR THE  
REQUIREMENT OF THE COURSE: CEDR 342  
(BUSINESS GROWTH AND DEVELOPMENT)**

**BY**

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**LECTURER: DR MRS NWAOGA**

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# **PRODUCTION OF CERAMICS INDUSTRY**

## **PART 1**

### **Executive Summary**

**1.10** A ceramic industry is a productive industry engaged in the production kitchen utensils of high quality and tensile strength. However, this industry is designed to meet up the demands of people and it is service oriented

### **1.11 Name of business**

The name of the business is Ceramic industry.

### **1.12 Legal form of business**

**Ceramic industry** is a private limited company.

### **1.13 Contact address**

No 33 ofulonu, Nsukka.

**1.14 Tel:** 08065194787 **E-mail:** ceramicindustry@yahoo.com

### **1.15 Type of business**

Ceramic industry is a manufacturing industry.

### **1.16 Concise description of the business idea**

#### a. Product or services

The product is ceramic bowl, plates, spoon, which is produced from natural resources. It is produced to aid aesthetics in terms of kitchen utensil and very strong that it can withstand high temperature.

#### b. Customers

General public can have it as part of their normal kitchen and/or household equipments. People are advised to use ceramic plates, spoon and ceramic related products to

stainless steel(plates, spoon, bowl) which rusts and can cause cancer.

c. Owners

EZE EMELDA I            99%

### **1.17 Number of jobs to be created**

By the time the company is started, it is expected to create direct jobs for 18 people for a start.

**1.2** The proposed project requires a starts capital of N1,000,000 made up of ~~N~~ 550,000 fixed assets and N450,000 for working capital.

**1.3** The enterprises vision is to be the most outstanding ceramic industry in South east of Nigerian particularly Nsukka

**1.4** The project will be located at Nsukka because of its access to target market from that location.

**1.5** A huge market is available for the business to serve

**1.6** The financial projection shows that the project would be financially stable and liquid by the time it matures. The sales figures stand at N800000, N1200000, N1600000, for year 1, year 2 and year 3 respectively. Also the profits after tax are N450000, N675000, N925150, for year 1, year 2 and year 3 respectively. The cash flow position is equally good and encouraging by the first year through the third year.

**1.7** The funding requirement is N700,000 as the promoter is committing N300,000 to the project.

**1.8** The competitive edge of the enterprise lies in its ability to offer fine ceramics and hygiene quality, which is

obtainable by use of good quality machines and suitable environment.

**1.9** The profitability measures are as shown below

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Turnover	800,000	1,200,000	1,600,000
Gross margin	650,000	1,150,000	1,400,000
Net operating profit	450,500	675,000	925,150
Return of Equity or owners contribution (%)	150.2	225	308.4

**1.10 Conclusion and Recommendation**

From the point of view of the analysis of my findings, the proposed project is found to be technically feasible, financially viable, and economically desirable. Thus, the project offers good investment benefits, and is therefore highly recommended for implementation.

## **PART II**

### **2.0 Introduction**

The planned ceramics industry project is the result of strong industry and needs assessment studies undertaken in South Eastern Zone of Nigeria, particularly Enugu (Nsukka) by the promoters of this project. The studies reveal that the demand for ceramics industry is high while there are few or no good industries to meet with this demand. This expanding demand trend is expected to be sustained into the future.

### **2.2 Mission**

To create a service base operation beyond the customer's expectation and satisfaction.

### **2.3 Key Success factors**

The following key success factors will be provided by the factory

- a. The use of good quality machines to meet up with customers demand
- b. Provide a good hygiene environment for production
- c. Maintain, an untarnished reputation in the community.
- d. Maintain good and experienced operators with entrepreneurship mindset.

- e. Operate at a competitive pricing
- f. Existence of reliable and durable market outlets.

## **2.4 Inherent Risks**

- a. Will the implementation of this project attract more contracts to the business to compete with?
- b. The problem of power failure
- c. The problem of machine maintenance and breakdown.

## **2.5 Business Ownership**

This is a partnership business owned and managed by EMELDA group of company.

## **2.6 Locational Factors**

The ceramics industry is located at Nsukka Enugu. What informed the choices of this location are;

1. Availability of land to contain expansion of the factory
2. High demand of ceramics and ceramics products in Nsukka
3. Availability of cheap and reliable labour
4. High produce of plates of different designs and shape suitable to use.



## **2.7 Available Market**

Information from the survey carried out, shows that about N50,000 or more plates are demand yearly in Enugu which is used as gifts at various ceremonial function (especially in Nsukka). This demand figure is expected to rise as the population within the market area being targeted increases, especially as the demand for products like plates, spoons, bowls etc keep increasing. Precisely the demand is about 80%.

## **3.0 Service**

EMELDA ceramics industry will provide the following services

- a. smooth quality ceramics
- b. Fine designs

### **3.1 Service Description**

The planned ceramics will offer good services according to the customers desire. This will be done through the use of machines.

Also, through the use of plate machine, the industry will offer fine sized ceramics according to the customer's demand and desire.

### **3.2 Costing**

The cost of running the company involves

- a. Maintenance of the ceramics machines
- b. Payment of company workers
- c. The cost of fueling the machine

### **3.3 Market Demand**

EMELDA ceramics industry is located at Nsukka which is within easy reach of some markets like Ogige, Orié Orba, Orié Igbo-Eze, Nkwo Ibagwa where the supply and demand of ceramics and ceramics products are high. Information from experienced operators in the business reveals that about 4000 ceramics of different usage are demanded monthly. And that this demand figure is expected to increase as the number of person that use ceramics and ceramic product keep increasing.

Experienced operators agreed on the fact that not more than 45% of the demands figures are met by existing factories.

### 3.4 Projected Annual demand for ceramics in Nsukka

There is an estimate of 50,000 ceramics are demanded in Nsukka and its environs. This figure is expected to grow with population growth in the area which has been growing at the rate of 1.5 to 2.5% for about five years now.

With the population growth rate, the demand for the services of ceramics Company in Nsukka beat at least 1% the next year.

<b>S/N</b>	<b>Years</b>	<b>Annual growth rate</b>	<b>Projected demand</b>
0	Base year (0)	1%	50,000
1	Year (1)	1%	50,500
2	Year (2)	1%	51,000
3	Year (3)	1%	51,500
4	Year (4)	1%	52,000
	<b>Total</b>	<b>5%</b>	<b>255,000</b>
	<b>Average</b>	<b>1%</b>	<b>51000</b>

### 3.5 Demand supply gap

As earlier stated, of the total demand figure of nut milling, only about 45% of the demands are met by the existing ceramics industry. Thus the demand-supply of ceramics Industry in Nsukka and its environs is shown as follows

<b>Adjustment</b>	<b>Demand-supply gap</b>
Estimated average annual demand less 45% of supplies existing ceramics in the area	52,000
Less 30% due to expansion of existing company and establishing of new ones	23400
Less 5% estimate error	28,600
	8580
	20020
	1001
Estimated demand-supply gap anticipated annually	19019

## PART IV

### 4.0 Market Analysis

EMELDA ceramics industry has a lucrative business opportunity since there is a huge demand for the industry in Nsukka and its environs. The increase in the population and much demand for ceramics and its products is an important factor for the welfare of the company.

#### 4.1 Customers/Market segmentation

The following are the classes of customers

- a. **Wholesalers:** These are those that mainly buy large quantity of plates, spoons, bowls for the purpose of selling the ceramics. They are usually price conscious but can buy in bulk and even pay in advance.
- b. **Households:** These households mainly buy in smaller quantity but variety of ceramics for different uses. They might not be sensitive to price but they are sensitive to hygiene issues and quality of ceramics.
- c. **Restaurants/Hoteliers/Bakers:** These classes of customers buy large quantity of ceramics though lower than the commercial class but higher than the households. They are consistent but unlike the household, they can pay in advance. They are price sensitive.

## **PART V**

### **Market, customers and competitors**

#### **5.0 Marketing Plan**

Though there are few ceramic industry in Nsukka and hence competition is inevitable, but EMELDA ceramics industry will adopt every market strategy in its operations. Therefore, if the company commences operations as planned, it will be a market leader in no distant time.

#### **5.1 Promotion Strategy**

EMELDA ceramics plans to embark on an aggressive awareness through the use of fliers, radio and television adverts. EMELDA ceramics will also give gifts to customers who are consistent.

#### **5.2 Market Strategy**

The company will present and position itself as the prime mover and best ceramics industry. To maintain a sizeable portion and lead of ceramics industry, EMELDA ceramics has decided to use good quality machine.

Furthermore, EMELDA ceramics will ensure good and high hygiene environment for our services and also employ consistency in operation and services.

EMELDA ceramics will also give trade discounts to drive the market faster. There are plans to distribute calendars and exercise books for her numerous customers. This will help in no small way to increase the firm's popularity amongst the middlemen in the ceramics market.

### **5.3 Market position**

EMELDA ceramics industry will position itself as the prime-mover and market leader in the ceramics market in Nsukka and its environs. The company will create peculiar leading edge profile for itself. The understated is how the firm will want to be seen by its customers, competitors and the general public.

- As a company that has the customer's interest, in the forms of hygiene, pricing and delivery at heart
- As a trustworthy provider of consistently reliable services.

## **PART VI**

### **Technical Analysis, Management and Operation**

#### **6.0 Technical Analysis**

The ceramics has an extensive and highly prolific information and knowledge of machines and equipments. It's only natural and confirmed that the firm will employ and maintain the best and latest technology to enhance its services, management, maintenance, record keeping and payment processing.

#### **6.1 Management and Organization**

EMELDA ceramics mill is Partnership business. It is owned by EBUKA, who is the owners and the managers of company (ceramics industry).

I am a trained entrepreneur and as such have the capability and basic knowledge of financial management, experience in production of ceramics and using machines which I am expected to utilize in running the firm.

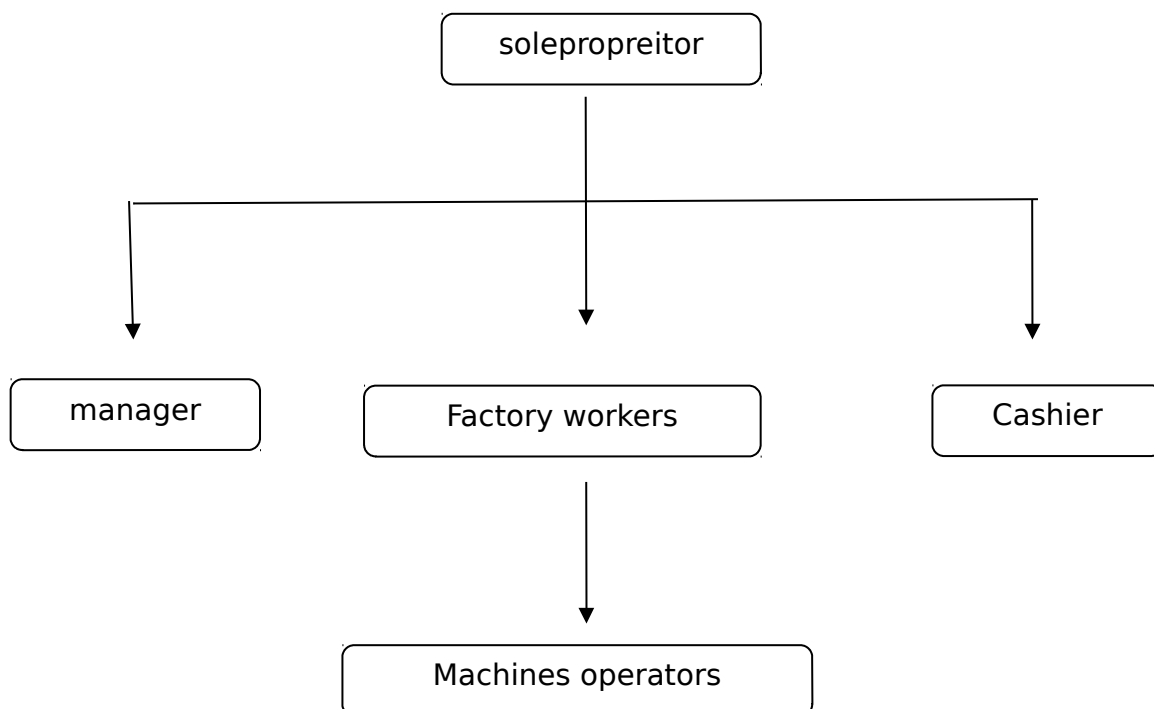
To help in the day to day running of the company, some other good and experienced hands will be hired.



## Management and labour compliments

S/N	Positions	No of staff	Annual salary (N)	Total
1	Proprietor	1	100,000	100,000
2	Manager	1	40,000	40,000
3	Factory workers	3	15,000	45,000
4	Machine operators	3	20,000	60,000
5	Cashier	1	25,000	25,000
				270,000
6	Add 25% fringe benefit			67500
	<b>Grand total</b>			<b>337,500</b>

Below shows the organization structure of the ceramics industry



## 6.2 External support

EMELDA ceramics industry is discussing with the Enugu Small and Medium Enterprise (SME) center to offer, over a period of years, strong management and business support service. Also the firm will access support on technical issues from the entrepreneurship development. Finally, the services of a machine expert and consultant has been planned to be retained.

### **6.3 Value and norms of the company**

EMELDA ceramics industry plans to adopt the following norms and values;

- a. To offer the best for the benefit of her customers
- b. To uphold her integrity always
- c. To see her employees as her most valuable assets
- d. To always be available to her customers
- e. To do her business within the federal, state and local government laws.

## **PART VII**

### **Legal, Environment, Social and Regulatory Issues**

#### **7.0 Legal Issues**

EMELDA ceramics industry plans to commence commercial operations as soleproprietor business. Such it is just enough to register the business name with the appropriate department at the local government headquarters. No special licenses are required for the operation of a ceramics. However every attempt will be made to get all necessary amount and licenses.

#### **7.1 Environmental challenges**

Ceramics could pose an environmental challenge or hazard if certain precautions are not taken especially with respect to non-biodegradable and waste disposal. It is the plan of the industry to use a noise condenser in machine exhaust pipes to reduce noise.

#### **7.2 Social**

The implementation of the project will bring about social and economic benefits to the society in the following ways;

1. It will create new employment

2. It will bring about wealth creation and poverty reduction

### **7.3 Regulatory**

The ceramics industry will comply with all environmental regulations, as well as all relevant industrial safety regulatory requirements.

## PART VIII

### 8.0 Risk Analysis

The project has been subjected to risk analysis and some inherent risks identified and appropriate mitigants preferred to avoid the business being disrupted.

#### Identified risks and their mitigants

Identified risks	Mitigants
Possibility of machine breakdown	The service of machine maintenance experts
Erratic power supply	A standby generator will be provided in case of power failure
Inadequate start-up demand	Aggressive promotion and adversity campaigns

### 8.1 SWOT Analysis

The SWOT analysis carried out on the ceramics mill revealed the following:

#### 8.1.1 Strengths

- The location of the industry makes it to have easy access to its targeted customers
- The owners have good experience and expertise in ceramics industry

### **8.1.2 Weakness**

EMELDA ceramics plans to address this weakness through hiring of skilled hands and retaining the services of experts in ceramics industry

### **8.1.3 Opportunities**

Currently there is no quality ceramics in Nsukka. Therefore, the establishment of EMELDA ceramics will provide quality ceramics.

Ceramics is in very high demand abroad especially when processed into other derivative product of ceramics. Therefore, it is a possibility that the business might grow in future to process or package ceramics or its other derivatives that could be exported overseas or sold in the local markets.

The industry hopes to exploit these opportunities

### **8.1.4 Threats**

- There is still the threat of machine breakdown including the power generator.
- Increased competition due to the entry of more ceramics industry

- Low initial demand

To checkmate these threats, the firm will mount aggressive awareness campaign and other promotions that will portray ceramics as another good supplement for some nutrients.

## **8.2 Exit Strategy**

No exist is planned, rather diversification will be pursued

## PART IX

### Company Financial

#### 9.1 Summary of project cost

The total of the project is N1,000,000 this is made up of N550,000 fixed capital and N450,000 in working capital.

#### 9.2 Fixed capital investment

EMELDA ceramics is located at no.21 Tectonics road Nsukka in Enugu on a land of about 3 standard plots of 80" x 160". That site is motorable all year.

#### Fixed capital investment

S/n	Detail	Quantity	Unit Price	Total
1	Structures (housing)	1	80,000	80,000
2	Hammer machines	3	60,000	180,000
3	Plate machine	2	55,000	110,000
4	Power generator	1	94,000	94,000
5	Metal basin (2000 litres)	10	4,000	40,000
6	Water tanks	1	40,000	40,000
7	Bench	3	2000	6000
	<b>Total</b>			<b>550,000</b>



### 9.3 Utilities

The ceramics is located to a cheap sources of raw materials but in a place faced with low supply of water and fluctuating electricity power supply; and as such, water will be supplied to the by commercial water supply tankers, while power generator will be used in case of electricity power failure.

#### Expenses on utilities projected

<b>Utilities</b>	<b>Year 1 (N)</b>	<b>Year 2 (N)</b>	<b>Year 3 (N)</b>
Water	5,000	5,000	5,400
Light	6,000	6,300	7,500
Ceramics	29,000	29,000	31,500
<b>Total</b>	<b>40,000</b>	<b>40,300</b>	<b>44,400</b>

### 9.4 Other Expenses

There are other expenses to be incurred in the course of running the ceramics

<b>Type of expense</b>	<b>Year 1(N)</b>	<b>Year 2(N)</b>	<b>Year 3 (N)</b>
Machine and equipment maintenance	34,000	83,000	86,000
Business travel	15,000	21,000	20,000
Public relation	20,000	24,500	18,000
Fuel/diesel	15,000	21,500	15,000
Miscellaneous	10,000	10,000	11,000
<b>Total</b>	<b>94,000</b>	<b>100,000</b>	<b>134,000</b>

### 9.5 Working Capital

<b>S/N</b>	<b>Working capital</b>	<b>Amount</b>
1	Repairs/maintenance	34,000

2	Electric bill	6,000
3	Water bill	5,000
4	Ceramics s	29,000
5	Salaries/wages	337,500
6	Administration	15,000
7	Wears	10,000
8	Adverts	13,500
	<b>Total</b>	<b>450,000</b>

### 9.6 Total required investment outlay (required start-up capital)

The table below shows the total investment outlay required to execute the project.

S/N	Working capital	Amount
1	Machinery, equipment and others	550,000
2	Working capital requirement	450,000
	<b>Total</b>	<b>1,000,000</b>

### 9.7 Financial Plan

To finance the required investment outlay, the manager plans to raise an equity capital of N300,000 while N700,000 will be borrowed from the bank.

S/N	Working capital	Amount
1	Equity contribution	300,000
2	Bank loan	700,000
	<b>Total</b>	<b>1,000,000</b>

### 9.8 Loan repayment schedule and interest paid

<b>Year</b>	<b>Loan (N)</b>	<b>Repaymen t</b>	<b>Interest 10%</b>	<b>Loan balance (N)</b>
1	700,000	Nil	70,000	700,000
2	700,000	300,000	70,000	400,000
3	400,000	400,000	40,000	Nil

## 9.9 Depreciation

The annual depreciation is calculated using the straight line method

<b>S/N</b>	<b>Capital item</b>	<b>LS</b>	<b>IV</b>	<b>SV</b>	<b>Depreciation</b>
1	Structures	1	80,000	60,000	20,000
2	ceramics machines	5	290,000	250,000	8000
3	Power generator	1	94,000	80,000	14,000
4	Metal basin	10	4,000	Nil	4,000
5	Water tank	1	40,000	30,000	10,000
	<b>Total</b>				<b>56,000</b>

## 9.10 Profit and loss

<b>Particulars</b>	<b>Year 1 (N)</b>	<b>Year 2(N)</b>	<b>Year 3(N)</b>
Exported sales	800,000	1,200,000	1,600,000
1% discount	8000	12000	16,000
Net sales	79,200	1188000	1584000
Expenses	80,000	100,000	150,000
Structures	80,000	75,000	70,000
Utility	40,000	40,300	44,400
Operation	337,500	400,000	450,000
Other expenses	100,000	94,000	134,000
Total expenses	557,500	634,300	778,400
Profit before int and tax	650,000	1150,000	1400000
Less interest	35,000	38,000	10,000
Profit before tax	615,000	1112,000	1,390,000
Less 10% tax	61500	111200	13900
Profit after tax	450,500	675,000	925,150
Less depreciation	56,000	56,000	56,000
Net profit	538,500	587,000	837,150
Retained	538,500	587,000	750,000
Dividend	Nil	Nil	87,150

## 9.11 Cash Flow Projection

<b>Cash in</b>	<b>Year 0 (N)</b>	<b>Year 1 (N)</b>	<b>Year 2 (N)</b>	<b>Year 3 (N)</b>
Equity	300,000			
Bank loan	700,000			
Net profits		538,500	587,000	837,150
Depreciation		56,000	56,000	56,000

Total cash in	1,000,000	450,500	675,000	925,150
Cash out				
Equipment and others	550,000			
Working capital	450,000			
Increase/decrease in cash		20,000	25,000	30,000
Loan repayment			300,000	400,000
Total cash out	1,000,000	450,500	675,000	925,150
Opening bal	Nil	Nil	538,500	220,000
Increase/decrease	Nil	538,500	758,500	380,000
Closing balance	Nil	538,500	220,000	600,000

## 9.12 Balance sheet projection

Cash in	Year 0 (N)	Year 1 (N)	Year 2 (N)	Year 3 (N)
Fixed assets	300,000			
Machinery, equity and others	550,000	550,000	550,000	550,000
Less com. Dep.		56,000	112,000	168,000
Net fix ass	550,000	494,000	438,000	382,000
Current assets			150,000	200,000
Stock of material	125,000	125,000	538,500	220,000
Operating balance B/F				
Debtors	410,000	28,000	125,000	173,000
Cash in and Bank		304,000	186,000	1,200,000

Total of current assets	535,000	151,000	220,000	1,793,000
Total Assets	1085,000	645,000	658,000	2,461,000
Longterm liabilities				
Capital (equity)	300,000	300,000	300,000	300,000
Retained earnings		538,500	587,000	800,000
Bank loan	700,000	700,000	400,000	Nil
Total of long term liabilities	1,000,000	461,500	1,287,000	1,166,000
Current liabilities				
Loan repayment			300,000	400,000
Creditors	85,000	151,500	393,000	579,000
Dividend				
Total of current liabilities	85,000	151,500	693,000	979,000
Total liabilities	1,085,000	645,000	658,000	2,461,000

## PART X

### 10.0 Financial analysis

$$\text{BEP} = \frac{\text{FC}}{1 - \frac{\text{VC}}{\text{S}}}$$

Where FC = fixed cost of 550000

VC = Variable cost of 450000

S = sales of 800000

1 = constants

$$\text{BEP} = \frac{550,000}{1 - \frac{450,000}{800,000}}$$

$$\frac{550,000}{1 - 0.5625} = \frac{550,000}{0.4375}$$

$$\text{BEP} = \mathbf{1,257,143}$$

### 10.1 Profitability analysis

Relevant key profitability ratio for the first three years are shown

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Turnover	800,000	1,200,000	1,600,000
Gross margin	650,000	1,150,000	1,400,000
Net operating profit	450,500	675,000	925,150
Return of Equity or owners contribution (%)	150.2	225	308.4

### 10.2 Cash Flow Projection



By the second year of operation when the business has fully matured, the cash flow position is as shown below

<b>Year 2</b>	<b>Year 3</b>
220,000	600,000

## **PART XI**

### **11.0 other consideration and conclusion**

#### **11.1 Economic Justification**

From the view point of my studies and analysis of the findings made, the project offers good benefit to the promoter, and the economy, wealth will be created even as job are also created. These are consistent with the federal and state government policy on entrepreneurship, wealth and job creation.

#### **11.2 Commercial viability**

The commercial viability of the project is very clear. The project has been found to be commercially viable, heavy shown through projections, an impressive sales, profits and cash flows positions.

#### **11.3 Conclusion**

Therefore, the project is highly recommended for both findings and implementation.