

**UNIVERSITY OF NIGERIA, NSUKKA**  
**FACULTY OF AGRICULTURE**  
**DEPARTMENT OF HUMAN NUTRITION AND NUTRITION**

**TOPIC:**  
**DRY SEASON IRRIGATION FARMING FOR VEGETABLES IN NSUKKA AND THE**  
**METHODS OF SALE AND DISTRIBUTION**

**AN ASSIGNMENT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT**  
**FOR THE COURSE: CED 342**  
**(BUSINESS MANAGEMENT AND DEVELOPMENT)**

**BY**  
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**2013/186556**

**LECTURER: DR. (Mrs.) NWAOGA T.C**

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## 1.0 EXECUTIVE SUMMARY

1.1 The following report and recommendation relate to the proposal to establish a dry season irrigation vegetable farm.

1.2 The proposed project is to be fully implemented with an investment of made up of ₦ 10,317,450 (ten million three hundred and seventeen thousand, four hundred and fifty naira) and is broken into ₦ 9, 635,200 fixed capital ( nine million six hundred and thirty five thousand two hundred naira) and ₦682, 250 ( six hundred and eighty two thousand, two hundred and fifty naira) working capital.

1.3 The vision of our business is to provide steady access to fresh leafy and non-leafy vegetables to the populace of Nsukka metropolis during dry season.

1.4 Proposed businesses will be located at No. No. 12 Agbani Nguru, Nsukka

1.5 A ready market exists for the business based on our survey

1.6 The financial projections reveal a good level of liquidity and stability. The projected turnover for year 1, year 2 and year 3 respectively is **₦1,450,000, ₦1,740,000, ₦ 2,175,000**

1.8 The company's competitive edge is the strong technical skills and knowledge of the business.

1.9 The profitability indicators as extracted from the projections embodied in the plan are as follows:

### PROFITABILITY ANALYSIS

#### 7.4 PROFITABILITY ANALYSIS

INDICATORS	2017	2018	2019
<b>Turnover (₦ )</b>	<b>1,450,000</b>	<b>1,740,000</b>	<b>2,175,000</b>
<b>Gross margin (₦)</b>	<b>1,000,000</b>	<b>1,230,000</b>	<b>1,800,000</b>
<b>Net operating profit (₦)</b>	<b>317,750</b>	<b>541,750</b>	<b>1,102,150</b>
<b>Return on equity and owners</b>	<b>3.3</b>	<b>5.6</b>	<b>11.4</b>

<b>contribution %</b>			
<b>Return on total investment %</b>	<b>3.1</b>	<b>5.3</b>	<b>10.7</b>

## **BACKGROUND**

### **2.1 INTRODUCTION**

Scarcity of vegetables (leafy and non-leafy vegetables) in Nsukka during the dry season has been a form of worry to me since my secondary school days as the only source of vegetables during dry season was from Adani in Uzouwani Local Government Area, enugu state. Few persons in Nsukka local Government Area that has ventured into the business did it on a small scale bases: hence the reason that prompted my interest in the business.

NONSO farms promises to meet up with these limitations by supplying to the best of their ability both leafy (pumpkin, water leaf, amaranthus), and non-leafy (garden egg, tomatoes, cucumber and improved specie of okro) vegetables to Nsukka metropolis and if possible eateries and whole salers (mgbere ahia).

### **2.2 VISION STATEMENT:**

Our vision at NONSO farms is to provide a steady supply of quality vegetables to our numerous customers and at an affordable cost.

### **2.3 MISSION STATEMENT:**

To produce fresh and good quality vegetables, provide employment to school leavers and maintain a nice method and channel of distribution

### **2.4 LEGAL STATUS:**

This business NONSO farms belongs to Obayi Chinonso Victoria. NONSO Farms is located at No. 12 Agbani Nguru, Nsukka on a fifteen plots of land owned by Obayi Ezeaku family and very close to lake called "OHE". It is in the process of registration with the corporate affairs commission.

## **2.5 LOCATION AND FACILITIES:**

NONSO Farms is located at No. 12 Agbani Nguru, Nsukka on a fifteen plots of land owned by Obayi Ezeaku family and very close to lake called "OHE" because of availability of the following facilities; availability of a natural source of water, regular power supply, availability of a commodity market (IKPA COMMODITY market), nearness to market. Other facilities needed includes a green house for breeding or raising the plant in the nursery.

## **2.6 PRODUCT AND SERVICES:**

Garden egg, Fresh tomatoes, Okro, pumpkin leaf, Amaranthus, and Water leaf.

## **2.7 MARKETING STRATEGY:**

Our products are to be sold to wholesalers, eateries and directly to individual consumers.

## **2.8 KEY SUCCESS FACTOR:**

- Improved varieties of vegetables that are resistant to drought and pest will be planted.
- We shall be polite and friendly to the customers.
- Existence of reliable market outlets.

## **2.9 INHERENT RISKS**

- Risk of pest and insect infestation.
- Implementation of this project may arouse the interest of competitors and more entrants into the business.
- Cost will be constantly accrued from the purchase of diesel for pumping water from the lake to the farm on a daily basis.

### **3.0 MARKETING AND CLIENTS:**

#### **3.1 NATURE AND SIZE:**

Vegetables are a necessity since they supply the nutrients that keep the body healthy. Large scale production of both leafy and non-leafy vegetables will be produced.

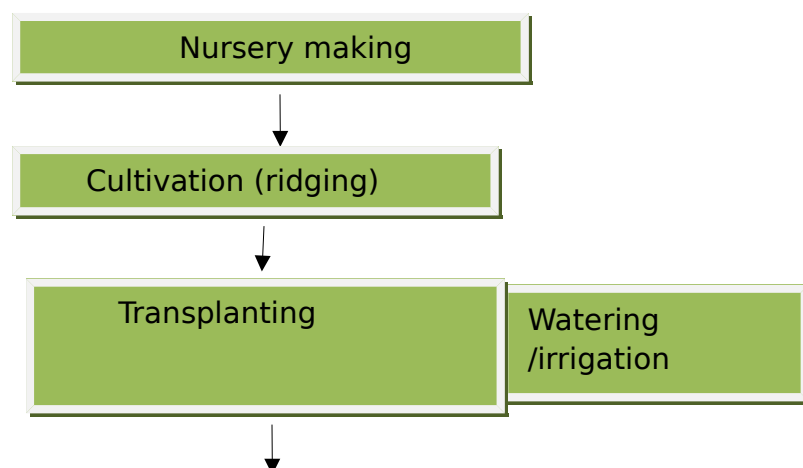
#### **3.2 TARGET CLIENT/MARKET:**

We are targeting students, civil servants (university of Nigeria Nsukka staff), public servants and business minded people of Nsukka Metropolis.

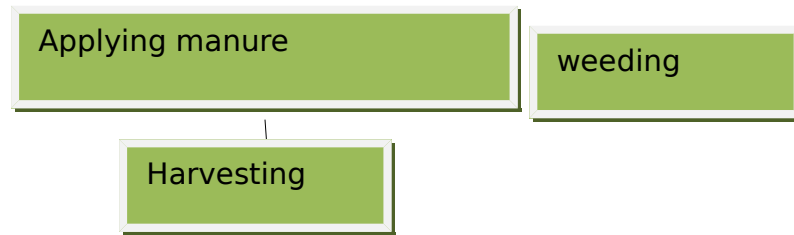
#### **3.3 KEY COMPETITORS AND PLAYERS:**

The key competitors and players in the irrigation of vegetable are the Adani people and small scale producers of vegetables, but still they are not satisfying the demand due to the population of increase in the area is always high and inconsistent supply.

#### **3.4 PRODUCTION PROCESS:**







### **3.5 DEMAND AND SUPPLY ANALYSIS:**

Although there are a few farms already operating at Nsukka but the demand has not been met. This may be attributed to a number of factors such as, the high population density in the area the population constitute mainly of the students and the lecturers that make use of these vegetables. Some of this enterprise are small in size with few members of staff and hence cannot serve large number of customers at a time. We are ready to employ a large number of staff especially young school leavers to help boost production.

Another noteworthy reason for the inability to render a satisfactory vegetable farming services in the area is because of the fact that none of these existing enterprise run a package like door step distribution of vegetables on demand with only a small cost attached to the price of the vegetables and NONSO Farms is set to offer these services.

### **3.6 TECHNOLOGY:**

As a starter, we are going to employ manual technology but will transform to farm mechanisation as the business grows.

### **3.9 COMPETITIVE EDGE:**

Our competitive advantage includes; availability of cheap labour, constant power supply, security and adequate market for our products.

#### **4.0 MARKETING PLAN:**

##### **4.1 MARKETING:**

We are going to sell our product direct to the customers in cash but may grant a credit to a regular customer and to those that comes directly to the farm to purchase of not more than two thousand naira (N2000.00) only.

##### **4.2 PROMOTION AND DISTRIBUTION STRATEGY:**

We are going to promote our business through personal contact, printing and distribution of hand bills and through the use of posters to be pasted in public places and placing large logos on our products.

##### **4.3 ALLIANCES:**

We do not plan any form of alliances until our business is established.

##### **4.4 MARKET POSITIONING AND SERVICES DELIVERY STRATEGIES:**

We are not going to be a one stop shop but instead shall specialize in rendering a certain number of services such as, door to door sale, sending products to local market and allowing wholesalers to visit the farms after harvest. We shall maximise the use of our resources efficiently.

##### **4.6 SWOT ANALYSIS**

**S**-Strength of this business lies on a number of factors favouring the business in the area. They include such factors as; cheap power supply, and availability of ready market for our products.

**W**-Weaknesses of this business, business and seasonality of demand as the most of the customers are students, which imply that the demand will be high during the time schools, are in session (UNN) and decreases rapidly during the holidays. Also, during rainy season there

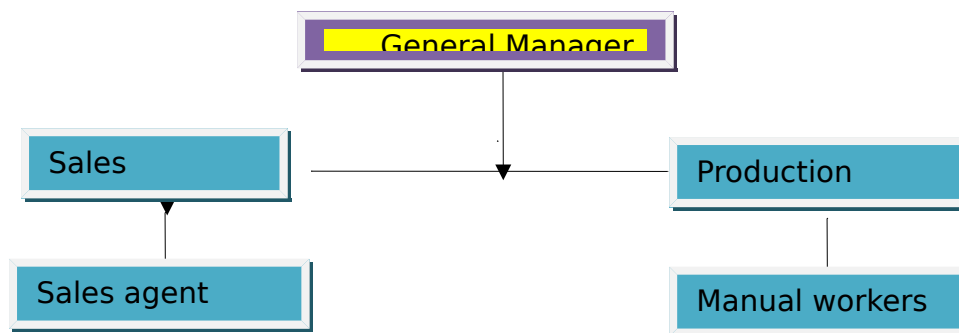
will be low turn up of customers as virtually every person has access to a vegetable garden hence restrictions.

**O**-Opportunities that are available to this business include; increased disposable income and availability of ready market.

**T**-Threats to this business are; pest, insects and disease infestation, perishability after harvest, loss of soil nutrient due to continuous fertilizer application, etc.

## 5.0 ORGANISATION AND MANAGEMENT

### 5.1 ORGANOGRAM



### 5.2 SHAREHOLDERS AND DIRECTOR

No room exists for shareholders and directors as the business have not been registered in Nigeria stock exchange and still rising. We plan to diversify to other areas of agriculture in the nearest future and may require shareholders and directors then.

### 5.3 MANAGEMENT TEAM

General Manager, production and sales manager, sales agents, manual workers (harvesters etc). We are not going to employ external personnel's, hence our managers should be versatile in areas of accounting, personnel, and recruitment.

### 5.4 PERSONAL PLAN (quarterly)

NAME	POSITION	QUALIFICATION	SALARY(N)	AMOUNT(*3)N
Eze, P. V	Manager	B.ED BUSINESS EDUCATION	16,250	48,750
Ugwuanyi, M. O	Sales manager	B.A Linguistic	16,250	48,750
Ugwuede, J.K	Production manager	B.ED BUSINESS EDUCATION	16,250	48,750
10 manual workers		WAEC holders	12,000	360,000
<b>TOTAL</b>				<b>506,250</b>

## 5.5 VALUE AND NORMS OF THE BUSINESS

The value and norms of our business are honesty and customer oriented service

## 6.0 LEGAL, REGULATORY, SOCIAL AND ENVIROMENTAL ISSUES

### 6.1 LEGAL ISSUES:

The name of our business is NONSO Farms. It is about to be registered with corporate affairs commission.

### 6.2 REGULATORY ISSUES:

Our business is going to abide by all regulatory policies as directed by the regulatory authority.

### 6.3 SOCIAL ISSUE:

Our business is going to contribute in improving the social standards of the people in the area through provision of access to quality and affordable fresh vegetables both leafy and non-leafy vegetables, hence leading to a healthy and social life.

### 6.4 ENVIROMENTAL ISSUES:

We are going to ensure proper discharge of waste products from the business such as empty fertilizer and manure bags, and proper channelling of spilled water to a collection tank. We shall also endeavour to maintain our generator frequently to ensure complete combustion of fuel and reduce noise so as to minimise pollutions.

## 7.0 FINANCIAL PLAN:

### 7.1 SUMMARY OF PROJECT COST:

The total cost of this project estimated to be ₦ 10,317,450. It is broken into ₦ 9, 635,200 fixed capital and ₦682, 250 working capital.

#### Fixed Capital Cost:

Land	₦ 9,000,000
Generator	₦110, 000.00
Computer System	₦65,000.00
Truncated table	₦25,000.00
Plastic chairs(4)	₦3,200.00
Erection of a nursery (green house)	₦25,000.00
Construction of packing store and one outlet office building	₦ 210,000.00
Buying of farm implements, various sizes of hose and pumping machine	₦ 197,000.00
<b>Fixed capital cost</b>	<b>₦ 9,635,200.</b>

#### Operating costs or variable costs

Salaries and allowances	₦ 506,250
Purchase of seeds and seedlings (improved varieties)	₦ 50,000
Electricity and fuelling	₦ 36,000
Transportation	₦53,000
Depreciation	₦37,000
<b>Total variable cost</b>	<b>₦ 682,250</b>

### 7.2 FUNDING PLAN:

Owner's contribution ----- ₦ 9,000,000 (₦ 600,000 x 15 plots of land)

Total project cost ----- ₦ 10,317,450

### 7.3. FUNDING REQUIREMENT:

The funding requirement for this project is ₦ 682,250 since the owner contributed ₦ 9,000,000.

### 7.3.1 DEPRECIATION SCHEDULE:

ASSET ITEMS	COST (₦)	SALVAGE VALUE(₦)	LIVE SPAN (years)	DEPRECIATION PER YEAR (₦)
Generator	110, 000.00	48,000	10	6,200
Construction of packing store and one outlet office building	210,000.00	100,000	10	11,000
Buying of farm implements, various sizes of hose and pumping machine	197,000.00	80,000	10	11,700
Truncated table	25,000.00	5,000	10	2,000
Computers	65,000.00	15,000	10	5000
Tables	25,000.00	8,000	10	1,000
Plastic chairs	3,200.00	1,100	10	100
Total	₦ 635,200	₦-252,100		37,000

### 7.5 PROJECTED INCOME STATEMENT

	2017	2018	2019
<b>Turnover</b>	<b>1,450,000</b>	<b>1,740,000</b>	<b>2,175,000</b>
<b>Cost of sales</b>	<b>450,000</b>	<b>510,000</b>	<b>375,000</b>
<b>Gross margin</b>	<b>1,000,000</b>	<b>1,230,000</b>	<b>1,800,000</b>

<b>Less: operating expenses</b>			
Salaries and allowances	₦ 506,250	₦ 506,250	₦ 510,850
Purchase of seeds and seedlings (improved varieties)	₦ 50,000	₦54,000	₦63,000
Electricity and fuelling	₦ 36,000	₦38,000	₦38,600
Transportation	₦53,000	₦53,500	₦57,000
Depreciation	₦37,000	₦37,000	₦37,000
<b>Total operating expenses</b>	<b>682,250</b>	<b>688,250</b>	<b>697,850</b>
<b>Net operating profit</b>	<b>317,750</b>	<b>541,750</b>	<b>1,102,150</b>

## 7.6 PROJECTED CASH FLOW STATEMENT

	<b>2017</b>	<b>2018</b>	<b>2019</b>
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<b>Cash inflows</b>			
Owners capital or equity	<b>₦ 9,000,000-</b>	-	-
Loan	<b>₦ 682,250</b>	<b>1,740,000</b>	<b>2,175,000</b>
Sales revenue	<b>₦1,450,000</b>	<b>1,740,000</b>	<b>2,175,000</b>
<b>Total cash inflows(A)</b>	<b>₦11,767,450-</b>		
<b>Cash outflows</b>		-	-
Fixed asset acquisition	<b>₦ 9,635,200.</b>	-	-
Cost of sales	<b>₦ 450,000</b>	<b>510,000</b>	<b>375,000</b>
Variable cost (less depreciation)	<b>₦ 645,250</b>	<b>651,250</b>	<b>660,850</b>
Loan repayment	-	<b>320,000</b>	<b>320,000</b>
<b>Total cash outflows (B)</b>	<b>10,730,450</b>	<b>1,481,250</b>	<b>1,355,850</b>
Net cash flow( A -B) = C	<b>1,037,000</b>	<b>258,750</b>	<b>819,150</b>
Opening cash balance	-	<b>1,037,000</b>	<b>1,295,750</b>
(D)	<b>1,037,000</b>	<b>1,295,750</b>	<b>2,114,900</b>
<b>Closing cash balance (D)</b>			

### 7.7 PROJECTED BALANCE SHEET:

	2017	2018	2019
<b>CAPITAL</b>			



<b>EMPLOYED</b>	<b>₦ 9,635,200</b>	₦ 9,635,200	₦ 9,635,200
Fixed asset (at cost)	<b>₦ 37,000</b>	<b>₦ 74,000</b>	₦ 111,000
Less: depreciation	<b>₦9,598390</b>	<b>₦9,561,200</b>	<b>₦9,524,200</b>
<b>NET BOOK VALUE</b>			
<b>(A) =</b>			
<b>Current assets</b>	<b>495,000</b>	<b>719,700</b>	<b>1,295,750</b>
Balance at bank and in hand (B)	<b>650,000</b>	<b>(400,000)</b>	-
Less: current liabilities (C)			
Net current asset	<b>(155,000)</b>	<b>319,700</b>	<b>1,295,750</b>
<b>B – C = D</b>			
Net asset <b>E</b>			
<b>FINANCED BY</b>			
Owners capital <b>F</b>	<b>9,635,200</b>	<b>9,635,200</b>	<b>9,635,200</b>
Retained profit <b>G</b>	<b>317,750</b>	<b>859,500</b>	<b>1,961,650</b>
Owners fund <b>F + G</b>	<b>10,176,950</b>	<b>10,494,700</b>	<b>10,596,850</b>

## 7.8 PROFITABILITY ANALYSIS

INDICATORS	2017	2018	2019
Turnover (₦)	1,450,000	1,740,000	2,175,000
Gross margin (₦)	1,000,000	1,230,000	1,800,000
Net operating profit (₦)	317,750	541,750	1,102,150
Return on equity and owners contribution %	3.3	5.6	11.4
Return on total investment %	3.1	5.3	10.7

## 7.6 BREAK EVEN ANALYSIS

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

Where; BEP = break-even point

FC - fixed cost

VC – variable cost

S – Sales

**FOR YEAR 1**

$$FC = 9,635,200$$

$$VC = 682,250$$

$$S = 1,450,000$$

$$BEP = \frac{9,635,200}{1 - \frac{682,250}{1,450,000}}$$

$$= \frac{9,635,200}{1 - 0.470517} = 0.445$$

$$1 - 0.445 = 0.555$$

$$BEP = 9,635,200 / 0.555$$

$$= ₦ 17,360,720.7$$

## **8.0 RISK ANALYSIS, CONTINGENCY PLAN AND EXIT STRATEGY:**

### **8.1 RISK ANALYSIS AND MITIGANTS:**

RISK	MITIGANTS
Thief	Highly armed security
Fire	Instillation of fire extinguishers and also proper wiring of the entire shop to avoid short circulating of electricity.

### **8.2 CONTINGENCY PLAN:**

CONTINGENCY	PLAN
Stronger competitor	Change of strategy
Reduction in sales	Use of promotion
Loss of information	Back up systems
Power failure	Stand by generator

### **8.3 EXIT STRATEGY:**

In the case of exit from business the strategy could be moving into another business like smoothie making company.

## **9.0 OTHER CONSIDERATION, CONCLUSION AND RECOMMENDATION:**

### **9.1 ECONOMIC JUSTIFICATIONS:**

The business is economically justifiable because it will provide employment opportunity to the youth and also promotes industries around it especially the banks

### **9.2 COMMERCIAL VIABILITY:**

The business has already developed market for its products

### **9.3 CONCLUSION/RECOMMENDATION:**

From the analysis so far, it could be seen that NONSO Farms is economically viable, financially viable, and technically feasible. Thus, the business offers good investment benefit and is therefore, highly recommended for funding /financial assistance.