NAME: BASSEY JOY ANIETIE MATRIC NO: 18/ENG01/004 COLLEGE: ENGINEERING DEPARTMENT: CHEMICAL ENGINEERING COURSE CODE: GST 212 COURSE: INTRODUCTION TO ENTREPRENEURSHIP ASSIGNMENT: PREPARE A BUSINESS PLAN.

## FEASIBILITY STUDY REPORT

ON

## JOY BASSEY'S POULTRY FARM PROJECT

AT

# AFIA NSIT, NSIT IBOM L.G.A. AKWA IBOM STATE MARCH 2015

## TABLE OF CONTENTS

1.0 Introduction/ Executive	
summary	4
1.1	
Purpose	
4	
1.2 Project	
description	
4	
2.0 Project background and	
concept	5

2.1 Poultry
market6
2.2 Project location
3.0 Project technical feasibility
3.1 Project execution plan
3.2 Risks/ Challenges7
4.0 Economic/ Financial plan
4.1 Operational costs
4.2 Salary/Wages
4.3 Variable costs
4.4 Amortization of costs
5.0 Estimated revenue10
6.0 Conclusion11

## LIST OF TABLES

 Table 5.1 Condensed income/expenditure of poultry farm

 project......11

## INTRODUCTION/ EXECUTIVE SUMMARY

Poultry business was first introduced to Nigeria in the late fifties with the importation of selected breeds of exotic poultry. Nigeria like most of the developing countries suffers from vitamin and protein deficiency in the balance of the citizens. The problem increases as the population increases. Increase in poultry production through poultry farm practice plays an important role in the increase in animal protein and vitamin. The implementation of this animal husbandry project depends on the proper selection of site, soil, project management on scientific lines e.t.c. The present report has been prepared keeping all these parameters in view.

#### 1.1 Purpose

The purpose of the study is to access the viability of establishment and to generate of a poultry farm at Afia Nsit in Nsit Ibom Local Government Area, Akwa Ibom State, Nigeria by attempting to provide for the following:

- Employment opportunity to individuals in the community
- Reduction of malnutrition among the members of the community
- The entire concept of the project
- The most viable dimension of the project including construction and structures
- The production technology
- The cost and revenue estimates for a year period
- Expansion/development and implication schedule
- Cash flow and financial plan of the project
- 1.2 Project description
  - The poultry farm project is for the purpose of producing hens (chickens) for sale. The project would be located at Afia Nsit and would produce hens for consumption.
  - The labor required would be available, particularly the unskilled, which are readily available in the project area. There is abundant unskilled manpower in the project environment. The market existing in the area, surrounding the project has not been exploited. The project market is therefore unlimited and all hens produced would be a ready market. The demand for hens exceeds the supply.
  - Required electric power would be supplied by a 5 KVA generator. The electric supply would be used in pumping water from the borehole.

- The project is financially viable and at the envisaged scope of operation (5 years). A short term loan of N 13,500,000 (Thirteen million five hundred thousand naira), is to be raised. From the second year, the project would generate sufficient cash to sustain production. The loan would be defrayed in the third year of the project.
- The project is economically viable. It would create a means of employment for unemployed individuals and has no negative impact on the environment.
- There would be no difficulty in the introduction of the technology to be adopted for the project. The manager of the project will be an adequately trained personnel with skills in poultry farming.
- The projections for the project take care of the bills that are paid from the first year and even at that the profit would be high.

## 2.0 PROJECT BACKGROUND AND CONCEPT

Afia Nsit is a village in Nsit Ibom local government area of Akwa Ibom state. Nsit Ibom is one of the local governments in Akwa Ibom state. It has a population of over 110,711 people. It is a popular town in Afia Nsit and it has a prominent market that attracts travelers. It is bordered by several towns like Ikot Ewang, Ikot Ukap, Afia Nsit Atai and other autonomous communities.

## 2.1 Poultry market

The poultry farm proposed is expected to supply hens and eggs to Nsit ibom and its neighboring communities at affordable prices. The town is close to two of the largest cities in the state, Ikot Ekpene and Eket. The demand for hens and eggs in both towns is huge and some of the hens and eggs from the farms can be transported to these places for sale to increase the market for the product.

## 2.2 Project location

Prior to the determination of site suitability, a careful consideration has been given to the easy accessibility to the site, easy availability of production inputs, socio-economic aspects, marketing channels etc. The project would be located on a 100 x 200m piece of land at Nsit ibom. The fact that the market for the product is large and can be profitable. The cost of the land is considerably low because it is presently not used for any major economic venture.

## 3.0 PROJECT TECHNICAL FEASIBILITY

The project would be in two separate compartments: Poultry production unit and a broiling unit. The poultry production section would be concerned with the production of table size hen for consumption. The layout of production would start with 2 poultry production area measuring  $25m^2$  each. In the 1st year of operation, the poultry area would be constructed and stocked. The two poultry production areas would have a stocking density of 6,000 hens each, per culture period. The 2 initial poultry production area would therefore have total hens density of 12,000 hens when fully stocked. It is expected that total yield would be increased per

unit of production. In the second year, 2 additional poultry production area measuring  $25m^2$  each would be constructed.

## 3.1 Project execution plan

When the project is fully implemented, a total of 1 brooder poultry area and 2 nursery transition poultry area would be constructed. The brooder poultry measure  $4 \times 4$  m (16 m<sup>2</sup>) and the nursery/transition poultry measure  $3 \times 4$  m ( $12m^2$ ). 4 production poultry would also be constructed and stocked for the production poultry, measure  $5 \times 5m$  ( $25 m^2$ ).

## 3.2 Risks /challenges

Power -Nsit Ibom town is located in a rural area and the supply of power to the area is poor. For the project to be successful, it would rely largely on power supply from the generator which could increase the operational cost.

Water - During the dry season, the water table in the area drops to a low level. This would put a lot of stress on the pumping machine and could result in frequent break downs which would increase the operational cost of the project.

Security -There are security challenges in the area which may result in loses if not properly managed. However, this can be managed by using locals who are conversant with the environment as security personnel.

## **3.0 ECONOMIC/FINANCIAL PLAN**

Table 4.1: Cost of Land and Poultry Farm Infrastructure Development

Activity	Amount (N)
A. Cost of land and land development	
Land acquisition	2,000,000
Survey of land	100,000
Poultry construction	1,000,000
Total	3,100,000
B. Poultry farm infrastructure	
development	
Cost of farm house/office	2,000,000
Fencing of the farm	1,500,000

Development of the lattice of	500.000		
Poultry cage building	500,000		
Generation of power (5KVA)	100,000		
Water pump	60,000		
Bore hole	1,000,000		
Incubator	500,000		
Total	5,660,000		
C. Poultry production materials			
Equipment (nets, cages, solar inverters,	1,000,000		
feeders and drinkers)			
Total	1,000,000		
D. Salaries and wages of staff			
Project/ farm supervisor	600,000		
2 Farm assistants	480,000		
Security	240,000		
Total	1,320,000		
E. Variable Inputs			
12,000 broilers	360,000		
Feed	400,000		
Knapsack Sprayers	20,000		
Motor machines	20,000		
Transportation	500,000		
Total	1,300,000		
F. Other operational costs			
Maintenance on poultry	100,000		
Maintenance on equipment	200,000		
Stationery	50,000		
Total	350,000		
Grand total	12,730,000		

The land required for the project was acquired from the community for a cost of =N=2,000,000 and the perimeter and topographic survey have been carried out. The design of the farm has also been completed. The constructions of the poultry area were estimated at =N=1,000,000. The construction would be undertaken manually, because, it would be more expensive to transport earth moving equipment from the state capital to site. The method of construction would also provide opportunity for greater participation by the unskilled unemployed labor force in the project area. With close supervision of the construction work, it is expected that the time schedule for the implementation of the project would be easily met. A farmhouse would be required in the site to secure the project. It would provide areas where farm equipment would be assembled and maintained. A small office and a store would be constructed as part of the building to enable adequate control of the staff activities on the project site. In view of the high cost of building materials and transportation of such materials to site, it is estimated that it would cost =N=2,000,000. All other equipment such as generator, tanks and other equipment would be procured from established companies. The total cost of all infrastructure for poultry farm, would cost =N=5,660,000.

## 4.1 Operational costs

The operational costs for the poultry farm include the cost of the day-to-day management of the hatching, the wages and salaries of staff and procurement of other operational inputs. The purchases for all the materials making up the broiler equipment will be made from Uyo and transported to the project site.

#### 4.2 Salaries and wages

The estimated total annual expenditure on wages and salaries is estimates at =N=1,320,000.

## 4.3 Variable costs

The total variable costs of the project amount to =N=1,300,000 for procurement of poultry equipment like; chicken cages, incubators, feeders and drinkers, water pumps, solar inverter etc.

## 4.4 Amortization of cost

All of the capital expenditure would be made in the 1st year of implementation of the project. Already, land acquisition, land surveying and poultry designing have been completed. It shows that the 1st year of the project, a total expenditure of (=N=12,730,000) would be made to take care of the operating costs of the project. A total of =N=2,970,000 would be needed for the operational expenditure of the project. After that, the project would be capable of generating sufficient funds to take care of all the operational expenditures.

## **5.0 ESTIMATED REVENUE**

For the purpose of this feasibility report, the revenue expected is restricted to the operation of the poultry production area. It is however necessary to mention that the poultry would produce the hens required for the poultry production area after the 1st year of operation. The production area when fully stocked would have a total hen density of 12,000 chickens, making provision for mortality at 50% mature chickens. The hens harvested would be 6,000 kg. It is expected that chickens would sell for =N=900 per kg. Sales and total estimated revenue for the 1st year of production would therefore, is =N=5,400,000. With a modest estimated annual increase in the prices of chickens of 10%, the estimated revenue accruing from the project for the first 5 years would be shown in Table 4.2.

Table 4.2: Condensed income/ expenditure of poultry farm product

Year	Income (N)
1	5,400,000
2	5,940,000
3	6,534,000
4	7,187,400
5	7,906,140

The Farm /project supervisor would be trained in poultry work/ animal husbandry and have acquired skills to provide technical and specialized leadership needed for the management of the poultry. He would be personally responsible for the day to day running of the poultry farm. The positions of the farm assistants would be occupied by men/women who have acquired some form of formal or informal experience in poultry farm management. It is also expected that they would be trained practically on the job.

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	5,400,000	5,940,000	6,534,000	7,187,400	7,906,140
Cost of sales	9,760,000	-	-	-	-
Gross profit	4,360,000	5,940,000	6,534,000	7,187,400	7,906,140
Operating cost	2,970,000	2,780,000	2,400,000	2,560,000	2,700,000
N.P.B.T	2,403,000	3,160,000	4,134,000	4,627,400	5,206,140
Tax 45%	-	1,422,000	1,860,000	2,082,330	2,342,763
Proposed loan	780,000	880,000	1,000,000	1,150,000	90,000
repayment					

Table 5.1: shows the principal: N13,000,000 + interest 30% = N3,900,000.

#### 6.0 CONCLUSION

The Poultry farm, when in full operation would have tremendous economic and socio economic well-being of the people in Nsit Ibom local government area and the entire Uyo zone. Chicken and egg have become very scarce commodities because of the ecological changes due to changes in climate. The scarcity has also made them very expensive and unaffordable to majority of the population in the area. This has resulted in serious deficiency in the intake of protein by the people in the area. The prices of hens and eggs produced in the farm would be cheap relative to the present supply. This can aid the increased intake of protein by majority of the people as it would be affordable and accessible. The project would provide direct employment for people for this operation. This is a significant contribution to the economic well-being of the people and social improvement of the project environment. The poultry farm would be a highly profitable project which would generate sufficient cash to sustain production from the second year. The profits from the project would be able to repay the loan and interest within the first 5 years.