

## BUSINESS PLAN FOR THE ESTABLISHMENT OF A PALM TREE PLANTATION AND PALM OIL EXTRACTION PLANT

### THE PROJECT CYCLE

- Identification/Selection of Project
- Preparation and Analysis of Project
- Appraisal
- Implementation and Monitoring
- Evaluation

### Identification/Selection of Project Stage

There are many agro-based businesses one can venture into to make substantial profit, especially in the Nigeria. Nigeria has a population of approximately 150 million people, what this tells us is that there are several opportunities in the country. We only need to find basic problems in the society and provide the solution to it. One sure way to achieve this is by setting up an agriculture business in Nigeria. Food is a major thing needed by the body and soul daily, without food, no one can survive. So finding the problem in the Food industry, choosing agriculture as a business and providing a solution to it will be a big hit for a businessman. Agriculture is one of the most lucrative businesses in the world because it provides the daily need for everyone, which means everyone in the world needs Agricultural produce to survive.

Palm oil business is one of the lucrative businesses any entrepreneur can delve into and make huge profits. The youths of today want white collar jobs in the oil and gas sector but fail to tap into the income potential in the agricultural sector. Those who are wise to go into palm oil business, always make crazy profits. This project is aimed at serving as a substitution to the importation of palm oil and its products from foreign countries (Import

Substitution). This project will help in reducing the dependence of Nigeria in foreign oil and in utilizing our own soil and climate conditions. Nigeria is known for very fertile tropical forests. These conditions are very conducive for the growth of palm trees. Rain is a very important factor too in the cultivation of palm trees and here in Nigeria, we are blessed with both rain and sunshine. Nigeria's drop in economic progress and dependence on crude oil means that this business is perfect for Nigeria to help build her economy back. Nigeria is one of the largest producers of palm oil but still loses millions on importation of palm oil. This shows that the demands in the country are not met by internal producers. The government will also be able to aid this business by adding subsidies to promote local patronage. This venture will also attract large sponsors because of its profitability. Nowadays, very prominent business men and politicians are involved in the investment of this agricultural business. Due to such reason, the selection of this business will be of great benefit both to the Country and to entrepreneurs.

### Project Preparation and Analysis Stage

This stage is very important in the success of this business. Various specialists in palm oil industries are needed to review intensively, the profitability of this business and how successful will be over time by checking out various factors. A feasibility study report is has been formed below in the analysis of the business plan.

**BUSINESS PLAN FOR AN AFRICAN OIL PALM PLANTATION OF 100 HECTARES AND AN OIL PALM MILL OF 1MT PER HOUR CAPACITY AT BONNY ISLAND, RIVERS STATE, NIGERIA BY AGROTECH INDUSTIRES.**

**CONTENTS**

- Executive summary of business plan
- Sponsorship
- Management Scheme
- Technical Assistance
- Market and Sales
- Competition Analysis
- Tariffs and import Restrictions
- Market Potential
- Profitability
- Technical Feasibility
- Government Regulations and Support
- Estimated Project Cost and Revenue
- Project Timeline
- Funding Mechanisms
- Conclusion

**EXECUTIVE SUMMARY OF BUSINESS PLAN**

As the need for palm oil grows in the country, the value of high-quality oil increases every day. Due to its high productivity it offers a far greater yield at a lower cost of production. This business plan will help to analyse how implementable the idea of setting up an oil palm plantation is. An oil palm plantation of up to 100 hectares next to an oil extraction mill which will be capable of producing up to 1MT of palm oil per hour under normal operating conditions is going to be set up within the thick tropical forest of Bonny Island, Rivers State by Nigeria Liquefied Natural Gas Company under consultations from Dalle Agricultural Consulting Firm.

The farm will have 130 palm trees per hectare and will be able to produce 500tonnes of palm fruit per harvest. Although the there is no huge local demand for palm kernel oil and its products, This agricultural project will prevent ant lack of oil in the island and it will also reduce the cost of transporting high-quality oil from other states of Nigeria. It will also provide this high valued product for other parts of Nigeria including our nearest neighbours, Port Harcourt as well as other states that possess companies that can utilize this product for other small scale businesses such as personal care (soap, lotions, etc.) , pharmaceuticals, cosmetics and so on.. This project will also be able to generate more economic opportunities as well as employment chances for people living in Bonny. This will also help in reducing the amount of palm oil imported into Nigeria and conserve our scarce foreign exchange. Labour costs in this region are relatively low so this will help reduce expenses in hiring workers and increase profits. Prices of or products can be significantly dropped and this will deepen our footprint in the oil palm market.

### **SPONSORSHIP**

This proposed oil palm production is sponsored by *The Nigeria Liquefied Natural Gas (NLNG)* which has its plant also located here in Bonny Island. NLNG is helping Nigerians in appreciating the value of home-made products and raw materials and discouraging the importation of foreign cash crops like palm oil from countries like Malaysia. Agrotech Industries has been giving the role of managing the entire project and providing of a 1MT palm oil milling machine.

### **MANAGEMENT SCHEME**

Although the executives/Managing Directors of this Agro-based business will solely be the Board of directors of NLNG, the management team will include the agricultural expertise at Agrotech industries as well as the Agricultural consultants of Dalle Consulting firm. They will

be responsible for timely decision making based on the growth and development of the business. New strategies will also be implemented by this group of people after prior consultation from The Board of Directors to keep up with the demands of the market regarding the production of palm oil. Both the short term bloom and long term success of this carefully and strategically planned and implemented business idea depends fully on the actions and activities of this set of individuals. Palm oil processing experts will be responsible for the day to day running of the milling machine and Engineers will be on stand by and ready for any malfunctions of any of processes involved in the plant. The overall plant manager will put down various modules and set day-to-day targets to be met by the industry as a whole. One of the main targets will certainly be maximizing the working conditions to produce as much oil as possible per day, maybe even attaining the full capacity of the machine to make as much money a day as possible. There will also be a storage manager as well as a transport manager to help control storage and transportation of the palm oil.

### **TECHNICAL ASSISTANCE**

Relationships between other companies on a business basis can be the difference between profit and loss. NLNG was the best choice of sponsors due to its wide communication links between wide varieties of companies. This helps in attracting competent technical assistance from other firms. One of its ties includes that with OKFarm Limited. This company specializes in the planting and cultivation as well as the extraction of palm kernel oil. They give quality assistance on processing techniques and other important strategic advice. The most important aspect of this relationship is in general farm management and maintenance. Experts in management such as spraying, planting, cultivating, harvesting and processing procedures are loaned out. This ensures the effective and expert running of the farm. The Bank of Agriculture is

the best bank to look towards to provide Agricultural loans in Nigeria. Even though of the financing will be done by NLNG, BOA will play an important part in providing the financial aid in form of loans to procure the 100 hectares of land needed for the project at a 7% interest rate.

An interaction with Sunny Oil Nigeria Ltd has also provided an easy means of selling the palm oil produce in large quantities. This alliance means that our product will be sold to them once it has been produced so there will be a reduced cost of storage and this will lead to profit increments. They have requested for about 500kg of palm oil a month to meet up with its production demands.

### **MARKET AND SALES**

Customers will want to buy products that are easily available and affordable. Therefore the management has focused on production and distribution efficiency as well as the demands of the target markets. The target markets will include other cities located in Rivers state as well as Bayelsa and Delta. It will also include South-East states such as Imo and Abia State. These states are zones that have been picked due to the rising demand for high-quality palm oil.

Market share will be 10% on niche markets in the South-South and South East of Nigeria. We will be able to make available, high-quality palm oil to the targeted niche markets as well as for other companies within the geographical zones who require the product for their own manufacturing needs.

### **COMPETITION ANALYSIS**

There is a lot of competition in terms of production within the states in the south-south and south-east of Nigeria. States like Akwa-Ibom produce very large amounts of palm oil. Other

states such as Delta and Rivers also have very significant competitors. Most of the palm oil used in the country is generated from these regions. However, the demand in these areas of Nigeria seems to be increasing every year. This is because most of what is produced by companies is transported to other states while the demand requirements within the region are not met. So the sale of palm oil within these regions of high production will be very feasible especially at lower prices but competitive quality. The analysis shows that even though there is completion, the supply of our product will help meet the demands of the market at low price for the locals small scale marketers and also for the large scale industries.

### **TARIFFS AND IMPORTATION RESTRICTIONS**

As said earlier, Nigeria Liquefied Natural gas is sponsoring this project to encourage businesses that are making use of Nigeria's own raw materials instead of importing foreign ones into the country. Nigeria as a whole is also placing higher tariffs on goods which can be produced in the country. This also includes aiding businesses like these in importing agricultural equipment needed for production in Nigeria.

### **MARKET POTENTIAL**

Due to the climbing demand for palm oil and its derivatives in the nation especially, within Rivers state it will be a very productive venture to dive into as largest producers are earning huge sums of money by the day. Agricultural Equipment will be imported and will raise the competence of this business relative to others within the African oil palm industry.

### **PROFITABILITY**

Due to the soil status and climate of Bonny Island, the growth of palm trees will be favoured and should produce enough yield to generate more than enough profit. Irrigation is not a problem since it is a tropical area where rainfalls are very consistent. However due to the large number of crows, there will be a tendency of loss of fruits due to invasion from these birds. Profitability might also be hindered by monkeys which are also present in the tropical forests of Bonny Island. Technical assistance from OkFarm limited and Dalle consulting as mentioned earlier will be of great value in talking this issue. Various solutions will be discovered to maximize profits.

### **TECHNICAL FEASIBILITY**

The business venture is a very common part of Nigeria's economy so it is not new to us here. The harvesting of palm kernels and the extraction of palm oil can easily be done through the use of modern day agricultural equipment and a 1tph milling machine. There is also a group of experienced palm oil experts that will be gotten from Okfarm Industries to help manage the procedures involved using milling machine and other implements. Specialists in the field of agricultural systems like irrigation, planting, harvesting, pest control and management of the farm machines and tools, will be hired for efficient running of the entire farm. The transport of the produce will be through sea because that is the only main means of transporting goods out of the island. This job will be managed effectively by loaned out Liquefied Natural Gas carrier managers who have high experience in transport services by sea. Although other companies like Okomu Oil Palm Company and Presco are continuing to grow every second, we are positive that our business will soon start to make its mark in Nigeria due to the strategies we have but in place to import the high quality of agricultural tools and machines and at the same time, by saving



costs due to storage. This was managed through the help of NLNG is giving out their fleet of cargo ships to be used for transportation. Also, the abandoned gas holders were also giving out for renovation to be used as storage facilities instead of constructing totally new storage infrastructure. Use of organic fertilizers will also be implemented in order to reduce the impact on the environment as compared to chemical fertilizers. This is to maintain the nutrients in the soil for much long and to prevent depletion of soil activities by micro-organisms and maintain the rich, fertile soil of the tropics.

### **GOVERNMENT SUPPORTY AND REGULATIONS**

This venture rhymes with the government's claim to reduce exports and increase national patronization. This will improve are foreign exchange with other countries and also bring about more opportunities in form of employment to the locals of Bonny. There will also be a benefit of support from government in providing left import taxes on agro-based equipment from overseas.

### **Project Timeline**

The project will be completed in a year and 6 months starting from September 2020 up until March 2020.

#### **Fixed Cost**

##### **(A) Land Clearing**

<b>Activity</b>	<b>QTY</b>	<b>₦</b>	<b>Amount for 100Hectares(₦)</b>
Land Clearing and Pulverization	1Hectare	230,000	2,300,000
Forming of road paths for transport	1Hectare	50,000	500,000

Cross cutting	1Hectare	20,000	200,000
Rome ploughing	1Hectare	50,000	500,000
<b>Sub total</b>	1Hectare	<b>300,000</b>	
<b>Total</b>	100 Hectare		<b>3,500,000</b>

## B) Equipment

Name	QTY	MODEL	USD	₦
Tractor	1	YTO-904(90hp)	24,450	8,802,000
Disc harrow	1	IBJ- 3.0	3,520	1,267,200
Palm Oil-filter	4	MODEL 870	4,950	1,782,000
Tripper	1	7CX-8T	9,450	3,402,000
Combine Harvester	2	4YZ-6	203,500	37,260,000
Boom sprayer	1	3W-1000L-18	6,950	2,502,000
Front loader	2	TZ10D	6,570	2,365,200
Palm-fruit Extraction Mill	3	1TPH-Model	30,000	11,670,600
<b>Sub total</b>			<b>49,784,440</b>	<b>90,338,000</b>

## (B) Transport Vehicles

Type	Model	QTY	Cost (₦)
Pick-up Truck	Hilux 2020	2	30,000,000
Trailer	Mercedes 2013	4	40,000,000
Total		6	70,000,000

**(D) Irrigation**

Type	QTY	Model	USD	₦
Hose Reel	1	140 – 440MT	28,186	1,0146,960

**(E) Operating Cost**

Operations	₦
Ploughing and Harrowing	2,500,000
Mechanization and storage	10,500,000
Input / Ha	9,182,500
Area yield insurance	13,500
Produce aggregation	5,500
Geo Spatial Service	4,500
Sub total	23,500
<b>For 100Ha</b>	<b>2,350,000</b>
Interest per hectare	23,000
<b>For 100Ha</b>	<b>8,831,700</b>
<b>Total cost for 100Ha</b>	<b>2,4532,500</b>
Loan principal and interest	250,000,000
Total for 100Ha	
<b>Irrigation cost for 100Ha (excluding fixed cost)</b>	<b>10,000,000</b>

**Amortization**

₦

Land clearing amortization (per hectare)	30,000
Land clearing amortization (100hectare)	3,000,000

**REVENUE**

Yield per hectare 3.25tonnes@ ₦300000	
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<b>per tonne</b>	
<b>For 100Ha</b>	<b>₦</b>
<b>Net revenue for 100Ha(without amortization)</b>	<b>435,000</b>
<b>Net revenue with amortization(100Ha clearing)</b>	<b>174,000,000</b>
<b>TOTAL</b>	<b>120,700,000</b>

### **FUNDING MECHANISMS**

NLNG will provide 100Ha of cleared farmland in the desired location for the palm oil production facility. NLNG is giving out their fleet of cargo ships to be used for transportation. Also, the abandoned gas holders are also given out for renovation to be used as storage facilities instead of constructing totally new storage infrastructure.

If there are any willing equity investor to provide equity for working capital but if not a loan is secure at the rate of 10% through government intervention window at the Bank of Agriculture, Bank of Industry and other Commercial banks.

### **CONCLUSION**

The project is technically feasible and commercially viable. It is therefore recommended for funding

### **Appraisal Stage**

The purpose of a formal appraisal of a business is to estimate the value of the business, usually for the purposes of insurance coverage or for the sale or purchase of the business. Although an appraisal uses a great deal of calculations and objective research, it is still an estimate.

In this stage a business analyst who focuses on the starting up of palm tree plantations and palm oil processing will be needed to test the validity the assumptions concerning the business plan and its budget. An expert in this area of agriculture is needed to ensure the competence of the analysis being made when checking out the budget plans and testing for feasibility. Such an expert can be gotten from a consulting firm which bases its services on oil palm consultations and information delivery regarding this enterprise and its viability. The prices of equipment needed, the potential market share in the targeted market areas, completion around and demand for palm oil and its products will be analysed by the expert. These factors are very important both during the set up and on the long run of the business.

### Implementation and Monitoring Stage

Implementation refers to a cycle of steps taken to deliver activities, outputs, results and impact while managing finances and for risk. An Implementation committee will review the business plan to identify opportunities for coordinating and combining resources. The committee should look for opportunities to collaborate and to clarify participants' roles. The implementation committee plays an important role in ensuring that implementation moves forward. The committee should have regular contact with the organizations or individuals leading each strategy to make sure activities are staying on track and any barriers are being addressed. After the necessary analysis and study of the validity of the proposed business plan, the resources needed for the business are finally procured and implemented into based on the business plan. The point of this stage is to ensure that the actual result obtained is in accordance with the expected result documented above in the feasibility report. This is usually a continuous process to measure the success in the implementation of the business plan and the strategies put in place. Due to changes in price of commodities and materials, the budget is carefully monitored to

prepare for any changes in the economic situation of the country. The Management of the enterprise will use control mechanisms to monitor the progress of the project at every stage.

Output Control Mechanisms will be used to set goals for the subsidiaries to achieve the targeted outputs in various departments. This will help to generate an overall study of the progress made by each group of workers in the project. It will also enable to fish out where problems in the project cycle are coming from. The major criteria for judging output controls of the business will include productivity, profitability, growth, market share, and quality of products. The actual output is compared to planned output to identify problems and to monitor varying factors. The mechanisms will include a daily target to be met by each committee involved in the project cycle such as the procurement committee, production committee and the analysis committee. The overall goal will be to ensure that all which was planned will be executed perfectly to ensure the progress the entire enterprise moving forward in the long run.

### Evaluation

This is the final stage of the project cycle where the success will be determined by the comparison between what was set out to be achieved and what was actually achieved.

All the loose ends of the project are tied up and all the individual and group performances will be evaluated. Each stage during the entire project development will be reviewed and any errors will be cleared up. New ideas could also be formed during this stage and implemented after the sponsors have been told. The palm oil business venture will be evaluated as a whole and the project will start to bring in significant profit.