A FEASIBILITY STUDY BUSINESS PLAN

ON

COCOA FARM

PRESENTED BY

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A BUSINESS PLAN FOR THE DEVELOPMENT OF A TWO HUNDRED HECTARES COCOA PLANTATION AT JOSELI FARMS, ILE-IFE, OSUN STATE, NIGERIA FOR BANK OF AGRICLTURE, ILE-IFE, OSUN STATE BY GARNET AGRIBUSINESS VENTURES AND CONSULTANCY CONFIDENTIALITY AGREEMENT

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Executive Summary/ Project Description

This business plan examines the feasibility of the economic viability of the development of a 200 hectares cocoa plantation in Ile Ife at Joseli Farms by Garnet Agribusiness Ventures. The farm will produce about 400 tonnes of cocoa beans in a production cycle using a special variety of cocoa which produces 2(two) tonnes per hectare. There is high demand for these products both domestically and internationally because of its varying uses and importance in the diet of many. This project or business is focusing mainly on the international aspect after which when the business expands, it will face the domestic aspect. This is done this way because of the high competition domestically, when the business starts internationally, there will be enough to gather for the domestic production. With this, it is hoped that the business expands in hectares and tonnes of cocoa beans for production of cocoa powder which is then used to manufacture chocolate bars, chocolate powder and beverages. Production is presently popular in the Southern region of Nigeria because of the favourable climate and soil conditions, in Edo, Oyo, Osun, Ondo, Ogun, Cross River, Akwa Ibom, Ekiti, and Delta with Ondo state being the highest in production.

This proposed project will provide employment opportunities, conserve scarce foreign exchange, affect people and the community positively and provide cocoa products for the citizens at a cheaper and affordable prize. When compared to Ondo state, Osun state produces less cocoa. This project aims at improving Osun state by being the first to introduce new technology in cocoa production, thereby creating awareness and improving standard of living of farmers, and development to the communities in Osun state. Cocoa plantation will be done on the 200 hectares of land and then the cocoa beans will be exported. After several production

cycles (years), when the business is stable enough, processing will be done to the cocoa beans. The cocoa beans will be processed into powder, chocolate bars and powder, and beverages and marketing will be first domestically, then internationally.

Sponsorship

The sponsorship of this project will be done by The International Fund for Agricultural Development (IFAD) and the Bank of Agriculture, Ile-Ife, Osun state. The International Fund for Agricultural Development (IFAD) will be giving grant and the Bank of Agriculture will supply the loan. The Bank of Agriculture (BOA) Limited was incorporated as Nigerian Agricultural Bank (NAB) in 1972 and became operational in 1973. The main aim of the bank of agriculture is the provision of agricultural credit to support all agricultural value chain activities. The bank also involves in capacity development through promotion of co-operatives, agricultural information systems, and the provision of technical support and extension services. This will help in achieving the project's aim of awareness and also provide support for the business when needed. Garnet Agribusiness Ventures & Consultancy will be responsible for the management consultancy of the projects in order to improve business processes, executive strategies and organizational designs.

Management

A democratically elected Board of Directors at the top (apex) of the organization structure with the democratic leadership style for the management. Democratic leadership, also known as participative leadership or shared leadership, is a type of leadership style in which members of the group take a more participative role in the decision-making process. Shareholders and members of the cooperative will make up the management and have stake in the survival, growth, development, profitability and success of the business as well as distinguished

agribusiness professionals of proven integrity and vast experience in the project area. The prime objective of the board will be to give strategic directions and policies that will ensure long term success of the organization. The board will ensure that the organization complied with all standards set by regulatory authorities. The board's key purpose is to ensure the company's prosperity by collectively directing the company's affairs, while meeting the appropriate interests of its shareholders and relevant stakeholders.

The Managing Director/President shall be responsible for the supervision and organization of daily management of the cooperative business. The main purpose of this role is to direct and control the all business operations. He is accountable to the Board of Directors; he will mobilize organization resources to achieve set goals. He will manage business risks and focus on wealth creation. A Managing Director is responsible for giving strategic guidance and direction to the board to ensure that the Company achieves its financial vision, mission and long term goals.

Technical Assistance

For the success of this business project, IITA (International Institute of Tropical Agriculture, Ibadan) and CRIN (Cocoa Research Institute of Nigeria) will be involved. The International Institute of Tropical Agriculture (IITA) is a non-profit institution that generates agricultural innovations to meet Africa's most pressing challenges and will provide technical assistance in this regard. The Cocoa Research Institute of Nigeria (CRIN) will come in for domestic trade. These institutions will help in the development of this project, research, provision of information, all for the success of the project. Bank of Agriculture has agreed to finance production of the 200hectares of cocoa through a loan between 7% and 20% interest rate (anchor borrower’s scheme) given to the cooperative. At the end of every year, a great but profiting discount will be placed on cocoa beans, to attract more market and for publicity of the business.

CRIN (Cocoa Research Institute of Nigeria) will fund the processing factory and access finance for the processing of cocoa. The cooperative will also seek grant from The International Fund for Agricultural Development (IFAD), making them the main sponsor and loan will be gotten from Bank of Agriculture.

A working relationship with Osun State Government, Osun State Ministry of Agric, Farmers' Union, Agric Cooperatives and individual farmers, also involving big farms such as Obasanjo Farms Ltd and so on. Cocoa beans will be exported, cocoa pod husk meal will be sold to poultry farms. Beverage, cocoa powder, cocoa oil chocolate bar and powder will be sold to supermarkets, wholesalers and retailers.

Market and Sales

Market orientation:

International; countries like Netherlands, Spain, China, Switzerland.
Domestic; Northern part of Nigeria

Market Share: 6.5% niche market internationally; 5% in Northern Nigeria

Users of Products: cocoa oil, cocoa powder for chocolate bars, chocolate powder and beverages. Cocoa pod husk meal as feed in layers' diet.

Competition analysis

The top growing states Ondo, Ogun, Osun, Oyo and Ekiti account for about 60% of the cocoa production and make up at least 30% of the total cocoa export in Nigeria. Ondo is rated the largest cocoa producing state with an output capacity of about 77,000 tons per annum. This shows that competition is high in the South but compared to Ondo, Osun is less competitive. The cocoa beans will be exported and those that will be processed will be done in the North. In the North, cocoa is not grown or produced because of the unfavourable weather and soil

conditions. So, if the cocoa beans are properly stored and then processed in the north where there is low competition, it will favour the business and meet demands.

Tariff and Import Restriction

Forex restriction on food importation and zero duty on imported agricultural equipment will favour the project under consideration. No tariff to pay, more market to target. This will really benefit this business project.

Market Potential

There is strong demand for cocoa and cocoa derivatives in the Northern part of Nigeria. Although with many factors affecting marketing like inadequate infrastructure, processing and storage facilities, and even poor transportation system; cocoa business project is still feasible within Nigeria and for international trade.

Profitability

Biotic (biological) factors such as water, air, soil conditions, varieties of seed, pests, diseases; abiotic factors like weather, chemical, physical and environmental factors such as temperature, sunlight, price fluctuations and other risks. To prevent and cover all risks and safeguard profit, technical, scientific and financial based solutions will be employed. Irrigation option will be factored in to ensure two cycle of production in a year to prevent water shortage or inadequate provision of water.

Technical Feasibility

The projects of production of cocoa beans and processing of cocoa beans into semi-finished and finished projects are technically feasible. Technological wise, the production and

processing of cocoa beans comprise of extraction from cocoa beans from cocoa pod, drying of cocoa beans, cocoa bean roasting, cocoa bean peeling, cocoa grinding, cocoa oil extractor, cocoa powder making and cocoa bean packaging. A retired professor in crop production who is an experienced cocoa farmer, expert and specialist is involved in this project with other professors in crop science and plant pathology (also phytopathology). The required equipment for the processing are readily available and our experts have the know-how and experience in the usage and maintenance of the equipment.

Among the team for the cocoa production, we have experts in machinery which includes mechanization and irrigation, agricultural economics and farm management, crop production, crop disease control, agricultural extension and rural development, weed science and control, accounting, quality control and market development as part of our management team. The quality of infrastructure is adequate and efficient for production, processing and marketing. Raw materials will be produced and sourced both locally and internationally.

The main competitor in Ile-Ife, Osun state, South West is Ile Oluji with few to none competitors in Northern Nigeria such as Femados Nigeria Limited in Kogi State, North Central. Ile Oluji has an installed capacity of 30,000 tonnes of raw beans per annum while Femados Nigeria Limited has a capacity of 10,000 tonnes per annum. Joseli farm will target a market niche and penetrate through cooperative societies to make the brand known and popular. From our analysis, joining of processing to production will give an edge in the competition, that is, competitive advantage.

The project will be carried out using best international practices, sustainable production, improved technology in processing and due consideration for the environment and

surroundings. Due to the project, there might be some degree of deforestation but since the environment will be replaced with cocoa trees in a form of reforestation, the EIA (Environmental Impact Assessment) report shows little or no damage to the environment as it relates to the issue of climate and soil quality change although. Fertility of the soil is really important especially from the third year upwards, it is necessary to increase the nutritional requirement. Though decaying of leaves and dungs of animals may act as organic fertilizer, inorganic fertilizer will most importantly be used alongside.

Government Support and Regulation

This project is in accordance with the economic diversification goal of the government. It also supports foreign exchange and import reduction conservation of government. The food security objective of government is supported by this project and it also creates economic opportunities, market access, and improved income for farmers. The project will benefit from government intervention fund in the agriculture sector. The project will also benefit from the favourable policy of zero duty for agricultural and equipment import. Restriction of forex for all food products will also widen market opportunity. The project will contribute significantly to employment, output increase, stable price and stable exchange rate and increase in income.

Project Timeline

The project will be completed within 4 to 5 years preferably from November, 2020 to November, 2024 because land clearing and preparation is done in dry season and the cocoa seedlings have to be planted in rainy season for easy germination of the seedlings.

7.0 Estimated Project Costs and Revenue

Fixed Cost

(A) Land Clearing

Activity	**QTY**	**₦**	**K**
Land Clearing	1Hectare	200,000	00
Cross cutting	1Hectare	15,000	00
Rome ploughing	1Hectare	40,000	00
Sub total	1Hectare	**255,000**	**00**
Total	200 Hectare	**51,000,000**	**00**

(B) Equipment

Name	**QTY**	**MODEL**	**USD**	**₦**	**K**
Tractor	1	Indo Farm 4175 DI 4WD (75hp)	27,000	9,720,000	00
Disc harrow	1	IBJ- 3.0	3,520	1,267,200	00
Sub soiler	1	IS-200G	3,250	1,170,000	00
Transplanter	1	Fedel	3,000	1,080,000	00
Tripper	1	7CX-8T	9,450	3,402,000	00
Combine Harvester	1	Wiking 7834	160	57,600	00
Boom sprayer	1	3W-1000L-18	6,950	2,502,000	00
Front loader	1	SIKU 6759	175	63,000	00

GrainPro Collapsible Dryer case	120	CDC -75	2,400	864,000	00
Cocoa pod splitting machine	1		6,000	2,160,000	00
Cocoa bean roasting machine	1	GGGHE-3	4,000	1,440,000	00
Cocoa bean peeling machine	1	GG	3,500	1,260,000	00
Cocoa grinding machine	1	GGJMS-180	4,500	1,620,000	00
Cocoa oil extractor machine	1	GGZY-230	4,000	1,440,000	00
cocoa powder making machine	1		2,500	900,000	00

Cocoa bean packaging	1		1,500	540,000	00
Sub total			**81,905**	**29,485,800**	**00**

(C) Vehicle

Type	**Model**	**QTY**	**₦**	**K**
Pick up Truck	**HILUX**	**2**	**35,000,000**	**: 00**

(D) Irrigation

Type	**QTY**	**Model**	**USD**	**₦**	**K**
Hose Reel	**1**	**75 – 300TX**	**5000**	**1,800,000**	**: 00**

Operating Cost

Working Capital		
	₦	**K**
Ploughing/Ha	10,000	00
Harrowing/Ha	8,000	00
Sub total	18,000	00
For 200 Ha	**3,600,000**	**00**
Mechanization and storage	100,000	00
For 200Ha	**20,000,000**	**00**

Input / Ha	80,500	00
For 200Ha	**16,100,000**	**00**
Area yield insurance	10,000	00
Produce aggregation	5,000	00
Geo Spatial Service	3,500	00
Sub total	18,500	00
For 200Ha	**4,700,000**	**00**
Interest per hectare	19,530	00
For 200Ha	**3,906,000**	**00**
Total cost per hectare	217,000	00
Total cost for 200Ha	**43,400,000**	**00**
Loan principal and interest (cost per Hectare)	236,530	00
Total for 200Ha	**47,306,000**	**00**
Irrigation cost for 200Ha (excluding fixed cost)	**15,500,000**	**00**

Amortization

	₦	**K**
Land clearing amortization (per hectare)	**7,718**	**: 82**

Land clearing amortization (200 hectares)	**1,543,764 : 00**

REVENUE

Yield per hectare 2 tonnes @ ₦710,640 per tonne	
	₦ K
Revenue per hectare	**1,421,280 : 00**
For 200Ha	**284,256,000 : 00**
Net revenue for 200Ha(without amortization)	**236,950,000 : 00**
Net revenue with amortization(200ha clearing)	**235,406,236 : 00**
2nd Production Cycle	
Net revenue	**233,780,214 : 00**
Net revenue with amortization(200ha land)	
Annual Net Revenue (1st + 2nd Cycle)	**469,186,450 : 00**

Currency conversion rate: ₦360.00 to 1USD

Funding Mechanism

Garnet Agribusiness will provide 200 hectares of farmland in Ile-Ife. The International Fund for Agricultural Development (IFAD) will sponsoring and Bank of Agriculture will provide loan with interest as low as 9% for this project.

Conclusion

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