BUSINESS PLAN FOR THE CULTIVATION OF 200 HECTARES OF COCAO AND 200 HECTARES OF COFFEE IN NORTHERN AND NORTHWEST REGIONS





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Project Description

This business plan examines the feasibility of the economic viability of the development of a 200 hectares cocoa plantation and 200 hectares of coffee plantation in the Northern Region and Northwest Region of Sierra Leone by **HACEM-SL LIMITD**. The farm will produce about 400 tonnes of cocoa beans and 400 tonnes of coffee beans in a production cycle using a special variety of cocoa and coffee which produces 2 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 is focusing mainly on the domestic aspect after which when the business expands, it will face the international aspect. This is because of the high competitive demand domestically, and when the business starts domestically, there will be enough to gather for the international production. With this, it is hoped that the business expands in hectares and tonnes of cocoa beans and coffee beans for production of cocoa and coffee powder which is then used to manufacture chocolate bars, chocolate powder and

beverages. Production is presently popular in the Southern and Eastern regions of Sierra Leone because of the favorable climate and soil conditions, with Eastern Region 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 and coffee products for the citizens at a cheaper and affordable price. This project aims at improving North-west Region by being the first to introduce new technology in cocoa and coffee production, thereby creating awareness and improving standard of living of farmers, and development to the communities in these two regions of Sierra Leone. Cocoa and coffee plantations will be done on the 400 hectares of land and then the beans will be exported. After several production cycles, when the business is stable enough, processing will be done to the cocoa and coffee beans. The beans will be processed into powder, chocolate bars and powder, and beverages and marketing will be first domestically, then internationally.

Sponsorship

This Business Plan will be submitted to different National and International Donor Institutions for sponsorship. This project will be submitted to The International Fund for Agricultural Development (IFAD) and the Bank of Agriculture Business Centers (ABC Bank) in the North and North-west Regions of Sierra Leone. The International Fund for Agricultural Development (IFAD) will be giving grant and the Bank of Agriculture Business Centers will supply the loan. The Bank of Agriculture Business Centers (ABC Bank) Limited was incorporated as Sierra Leone Agricultural Business Centers Bank (ABC-SL Bank) in 2010 and became operational in 2011. 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. The Company will be responsible for the management of the projects in order to improve business processes, executive strategies and organizational designs.

Management

A democratically elected Board of Directors at the top 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 of Directors 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 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, The Ministry of Agriculture, Forestry and Food Security (MAFFS) and the Sierra Leone Agricultural Research Institute (SLARI) will be involved. The SLARI is a non-profit institution that generates agricultural innovations to meet Sierra Leone's most pressing challenges and will provide technical assistance in this regard. The MAFFS will come in for domestic and International trade in addition to its technical and financial support. These institutions will help in the development of this project, research, provision of information, all for the success of the project.

Bank of Agriculture Business Centers and the International institutions will be approached to finance the production of the 200hectares of cocoa and 200 hectares of coffee through a loan of low interest rate given to the Company. At the end of every year, a great but profiting discount will be placed on cocoa and coffee beans, to attract more market and for publicity of the business. The MAFFS and other International Financial Institutions will fund the processing factory and access finance for the processing of cocoa and coffee.

A good working relationship with the Local Government, Farmers' Cooperative Societies and individual farmers involving big farms will be established. Cocoa and coffee beans will be exported, while cocoa pod husk meal will be sold to poultry farms. Beverage, cocoa powder, coffee 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, UK and America.
- Domestic: Sierra Leone
- Market Share: 6.5% niche market internationally; 5% Sierra Leone
- Users of Products: beverage, coffee powder, cocoa oil, cocoa powder for chocolate bars,
 chocolate powder and Cocoa pod husk meal as feed in layers' diet.

Competition analysis

The top growing regions in Sierra Lone are South and East account for about 40% of the cocoa production; 20% of coffee and make up at least 20% of the total cocoa export and 5% coffee export in Sierra Leone. Kailahun District is rated the largest cocoa and coffee producing district with an output capacity of about 20,000 and 10,000 tons per annum respectively. This shows that competition is high in the East compared to South which is less competitive. The cocoa and coffee beans will be exported and those that will be processed will be done in the Northwest Region. In the North, cocoa is not grown or produced abundantly because of the unfavorable 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 favor the business and meet demands.

Tariff and Import Restriction

Forex restriction on food importation and zero duty on imported agricultural equipment will favor 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 Western Area of Sierra Leone.

Although with many factors affecting marketing like inadequate infrastructure, processing and storage facilities, and even poor transportation system; cocoa and coffee business project is still feasible within Sierra Leone 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 cycles of production in a year to prevent water shortage or inadequate provision of water.

Technical Feasibility

The projects of production of coffee and cocoa beans and processing of the beans into semi-finished and finished projects are technically feasible. Technological wise, the production and processing of beans comprise of extraction of 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. Similarly coffee beans are extracted from thin outer layers, dried, roosted and grinded into coffee power.

A retired expert in crop production who is an experienced cocoa and coffee farmer will be involved in this project with other professors in crop science and plant pathology. The required

equipment for the processing will be 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 and coffee 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 will be adequate and efficient for production, processing and marketing. Raw materials will be produced and sourced both locally and internationally. 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 and coffee trees in a form of reforestation, the Environmental Impact Assessment (EIA) 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 dung 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 Sierra Leone 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 favorable 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 January, 2023 to November, 2028 because land clearing and preparation is done in dry season and the cocoa and coffee seedlings have to be planted in rainy season for easy germination of the seedlings.

Estimated Project Costs and Revenue

Fixed Cost

BUDGET FOR COCOA FARM

A: LAND PREPARATION FOR 200 HECTARES	
Activity	US Dollar
Land clearing	550
Cross cutting	450
Ploughing	500
Sub-total for 1Ha	1,500
Total for 200Ha	30,000

B: EQUIPMENT			
Name	Quantity	Model	US Dollar
Tractor	2	Indo Farm 4175 DI 4WD (75hp)	60,000
Disc Harrow	2	IBJ- 3.0	20,000
Sub Soiler	2	IS-200G	10,000
Transplanter	2	Fedel	10,000
Tipper	2	7CX-8T	60,000
Combined Harvester	1	Wiking 7834	15,000
Boom Spray	1	3W-1000L-18	10,000
Front Loader	1	SIKU 6759	5,000
GrainPro	100	CDC -75	5,000

Collapsible Dryer case			
Cocoa Pod Splitting	1	-	7,000
Machine			
Cocoa bean roasting machine	1	GGGHE-3	10,000
Cocoa bean peeling machine	1	GG	5,500
Cocoa grinding machine	1	GGJMS-180	5,500
Cocoa oil extractor machine	1	Cocoa oil extractor machine	5,000
cocoa powder making machine	1	cocoa powder making machine	6,000
Cocoa bean packaging	1	-	5,000
TOTAL		1	239,000

C: VEHICLE				
Туре	Model	Quantity	US Dollar	
Pickup Truck	Hilux	2	80,000	
Trailer		2	120,000	
D: IRRIGATION				
Туре	Model	Quantity	US Dollar	
Hose Reel	75 – 300TX	2	12,000	

Operational Cost

Working Capital	
Activity	US Dollar
Harrowing/Ha	500

1,100	
	220,000
2,000	
	200,000
500	
	100,000
28	
100	
100	
200	
	40,000
55	
	11,000
	5,000
	576,000
	2,000 500 28 100 100 200

Amortization

	US Dollar
Land clearing amortization (per hectare)	22
Land clearing amortization (200 hectares)	4,288

Loan Principal and Interest

	US Dollar
Loan principal and interest (cost per Hectare)	6,570
Total for 200Ha	1, 214,000

REVENUE

Yield per hectare 2 tonnes @ 3,948 per tonne	US Dollar
Revenue per hectare	3,948
For 200Ha	789,600
Net revenue for 200Ha(without amortization)	658,194
Net revenue with amortization(200ha clearing)	653,906
2nd Production Cycle	
Net revenue	649,389
Net revenue with amortization(200ha land)	
Annual Net Revenue (1st + 2nd Cycle)	1,303,296

BUDGET FOR COFFEE FARM

A: LAND PREPARATION FOR 200 HECTARES			
Activity	Amount in Leones	US Dollar	
Land clearing		550	
Cross cutting		450	
Ploughing		500	
Sub-total for 1Ha		1,500	
Total for 200Ha		30,000	

B. EQUIPMENT			
Name	Quantity	Leones	US Dollar
Combined Harvester	2		10,000
Boom Spray	1		8,000
Coffee bean Dryer case	100		3,000

Coffee bean roasting machine	1	10,000
Coffee bean peeling machine	1	5,000
Coffee grinding machine	1	5,500
Coffee powder making machine	1	5,000
Coffee bean packaging	1	5,000
Total		51,000

C: VEHICLE				
Туре	Model	Quantity	US Dollar	
Pickup Truck	Hilux	2	70,000	
Trailers		2	120,000	
D: IRRIGATION				
Туре	Model	Quantity	US Dollar	
Hose Reel	75 – 300TX	1	6,000	

Operational Cost

Working Capital	
Activity	US Dollar
Harrowing/Ha	500
Transplanting/Ha	600
Sub total	1,100
For 200Ha	220,000
Mechanization and storage	2,000
For 200 Hectares	200,000
Input/Ha	500
For 200Ha	100,000

Area yield insurance	28	
Produce aggregation	100	
Geo Spatial Service	100	
Sub total	200	
For 200Ha	40,000	
Interest per Hectare	55	
For 200Ha	11,000	
Irrigation cost for 200Ha (excluding fixed cost)	5,000	
TOTAL OPERATIONAL COST FOR 200HA	576,000	

Amortization

	US Dollar
Land clearing amortization (per hectare)	22
Land clearing amortization (200 hectares)	4,288

Loan Principal and Interest

	US Dollar
Loan principal and interest (cost per Hectare)	6,570
Total for 200Ha	1, 214,000

REVENUE

Yield per hectare 2 tonnes @ 3,500per tonne	US Dollar
Revenue per hectare	3,500
For 200Ha	700,000
Net revenue for 200Ha(without amortization)	568,594
Net revenue with amortization(200ha clearing)	564,306
2nd Production Cycle	

Net revenue	559,789
Net revenue with amortization(200ha land)	
Annual Net Revenue (1st + 2nd Cycle)	2,396,189

Funding Mechanism

The Management will provide 200 hectares of farmland in Northern and Northwest regions. The International Fund for Agricultural Development (IFAD) and other International Financial Institutions will sponsor the project and the Bank of Agriculture Business Centres will provide loan with low interest for this project.

Conclusion

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

END