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A BUSINESS PLAN FOR THE PRODUCTION OF VERMICOMPOST ORGANIC FERTILIZER, ESTABLISHING 90 GALLONS PER DAY AT THE ALMAT FARMS LIMITED LOCATED AT THE COUNTRYSIDE OF KUJE, ABUJA NIGERIA BY CANAZ AGRIBUSINESS VENTURES AND CONSULTANCY CONFIDENCIALITY AGREEMENT.

This agreement is made effective as of March 6th 2020 between ALMAT farms and CANAZ agribusiness ventures. The term confidentiality means that the reader acknowledges that the information provided in this business plan is a confidential intellectual property obtained by the investment of significant time, effort and expense, and the confidential information is a valuable, special and unique asset which provides a significant competitive advantage and need to be protected from improper disclosure.

In the consideration for the disclosure of the confidential information, the reader agrees to not disclose the confidential information to any person or entity without the prior written consent of the other party.

Signature:

Name:

Date:

CONTENTS OF THE PLAN.

1) Brief summary of the business plan.

Vermicompost is essentially organic manure. This type of bio fertilizer is prepared by mixing up earthworms on biological and plant residues. This organically prepared fertilizer is rich in micronutrients like N, P, K and many others that are essential for the growth of plants. It is eco-friendly, non-toxic, consumes low energy input for composting and is a recycled biological product. The vermicompost contains higher

percentage (nearly twofold) of both macro and micronutrients than the garden compost. The product gets matured in a period of 45-60 days depending upon the type of wastes, earthworm population, and environmental factors. There is a 5 to 6 possible cycle in a year.

A rural area with a predominance of agriculture, suburbs of cities and peri-urban villages was considered as the ideal location for setting up of vermicompost units on a larger scale from the viewpoint of availability of raw material (cow dung) and marketing of the produce that's why the Almas farms located in the north is set as the base of operation. The farm has developed an efficient waste disposal system by culturing the lowly earthworm in an appropriate environment. This process allows for the safe conversion of waste into a valuable nutrient rich humus fertilizer-vermicompost .

This project aside from providing job opportunities to the citizens, it helps in growing better and healthier crops which benefits the country's food production in various ways. Fertilizer is a product that is in high demand by farmers but some local farmers are unable to have access to these fertilizers but vermicompost fertilizers will be available to all as it is not going to be sold at a very affordable price.

2) **Sponsorship.**

The project is sponsored by Donald Matheson and Uche Alozie, the founders of the Almat group. They oversee all Almat groups development and acquisition opportunities but the director Maurice Ekpenyoung, the director will be in charge of this project as he manages all operations and business development effort for the Almat land Ltd. The Canaz ventures will be responsible for the management consultancy of the project together with Maurice.

3) Management.

The management comprises of a board of directors at the apex of the organizations structure. This will be made up of shareholders and members of the cooperative who are to organize and make sure of the growth, survival and success of the business. The main aim of this project is ti provide strategies and plans that will promote the growth of the produce. The managing director Maurice will be in charge of the day to day activities. He is accountable to the board of directors and take all the risks to ensure success.

4) Competition analysis.

The competition is pretty low because vermicomposting is not popular in Nigeria so it will give the company opportunity to operate smoothly without and competition and it is very useful for farmers.

5) **Tariff and import restriction.**

Due to the fact that the government has put a ban on importation of fertilizers, the company would be able to profit from the policy by being one of the biggest suppliers of the product.

6) **Technical assistance.**

The product will definitely be approved by FEPSAN- The Fertilizer Producers and Suppliers Association of Nigeria.

7) **Materials Required for Vermicomposting Organic Fertilizer Production.**

Several decomposable organic wastes normally used as composting materials. It includes animal excreta, kitchen waste, farm residues, and forest litter etc. In general, animal dung mostly cows dung and dried chopped crop residues are the key raw materials. A mixture of leguminous and non-leguminous crop residues enriches the quality of vermicompost.

There are different species of earthworms viz. Eisenia Foetida (Red earthworm), Eudrilus Eugeniae (Nightcrawler), Perionyx Excavatus etc. Red earthworm is preferred because of its high multiplication rate and thereby converts the organic matter into vermicompost within 45-50 days. Since it is a surface feeder it converts organic materials into vermicompost from the top.

8) **Preventive Measures in Vermicompost Organic Fertilizer Production.**

- The floor of the unit is made compact to prevent earthworms' migration into the soil.

- 15-20 days old cow dung is used to avoid excess heat.
- The organic wastes are free from plastics, chemicals, pesticides, and metals etc.
- Aeration are maintained for proper growth and multiplication of earthworms.
- Optimum moisture level (30-40 %) is maintained.
- 18-250°c temperature is maintained for proper decomposition.

9) Market Opportunity for vermicompost Organic Fertilizer Production

Vermicompost organic fertilizer production business has good sale potential over a range of crops i.e. agricultural, horticultural, ornamental, vegetables etc.

Direct sale to end users this includes farmer's groups and subdivisions in nearby cities and municipalities. Bulk sale to producers and distributors of organic fertilizer that needs vermicompost as one of its primary components. High-end market in urban areas due to the popularity of organically grown farm produce among the rich residing in posh villages and other high-end residential areas.

10) Profitability.

Environmental and chemical factors may hinder the production of this product but as long as the shed is well structured which it will, the produce will be produced with no problems.

11) Government support and regulation.

This project will definitely help the government as the waste in the food waste and cow dungs littered all around will be converted into productive fertilizers for food production. It also creates more job opportunities for the citizens as the job prescription requires little or no skill for

the production to occur. This would be very useful for the illiterates that are not opportune to get a decent job. Although it doesn't supply much to the economy, its production will lead to the enhancement of crops thereby help in increasing the rate of exportation in the country.

12) Project Timeline.

The product gets matured in a period of 45-60 days depending upon the type of wastes, earthworm population, and environmental factors. There is a 5 to 6 possible cycle in a year. Therefore, if the project starts march it end in May or early June in case of any difficulty.

13) Estimated project cost and Revenue.

Fixed cost

a) Land

Activity	Quantity	₦	K
Land clearing	$^1/_2$ hectares	115,000	00
Total	$^1/_2$ hectares	115,000	00

b) Equipment

Name	QTY	MODEL	USD	₦	K
Weighing machine	1	Rx-10A-1600s	3871.6	1,508,000	00
Static organic vermicomposting machine	1	Shuxin	20302.9	7,908,000	00
Chaff cutter	1	Taizy TZY-C	2053.9	800,000	00
Water pump	1	MHF7AR	10238.5	3,987,900	00
Mechanical. shredder	1	SYU61180	3090.11	1,203,600	00
Bicycle powered sorter	1	TRY-8	1797.17	700,000	00
Sub total			413354.18	16,107,500	00

c) Vehicle.

Type	Model	QTY	₦	K
Pickup truck	HILUX	3	90,000,000	00

d) Operating cost.

Working capital	N	K
Drilling	12,000	00
Placement of compost	10,000	00
Shredding	5000	00
Feeding	4000	00
Harvesting	15,000	00
Casting	9,000	00
Sub total	55000	00

For mechanization and storage	100,000	00
For 200 Ha	13,000,000	00
Input	35,400	00
Area yield insurance	6500	00
Produce aggregation	3500	00
Geo spatial service	2000	00
Sub total	13147000	00
For 200Ha	4,000,460	00
Interest per hectare	15,500	00
For 200Ha	3,954,000	00
Total cost per hectare	44,365	00
Total cost for 200Ha	3998365	00
Loan principal and interest (cost per hectare)	123,870	00
Total for 200Ha	123,870	00

Irrigation cost for 200Ha (excluding fixed cost)	12,908,670	00

Amortization N K

Land clearing amortization($^{1}/_{2}$ hectares)	15,000	: 00
Land clearing total	15000	: 00

REVENUE

Yield of the hectare	N	K
Revenue per hectare	290,000	00
2nd production cycle		
Net revenue	4,900,000	00
Annual net revenue	88,777,700	00

Currency conversion rate: ₦389.50

14) <u>Funding mechanism</u>

Almat will provide the 200Ha of farmland for the building of the shed in the farm and lease it to members of the cooperative. Almat will also help in the distribution of the fertilizers. Also, the equity investor to provide equity for the equipment's and vehicles purchase.

The possible equity investor will also provide equity for the working capital or secure a loan at the rate 0f 4% through the government intervention window at the bank of agriculture and commercial banks.

15) Conclusion

The project is technically feasible and commercially viable. It is absolutely open for funding.