NAME: BRAIDE DIVINE

DEPARTMENT: PHARMACOLOGY

COURSE: AFE 202

LEVEL:300

BRAIDE FISH FARM

PLOT A 38

MASAKA TOWN

KARU LOCAL GOVERNMENT

NASARAWA STATE

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EXECUTIVE SUMMARY

BRAIDE catfish business will be established to meet the fish demand in the community. It will be located in Area One Masaka, Karu Local Government Area of Nasarawa state. The main economic significance of the business is to contribute towards narrowing down the fish demand supply gap deficit in Nigeria as well as the supply of proteins and micro nutrients for feeding the teeming population Nasarawa State, North Central and Nigeria at large. The business would be managed by Richard Stone and Stephanie Grey who are all part of the management team. They are both experienced in the field of fish farming and have managed different businesses across the state.

The catfish industry is a lucrative business as the demand for fish in the country is growing geometrically, the opportunity to expand is necessary because of the growing demand for fish and due to some health benefits attached to consumption of fish as compared to consumption of meat. With our dominance, and being the only and pioneering fish farm in this locality, we would flood the whole market with our fish. The business will be a partnership with all partners required to contribute capital according to agreed percentage (40%, 35%, 25%) respectively. The risk of the business is mainly getting a market and we have already identified our target market. The cost benefit analysis of this plan shows that in the start-up year, with 1700 fingerlings in stock and projected sales of 1500 adult fish in one circle which is half a year, we would make N1,000,000. This implies that about N2,000,000 is realizable annually for two (2) production cycles with a return on investment (ROI) of 100% which indicates that the project is very much feasible, viable and very much profitable and as such, worth investing.

**INDUSTRY ANALYSIS**

ABOUT THE FISH INDUSTRY

The fish industry involves the cultivation and marketing of fish in a controlled environment for all or part of their life cycle. The catfish industry in Nigeria is one of the fastest growing segments of the agriculture fish market today. The growth potential for the catfish market is at its strongest level ever. The demand for catfish is increasing due to the ever-increasing health consciousness of consumer. Per capita consumption of fish in Nigeria has increased geometrically. These increases in demand are stressing the world’s natural fisheries, which are generally considered to be at or near their maximum sustainable yield, thus increasing the demand for the catfish raised in aquaculture facilities. Not to mention the increasing demand in our society for locally grown products.

**GROWTH RATE, INDUSTRY SIZE, OPPORTUNITY AND SALES PROJECTION**

The demand for fish according to the federal ministry of agricultural was 9.1 million tons in

2015 while domestic production was 3.5 million tons. The Nigerian Federal Ministry of Agriculture estimates that the demand for fish in the nation is projected to grow from its current demand by 30%. This deficit was partly augmented by massive importation of fish of about 1,200,000 tons. This is a big drawback on our scarce foreign exchange. This still left a huge deficit of 4,400,000 tons, hence the concerted effort to ensure self-sufficiency in fish production through aquaculture in Nigeria. The demand for fish in the country is currently estimated at about 11,830,000 million tons annually, as against the local annual production of just 3,500,000 metric tons, giving a demand supply gap of about 8,330,000 million tons. It is very clear that the demand is far higher than supply.

**NATURE OF PARTICIPANTS**

The participants in this industry ranges from other local farming mainly in the south-south, south east, north central region of this country and also importers of the product. The participants of this industry are all after which supply type would bring profit.

INDUSTRY STRUCTURE

The Nigerian fishing industry comprises of three major sub sectors namely the artisanal, industrial and aquaculture. The awareness on the potential of aquaculture to contribute to domestic fish production has continued to increase in the country. This stems from the need to meet the much-needed fish for domestic production and export. Fish species which are commonly include Heterobranchusbodorsalis, Clariasgariepinus, Mugiespp, Chrysichthysnigrodigitatus, Heterotisniloticus, Ophioce-phalus obscure, Cyprinuscarpio and Megalospp. Fish culture is done in enclosures such as tanks. The aquaculture sub sector contributes between 0.5% and 1% to Nigeria’s domestic fish production.

**KEY SUCCESS FACTOR**

* We are the only fish farm in Masaka which provides us with the avenue to control the market, and being the only fish farm, we will enjoy monopoly.
* We also intend to offer free delivery services to our customers in the first few years of operation.
* The growing population is another major factor because more people are coming ranging from students to business men and women, investors and people from all part of the country.

**INDUSTRY TRENDS**

The demand for cat fish is non-seasonal commodity. There are no up and downtrends in this industry as there is always demand for catfish. Demands even goes higher than normal during festive periods but they are no periods when demand is below normal as even during fasting periods, at evening time of break, people would also come to buy to break their fast.

**Our Goals**

* To remain pioneers in the fish farm business and to further strengthen our leading position.
* To increase the production of our product (Catfish).
* To lay emphasis on the vertical integration of the production and to achieve added value.
* To increase productivity and efficiency to the benefit.
* To establish long-term planning for the benefit of the consumers and make more profit.
* To successfully meet the challenges and demands of the domestic market.
* To seek transparency in the structure, operation and production of the company

**MARKET ANALYSIS**

Fish Farming in Nigeria started gaining wide spread recognition in the year 2000 and has now become a business that all farmers are venturing into. Statistics has it that only 50% of the demand of fish has been met, why is that so? Statistics also has it that 51% of poultry farmers are now engaging or converting to fish farming.

Nigeria who is a major consumer of fish has been known for her large importation and total dependence on fishing in rivers lakes and the sea, yet the demand for fish is still high. States around the west like Lagos, Ogun and Osun realized the business in good time, that’s why at 2007 Lagos state had over 40,000 registered farmers and 20,000 being fish farmers, these statistics is not taking into consideration the non-registered farmers. This large market of life fish has remained untapped by the residence of States in North East, North West and North Central Nigeria, and you are one of the chosen few to enjoy what it has to offer. On daily bases a large number of fish is been imported into the country in order to attempt to meet the unending demand yet the demand never seems to reduce. This is an indication that there is a need for increased fish farming in the North and Central regions of the country.

**TARGET MARKET**

With the location of our business in North central, Nassarawa State, Masaka town to be specific, we hope to enjoy huge patronage of the large population here. The following are our target market:

* Student Community of Masaka
* Masaka Market for the locals
* Student Community of karu
* Nyanya Town Market
* Ado Market
* Karu international market

We are planning to meet a production capacity of 1500 cat fish per month. We would make effort to contact cold room buyers within the State, and preservation through drying is also an option we are planning for. We are also planning to reach out to industrial users that utilize the fish for fish meal production and other products. Having out our feasibility analysis and research on our target market and location we have seen that basket load of tomatoes thrown away at the end of market day but fish is one product that is never sufficient for sale and here are adequate preservation processes available.

BUYING BEHAVIOR

As a new business that is just starting, also considering the location of our business, we will be selling basically on cash but might consider giving credits to individual who purchase in large quantity either for consumption or resale.

COMPETITOR’S ANALYSIS

Our main competitor in this fish farming business is the importers of frozen fish. From our analysis, the cost per kilogram of frozen fish, popularly called ice-fish is N750, to achieve this, weighing three units which give a kilogram of and a unit of that size of fish bought for N250. Currently, the catfish is sold to main distributors at N500 per kilogram, and it is retailed at N600 per kilogram, this makes it reasonably cheaper, survey data has shown that the catfish is preferred to the frozen ice-fish in taste and nutritional value. For other competitors in the cat fish market, we have a considerable advantage, being that fish farming is our passion and our farm is situated right within reach and the market premises which makes supervision easier and We the business partners as the sole equity owners and also the ones to provide most of the factors for the production as land the location and climate of the area is very suitable for fish production. The business has relatively low overhead expenses with few staff presently to match current production capacity.

**BENEFITS TO CLIENTS**

Most children that grow with low protein intake end up malnourish and low intelligent quotient. Economically, the continuous importation of frozen fish to the country reduces our GDP, and thus reduces the national income. Also, the ever-increasing rate of unemployment in the country is truly becoming worrisome to the Government and well-meaning Nigerians.

Like most entrepreneurs, the goal of the fish farm business is for profit, but the underlying benefits cannot be overemphasized, from putting more fish into the system, thereby increasing the chance of more source of protein in the society at affordable rate to reduction of unemployment rate and increase in national income, taxes are paid and wealth are distributed.

**THE ECONOMICS OF THE BUSINESS**

REVENUE DRIVERS AND THE PROFIT MARGINS

The end product of fish farm is the grown up (Adult) fish for sale in the market. Unlike poultry farming or other farms where you can have other bye products like the animal dung, fish have no such bye products which you can also sale for profit. Our revenue driver, would be the sale of the grown up or adult fish to the market. The revenue to be raised here from this sale is high if we are able to work hard and ensure our fish are alive, healthy and well feed and reach the market desired size. When we buy a fingerling at the cost of N40, after the growth cycle of 6months, the fish would be sold in the market for about N600 –N700, it’s a big revenue driver for us. So, have to work hard so that this is achieved.

FIXED AND VARIABLE COST

Fixed costs for these early periods are as follows:

* Tax
* Depreciation

VARIABLE COST

Fixed costs for these early periods are as follows:

* Feeds
* Seed (Fingerlings)
* Fuel
* Electricity
* Chemicals
* Labour Cost (Sales Girl and Labourers)

OPERATING LEVERAGE AND ITS IMPLICATIONS

Operating leverage measures a company’s fixed costs as a percentage of its total costs. It is used to evaluate the breakeven point of a business, as well as the likely profit levels on individual

START UP COST

|  |
| --- |
| Acquiring land 1. Land (200x200) N500000
2. Land rights N70000
3. Evacuation and fencing N397,000

Total N 96700 |
| Pond construction1. For start up two concrete ponds to carry 850 fishes and will be constructed 3mx2.5m by 1m each pond requires 210 blocks

Hence 420 blocks N63,0001. 1 trip of sand N12,000
2. ½ trip of gravel N15,000
3. Cost of labour N20,000
4. Cost of plumbing (inlet and outlet facilities) N50,000
5. Cost of well digging (water source) N30,000
6. Cost of pump machine N15,000
7. cost of pond treatment N30,000
8. Cement N20,000

Total N225,000 |
| Fingerlings 1. Cost of high breed fingerlings N68,000
2. Cost of feed N140,000

Total N208,000 |
| Feeding equipment N80,000 |
| Harvesting equipment N120,000 |
| Second hand car delivery N350,000 |
| Equipment for maintaining, repair and monitoring N103,000 |
| Other facilities N200,000  |
| Total for start-up cost N2,283,000  |

**MARKETING PLAN**

MARKETING STRATEGY

The demand for cat fish is non-seasonal commodity, we have plans to reach out to other market in the North central states for faster sales and better profit, we plan to also employ the service of the available modern fish driers as we have identified that dry fish yield more profit and it is preserved and sold at will. We are also planning to contact Bulk cold room buyers from in our target market, who are still looking for more fish supply as the fish demand and fish stock have not been able to satisfy them and they are always on the lookout for more.

**OPPORTUNITY OR PROBLEM IN THE MARKET TO BE ADDRESSED**

Fish remains the most acceptable and healthy source of protein for human consumption, but this essential product is not readily available in our local content to address the demand of our ever increasing population, hence the continuous importation of frozen fish to make up for the shortfall, but still the cap in demand and supply keeps widening, giving rise to high cost of purchase and denial of fish in most homes because they cannot afford it. Rampant cases of goiter (sickness due to lack of iodine) is been recorded in our hospitals in recent times due to the scarcity of the main source of iodine, fish in most homes. This is a social and economic problem I feel should not be left to the Government alone.

**SPECIFIC STRATEGY**

Marketing strategy is a process that can allow a business venture to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage. Our marketing strategy is centred on the key concept that customer satisfaction is the main goal. Without customers you we cannot survive or exist. We intend to use market penetration as our marketing strategy. This is because the sellers of this in this location import fish to sale, so since we would be opening our own fish farm, we would have to take over the market by penetrating, marking the wholesalers and individual buyers to buy from us until we break the chain of buying imported fish. We intend to achieve this as we already have new customers and market demand, lower prices (through flowing on breakeven for the first periods of sale), aggressive promotion and distribution.

 PRODUCT:

Our products are in high demand in the market. There is great need and demand for supply of catfish. We intend to grow our product to be very qualitative and beat down all imported fish in the market.

PRICE:

Our products prices would be fair to those in our target markets, we have greater advantage as buying from us would mean the buyer would not incur transportation (carrying) cost as our farm house is close to all our target market. We have considered our prices and have seen that selling from N500 would give us profit while those selling in the market by other sellers are sold for N700 – N800. Our Products are price is almost on same bench mark with the prevailing market price.

PROMOTIONS:

At the initial or first harvest, we intend to draw customer’s attention to our farm and product by offering discount to customers on total price payable. This discount would be given as below:

* Above 30 pcs of fish 1.5% Discount
* Above 90 pcs of fish 2% Discount
* Above 150 pcs of fish 2.5 % Discount
* 500 and above 5% Discount

DISTRIBUTION:

Our product would be available at the farm sales room (Cool Room) immediately after harvest where buyers can come to buy, wholesalers, retailer and also individual buyers. We would make arrangements for customers to contact the sales representative to place order which would be delivered using the business car.

DESIGN AND DEVELOPMENT PLAN

Development Status and Tasks

The farm would be built in Masaka town to hold a capacity of 1700 fingerlings and would be fed till they grow to adulthood and sold in the market once they are up to the desired market size. The cycle period is 6 months (24 – 28 weeks). We intend to start another cycle immediately the adult fishes are sold and start another cycle at the same scale, that is, with 1700 fingerlings. We would flood the Masaka market with our fish which is cheaper than the ones imported and sold in the area. Also, our second target which is Ado, in both the student community and the town’s market, there is no fish farm and as a result, all the fishes sold in those locations are relatively expensive in comparison to ours which would be cheaper and more affordable.

The farm house would be built to accommodate two (2) ponds for start, well as the source of water to the farm house, a drainage system for disposal of changed water from the pond, a cool room system to serve as store room while we sales the fish to the market, an equipment store house. The farm land is very large and has been fenced as we still have hopes to grow as our sales raise.

Light to the farm would be supplied to the farm from the government source but we have a 14KV generator as stand by power due to the high need of light by fish farm. A certain amount of capital will be invested into the business at start up level and the partners would manage the farm but would make use of few laborers.

**CHALLENGES AND RISK**

CHALLENGES IN CATFISH FARMING

Fish farming is a very lucrative business and a profit maker all year round. The reason for its profitability can be attributed to the fact that it is a food and it is always in demand. In fact, the demand for fish can never be met because of the massive population we have especially here in Nigeria.

As any farm or business venture, catfish farming involves risk. This risk if managed carefully could be minimized, as they have the potential to wipe out your fish stock or make the farm unprofitable. Some of these challenges and risks include:

* Fish Loss: This loss could be as a result of disease affecting the fingerlings in the pond. Some of these diseases include; Enteric Septicemia, Columnaris, Aeromonas, Virions, Tape Worms, round worms, flukes, etc.
* Fish is very sensitive to manage and a slight mistake could result to degenerated growth of your fish or even death which may cause massive revenue loss.
* Water Contamination: Spillage into the ponds could cut off oxygen flow to the fingerlings or fishes and this would kill the fishes.
* There is no by product in fishery unlike poultry where even the drop can be harvested and sold to other farmers and make extra profit. In fishery, all you get is the flesh.
* Quality of Fingerlings: Poor quality fingerlings may die or even fail to grow and this would result in a loss of investment.
* Setting up fish farm is capital intensive, much more than that of poultry and snail farming. Setting up fish farm requires more careful planning and much capital input.
* Failure of water supply: Breakage of water supply is potentially dangerous to the fish and if such occurs, there are great tendencies of the fishes dying.
* Fish farming is capital intensive.
* It is labor or management intensive
* Cannibalism and high mortality rate of fingerlings
* Pest and predators
* Market instability
* Loss during harvest.

PROJECTED DEVELOPMENT COSTS

We intend to construct more additional 8 ponds to raise our ponds to 10. With this capacity, we intend expand our production to about 10,000 fingerlings to be raised for sale. A borehole will need to be drilled and a water tank shall be installed; this will be the source of water for the fish farm. A greenhouse to further stabilize temperatures shall cover the fish tank. Among our future plans is to also purchase hauler trucks (Cold room Vehicle) to facilitate the selling of our fish as we intend to dominate the whole of North Central States.

**OPERATIONS PLAN**

**GENERAL APPROACH TO OPERATIONS**

**Actual Production Process**

The fish cycle starts from getting the fingerlings from the market into the pond and then feeding them with the various feeds until they are due for harvest and then taken to the market for sales

Why company is cited

The company is cited in Masaka due to a host of different factors which include the presence of the University which makes it a growing area with high population and different people from different parts of the country. This gives us an advantage in terms of the demand for our fish. Labour is another reason for choosing this particular location. The Masaka community is characterized by a population where youths occupy the largest percentage of the population and most of these youths are either drop outs or those who cannot further their education these makes it possible for the company to get labour at a cheaper rate compared to cost of labour in Keffi town.

Another reason is the fact that with time the company intends to be hiring students especially those from the agricultural department as workers in the company either on interim basis (in the case of undergraduate) or permanent basis (in the case of graduates). With the presence of the university, the company is exposed to information about new variety of fish, or new improved feeds through their research and development.

BUSINESS LOCATION

The farm would be located in area one Masaka town, Karu LGA, Nasarawa State. The site is generally flat with gentle sloping which is quite suitable for the farm. This slop would aid ensure 100% drainage of pond water. We have a plot of land their which covers a capacity of 200 by 200 meters. The farm site is also located to the community stream. The environment is cool and dense which support fish production and theirs an access road from the farm to the main dual carriage way which would reduce transportation cost. Furthermore, harvested farm products can easily be transported to our target markets for sale. Weekly sales are also numerous within the community. The site is also very motor able hence vehicles can easily reach the site to evacuate fish farm products.

**FACILITIES AND EQUIPMENT**

The facilities and equipment needed in the catfish farming are as follows:

* Electric Aeration
* Hauling Trucks and Tanks
* Generator
* Mechanical Blower
* Truck Mounted/ Tractor – powered
* Harvesting bag net
* Bamboo Screen Trap
* Leveling tool
* Distilling tool
* Seine
* Boom Truck
* Fish Basket
* Tractors
* Picking Truck
* Fertilizer Tools
* Analysis Kit
* Chilling Box
* Cast Net
* Nets and Trap
* Fingerling Seine
* Fingerling Suspension Net
* Gillnet Seine generator
* Spawning tools
* Fridge