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BUSINESS PLAN ON FISH FARMING

Fish farming or pisciculture involves raising fish commercially in tanks or enclosures such as fish ponds, usually for food. It is the principal form of aquaculture, while other methods may fall under mariculture. A facility that releases juvenile fish into the wild for recreational fishing or to supplement a species' natural numbers is generally referred to as a fish hatchery. Worldwide, the most important fish species produced in fish farming are carp, tilapia, salmon, and catfish.

Demand is increasing for fish and fish protein, which has resulted in widespread overfishing in wild fisheries. China provides 62% of the world's farmed fish. As of 2016, more than 50% of seafood was produced by aquaculture. Farming carnivorous fish, such as salmon, does not always reduce pressure on wild fisheries. Carnivorous farmed fish are usually fed fishmeal and fish oil extracted from wild forage fish. The 2008 global returns for fish farming recorded by the FAO totaled 33.8 million tonnes worth about \$US 60 billion. The cost of inputs per unit of fish weight is higher than in extensive farming, especially because of the high cost of fish feed. Higher protein-level requirements are a consequence of the higher feed efficiency of aquatic animals (higher feed conversion ratio [FCR], that is, kg of feed per kg of animal produced). Fish such as salmon have an FCR around 1.1 kg of feed per kg of salmon, whereas chickens are in the 2.5 kg of feed per kg of chicken range. Fish do not use energy to keep warm, eliminating some carbohydrates and fats in the diet, required to provide this energy.

Some fish farms have different caging systems but first what are fish cages used for; Fish cages are placed in lakes, bayous, ponds, rivers, or oceans to contain and protect fish until they can be harvested. The method is also called **OFF SHORE CULTIVATION** when the cages are placed in the sea. They can be constructed of a wide variety of components. Fish are stocked in cages, artificially fed, and harvested when they reach market size.

TYPES OF CAGING SYSTEMS;

1. COPPER-ALLOY NETS

Copper alloys have become important netting materials in aquaculture. Copper alloys are antimicrobial which means they destroy bacteria, viruses, fungi, algae, and other microbes. The resistance of organism growth on copper alloy nets also provides a cleaner and healthier environment for farmed fish to grow.

2. IRRIGATION DITCH AND POND SYSTEM;

These use irrigation ditches or farm ponds to raise fish. The basic requirement is to have a ditch or pond that retains water, possibly with an above-ground irrigation system, many irrigation systems use buried pipes with headers. Using this method, water allotments can be stored in ponds or ditches, usually lined with bentonite clay.

3. COMPOSITE FISH CULTURE;

The composite fish culture system is a technology developed in India by the Indian Council of Agricultural Research in the 1970s. In this system, of both local and imported fish, a combination of five or six fish species is used in a single fish pond. These species are selected so that they do not compete for food among them by having different types of food habitats. As a result, the food available in all the parts of the pond is used. Fish used in this system include catla and silver carp which are surface feeders, rohu, a column feeder, and mrigal and common carp, which are bottom feeders.

Categories of Aquaculture:

Aquaculture makes use of local photosynthetic production (extensive) or fish that are fed with external food supply (intensive).

EXTENSIVE AQUACULTURE; Growth is limited by available food, commonly Zooplankton feeding on pelagic algae or benthic animals, such as crustaceans and mollusks.

Tilapia filter feed directly on phytoplankton, which makes higher production possible.

Photosynthetic production can be increased by fertilizing pond water with artificial fertilizer mixtures, such as potash, phosphorus, nitrogen, and micro-elements.

INTENSIVE AQUACULTURE; In these kinds of systems fish production per unit of surface can be increased at will, as long as sufficient oxygen, fresh water and food are provided.

Because of the requirement of sufficient fresh water, a massive water purification system must be integrated in the fish farm. One way to achieve this is to combine hydroponic horticulture and water treatment. The exception to this rule are cages which are placed in a river or sea, which supplements the fish crop with sufficient oxygenated water.

FEASIBILITY STUDY/ REPORT FOR FISHERY/FISH FARMING

This business plan examines the feasibility of the benefits of fish farming in particular areas.

The pond will be big enough to contain numerous amount of fishes for the consumption and distribution of fishes to market sellers and various consumers. There is high demand of fish in the community nowadays. This business will impact greatly and positively on various fish sellers and improve the income of various fish farmers. The name of the Organization is

CHRISTAL FARMING INDUSTRIES.

BUSINESS EVALUATION OF FARM

This evaluation is based on fishes i.e tilapias and catfishes. Evaluation would be based on 5% normal loss i.e the process of taking care of young fry's, its possible to loose 5% of the fishes due to sickness. Therefore if we start with 1000 tilapias its possible to loose 50 fishes at the process of rearing them, while if we start with 400 catfishes, its possible to loose 20 fishes to disease at the process of rearing them.

SPONSORSHIP: This business is sponsored by Pastor Belemina Obunge. Pastor in charge of Region 5(RCCG), Special adviser to the General Overseer(RCCG). Pastor Belemina Obunge He is using this business idea as an opportunity to engage talented fish farmers and to help the society at large. He is also handling and promoting a small scale business in Bayelsa State.Christal Farming Industries will be responsible for the management of the projects.

MANAGEMENT: The management will comprise of specifically hand-picked experienced people to manage the business. The greatest aim of this management is to give sensible decisions and right policies that will enable the business to run effectively. I, WOKOMA OLOBO BENEBO will be responsible for the day to day management for cooperative business.

MARKET AND SALES:

MARKET ORIENTATION: Domestic, South-South, South-West, Nigeria

MARKET SHARE: 5% niche market in the south-south, Nigeria

USERS OF PRODUCT: Canned Fish, Fish Oil, and many others

COMPETITION ANALYSIS:

The coastal federal states of Nigeria are Ogun, Lagos, Ondo, Edo, Delta, Bayelsa, Rivers, Akwa Ibom, and Cross Rivers States, found in the southern part of the country. The importance of the fisheries sector to individuals and the economy of many developed and developing countries cannot be overemphasized. It is notable that fish provides more than 60.0% of the world's supply of protein, especially in developing countries. Its importance could be felt directly and indirectly among rural and urban residents in Nigeria.

MARKET POTENTIAL:

The market opportunity for fish farming in Nigeria is huge. Nigerians consume nearly 2 million tons of fish per year, and the country's growing population ensures demand will continue to boom. Demand far outweighs current national production, making it necessary to import fish from all over the world.

PROFITABILITY

Physical, chemical, biological, weather and environmental factors such as temperature, sunlight, water, air, size of the pond, varieties of fish feed, diseases, price fluctuations and other risks e.g. invasion of thugs to the ponds to steal the fishes.

Technical, scientific and financial based solutions will be employed to hedge against these factors to safeguard profit. Watching Over the pond by security personnels and refilling of the water in the pond to ensure effective production.

TECHNICAL ASSISTANCE; This organization has technical assistance from the FAO.

They provide technical expertise to deal with conservation, management, policies, economics, industry and products of our fishery resources. This business has dogged a very deep foundation and we have at our backs working hand in hand with us the RIVERS STATE GOVERNMENT. The government will also have a hand in our transportation of our goods in and out of the state and to other various industries.

FUNDING MECHANISMS: Pastor Belemina Obunge will provide us with a cleared bush and a pond of about 70ft long, 35ft width and 4-5 ft of water dept. Pastor Belemina Obunge will also provide various caging systems and fish feed for the organization. The government will also provide some farming implements and also some equipments for the progress of the project.

ESTIMATED PROJECT COSTS AND REVENUE

FIXED COST

LAND:

ACTIVITY	QUANTITY	#	K		
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LAND CLEARING	3 Acres	600,000	00		
DIGGING AND CONSTRUCTION OF POND	4 Each of which will be 70ft long, 35ft of width	1,000,000	00		
FILLING OF WATER IN THE POND	456,300Litres	5,000,000	00		
Total		6,600,000			

VEHICLES

ACTIVITY	QUANTITY	N	K
EXCAVATOR FOR DIGGING OF THE POND	2	1 million each Which is 2,000,000	00
WATER TANKERS FOR THE FILLING UP OF THE POND	7	200,000 each Which is 14,000,000	00
BULLDOZERS FOR LAND CLEARING	3	300,000 each Which is 900,000	00
Total:		16,900,000	

PROJECT TIMELINE:

The project will be completed within 2 and a half years preferably between October, 2019 to March 2022 because land clearing is mostly done in the dry season and also the digging of the pond and the buying of young fishes. Young fishes grow to their actual size in about 1-2 years.

IMPLEMENTATION/MONITORING: I, OLOBO, ensured the actual budget was being monitored to show that the actual result reflects the expected result as contained in the blueprint project plan . a control mechanism was included in the implantation plan to ensure viability of the project at all time.

CONCLUSION:

My Project is feasible and commercially viable. It is therefore recommended for funding so implementation can take place.