NATURE'S FISH LIMITED
PROPOSED BUSINESS PLAN
FOR
THE ESTABLISHMENT OF
DRIED FISH MAWS PLANT
ILEMELA DISTRICT, MWANZA REGION,
TANZANIA.

Prepared by:
NATURE'S FISH LIMITED,
P O Box 2589
Plot 43, Block C, Ilemela District,
MWANZA

June, 2021

Table of content

List of Abbreviations

CAPEX – Capital Expenditure
CIF – Cost Insurance and Flight
CSI - Corporate Social Investment
MWAUWASA– Mwanza Water Supply and Sewerage Authority
EIA – Environment Impact Assessment
GDP – Growth Domestic Products
GOT- Government of Tanzania
ICT –Information Communication Technology
IRR – Internal rate of return
KVA – Killo Volt Ampere
NFL – Nature's Fish Limited
NBS – National Bureau of standard
NEMC – National Environment Management Council
NGO – Non Governmental Organization
OPEX – Operating Expenditure
SWOC – Strength Weakness Opportunity and Challenge
TANESCO – Tanzania Electric Supply Company
TZS – Tanzania Shilling
USA - United state of America
US$ - United State Dollar
VETA – Vocational Educational Training Authority
QTS - Quantity
VAT – Value Added tax

EXCUTIVE SUMMARY

Tanzania is endowed with rich marine and inland waters that yield a wide range of living aquatic resources, providing livelihoods, food security, export revenues, and potential for further economic development. The country is both an importer and an exporter of fishery products, although the latter are more significant. Exports were 43,354 tons in 2018, valued at US$188 million, and were mainly in the form of Nile perch fillets to international markets and dried *Dagaa* to regional markets.

Fish maw, which was once regarded as a waste by-product in East Africa, is slowly becoming a multi-million dollar export, thanks to the growing appetite in Asia. Uganda, Kenya and Tanzania inclusively: collectively earn some $86 million per annum from Nile perch maw, which has become a highly sought-after commodity in China, Japan and other Asian countries.

Dried Fish maws require proper handling, appropriate storage conditions before processing, drying and packing for export in order to meet the customer obligation. The project will be undertaken by Nature's Fish Limited. The company is planning to set up a Dried Fish Maws Processing Plant in Mwanza region, with a maximum production capacity 270MT of dried fish maws per year.

The proposed Established plant will attract an investment capital of 1,0000,000US$ whereas shareholders plan to inject 100% of investment capital to a plant. The company anticipates providing 67 direct and indirect employments.

On the basis of all the analysis done in this Business Plan, all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the Establishment of the factory as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, Nature's Fish Limited through professional consultative manner will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the Establishment of the factory is financed by 100% by promoters, it gives an IRR of about 23.71%. The computed IRR is well above normal interest rates of commercial banks in Tanzania that range between 12 to 21% which is technically interpreted that the project is financially viable. The payback period for the project is estimated within 4 years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during Establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

1.0. THE FISHERIES SECTOR OVERVIEW IN TANZANIA.

1.1. The fisheries sector in Tanzania

Tanzania is endowed with rich marine and inland waters that yield a wide range of living aquatic resources, providing livelihoods, food security, export revenues, and potential for further economic development. The fisheries can be divided into the following subsectors: marine and inland capture fisheries, aquaculture, and fish processing. The scale of operations ranges from small-scale subsistence fishing to industrial fish processing. There is a vibrant export market, exploited by small-scale fish processors and traders serving the regional market, and by large fish processors selling into international markets. Over the last decade, Tanzania's fisheries production has been in the range of 325,000 to 380,000 tons per annum[1]. About 85% is from inland fisheries, 14% from marine fisheries and just 1% from aquaculture. Fish consumption is estimated to be about 7-8 kg/year and contributes to about 30% of the total animal protein intake. This level of per capita consumption is low, compared to the global per capita consumption of about 20 kg in 2018. With a population growing at 2.7% annually, increased supplies are required just to maintain this limited contribution to the diet .In 2019, there were some 183,800 persons engaged in fishing, accounting for about 0.7% of the work force, with a large, but unknown number, also engaged in fish trading and processing.

1.2. International Trade in Fisheries Products

Tanzania is both an importer and an exporter of fishery products, although the latter are more significant. Exports were 43,354 tons in 2018, valued at US$188 million, and were mainly in the form of Nile perch fillets to international markets and dried *Dagaa* to regional markets. Other than Nile perch and dried *Dagaa,* Tanzania also exports crabs, prawns, fish maws, octopus, seashells, live lobsters, squid, seaweed and ornamental fish[2]. Total exports of fishery products have plateau since 2005, varying from year to year in the region of US$140-188 million. Exports of fishery products accounted for 10% of the value of all national exports, and between 20012 and 2019 the fisheries contribution to GDP rose from 1.3 to 2.2%. Tanzania also imports some fish, mainly low value species (6,793 tons in 2014, valued at about US$6 million, mostly small pelagic fish from China).An export levy of US$0.12/kg is imposed on fish exports, and exporters complain that this affects their competitive position. However, this tax accounts for about 2% of the FOB price and has

[1] file:///C:/Users/USERNA~1/AppData/Local/Temp/The%20Tanzanian%20Fisheries%20Sector%20-%20Challenges%20and%20opportunities.pdf

[2] https://www.theeastafrican.co.ke/tea/business/chinese-culinary-and-sex-appetites-a-boon-for-east-africa-fish-exporters-1409932

generated important revenues for the Government (estimated at US$4.5 million in 2014). Along with high import duties of about 25-30%, which raised a further US$1.7 million, this has helped to finance fisheries development and Monitoring Control and Surveillance (MCS) activities. The exports were sent to 47 countries. The European Union as a trading block accounts for 45% of the volume and 52% of the total value of all exports. According to Euro stat data, the EU imported 26,100 Tons of Nile perch fillets in 2013, mainly from Tanzania, Kenya and Uganda. Tanzania was the main supplier of Nile perch fillets to the EU, exporting 12,400 tons (47.5% market share), followed by Uganda with 10,800 tons (41%) and Kenya with 2,900 tons (11%).Within the African region, the DRC is a very important market, accounting for 17% of the value of exports. This may well be an underestimate due to the existence of a significant informal trade.

1.3. Fish Maws business in Tanzania

Fish maw, which was once regarded as a waste by-product in East Africa, is slowly becoming a multi-million dollar export, thanks to the growing appetite in Asia. Uganda, Kenya and Tanzania collectively earn some $86 million per annum from Nile perch maw, which has become a highly sought-after commodity in China, Japan and other Asian countries.

Fish maw is the commercial term for the swim bladders of large fish like the Nile perch. Other fish with similar bladders are catfish, croaker and sturgeon. They are internal organs filled with gas that helps the fish rise, sink or remain stationary at its preferred depth underwater. Dried swim bladder is a delicacy in China, where it ranks number four among sea treasures in the country's cuisine after clams and oysters, sea cucumber and shark fin. They are also used in the production of aphrodisiacs. International prices of dry maw range between $450 and $1,000 per kilogram, depending on the size, quality and market strength. In 2017, maw worth $40 million was exported from Uganda, which leads in the trade, with 17 regional traders and 20 exporters. Tanzania, earned over $42 million while Kenya exported maw worth $5.6 million during the year.

1.4. Fish Maws processing factories

Processing companies in the region take the lion's share of the maw business. The business has also boosted the earnings of maw traders, middlemen and a few agents trusted by Chinese maw processing and export companies. In the search for maw to supply to Chinese companies, the agents have covertly created a lucrative artisanal segment. They have established business linkages cascading from middlemen based in towns to small extractors and itinerant maw collectors based at landing sites and villages.

The benefits from the increased demand for maw as well as from price surges, however, do not trickle fairly down the fish supply chain. Requirements by factories in Tanzania and Kenya, for example, and a recent directive in Uganda that all fish be supplied with their maw to processing factories, are partly to blame, according to the report. Authorities in the region consider many actors in the chain to be illegitimate. They have resorted to smuggling maw across borders in a bid to obtain better prices.

While Tanzania has 11 Chinese-manned maw processing factories in Mwanza, the country has only one licensed local trader, who runs centres in Bukoba, Mwanza and Musoma. The centre's collect and export maw to Uganda. Several local traders also work with Ugandans to illegally export maw from Tanzania.

The absence of Chinese buyers in Mwanza, Tanzania, , strict licensing for regional exporters and the taxation system in Tanzania, as well as a perceived laxity in the regulatory system associated with maw trade in Tanzania are being blamed for the smuggling of the product. The previous arrangement between factories and fish suppliers — where factories would give back their maw to fish suppliers — has now been banned in Tanzania. The fish suppliers would then sell the maw to Chinese traders to export to China.

1.4. Nature's Fish Project background

The company is planning to establish dried fish maws plant as fisheries by products "Dried Fish Maws" Processing at Ilemela industrial area. The plant set up will have a maximum capacity of processing 270MT of dried fish maws per year equivalent to 1.5MT per day in a planned 180 days in a year. The company plans to expand the facility subject to market condition and also include establishment branches in different region within the country.

Dried Fish maws require proper handling, appropriate storage conditions before processing, drying and packing for export in order to meet the customer obligation. The project undertaken by Nature's Fish Limited is going to be one of the major infrastructure requirements for the Fish Maws processing industry in Mwanza Region. The project will ensure the increased availability and improved quality of high value of dried fish maws for export .The proposed industry for drying fish maws will work as a facilitation point in a way that the fish maws for other business firms under contract to make it a commercially viable venture. The major clients for this investment will be the fish traders, processors and other individual fish and fish related products business firms.

.

1.5. Establishment of Nature's Fish Ilemela District:

The idea is to establish and modernize the existing structures and facilities for provision of quality Fish maws by ensure proper handling, appropriate storage conditions before

processing, drying and packing for export in order to meet the customer obligation. The project will ensure the increased availability and improved quality of high value of dried fish maws for export .The proposed industry for drying fish maws will work as a facilitation point in a way that the fish maws for other business firms under contract to make it a commercially viable venture. The major clients for this investment will be the fish traders, processors and other individual fish and fish related products business firms.

This factory attempts to fill the gap that exists between demand and supply of fisheries' by products. The proposed project will be established in Ilemela industrial areas by construction of factory structures, purchasing machineries and equipments for fisheries processing and purchase 7 motor vehicles for easily handling of the whole management and business entities. The proposed project will be implemented end of June 2021 and is being mainly run by mobilize funds from own sources and commercial banks.

1.6.Proposed plant capacity of Nature's Fish Limited.

Investors plan to establish dried fish maws plant that will set up a maximum capacity of processing 270MTMT of dried fish maws per year. The working day of the plant is180 days excluding off season of fish farming and for machine repairs, public holidays and Sunday. The estimated dried fish maws from fresh fish maws is 2% per KGs while 60 t0 75% will be fresh fish and the remaining will be sorted as waste or unwanted materials for dried fish maws.

1.7. Capital Investment and Financing Plan

The proposed Establishment and modernization plan under this phase (Phase Two) attracts additional investment capital of 1,000,000US$ (excluding interest and depreciations of machineries and equipments)

The project promoters are planning to finance project cost for the whole establishments of project as local investors will contribute land and structures while foreign investors will contribute working capital and major renovation of structures. Total investment is anticipated to 1,000,000US$. All these will be for major rehabilitation of structure to fit dried fish maws process requirements, purchase of machineries and equipments, purchasing of Light vehicles, furniture's, pre operational cost and initial working capitals of project.

2.0. PROJECT OVERVIEW

2.1 The project location and ownership structure

Nature's Fish Ltd (NFL) is a limited liability company incorporated in Tanzania under the Companies Act, 2002 vide Certificate of registration number 130688 from Registrar of Companies with effect from 27th October, 2016.The office of the company is located at Ilemela industrial area, Block C, Ilemela District, Mwanza Region.

The initial Authorized Share Capital of the company is TZS 10,000,000/= divided into 100 ordinary shares of TZS 100,000 each and the company have the power to divide the original or any increased capital into several classes, and to attach thereto any preferential, deferred, qualified or other special rights privileges, restrictions or conditions. Unless the conditions of issues shall otherwise expressly declare, every issue of shares, whether preference or otherwise, or any such rights, privileges or conditions shall not be altered or modified except in accordance with the registered Articles or Association. The liability of the members is limited and the following names compromise the company ownership and principal shareholding as illustrated on Table 2.1 below.

Table 2.1: Company Ownership and Principal Shareholders

S/No.	Shareholder's Name	Address	Occupation of Subscriber	Number of Shares
1.	MR. PETER JOHN LOUIS. (Tanzanian) (BUSINESS MAN)	P o Box 2589 MWANZA, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number130688	55
2.	MR. LIBI JOY (Indian) (BUSINESS MAN)	P o Box 2589 MWANZA, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number 130688	35
3.	NEVIN T GOMES (Indian) (BUSINESS MAN)	P o Box 2589 MWANZA, TANZANIA	Private Company By Share, Domicile In Tanzania- Incorporate Number 130688	10

2.2. Project site analysis

Based on physical inspection of the proposed site, the availability of basic and essential industrial infrastructure such transport, water supply, effluent disposal, electric power supply, telecommunication system and security were all checked out. The current physical condition of infrastructure and utilities on the proposed site is as shown on the pictorial overview of the project site as follows:

2.2.1. Utilities and Other supporting Facilities

The realization of the project development requires successful completion of a number of necessary activities and facilities to enable a successful development of the project. Strategic and situational analysis of project, the project needs reliable supplies of energy, water, transportation, telecommunications services, waste disposal and other services. The regional government under MWAUWASA "Mwanza Urban Water Supply Authority" and TANESCO has distributed power and water to ensure water network reaches peri urban areas especially where the project will be located. The following are reliable utilities found at the site;

A. Electricity Supply

The proposed site will be supplied with industrial production 2-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Nyamagana to Ilemela District, and if possible the institute will request installation electric Transformer in case the available power supply is not enough to feed the factory.
As part of project budget, the factory will be installed with a stand by generator with a capacity of 50KVA that will be installed for power supply. Solar energy will be alternative source for administration and other miscellaneous activities and not processing activities.

B. Water supply

The proposed site has close to MWAUWASA water network, the agency is major supplier of water to urban and peri-urban area in the city. While depending on water supply from MWAUWASA, Nature's Fish Limited. Plan to find alternative source of water while Hydrological surveys are ongoing on the project area to determine availability and sustainability of water supply.

C. Transportation network and communication system

The proposed project is located just 6.5 Km from Mwanza city centre the project is accessible in all mean of ground transport, such as heavy vehicles, Light Vehicle and public transports. The mobile tower operators and service providers available to the project area are such as Vodacom, Tigo, Airtel and Halotel The particular business communication system with external world/entities is expected to improve once the company becomes operational. The National Fibre Optical line transmission is closer the project area, actually just like 3 meters closer to the project area.

2.3. Project Description

2.3.1. Background information of the project

Nature's Fish Limited is a private company based at Ilemela Industrial areas, in Ilemela Municipality in Mwanza region. NFL's is intending to establish dried fish maws plant in Mwanza region. The factory's objective includes; To carrying out business processing and exporting dried fish maws, processing aforesaid marine and sea product by freezing, picking, drying etc, prepare the same sale and deliver international and international market to provide in connection therewith all necessary arrangement, facilities and acts which are incidental there to. Establish, build on, operate, acquire, run and manage processing factory, cold storage, refrigerator, and also ware house, godown, sheds and packing, preserving and canning all varieties of fish product dealt in the factory.

The plant that will be set up will have a maximum capacity of processing 270MT of dried fish maws per year. The company will start by rehabilitation of existing structure by renovating electricity system, water and sewerage system, paintings shading and install CCTV cameras. Apart from major renovation, the company will purchase 7 vehicles, generator with output capacity of 50KVA, 4 reserve tanks, 20 aluminum tables, 4 deep freezers, drying fans, projected total investment is 1,000,000US$.

Nature's Fish Limited seek the opportunity for the Establishment fish maws factory in Buzuruga industrial area, and take an advantage of competing to other companies by supply high demands of dried fish maws in China, Japan and other Asian countries for hospital purpose.

The Business Plan report explores the viability of the proposed Establishment and modernization project in an economy whose liberalization in recent years has witnessed private sector increasing in number and the demand of these commodities. In addition, the study will enable the sponsors to present the parameters and objectives of the proposed project to external financiers such as development and commercial banks, NGOs etc based in Tanzania.

2.4. Project Cost & Financing Pattern

The proposed project is estimated to cost a total of US$ 1,000,000 which includes 100% owner's equity as proceeds from capital contribution of the project, Liability of 1,269,387US$, The Current asset of US$ 199,500, fixed assets US$ 800,800 of 295,219US$, liquidity. Total equity 1,162,740US$ which include depreciation and corporate tax 30% - see Annex I and III,

	EQUITY + LOAN	DISTRIBUTION	AMOUNT
1	LOAN FROM COMMERCIAL BANK	0%	0
2	EQUITY – SHARE HOLDER CONTRIBUTIONS	100%	1,0500,000
3	TOTAL FINANCING	100%	1,000,000

2.5. Business Plan Objectives

The objectives of this study are three-fold. First is to determine the viability of the proposed integrated project and serve as a business plan for the company's development program. Secondly, it is meant to facilitate initial Joint-venture process to 2 international investor from India who are will to in dried fish maws industry, major development include general rehabilitation of the plants, installation of simple processing machines, and working capital for production. Thirdly, the business plan will act as a supporting document in the company's application for Tanzania Investment Centre (TIC) Certificate of Incentives so as to access exemptions on duties, VAT deferments and other benefits and protections as statutorily provided for under Tanzania Investment Act (1997).

2.6. Market and pricing Analysis

Nature's Fish Limited, Presently, there is no local market for dried fish Maws in Tanzania, the major customers of this product are China and Hong Kong. The market of dried fish maws is large and had wide appeal over 150 tones (Retail level) are purchased each year in China and Hong Kong from Tanzania, Due to this the company and Country will benefit a lot from this business as it will have an opportunity to raise income of the people and earn foreign currency from trading abroad.

The plant is estimated to use 75MT of fresh fish to process 1.5MT of fish maws per day. Which means to every KG of fresh fish is estimated to produces 2% of fish maws. Annual production of fish maws is estimated to 270 MT and the plant will run for 180 days per year. The Projected of Revenues from Sales at the extraction rate is 2% dried fish maws from the fresh fish maws , the price of the dried fish maws in the market is 65Milion TZS

per MT, and for 270MT production per year will gain sales of 17.55Bilion TZS equivalent to 7,630,435US$ per year at an exchange rate of 2,300TZS..

2.7 Technical aspect and related cost

2.7.1. Land acquisition and Buildings

The project is located at Ilemela district, the project is 6.5Kms from the city centre of Mwanza city in Tanzania. Based on physical inspection of the proposed site, the availability of basic and essential project Establishment development are in place. The shareholder already acquire plot at 35,000US$.

The floor plan and elevation of buildings and other related structures will be constructed to meet equipment of fish maws productions, the proposed structure is designed to meet highly hygienic of dried fish maws. Shareholders will start with the whole project in a end of June, 2021 by purchase or otherwise establish, build on, operate, acquire, run and manage processing factory, cold storage, refrigerator, and also ware house, godown, sheds and building for the purpose of processing, packing, preserving and canning all varieties of fish product dealt in the factory. Total estimates of land and building is 109,000US$

2.7.2. Machinery and Equipment.

Proper machinery and equipment selection is one of the key problems in the development highly hygienic dried fish maws in Tanzania. The machinery and equipments must suit the two-fold requirements of the developing countries, i.e. it should be up-to-date to allow quality delivery of dried fish maws commodities. In view of the foregoing, an effort has been made to choose from modern technological alternatives, a level that strikes a balance between fixed costs based on depreciation and variable costs based essentially on wages.

The requirements of various items of equipment have been worked out taking into consideration the quality provision of mental health care education, average equipment utilization and normal productivity level of professional worker etc. While working out details of equipment required, it has been assumed that the factory will work 180 days in a year. The projects machinery and equipment will be sourced from China and local market in Tanzania Estimated total cost is 262,000US$.

These cost assumptions are C.I.F Mwanza and include installation, commissioning, consultancy, port charges and transport to the project site. Calculated depreciation of

machines and other working facilities is estimated to cost US$ 25832 please see Appendices I on income statement.

2.7.3. Motor Vehicles

The project anticipated to purchase 7 motor vehicles costing to 395,000US$, these includes 2 administrative cars and 5 cold room trucks, these vehicle will facilitate factory operations and management of the industry. Hence increases plant performance and administrative work.

2.7.4. Furniture & Fittings and office equipments

The project building and structures are not enough to run smoothly project implementations; promoters during assessment keep asides a total budget of 9,000US$. The cost of furniture and fittings includes: tables, chairs cabinets, office furniture's assets etc in this context promoters/investor regards. Apart from furniture and office equipment, the project will allocate 20,000US$ for unforeseen other office facilities in case the budget goes above limit.

2.7.5. Pre-Operational Expenses and initial working capital

Under pre-operational expenses are considered costs like company formation, preliminary project studies, business plan preparation costs, licenses, permits and authorization, including processing of Incentives, legal fees, etc set aside of 39,000US$. While for Initial working capital of the project which includes initial imports of consumable goods and material estimated to last for the 1st three months of operations. Otherwise, raw materials will generally be maintained at one month's stock and debtors at one month's sales volume total 160,000US$ set aside. All these are considered as current assets and the investors are responsible for these.

2.7.8. Project Financing

The project costs, including fixed costs (machinery, equipment, building renovations, motor vehicles, office furniture and equipment and pre-operation expenses will be financed by a combination of bank term loan and shareholders own resources. Working capital requirements will be financed by short term bank financing in form of overdraft facility:

2.7.9. Project Implementation

Full implementation of the project is planned to take place by end of June, 2021. Machineries and motor vehicles will be imported immediately while construction/renovation works are in process.

2.7.10. Explanatory Notes.

The plant will operate for 180 days in a given year of operation. Since fisheries are seasonal and plant operation depends on local fishing, the management set aside of 180 days as a major production effective, the remaining days the plant will deal fresh fish production for Nile perch. The forecast has made for the duration of five years of operations, Extraction rate is 2% dried fish maws from fresh fish maws, capacity utilization of the project. The proposed project is a complete set of latest processing dried fish maws machine, equipment and tools. All these will be imported from china or India and local made with life span 2 to 5 years project economic life.

2.7.11. Operating and Administrative Costs

The major operating costs are salaries, wages and allowances; and food and beverages for hostel students. Consumable goods and material like chemicals, administrative expenses, fuel and lubricants, general clearness and security, uniforms and other related goods, insurance, licensing, tax, utilities has been stipulated to this report (see income statement Annex I) total operational and administrative cost 7,335,216US$

2.7.12. Auxiliary Materials/ services

Falling under this category of factory, utilities and service facilities must be considered,

Utilities and service facilities that will need to be provided in this plant are as follows:

(i) Workshop
(ii) Electric power
(iii) Water supply
(iv) Miscellaneous facilities {Canteen; First Aid Kit, Storage and transport and Office Facilities}

(i) Workshop

It is necessary to make provision for a small workshop in the factory premises so that certain maintenance operations could be carried out following sudden breakdowns and major routine matters.

The facility will comprise of necessary machines like small centre lathe, drilling machine, welding set, soldering and gas-cutting equipment including complete electrical kit to take care of necessary electrical maintenance as well as to replace worn-out parts and periodic oil and greases needs for the factory. Equipment provision has been restricted to the minimum.

(ii) Electric Power and Generator

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Mwanza Region. As part of an alternative power supply, the factory will heavy duty 50KVA power generator automated generator that will be connected to the all necessary factory compound for standby power supply. The factory will install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems.

(iii) Water Supply

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed site has close to MWAUWASA water network, the agency is major supplier of water to urban and peri urban area in the city. While depending on water supply from MWAUWASA, the main line is close to the proposed project from water source at Capiripoint in Nyamagana district to Ilemela District. The main line from this source will be tapped and let to the land site and water collected in an overhead reservoir provided at the top of the building of the project. Adequate provision has been made in the project cost for the overhead tank and supply and laying of pipelines etc.

(iv) Miscellaneous Facilities e.g. First Aid Kit, Storage and Transport, Office Facilities etc

- Provision has been made in the project costs for necessary facilities for external telephones and fire alarm system;
- Sickness and ill-health are recognized to be among the cause of absenteeism and low morale leading to decreased provision of factory, increased waste and bad employee-management relations. Therefore, necessary provision has been made for the canteen and first aid facilities in case of accidents, sudden sickness etc.
- Storage and transport needs of the factory have been duly recognized and been attempted mostly manual. Regarding transport, 3 light vehicles will be purchased and some will be hired during the start of project
- Necessary provision for furniture and office equipment has been made in the Capital Cost estimates.

2.7.12. Waste management for the project

In order to create a sustainable society, it is necessary to develop effective utilization of all sorts of wastes. One of the major wastes from our living is fiber wastes. Fiber wastes are generally divided to nonindustrial (organic chemicals) and industrial wastes (inorganic Chemicals). In her strategic management for a factory establishment; the project has to move from an understanding of improvement at all costs to an understanding of continuous and balanced improvement once established. In modern times, environmental protection is being implemented not because it is enforced law, but as an administrative philosophy.

3.0. PROPOSED SALARY BUDGET AND MANPOWER

3.1. Employment

The factory is looking at providing direct employment to at least 17 permanent jobs on full implementation and operation of the project and 50 part time employments. The project is divided into 3 Departments; Administration (7), Finance (5), Operational department (57)

3.2. Recruitment

Recruitment of the 17 persons will be carried out by recruiting qualified operational department especially general fish maws processors who have experienced in teaching methodology based on demonstration of skills and aptitude. Other regulatory organs will be invited during recruitment process. Careful methodology is being worked out by a competent management consultant who will set the job descriptions. To ensure that the right calibre is recruited. Recruitment of expatriate personnel will be carried out in consultation with the relevant authorities in Government and the collaborating agencies.

3.3. Training and the use of Consultants

The NFL plans to initially carry out on the job training for most of the technical staff to be dispatched to the project site by the suppliers of the machineries and equipments of the factory which will be specified under sales agreement. In general the factory will ensure that employees acquire new skills and procedures to increase their productivity fourfold. Educational materials will be subsidized or paid for to motivate the workers to develop themselves.

Whereas the factory will endeavor to obtain the best talents to fill the permanent posts in the organization, it is intended where necessary, to continue with the policy of hiring out some specialized skills by way of consultants. Alternatively, those skills not required throughout the year will be left to consultants. To ensure efficient and scientific management, operational manuals will be prepared for the core functions of the factory.
The project will be managed by qualified professionals given the vast experience that the promoters have acquired over years in running and managing similar businesses, guidance to management and regularly monitor and evaluate performance of the project.

Table 3.1. Proposed manpower requirement:

A.ADMINISTRATION DEPARTMENT	FULL TIME STAFF	MONTHLY SALARY	MONTHLY ALLOWANCE	TOTAL ANNUAL SALARY
EXCUTIVE DIRECTOR	1	2,000		24,000
DIRECTOR ADMINISTRATION	1	1,500		18,000
DRIVER	1	300		3,600
SECURITY GUARD	4	200		9,600
SUB TOTAL	7	4,000	0	55,200
B.FINANCE DEPARTMENT	FULL TIME STAFF	MONTHLY SALARY FULL TIME STAFF	MONTHLY ALLOWANCE	TOTAL ANNUAL SALARY
DIRECTOR FINANCE	1	1,500		18,000
ACCOUNTANT	1	600		7,200
PROCUREMENT OFFICER	2	500		12,000
DRIVER	1	300		3,600
TOTAL	5	2,900	0	40,800
C. OPERATIONAL DEPARTMENT	FULL TIME STAFF	MONTHLY SALARY FULL TIME STAFF	MONTHLY ALLOWANCE	TOTAL ANNUAL SALARY
QUALITY MANAGER	2	2,400		57,600
DRIVER	5	300		18,000
FISH MAWS PROCESSORS	50		2,608	21,913
TOTAL	57	2,700	2,608	97,513

GRAND TOTAL	69.00	9,600.00	2,608	193,513.04

4.0. FINANCIAL ANALYSIS

4.1. Production, Revenue and project viability

- The estimated revenue gain in production of dried fish maws is 7,630.435US$ annually excluding Value Added Tax during the first year in operation of the factory,
- Net profit before tax is 295,219US$ for the first year, and increases to second year to the fifth years of economic production life of project
- Percentage of gross contribution for the first year 4% and increases tremendously as shown in income statement,
- Net profit after tax and depreciation for the first years in operational is 185,571US$ and increases positively, the project is able to pay corporate tax 80,816US$ which has positive contribution to GDP of the country,
- The expected sales increase annually is 5% while expenses increases by 3% which depends on inflation rate of the country
- Total investment cost of the project is 1,000,000US$ whereas the own equity is 100% with no loan-able amount from commercial bank,
- Project current assets for the first year is 199,500US$, fixed asset 800,500US$, Project liquidity is 295,219US$ which makes total liability of project to1,295,219US$, all these raised after include, bank interest, depreciation, taxes and social security benefit to employers,
- The end balance of project in cash flow statement is positive and increases tremendous.
- Cash generated from operation and net cash from operational activities increases positively of project (see cash flow sheet)
- The Discounted Cash flow yields an Internal Rate of Return (IRR) of 23.71% which is well above the commercial bank interest and payback period of project is within 4 years. This confirms the financial viability of the proposed project.
- Return on Investment is anticipated to 17.2% which is increases positively to 34.2% to the fifth year of project economic life - see balance sheet,
- Depreciation of fixed assets and amortization of the pre-operational expenses rates used are as follows: land 5%, Civil Works/ Structures/Buildings 5.00% on straight line basis, Plant Machinery & Technical Equipment 12.50% on straight line basis, Motor Vehicles. 20.00% on straight line basis. The business plan use 12.5% as depreciation factors. To this project after including depreciation factors, the first year

depreciation value is 25,832US$ and increases gradually due to wear and tear of fixed asset.

- Salaries and Wages have been based on the prevailing scales in the project. There is provision of 20% to cover company contribution to NSSSF (10%) and other social welfare (10%). Included to the total amount (see Income statement)

5.0. RISK ANALYSIS

5.1. Risk Analysis

Risk is the probability that an event or action will adversely affect the organization. Risk assessment is the identification and analysis of risks associated with the achievement of operations, financial reporting and compliance goals and objectives. Risk management is a central part of the factory. The factory's management will determine the level of operations, financial and compliance risk they are willing to assume. Risk assessment is one of the Factory's management responsibilities.

5.2. Macroeconomic risk analysis

Since early 1986, the government of Tanzania has launched a comprehensive economic policy and stabilization plan with the aim to enhance the amount of infrastructure construction and improve the lives of the poor. During this time the main economic indicators significantly improved. However, uneven development of various region in the country, lack of relevant infrastructure in transportation, telecommunications, networking, factory facilities, electricity and water supplies have proven to be investment barriers. Overall, Tanzania has a weak economic foundation but the project can achieve a greater impact in attaining social and economic goals for the country.

5.3. Finance risk analysis

a) Supply Risk: The risk in consumable good relates to supply of raw material, transportation and price fluctuations. There is no assurance of enough supply of raw materials in the local market instead mostly of raw materials are imported.

b) Processing Risks: The technology, machines and equipment used in factory are in rudimentary stages all of which contribute to reducing output efficiency.

c) Sales/market risk: Placing on the tuition fees markets bears risk of demand fluctuations and rejections through the implementation. Furthermore, beneficiaries/students are not aware of the factory and are usually very pricing sensitive.

5.4. Other potential external risk

a) Lack of Governance: the governance mechanism is underdeveloped, actors operate in an uncoordinated and unorganized fashion, and if rules exist they are often ignored;

b) Lack of market coordination: No lead organization has a coordinating role in relation to markets, technology and information such no incentives for

improving mental health education and promote sustainable income earning opportunities;

c) Unclear and conflicting roles regulatory authorities: Regulatory Agencies are responsible for quality control education and as well as enforcing such as NEMC, TBS, TMA, ministry of industries etc, are regulatory role in issuing licensing etc

d) Operating procedures: Standard procedures are inadequately enforced, or not enforced at all, because of relaxed regulations; and

e) Integration: there is little vertical integration of education system

5.5. Mitigating potential risk

The development of a large and complex project such as NFL is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach to manage the project in a manner which is fairly and adequately address the multiple risks in a comprehensive as well as systematic manner is to use the risk analysis and management methodology which identifies the risk issues and their instrumental cause. In this regard, the risk is eliminated or effectively managed by the party best suited with capacity to handle or deal with the risk factors.

6.0. ECONOMIC AND SOCIAL ASPECTS

6.1. Broad Socio Economic impact of the project

In the Business field, what still really matters most is *"What is the return on investment of your project?"* The challenge thus created is to determine the relationship between community and social impact and business value (or return on investment). Many public, private and community stakeholders have over the past few decades become disappointed about the potential social impact and value of Corporate Social Investment (CSI) projects. NFL will apply the CSI perspective, social impact assessment as a tool that will be used to qualify and quantify the social, economic and environmental changes and outcomes that will occur over a period of time, within the development context, as the result of the project investment. In order to address the impact assessment framework, the company will apply the Impact Investment Index, which will show through evaluation and assessment, the social impact of the project through a blend of indicators that are able to prove positive short, medium and long term impacts.

Impact Investment Index Framework

Impact Investment Index		
Frame Work for NFL		
Performance Area	Quantitative Indicator	Remarks
Investment Capital	Total investment capital, CAPEX and OPEX US$ 1,000,000, sale gained 7,630,435US$ while small scales fishermen gain from factory purchasing is 6,500,000 US$	Substantial amount of capital invested into the domestic economy
Income Tax Annually	Indicative Annual audit report 80,816US$,	Increased GDP of the national
Job requirements	Job creation after establishment of the project is 17, direct Tanzanian Job, and 50 temporary employment	Reasonable number of direct job created to local Tanzanians with direct impact on poverty reduction through enhanced income generation
Technology applied	High Tech Environmentally friendly machinery	Applied technology which is free from environmental pollution

Other Implied Project Benefits
• Increased sales to the Utility Companies providing services of electricity, water and sewerage, telecommunications; • Increased business transacted by local banks and institutions providing financial services; • Business opportunities for local contractors and sub-contractors during the construction phase; • Increased regional intra-trade and international trade due to better infrastructure facility and links to markets; and • Contribution to GDP growth through increased economic activities

Based on the Impact Investment Index analysis, the Institute can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements. In this regard therefore, NFL will promote export, , create employment, attract new technologies, expand earnings and ultimately contribute substantially to the country's economic growth.

7.0. FINANCIAL MODELLING AND ANALYSIS

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the NFL. The analysis is based on the assumptions that have been taken for the implementation of the site development, demand and the associated potential investment requirements for a 5 year time period. The purpose of Establishment of the factory will speed up the country´s economic development by being a catalyst for restructuring the existing factory to set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

7.1. Project investment inputs and sale/revenues

The plant is estimated to use 75MT of fresh fish to process 1.5MT of fish maws per day. Which means to every KG of fresh fish is estimated to produces 2% of fish maws. Annual production of fish maws is estimated to 270 MT and the plant will run for 180 days per year. The Projected of Revenues from Sales at the extraction rate is 2% dried fish maws from the fresh fish maws , the price of the dried fish maws in the market is 65Milion TZS per MT, and for 270MT production per year will gain sales of 17.55Bilion TZS equivalent to 7,630,435US$ per year at an exchange rate of 2,300TZS.. The projected sales of the project will increase by 5%.

7.1.1.. input estimates

INPUTS/RAW MATERIALS ESTIMATE PER ONE YEAR		
Design Capacity of 75MT per day	1.5 MT per Day	
Period (180 Days)	Year	1
Fresh Fish processed Per year in KG		75000
Total MT of Fish Maws per day at 0.02KG		1.5MT
Annual Production of fish maws for 180 days		270MT

7.1.2. Revenue estimates per MT

FRESH FISH MAWS PURCHASE COSTS		
COSTS (TSHS)		
Year		1
Fresh Fish Maws production per year		270MT

selling price per MT	65,000,000	17,550,000,000
annual selling price of FM in US$ at 2300TZS exchange rate		7,630,435

7.2. Project investment summary.

Investment Summary	
Fixed Assets US$	
A. Land and Buildings	
Land Acquisition/rent	35,000.00
Administration Block	15,000.00
Dinning/Kitchen	4,000.00
Processing factory	16,000.00
Packaging room	12,000.00
Godown	15,000.00
Cold room storage	12,000.00
Sub total	109,000.00
B. Machines and Equipments	
Diagnosis Equipment for testing quality	10,000.00
Draying fens 15	3,000.00
Refrigerator containers 3	3,000.00
Deep Freezer 5	10,000.00
Protection Gears	6,000.00
CCTV Camera and accessories	6,000.00
processing knifes 200	1,000.00
Plastic containers 120	6,000.00
Reserve tanks 10000lts 5	5,000.00
Cold room facilities	25,000.00
Miscellaneous Tools and Equipment	30,000.00
Computer and accessories 5	7,500.00
Standby Generator	150,000.00
Sub Total	**262,500.00**
C. Motor vehicles	
Light Vehicles for administration 2	20,000.00
Cold room Truck 5	375,000.00
Sub Total	395,000.00
D. Other Facilities	
Furniture and fittings	9,000.00
Aluminum Tables 50	5,000.00
Contingeous	20,000.00

Sub Total	34,000.00
Sub total Fixed Assets	800,500.00
Current Asset	
Pre operational expenses	39,500.00
Initial working capital	160,000.00
Sub total current Assets	199,500.00
Total Investment	1,000,000.00
Equity	
Loan (0%)	-
equity (100%)	1,000,000.00
Total Equity	1,000,000.00

7.2. Objective and Scope of Financial Model

7.2.1. Objective

The main objective of the financial modelling and analysis is to setup a financial model framework for potential generated revenues and operational & maintenance costs for the full operation of NFL based on the assumptions taken for the Market Analysis, the plan for the facility development, unit production costs and other overhead and operational charges.

7.2.2. Scope

The scope consists of a financial model that will be used to analyse the potential financial viability of the project based on the assumptions taken for the concept and scope of the factory on the Market Analysis. The financial model has been developed in excel spread sheet and include information on costs, expenses and the subsequent sales revenue based on the average market prices and linked to the financial cash flow.

ANNEX I – INCOME STATEMENT

(all numbers in US$)

Revenue	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
annual selling price of FM in US$ at 2300TZS exchange rate		7,630,435	8,011,957	8,412,554	8,833,182	9,274,841
Total Operating Revenue	-	**7,630,435**	**8,011,957**	**8,412,554**	**8,833,182**	**9,274,841**

Expected Expenses	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Salaries		193,513	199,318	205,298	211,457	217,801
Social Charges & Pension Payments		38,703	39,864	41,060	42,291	43,560
campus consumable goods - raw materials		6,500,000	6,695,000	6,895,850	7,102,726	7,315,807
Administrative expenses and management system		90,000	92,700	95,481	98,345	101,296
Fuel and lubricants for cars and generators		120,000	123,600	129,780	136,269	140,357
General Clearness and security services		12,000	12,360	12,731	13,113	13,506
Transportation		150,000	154,500	159,135	163,909	168,826
Insurance/licensing/healthy premium/other charges		9,000	9,270	9,548	9,835	10,130
Utilities - Electricity and water services		72,000	74,160	76,385	78,676	81,037
Other Costs		150,000	154,500	159,135	163,909	168,826
Total Operating Costs		**7,335,216**	**7,555,272**	**7,784,402**	**8,020,530**	**8,261,146**
Operational Net Earnings before Depreciation, Interest & Tax		**295,219**	**456,684**	**628,152**	**812,652**	**1,013,695**
%age Gross Contribution						

		4	6	7	9	11
Depreciation at12. 5% (Machines, Equipment.)		25,832	39,960	54,963	71,107	88,698
Net Earnings before Tax & Interest		269,387	416,725	573,189	741,545	924,997
Interest Paid (Bank Loan)		-	-	-	-	-
Tax (30%)		80,816	125,017	171,957	222,464	277,499
Net Earnings		188,571	291,707	401,232	519,082	647,498

ANNEX II -CASH FLOW FROM OPERATING ACTIVITIES

Cash Flow statement from Investing Activities for five years					
(all numbers in US$)	Year 1	Year 2	Year 3	Year 4	Year 5
CASH FLOW FROM OPERATING ACTIVITIES					
Cash receipts from Sales	7,630,435	8,011,957	8,412,554	8,833,182	9,274,841
Cash paid to suppliers and employees	(7,335,216)	(7,555,272)	(7,784,402)	(8,020,530)	(8,261,146)
Cash generated from operations	295,219	456,684	628,152	812,652	1,013,695
Dividends received*	0	0	0	0	0
Interest received	0	0	0	0	0
Interest paid	0	0	0	0	0
Tax paid	(80,816)	(125,017)	(171,957)	(222,464)	(277,499)
Net cash flow from operating activities	**214,403**	**331,667**	**456,195**	**590,189**	**736,196**
CASH FLOW FROM INVESTING ACTIVITIES					
Replacement of equipment	0	0	*0*	0	*0*
Proceeds** from sale of equipment	0	0	*0*	0	0
Net cash flow from investing activities	**0**	**0**	**0**	**0**	**0**
CASH FLOW FROM FINANCING ACTIVITIES					
Proceeds from capital contributed	1,000,000	0	0	0	0
Proceeds from loan	0	0	0	0	0
Payment of loan	0	0	0	0	0
Net cash flow from financing activities	**1,000,000**	**0**	**0**	**0**	**0**
NET INCREASE/ DECREASE IN CASH	**1,214,403**	**331,667**	**456,195**	**590,189**	**736,196**
Cash at the beginning of the period	188,571	291,707	401,232	519,082	647,498
Cash at the end of the period	**1,402,974**	**623,374**	**857,428**	**1,109,270**	**1,383,694**

ANNEX III – PROFOMA BALANCE SHEET

Pro forma balance sheet					
(all numbers in US$)	Year 1	Year 2	Year 3	Year 4	Year 5
ASSET					
Current asset	199,500	291,707	401,232	519,082	647,498
Fixed asset	800,500	774,668	760,540	705,577	689,433
Liquidity	295,219	456,684	628,152	812,652	1,013,695
TOTAL ASSET	1,295,219	1,523,060	1,789,924	2,037,310	2,350,626
NET ASSET MINUS DEPRECIATION	1,269,387	1,483,100	1,734,961	1,966,203	2,261,928
EQUITY & LIABILITIES					
Equity	1,162,740	1,318,123	1,508,041	1,672,633	1,895,730
Reserves					
Total Own Equity	1,162,740	1,318,123	1,508,041	1,672,633	1,895,730
Provisions					
Long term loan	0	0	0	0	0
Short term Liabilities	106,648	164,977	226,920	293,571	366,197
Total Equity & Liabilities	1,269,387	1,483,100	1,734,961	1,966,203	2,261,928
CL/CA	0.53	0.57	0.57	0.57	0.57
DEBIT/CAPITAL RATIOS	0.08	0.11	0.13	0.15	0.16
ROI	17.2	22.1	26.6	31.0	34.2
BREAK EVEN POINT	2.71	1.70	1.21	0.87	0.68
BREAK EVEN RATIO	25.21	16.90	12.75	10.23	8.51
EQUITY/TOTAL LIABILITIES	92	89	87	85	84

ANNEX IV – INTERNAL RATE OF RETURN

IRR for the Project		
	(all numbers in US$)	
	Initial Investment	-1,000,000
Year 1	Additional Annual Net Profit	188,571
Year 2	Additional Annual Net Profit	291,707
Year 3	Additional Annual Net Profit	401,232
Year 4	Additional Annual Net Profit	519,082
Year 5	Additional Annual Net Profit	647,498
	IRR (in 5 years)	23.71%

The IRR above indicates that the expected return on the TZS 1000,000 initial investment after 5 years is 23.71%.

ANNEX V- PAYBACK PERIOD

Payback Period Analysis				
	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	1,000,000.00	0.00	1,000,000.00
	1.00	1,000,000.00	188,571.22	811,428.78
	2.00	811,428.78	291,707.16	519,721.62
	3.00	519,721.62	401,232.13	118,489.49
	4.00	118,489.49	519,081.54	400,592.05
	5.00	400,592.05	647,497.88	1,048,089.93

Payback Period =	4.00	Years

8.0. CONCLUDING REMARKS AND WAY FORWARD

8.1. Evidence of project viability based on financial model and policy framework support

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the Establishment of the factory as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, NFL through professional consultative manner will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis shows the IRR of about 23.71%. The computed IRR is well above annual loan commercial bank loan interest in Tanzania. Which is technically interpreted that the project is financially viable. The payback period for the project is estimated within 4 years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

8.2. Policy Framework Support

The development of the NFL is designed to tape advantages of the current Tanzanian market-oriented reforms. The Project will be developed and established to accelerate the industrialization process. The vision 2025 emphasizes the importance of the allocation of public funds for strategic investments and private sector financing for development investments.

The 15 years Perspective Plan (2020-2025); Priotize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2015-2020) recognizes the fundamental role of the private sector in enabling the government to allocate its fund to strategic projects to facilitate a higher level of development. MKUKUTA II (2010-2015) identifies Public Private Partnership as a means of increasing the level of stakeholder participation and of easing the financial burden on the government. It should be noted that existing public resources are clearly insufficient to meet Tanzanian's huge development needs. The increased use of private enterprises participation in development projects can help alleviate the financing gap. This approach is now applied by NFL to ensure development of one among the Establishment of the factory to be developed in Ilemela, Mwanza Region. Private sector and investment have

been recognized as the most significant potential source of additional funding required to facilitate development projects.

8.3. Conclusive Remarks and Way Forward

The Establishment of the NFL Ilemela Factory will be funded by investors 100%and the project will purchase or otherwise establish, build on, operate, acquire, run and manage processing factory, cold storage, refrigerator, and also ware house, godown, sheds and building for the purpose of processing, packing, preserving and canning all varieties of fish product dealt in the factory. Before the factory engages into the development of this project as a private enterprise, it needs to accomplish the pre development activities to make way for the development of the designated project.

a) Conduct Environmental Impact Assessment.

The factory has to engage a consultant to conduct EIA in order to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and project development. The EIA Directive aims at introducing systematic assessment of the environmental effects of strategic land use related plans and programs. It typically applies to regional and local, development, waste and transport plans, within the country. EIA ensures that plans and programs take into consideration the environmental effects they cause.

b) Mobilization of project requirements

The factory should engage a firm to make construction that will suit factory requirement. The structure should include all vital service facilities described in this business plan. When possible, the process of design of the facility should be consultative insomuch that it should allow and incorporate ideas from experienced professionals from the project.

c) Mobilizing Funds

As previously discussed on the Financial Analysis of this business plan, financing mechanism for the factory should be scrutinized well before commencing the project implementation. There may be several options of financing the project development but the firm will find the best option. The investment team should do consultation with relevant financial institutions (Banks and non-bank Financial Institutions), both within and outside the country. This exercise should be more effective if the team works closely with central government agencies, particularly health regulatory agency Ministry of industry, Ministry of fisheries, TBS, TMA, VETA, SIDO, etc