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## **INTRODUCTION**

Moringa has recently received a lot of attention in the press, yet few people understand the background and true value of the tree. Misconceptions are widespread. Many yield and income predictions are overstated and incorrect. This situation opens the door to unhealthy business practices that would only harm the moringa industry in the long run. All information supplied via the web and press, in general has limited application to African conditions. This document must be seen as an introduction to the business plan development for potential Moringa projects in Africa. This is an introduction to the services that we as a consultancy group can render to possible investors and stake holders in the Moringa industry.

(Tarafter CR, Ethno-gynecology in relation to plants,)

## **MISSION STATEMENT**

The mission statement for our company is to reach every area of the country or markets to deliver the products to every customer to meet the demand of our customer, providing unrepresented quality products and meeting the expectations of stakeholders as well as engaging corporate world to come on board and work with us for the common goal.

## **VISION STATEMENT**

The vision of the team is to develop sustainable production systems for moringa and other crops that can be implemented in Africa for long term financial gain, job creation and poverty alleviation in rural areas. We work from a conservative and responsible point of view and favour an integrated farming system with the production of both primary and secondary moringa products and by thus reducing risk to the minimum and optimizing the potential for long term success of moringa and other projects. All recommendations are science based and if possible tested under practical production conditions.

## **BUSINESS PLAN DEVELOPMENT**

The team is able to develop a business plan for any proposed production system and product to be produced. Depending on funding, different areas would be addressed. In general the plans consist of:

- General overview of Moringa/ crop (Horticultural aspects as well as current production)
- Production plan including Job creation, processing etc. (Developed to client's needs)
- Sapling production plan
- Economic model/plan including financials (needed for funding)
- Marketing overview and potential
- Contingencies and conclusion.

## **OVERVIEW OF MORINGA**

*Moringa oleifera* belongs to a monogeneric family of shrubs and trees, Moringaceae. *M. oleifera* is cultivated throughout the Middle East and in most of the tropical belt. It was introduced in Eastern Africa from India at the beginning of the 20th century.

*M. oleifera* is a medium-sized tree that reaches about 10m in height. It has a straight trunk about 10-30cm thick with bark that is whitish grey, corky, with longitudinal cracks. It also has a tuberous taproot to tolerate drought conditions. The umbrella shaped tree comes with a loose crown of feathery foliage (National Research Council, 2006). The foliage is evergreen or deciduous depending on the environment. In season the tree is covered with creamy white, honey-scented flowers arranged in drooping panicles. Flowers are insect pollinated and require a large number of insect visitations, with bees the most common.

## **MORINGA TREE USES**

The Moringa tree has many potential uses, and as a result a great deal of research and development has been done. Moringa is regarded as the “poor-person’s plant” with the promise to benefit rural

Africa. It shows the capacity to provide many different foods and other profitable uses with minimum growing and harvesting input. The tree can also be used to combat deforestation and to beautify streets and informal settlements.

Moringa leaves are an inexpensive source of proteins, vitamins and minerals for developing countries. It is reported that the leaves contain more beta-carotene than carrots, more protein than peas, more vitamin C than oranges, more calcium than milk, more potassium than bananas, and more iron than spinach. Dried and milled leaves are easily stored and used by families who can then add the powder to their daily meals. The powder can also be used by food businesses as a nutritional additive to their products. Moringa leaves can help decrease developing countries dependence on imported goods. Crushed seed of *Moringa oleifera* has been shown to be an effective natural coagulant for the treatment of river waters exhibiting relatively high levels of suspended solids (Fuglie, 2001). The leaves and twigs can be used as fodder for cattle.

Seeds of *Moringa oleifera* yield 25 - 30% of a non-drying oil, known as Ben oil, used for lighting, in arts and for lubricating watches and other delicate machinery. Oil is clear, sweet and odourless and turns rancid slowly, and as a result it is edible and useful in the manufacture of perfumes and cosmetics. This oil resembles olive oil and may be of some value as a constituent of non-yellowing, non-drying plasticising alkyds. It is highly valued by perfumers as it absorbs and retains fugitive odours.

For the development of potential investment opportunities the three main uses of moringa can be summarized as:

- Dried leaf powder for human and animal consumption
- Oil for human consumption and bio-fuel
- Leaf, twigs and press cake as animal fodder.

Production systems could be developed for single product use or for multi- product use.

( Tahiliani P and Kar A, Role of Moringa oleifera leaf extract in the regulation of thyroid hormone status in adult male and female rats, Pharmacol Res, 2000, 41(3), 319-323. 32 "Moringa Oleifera - A Supermarket On A Tree." *MORINGA TREE, Plant, Benefits*. N.p., n.d. Web. 3 Jan. 2014. )

## **EXECUTIVE SUMMARY**

Established in February, Moringa Initiative is located on Westgate Farm in Chisamba. It locally grows and manufactures its own Moringa Oleifera for a variety of products such as Moringa Miracle Capsules, Moringa Miracle Tea and Moringa Leaf Powder. It aims to supply Zambia with Moringa Supplements in an effort to help build a healthier nation. Moringa products are sold in many shops and pharmacies in Zambia. This underutilized natural resource was never thought in ways that can make it as source of income or livelihood. Now for the first time in Zambia, it is being processed as a valuable feeding program against malnutrition and into various other products by Tiyezye Farming a community based organization registered with the Ministry of Gender Sports and Social Services. Cips Network Youth Group plans to produce the following products from Moringa: Moringa capsule as food supplement and source of vitamins, liquid fertilizer for plants, porridge flour as nutritional supplement for malnourish, topical ointment to cure skin diseases and allergies, and herbal iodine powder to treat open wounds and rashes. The major products will be porridge flour and food supplement capsules, targeting a wider market including the Government Administrative Districts (GADs) of the entire province of Lusaka Province, Copperbelt Province, Eastern Province, Southern Province, Western Province and Central province region. The products will be used in the GADs' feeding programs to combat malnutrition. We project an average daily sale of ZMW3, 000 or ZMW1,080,000 a year for the first year, ZMW1,560,000 for the second year, and ZMW1,850,000 for the third year respectively. The other products will be produced in a much smaller scale and will be sold to pharmacies, drugstores, clinics, hospitals, medical supplies, agricultural supplies and farmers associations for liquid fertilizer. In total, all the Moringa products that Cips Network Youth Group will produce is projected to earn a net profit after tax of ZMW491,026 for year 1, US \$807,777 for year 2 and US \$124,587 for year 3. We also plan to enter the global market with these first three years of operation. This project will have positive impact on the physical

wellbeing of its consumers and on poverty alleviation through livelihood generation. This project will also compliment the government’s “Environmental Advocacy and Awareness Raising Programs” through massive planting of Moringa trees. As the entrepreneurs behind this business plan, our knowledge and experience, coupled with well-informed Tiyezye Farming members, our active linkages with different government agencies, nongovernmental organization (NGOs), learning institutions and religious organizations, will all contribute to the operational success and continuous growth of the business.

Year	Estimated Net Profit	Estimated Annual Sales
1	ZMW491,026=00	ZMW 1,155,555=56
2	ZMW 807,777=00	ZMW 1,720,000=00
3	ZMW 124,587=00	ZMW 2,324,756=94

## **1. THE BUSINESS**

### **1.1 BUSINESS PROPOSITION**

Moringa Oleifera had been a part of diet and natural home remedy medication for many years of the Lusaka residents, particularly the ethnic community. And because of its abundance and enormous supply, excess were thrown as trash and farm waste. Time has come to discover the remarkable attributes of this simple tree that it had become famous because of its extremely nutritional values, healing wonders and rare powers that it had obtain its name as the “Miracle Tree”. This unique tree sounds like fiction because of its more than three hundred kinds of valuable traits that had become a phenomenon. Among this trait, is its power to purify very turbid water to become drinkable and safe and can feed the hungry. Ounce by ounce, it has the calcium of four glasses of milk, the vitamin C of seven oranges, four times the vitamin A of carrots, two times the protein of yoghurt, and three time the potassium of bananas. It has tripled the iron of spinach and more impressive attributes than olive oil. The very first of its kind to become a business in Zambia, an under develop natural resource discovered to generate income, jobs and livelihood to common farmers and poor people. Customers will value and patronize the product because of its effectiveness to many kinds of illnesses through the rare power of its powdered dried leaves in capsule form. Strong belief in the medicinal value of Moringa hence

catalyst to demand. The price of raw materials are so low, to make any investment profitable and viable. It can offer extremely low cost with its product because of almost free raw materials and that anybody can afford to buy. Moringa had been a part of old culture medications for generations, the reason why customers are very aware of its effective powers. It also provides lasting energy and delivers supreme energy to all ages.

## **1.2 PRODUCTION PROCESS AND DEVELOPMENT**

Processing of Moringa leaves can be difficult if it is done during rainy days. Within 24 hours the fresh Moringa leaves, if not totally dehydrated and dried, would acquire mould and will lose their nutrients. Dryer or dehydrating machine is very important at the very start of the process of every product. Moringa leaves will be dried gradually with hot air fan at 50 to 60 degrees centigrade using a cabinet drier. When dried, the leaves will be milled with pulverizing machine.

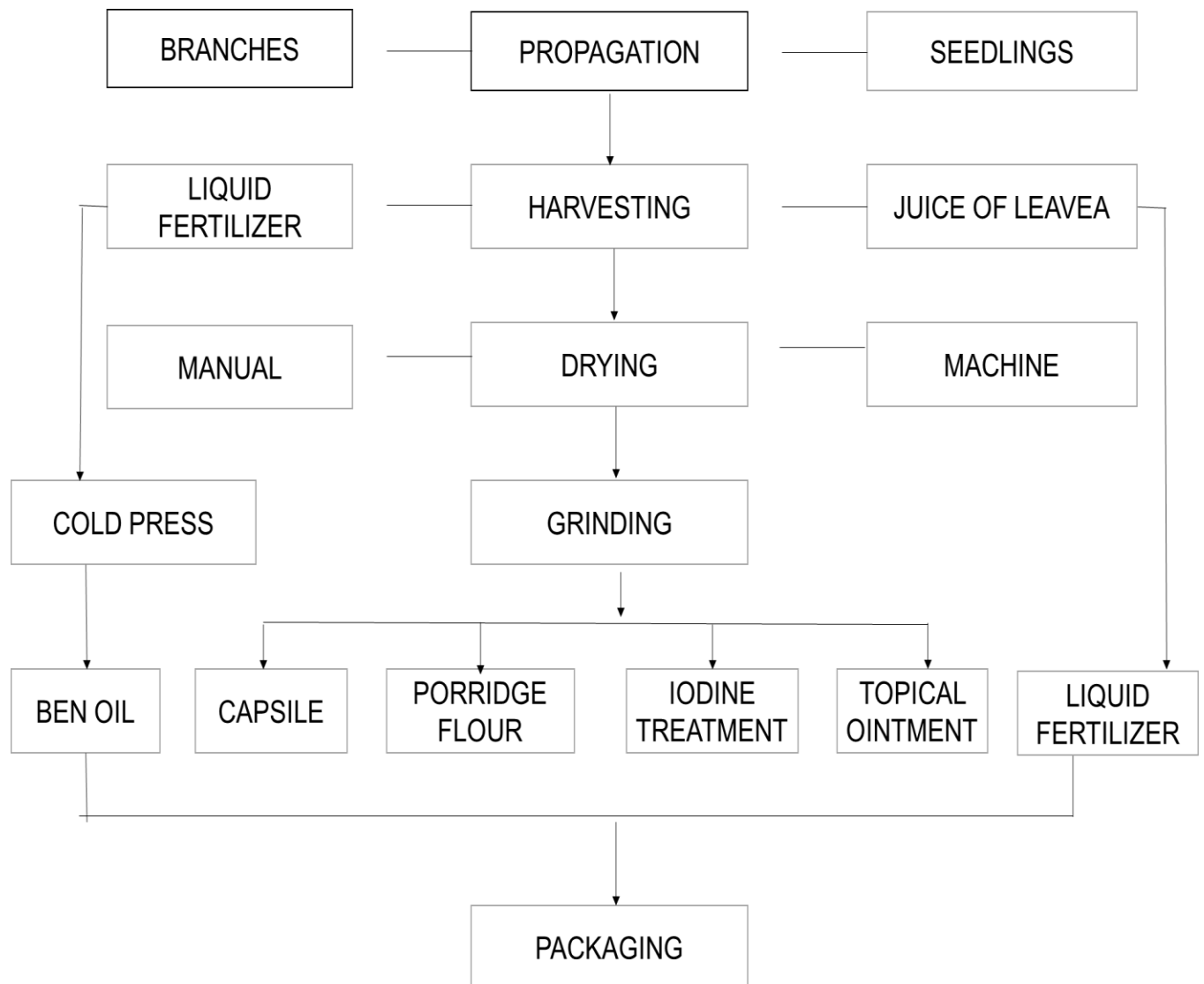
The following are among the scores of possible products from powdered Moringa leaves:

PRODUCTS	USES
Moringa capsule	Food supplement/vitamins
Liquid fertilizer	Plant nourishment
Porridge flour	Nutritional supplement for Malnourish
Topical ointment	Cure for skin diseases and allergies
Herbal iodine powder	Treat for open wounds, cuts and rashes

### **THE VITAL, MOST NEEDED RESOURCES FOR PRODUCTION ARE:**

- (i) Dryer/ Dehydrator
- (ii) Grinder
- (iii) Capsule making machine
- (iv) Blister packing machine
- (v) Cold press oil extracting machine (for Moringa seeds)
- (vi) Small building factory fitted with 2 milling machines.
- (vii) Transportation

## FLOWCHART OF PRODUCTION



Research and development had already been done, through the help of ZIRDI (Zambia Institute of Research Development Institute), MOT (Ministry of Trade), ZABS (Zambia Bureau of Standards), and seminars members and we had attended, summing up with my experience and expertise in health food business and in making, producing and promoting vegetarian health foods.



The quality standards and verification, such as testing and certification of nutritional facts and shelf life of the products, has been done by Zambia Bureau of Standards and (ZABS). The privileged of additional research and development will be done by injecting more funds in the production process, and more efficient techniques could be adopted in quality and shelf presentation and thereby eliminate the inferiority concept associated with Moringa products could be greatly achieved by governments assistance through provision of market incentives and concessions.

### **1.2.1 SUPPLIES**

The supply of raw materials such as leaves and seeds are the easiest and most convenient part of the business. The unusually large supply of raw materials is one of our inspiration to move and hold to the business plan, despite the difficulties and scarcity of financial source or aid and the government's lack of interest to provide assistance to small entrepreneurs. Its abundance is number one factor that will make this business very successful.

Apart from the overflowing supply that grows everywhere and the 50-hectare land donated by Chieftainess Mungule of Lenje Land, we will encourage every neighbor and all small farmers around the area to plant and produce Moringa for their added income. Moringa is a year round production tree and sticking a branch to the ground anywhere, will surely grow and produce healthy green foliage with healthy flowers and pods without the need of pesticides and insecticides.

## **1.3 MARKET STRUCTURE AND ANALYSIS**

### **1.3.1 TARGET MARKET AND CUSTOMER BASE**

The porridge flours and food supplement capsules are the first products to be launched. The initial target market is the feeding programs against malnutrition in local schools, rehabilitation Centers and orphanages in the entire provinces of Zambia region which is composed of 10 Provinces. The feeding programs involve all Districts and Schools and Lusaka Province has a total of estimated to be 500 plus Schools. Most NGO's have shown interest in the porridge flour for their feeding programs (currently we are supplying Help Age Zambia in 3 Districts in Central Zambia). Feeding of malnourished children in Schools and orphanages is done on daily basis,

thus, the Moringa porridge flour locally will be an item for daily consumption together with the food supplement capsule. If the porridge flour will thrive at every District's nutrition program; we will have a stable and permanent market. Assuming 95% of all Schools in the Lusaka Province will consume 3 packets of porridge flour a day at K10 per packet of (1KG), we will have an average daily sale of K30, 000 and that will be K90, 000 a month.

The anticipated figures apply only in the district of Lusaka Province. Central province of Zambia region has with a total of 11 districts of which Moringa Initiative is located on Westgate Farm in Chisamba. The region alone will be a vast market and a great responsibility.

From the very start, we planned to aim at the government's existing feeding program in Zambia. The already proven nutrition of Moringa leaves had been used for feeding for years and mixed in rice and other ingredients for porridges to the young children. On the other hand, Moringa dried leaves is ten times more nutritious than the fresh leaves, and if taken in powdered form, it tastes more delicious.

Estimated Sale of Moringa Porridge Flour for Lusaka Province			
Districts	Number of Schools	Average Daily Consumption	Monthly Sales (at ZMW00/Pack)
Lusaka Central	253	3,000 packs	ZMW90,000.00
Chongwe	12	801 packs	ZMW24,030.00
Kafue	25	2,052 packs	ZMW61,560.00
Chilanga	20	1,539 packs	ZMW46,170.00
Luangwa	9	897 packs	ZMW26,910.00
Rufunsa	10	1,566 packs	ZMW46,980.00

### 1.3.2 COMPETITOR ANALYSIS

Currently we are enjoying the monopoly of this unique product in Zambia. Although competitors could penetrate the target with their food supplements and multi-vitamin products, the government's feeding program needs a product that malnourished mother and young children could take as food and would supply them a lot of nutrients and energy for their malnourished bodies.

These competitors could somehow complement our Moringa food supplement in capsule form, but not its extremely low prices.

### **1.3.3 MARKET SIZE AND POTENTIAL**

As long as the government and NGO's programs on malnutrition exists, our market size will become bigger, stable and permanent. Supplying a region wide daily feeding activity program will definitely make the business expand and will make the production process larger. Therefore, finance and manpower will also need more attention. Raw materials will never be a problem since raw materials are everywhere. Speaking of big production to supply a country wide item for daily consumption is another thing especially when machines being used are not capable for big production.

Judging on the present status of our products being the sole producer of Moringa porridge flour, within a year's time, our target market of region wide consumers will expand and grow, that the planned sole factory for production will not be able to accommodate the markets demand.

### **1.3.4 COMPETITIVE ADVANTAGE**

The number one of selling advantage of our Moringa flour and our food supplement capsule is its uniqueness. The very first of its kind ever introduced for business in the Zambian market. Number two selling point is it is already proven of its well-known multi-nutrients that no other fruits or vegetables can ever have. Its rare powers of medicinal properties and enormous vitamins will not be compared to any nutritious fruit or vegetable that one needs to combine all their nutrients, to equal wonders and energy giving properties. It is like growing vitamins at your doorstep.

## **1.4 MARKETING AND SALES**

### **1.4.1 SALES**

Our plan to push our sales in its first year of operation to be able to compensate the full initial capital of ZMW250,000 should be ploughed back and would materialize through commitment,

determination and hard work. Through close supervision in our target market, cooperation and proper contact on the targeted market groups by each member of the company, voluntary labour and support and the rich supply of raw materials will definitely make our goals come true. This low initial investment due to premium pricing boost high profit margin and will help a lot to compensate the ZMW250,000 initial capital.

#### **1.4.2 MARKETING AND COMMUNICATION**

Our privilege to push our products to market is through close communication and direct contact with different government agencies and their programs; participation in trade fairs through the help of the department of Trade and Industry (DTI); seminars and demonstrations in different communities; Association, Trade Shows conferences; meetings of Parents-Teachers Associations (PTA); advertisements both in print media and over the radio and television; and through the Internet could all be possible ways to market our new products.

#### **1.4.3 DISTRIBUTION**

Distribution will be done on weekly basis. These distributions of supply for feeding activities will be delivered at schools, county council or city halls. Supply for two weeks will be delivered and distributed in advance for feeding activities. Cheque payments on delivered Moringa flour will be picked up from the contracted institutions one three days after delivery of the product. Currently and in a small scale, we are supplying Help Age Zambia with 2,400kg per week and 4,800kg to the local supermarkets like shoprte shopping malls, pick n pay shopping malls, soweto market, city market, spar shopping malls, kabwata market, arcades shopping mall, manda hill shopping mall, cheers shopping malls, chilenje market, lilanda market and matero market respectively on a weekly basis.

### **1.5 COMPANY STRUCTURE**

#### **1.5.1 MANAGEMENT**

The management team is consisting of five:

SIMWANZA HAPPY M.

The company CEO and in charge of product development, advertisement and marketing through performing seminars with the NGOs and PTAs in the region.

HAMUKOMA AMOS

Head of production and in charge of the factory and product development.

Mike Mweemba

In charge in office management and team cooperation.

Jackline Mwanambala

IT; in charge of product label and designs.

Womba

Sales and delivery; farm management; in charge of equipment/ machines repairs. Three manual laborer s and one messenger.

1.52 LEGAL STATUS

The name of the organization is Tiyezye Farming, it was registered with the Ministry of Gender Sports and Social Services in 2017. The Moringa project is a masterpiece of the organization.

**1.5.3 PARTNERS AND SPONSORS**

Our financial partners come from the able membership of the organization. Each member has his/her own personal funds used in the development of the products. The members are already determined to have their roles, ties and commitment with the business.

We have received support from the Ministry of Trade, Ministry of Youth Affairs, Zambia Agricultural Finance Cooperation, Zambia Industrial Estate (ZIE), etc.

## 1.6 RISKS

Risks	Measures to Counteract the Risks
1. Copycat is the number one risk that any businessman should be aware of. One has to be cautious of showing and talking of how the business or the production goes.	1. Business secrecy is a must. Confidentiality must be the number one rule of the company. Because even if the product had already been patented, copyrighted and trademarked for its legal rights and protection, nobody can prevent anyone else to pirate or imitate the product.
2. Weather and natural calamities – heavy rains and floods is a threat to Moringa trees	2. They should be planted in high places where water would not stay stagnant. Seedlings placed in plastic bags for propagation and substitute for destroyed and damage trees after turbulent weathers should always be ready.
3. Astray domestic animals around the plantation area should always be considered for the tree's safety.	3. Someone should always be in the area of plantation in watch for strayed cattle which can spoil the plants.

## 1.7 SWOT ANALYSIS

The analysis of strength, weaknesses, opportunities and threats that will make the business survive its internal and external environment strategic in its planning process is the life and success of the company.

Strengths	Weaknesses
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<p>1) The abundance of raw materials to the extent of overwhelming supplies of Moringa.</p> <p>2) Improvement on the market demand through positive advertisements and direct contact to potential markets.</p>	<p>1) Lack of access to key distribution channels, e.g., even if you have the best unique product but one cannot go near and approach the market group potential, sales or distribution is considered weak.</p> <p>2) The poor reputation of products among customers and market potentials-e.g. the</p>
<p>3) Sincere support, commitment and hard work from the members of the organization are significant to the business operation.</p> <p>4) Prices are still good considering that the product is the very first of its kind in the country and will make an investment in Moringa very profitable and viable.</p> <p>5) The Kenyan climate favors high potential to increase production for export and local markets.</p> <p>6) The know-how and the expertise of its members are cost advantages</p> <p>7) Speaking of Moringa products, we still claim to have exclusive access to high grade Moringa resources</p> <p>8) The favorable access in the distribution of our products to the different feeding program activities of the government.</p> <p>9) The price of our products which the lowest sector can afford to purchase.</p>	<p>attitude of buyers towards the local food supplement in general as inferior, compared to imported alternatives.</p> <p>3) Lack of patent protection – patented product is not usually protected by the Government, the reason why most products, especially small entrepreneurs, never had the intention to have their product patented.</p> <p>4) Poor production technology and capacity to improve the products because of lack of finance.</p> <p>5) Most production is at domestic level, hence unrecorded and its result is inconsistency of production.</p> <p>6) The current business trend cannot sustain the commercial interest rates on bank loans</p>
Opportunities	Threats

<p>1) The opportunity for Moringa leaf powder to be launched and absorb by the government nutrition council would be 90% because of its interest to its low cost and nutritional properties that will be served to their recipients.</p>	<p>1) Shifts in consumers tastes away from the companies products – the taste of Moringa powder in its pure form is not considered appetizing.</p> <p>2) The lack of production technology to add value and flavor denies it the market advantages which could accrue to its</p>
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<p>2) The opportunity of being the first company to introduce such product in the market 3) The opportunity to satisfy the trend of the government feeding program because of its very low cost to cope with their poor budget. 4) The opportunity to offer an item which other companies don't have or had not offered in the past.</p> <p>5) The opportunity to satisfy the curiosity of the consumers because of its reputation to be a very nutritious plant.</p> <p>6) The opportunity of increasing popularity trend in Moringa products and the increasing demand both locally and internationally</p>	<p>nutrition potential – these threats of the business can be avoided through sufficient finance in production.</p> <p>3) Emergence of substitute products – competition from imported food supplements due to more advanced packaging and branding; people tend to have more trust in imported products as they are easy to identify with, and most of them are flavored and value added.</p> <p>4) Poor processing methods – Moringa products had been associated more with medicinal drugs other than food supplement due to poor advertisement.</p> <p>5) The population is not fully aware of the nutritional values of Moringa; poor advertising strategy.</p> <p>6) Lack of government commitment to promote Moringa – the government is not offering appropriate support in terms of concession and research in the development of Moringa products.</p> <p>7) Lack of adequate capital to buy equipment to use in the processing, packing and improving of Moringa products.</p> <p>8) The numerous typhoon visits in the region and heavy rains on rainy season is the biggest threat to slow down the business; the mortality of Moringa trees and the high potential of increase of production usually</p>
	<p>depends upon the weather, hence threats on raw material supply is inevitable.</p>

## **2.0 THE ENTREPRENEUR**

### **2.1 PERSONAL MOTIVATION AND INDIVIDUAL QUALITIES**

We formed a small group of five youths as an association and later decided to make it as a legal organization. After few weeks, we were legally registered and the organization was born. Long before the organization was envisioned, we had been giving special attention to the vast supply of Moringa Oleifera in our surroundings because of its thick and abundant green foliage, which we felt giving a desirable easy feeling and ambitious mind. That was the beginning of more research and study regarding the odd traits of this simple and underutilized tree.

Several calamities came and ruined the green environment of Moringa tree. Tons of Moringa leaves and branches together with its trunks were dump as rubbish without any regard of its importance. Our affection to this simple tree became an interest to turn this into a livelihood that could help generate income to farmers and unfortunate people. It came to our mind that if those unfound people could be taught to utilize their unproductive time by sowing Moringa branches to their yards and surroundings, they could improve their lifestyle and well-being.

And not long after the organization was registered and was named “ Tiyezye Farming” the project Moringa Oleifera was born.

### **2.2 EXPERIENCE**

For the last 5 years, we had been connected with different community organization. We have participated in the World Jersey Youth Exchange Program in 2012, working with Jersey Farmers in England and Jersey Channel Island for 8 Months. We were volunteers with the Jersey Overseas Aid in the year 2015 where we help build schools. We had also been dealing with herbal books and health magazines and the latest with our health food business.

Our capability to convince helps a lot in the progress and management of our latest business; producing and promoting our vegetarian health foods, like burgers, vegemeats, soy coffee, soy milk, and lot more. Our experience and our background as nutritionist improve us more in developing product such vegetarian foods.

## 2.3 PERSONAL ROLE

Being the founder of the organization, my plan is to lead and act as the president/Chairman of the company. Our will particularly be taking charge of advertisement and marketing of the products through direct selling, contact and close cooperation with different government agencies, feeding programs and medical outreach by different NGOs and the international market. All the members of the organization will have their specific task allotted to them; we have IT, master in business administration and enough knowledge in production.

## 3.0THE FINANCIAL PLAN

### PROFIT & LOSS STATEMENT

<u>2013</u>	<u>2014</u>	<u>2015</u>
Revenues	<u>1,155,556</u>	<u>1,719,444</u> <u>2,326,389</u>
Total Revenues	<u>1,155,556</u>	<u>1,719,444</u> <u>2,326,389</u>
Cost of Sales or Direct Costs	<u>152,593</u>	<u>190,074</u> <u>238,944</u>
Cost of Sales	<u>152,593</u>	<u>190,074</u> <u>238,944</u>
Gross margin	<u>1,002,963</u>	<u>1,529,370</u> <u>2,087,445</u>
Marketing and promotions and other cost	<u>5,733 6,</u>	<u>800</u> <u>7,867</u>
Staff costs	<u>9,950</u>	<u>12,948</u> <u>15,947</u>
Travel costs	<u>1,600</u>	<u>1,867</u> <u>2,133</u>
Office costs	<u>4,320</u>	<u>4,453</u> <u>4,587</u>
Equipment & maintenance costs	<u>1,333</u>	<u>1,520</u> <u>1,667</u>
Third Party Costs	<u>424,800</u>	<u>625,267</u> <u>841,233</u>
Licenses	<u>14,778</u>	<u>0</u> <u>0</u>
Operating Costs	<u>462,514</u>	<u>652,855</u> <u>873,433</u>
Income from Operations	<u>540,449</u>	<u>876,516</u> <u>1,214,012</u>
Interest charges	<u>8,000</u>	<u>5,333</u> <u>2,667</u>
VAT	<u>15,142</u>	<u>24,782</u> <u>35,522</u>
Depreciation	<u>11,095</u>	<u>13,640</u> <u>16,455</u>
Non-operating costs	<u>34,237</u>	<u>43,755</u> <u>54,644</u>
Gross profit	<u>506,212</u>	<u>832,760</u> <u>1,159,368</u>

Profit tax	<u>15,186</u>	<u>24,983</u>	<u>34,781</u>
Net profit	<u>491,026</u>	<u>807,777</u>	<u>1,124,587</u>
Number of staff	<u>25</u>	<u>40</u>	<u>60</u>

### CASH FLOW

	<u>2013</u>	<u>2014</u>	<u>2015</u>
Beginning Cash Position	<u>250,000</u>	<u>684,292</u>	<u>1,214,927</u>
Revenues	<u>1,155,556</u>	<u>1,719,444</u>	<u>2,326,389</u>
Cash IN	<u>1,155,556</u>	<u>1,719,444</u>	<u>2,326,389</u>
Costs	<u>653,435</u>	<u>898,027</u>	<u>1,185,347</u>
Fixed asset purchases	<u>76,700</u>	<u>25,650</u>	<u>28,100</u>
Cash OUT	<u>730,135</u>	<u>923,677</u>	<u>1,213,447</u>
Subtotal	<u>425,421</u>	<u>795,767</u>	<u>1,112,942</u>
In			
Loans/Grants received	<u>250,000</u>	<u>-</u>	<u>-</u>
External share capital paid in	<u>5,000</u>	<u>-</u>	
Out			
Loan Repayment (not interest payments)	<u>16,667</u>	<u>016,667</u>	<u>16,666</u>
Dividend payments	<u>29,462</u>	<u>48,467</u>	<u>67,475</u>
Subtotal	<u>8,872</u>	<u>65,133-</u>	<u>84,141-</u>
Cash flow per year	<u>434,292</u>	<u>730,634</u>	<u>1,028,801</u>
Ending cash position	<u>684,292</u>	<u>730,634</u>	<u>1,028,801</u>

### BALANCE SHEET

#### ASSETS

	<u>2013</u>	<u>2014</u>	<u>2015</u>
Net Fixed Assets (purchaser.)	<u>65,605</u>	<u>77,615</u>	<u>89,260</u>
Cash	<u>684,292</u>	<u>1,214,927</u>	<u>2,243,727</u>
Inventory	<u>1,555,555.56</u>	<u>1,719,444</u>	<u>2,326,389</u>
Current Assets	<u>1,839,848</u>	<u>2,934,371</u>	<u>4,570,116</u>

Total Assets	<u>1,905,453</u>	<u>3,011,986</u>	<u>4,659,376</u>
<b>LIABILITIES &amp; EQUITY</b>			
Outstanding loans	<u>33,333</u>	<u>16,667</u>	<u>1</u>
Total liabilities	<u>33,333</u>	<u>16,667</u>	<u>1</u>
Profits current year	<u>491,026</u>	<u>807,777</u>	<u>1,124,587</u>
Retained earnings	<u>29,462</u>	<u>413,097</u>	<u>1,153,400</u>
External share capital paid in	<u>5,000</u> -	-	-
Other equity	<u>1,205,556</u>	<u>1,774,444</u>	<u>2,381,389</u>
Total Equity	<u>1,672,120</u>	<u>2,995,319</u>	<u>4,659,376</u>
Total liabilities and equity	<u>1,905,453</u>	<u>3,011,986</u>	<u>4,659,376</u>

#### **4.0 THE DEVELOPMENT IMPACT**

##### 4.1 The Development Impact of the Business

While economic development had taken off little by little and had some gradual improvements in some urban areas and big cities in the Zambia, development in the provinces like Lusaka has remained at subsistence level because of poor market access and limited government attention. However, there is an abundance of natural resources and skills, the reason why one of these natural resources, such as Moringa Oleifera, that thrives abundantly everywhere in the region will soon be one of natural resources under developed productive assets. The development impact of our project will be measured on:

1. Poverty alleviation
2. Positive lifestyle development
3. Promote social reforms
4. Participation to help improve the quality life of others
5. Development of wellbeing of fellow citizen

##### 4.2 Local Employment and / or Income

On the first year of operation, while Moringa products are still being advertised in the market, the 560 families living around the 50 hectares farm lot of the Moringa plantation will be the first ones to gain in this project. They will have indirect jobs and increase their income by planting and supplying us their Moringa produce. This will generate 50 jobs in the first six months.

For the first month, three families will benefit by supplying fresh Moringa leaves to the company. They will experience 50% mark up on their daily wages. As the productions gradually increase, more families will upgrade the quality of living standards as months go by.

Number of family on the 1st month of operation =3

Supply of fresh leaves per day= 50 kilos

Price per kilo= ZMW0.11

Total= ZMW5.55

Average additional daily income per family= ZMW1.85

### **4.3 IMPROVING THE QUALITY OF LIVING STANDARDS**

In a month time, families around the area of production will experience the increase of income as seen in the table above. More demands means higher supply needed and more families will profit with its growth. Within a year, we aim to increase personnel on production. We could hire 10 labors on the factory. Our Moringa porridge flour will be a source for daily consumption on feeding program that demands a huge amount of supply region wide thus, we hope to expand and have two to three factories in three years. Direct jobs will be created and their income will increase by 50% in two to three villages. Around 2,000 people will also gain by providing them indirect employment through selling Moringa fresh leaves because of the demands of the products.

### **4.4 KNOWLEDGE AND SKILLS TRANSFER**

Development of living standards will steadily be seen as they gain knowledge and skills by teaching them to plant and grow for a productive harvest. Educating and informing them about the advantages and profit that they will gain by planting Moringa in their surroundings will inspire and give them hope to look forward to in the future because they will learn the value of their labor and would realize to utilize their idle time in order to have more income.

### **4.5 THE ENVIRONMENTAL IMPACTS AND IMPROVEMENTS**

Through the Moringa project, we will be complimenting the government's "Green Program" and reforestation and green environment. A healthy atmosphere of enormous green foliage freshens

the mind, relieves worries and lessens boredom. “Green Zambia” is an alliance of citizens, who believe that humankind is responsible for the care of the planet, holding it in trust for all other living things and for future generations. Our Moringa project will not only give livelihood and income generating activities, but also ecological phenomena.

## **CONCLUSION**

Medicinal potential of Moringa is enormous and difficult to cover in a single article, despite this current article provided glimpses of Moringa applications for performing appraisal of this promising nutrition and medicinal plant. Although, many bioactive compounds have been discovered from Moringa, still the knowledge is in infancy, in term of its total reserve. Perhaps, future rigorous studies directed towards the detection, and commercialization of Moringa bioactive compounds can lead to the development of remedies for several ailments. Thus, it can also prove the validity of traditional utility of Moringa in various folklores.

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