

DIGITAL AGRIBUSINESS AND INVESTMENT LIMITED

BANANA FIBERS PROJECT:

EXECUTIVE SUMMARY

BRIEF DESCRIPTION OF THE PROJECT:

Digital Agribusiness and Investment Limited is the legal and beneficial of an individual one hundred percent interest in the intended banana fibers productions project, it is dully registered in the United Republic of Tanzania under the companies Act 2002, and issued with certificate of Incorporation No. 140881422. Digital Agribusiness and Investment is a private limited entity, with office premises located in a farm plot No. 17MLB/967 in Bushaka, Bulamula village, Kamachumu, Muleba district, in Kagera region. The project aims to extract banana fibers for industrial uses, from banana stems after cutting off the banana bunch that all the time considered as waste. For more than five years, the proponent has been engaged privately in research and studies of banana fiber extraction, quality, enhancement, uses, durability, environm,ental friendly and protection, and economical potential.

The total cost of the project is calculated to Tsh 957,412,622 of which the proponent proposed to finance the capital requirement by a bank loan of Tshs 287,446,475 (30.02%) and the balance of Tshs 669,966,147 is (69.98%) by his own capital.

THE PROFILE OF THE ENTREPRENEUR:

This business is owned by Digital Agribusiness and Investment Limited.

The shareholders of the company are:

1. Mr. Elias R. Bulaya is a Tanzanian, 68 years old born in Bushaka, Bulamula village, Muleba district, Kagera region which is the main grower of banana in the United Republic of Tanzania. He graduated at University of Dar es salaam in 1986 in Bsc. Electrical. He was employed by Tanzania Postal and Telecommunication Corporation as an Instructor in technology at TP & TC College located in Kijitonyama, Dar es Salaam. In 1994 he resigned for TP & TC employment, he joined a private company namely EB – Hance Company Limited as a Fulltime Executive Director. He had attended various courses and seminars e.g in the year 2003 attended; Credit and business management course, conducted by International Partnership for Small Entrepreneurship Development. In the year 2007 attended professional training workshop on entrepreneurship conducted by University of Dar es salaam Entrepreneurship Center (UDEEC) etc.
2. Mr. Julius S. Zimbiha is a Tanzanian, 69 years old born in Kishanda village, Muleba district, Kagera region. He graduated at University of Dar es Salaam in 1985 in Bsc. Engineering (Hons). He was employed by BP Africa a giant energy company, served in various capacities in Tanzania, RSA and DRC. Attended several courses and seminars i.e

Human Resource Development; Aviation; Lubricant Marketing; Negotiation Skills; Safety / Health / Environment / Quality (SHEQ); Project Management; Oil Spill Management; Modern Safety Management.

The Board of Directors has resolved to invest into banana fibers project after being convinced by the following factors:

- i. Sustainable availability of banana pseudo stems in Kagera region. Banana is a staple food in Kagera region. After harvested the banana bunch the remaining pseudo stem is a waste. In Kagera region banana is the prime source of food, security also it is the source of sustainable income by selling the bananas to other regions in Tanzania.
- ii. Acquired technical knowhow to produce the banana fibers for industrial uses. The intended banana fibers to be produced will be used for textile manufacturers, carpets, cushions, hair extensions, special papers etc.
- iii. The research worldwide found reliable manufacturers of the needed machineries for the project. The machines that apply conversant technology, affordable prices, granted quality and availability of spare parts and reasonable power consumption.
- iv. Assurance of markets, the project planned to start by selling the produced banana fibers to textile and carpet manufacturers mainly from India. After three years, the proponent planned to erect its textile factory to utilize the banana fibers to produce various fabrics.
- v. Economical potential the feasibility study conducted justifies; The economical figures and diversifications convinced the Board of Directors.
That fifteen (10kg) kilogram of pseudo stem when undergo the extraction process it produce minimum 0.8 kilogram of fibers of which the product is distributed as peel banana fiber is 80% and banana silk is 20%
- vi. The project will create numerous direct permanent employment and indirect employment much extended to the farmers who will bring and to sell to the factory their banana stems.
- vii. Banana fibers are environmental friendly for entire life cycle (from growing of a banana plant up to biodegradable stage)

This study had been prepared to determine the commercial prerequisites, technical requirements and financial viability of the project, this include source of banana stems, extraction, combing, dehumidify, packing and marketing of the fibers.

PROJECT CONTRIBUTION TO THE NATIONAL ECONOMY

Tanzania remains unindustrialized to date despite being endow with huge arable land that grows various crops. Agriculture had been considered as the backbone of Tanzania economy; but most of the crops grown in Tanzania are exported in a raw form of which the crop producers, farmers and peasants get low prices for their crops, the nation is denied employments; taxes and lower citizens' purchasing power that lead to low GDP index.

Kagera region leads in banana production in Tanzania, since ages the natives of Kagera region uses the banana as staple food. Other regions in Tanzania producing banana are Mbeya; Kilimanjaro; Morogoro; Kigoma though banana can be grown in most regions of Tanzania mainland. The banana plant grows once and harvested once leaving behind the pseudo stem as waste. The farmers always struggle a lot with the remained wastes.

1. The project architecture is to utilize the waste remain pseudo stem of banana to produce fibers for the industrial raw materials. The project is going to convert the pseudo stem of banana usually considered as waste and discarded into economical raw materials. The project is going to introduce and extract an additional new product from the banana plant, which will result into new creation of a sustainable source of income to the banana farmers/peasants.
2. The project anticipate that the fibers produced will trigger the new entrepreneurs to establish textiles; carpets and sipping industries to utilize the fibers.
3. The project is a response to the national leaders' call for entrepreneurs to venture in processing and add value to the produced crops in the country.
4. The project is planned to start with13.....direct employees including the directors of the company. It aims to produce the high-quality standards of the fibers required by the factories to produce fabrics, carpets, cushions, doormats, tablemats, twines and ropes, hair extensions.
5. It is assumed that the project will hub the Tanzanian banana fiber production technology. The project had initiated formal discussion with VETA – Ndolage, Kamachumu to collaborate and establish a special curriculum for training banana fiber extraction and enhancement.
6. It is assumed that the farmers and peasants growing bananas at any time will have a chance or opportunity to convert the 'waste' into valuable product. The peasants and farmers will earn extra income from their plantations; alleviate the poverty in the rural communities.
7. Directly and indirectly, this project creates jobs vacancies (unlimited number) to the people engaged in agriculture and entrepreneurs.
8. The project will directly and indirect pay various taxes to the government.
9. It is assumed that the project will play an important role in poverty eradication in Tanzania.

MARKETING PLAN

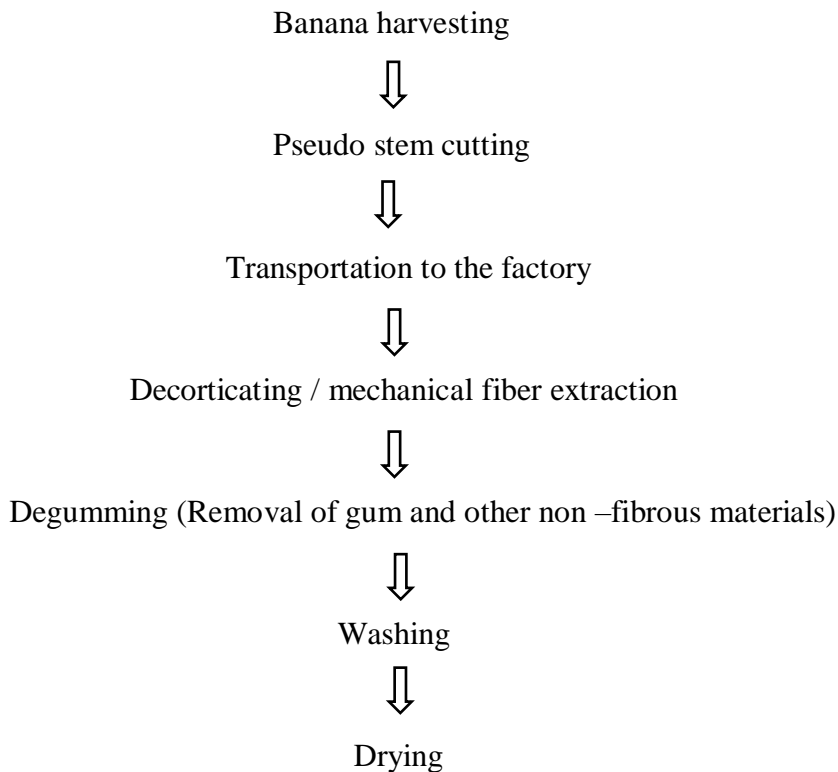
DESCRIPTION OF THE PRODUCTS:

The banana plants scientifically known as *Musa acuminata* are a vigorously grown monocotyledonous herbaceous plant. It grow once and harvested once, leave behind the stem as waste. Banana stems sometimes known as pseudo stems. Banana stems vary in size, depending on how they are cut from the plant and they have a thick, straight and cylindrical appearance. Banana stem height and weight vary depending on the banana variety and environmental conditions. Generally, the pseudo stem can grow to be 3 -8 meters tall and can weigh from 14 to 50 kg.

Banana fiber extraction can be achieved through manual; mechanical; chemical or biological methods or a combination of these methods can be used independently or in combination to produce different qualities of fiber.

The project is designed to utilize mechanical extraction method; this involves using machines like decorticators to separate the fiber from pseudo stem. After extraction, the fibers shall undergo degumming process to remove any remaining non-fibrous materials. This will be achieved through washing and chemical treatment. Thereafter the extracted fibers are dried thoroughly to remove moisture and prevent mildew and ensure proper dried fiber. fibers.

Steps involved in extraction of banana fibers from pseudo stem



The project is designed to produce two types of banana fibers to meet the modern industrial requirements namely peel banana fibers and banana silk.

Combing or carding is a primary process involves removing impurities, separating fibers, straight and preparing them for further uses. This will be done with specialized machines.

Dehumidification of banana fibers involves removing excess moisture, which is crucial for processing and utilizing these fibers. Methods for dehumidifying banana fibers are air drying, oven drying and chemical treatments. A combination of air-drying and oven drying will be employed to optimize the process. The project planned to install special dehumidifier machines.

Banana fibers whether for packing or textiles require careful handling during packing and storage to maintain their quality. Proper drying is crucial to prevent mold and degradation and the storage environment should be controlled to minimize moisture and pest damage. The raw banana fiber

must be thoroughly dried to a low moisture content below 14%. The fibers will be bundled or balled for easier handling and storage. The fiber will be protected from prolonged exposure to direct sunlight.

AWARENESS ON THIS BUSINESS

Tanzania is among the countries growing bananas; and Kagera region is leading in for growing bananas. In Tanzania no any entrepreneur or factory producing banana fibers this results into a less competition on this line of production in the country. The proponents of the project are growing bananas as traditional, the project anticipate to source not less than 90% of the monthly required pseudo stem from one of the proponent; the remain required pseudo stem will come from other farmers. The first year of the project, it is planned that in each village in Kamachumu division (Tarafa) will be installed with a decorticator machine to extract the fibers form the pseudo stem collected in village to avoid bulk transportation costs, extend production capacity and enable more farmers to access the opportunity.

BUSINESS LOCATION:

The business premises panned to be allocated in the piece of land area of more than two acres, owned by Elias Rwezaula Bulaya under the customary right of occupancy (Hati ya Hakimiliki ya kimila) No. 17MLB/967, in Bushaka – Bulamula village, Kamachumu, Muleba District, Kagera Region. Kamachumu division is famous in cultivation of banana with pseudo stem up to & meter high. All districts that constitute Kagera region grow bananas, Muleba is one of the districts in Kagera region located in the middle of the region. The project envisaged that the location would enable easy and smooth accessibility of the process hub from all districts.

MARKET AREA:

Certainly, the project is introducing banana fibers in to the market of Tanzania as a new raw material; therefore, at the commencement of the production, whole products will be exported to international markets where there is a big demand of the products. Parallel to that the proponents had sponsored four youths to undergo 3 years training at VETA –Tabora in weaving. The project envisage in the near future to establish a textile factory to utilize the banana fibers.

The project promoters anticipates that just after the products introduced into the market the Tanzanian enterpreneurs will quickly grab the opportunity and establish their sustainable businesses e.g hair extensions, hand craft products, hand looms, spinning factories etc.

MARKET SHARES:

The conducted study had revealed that in the United Republic of Tanzania no one is producing banana fibers. The project tailored to produce quality raw materials for industrial uses therefore the market shares is guaranteed.

SALES FORECAST AND SELLING PRICE

The factory is planned to produce two products namely

- 1) Peel banana fibers
- 2) Banana silk

For a period of five years it is planned that the volume of will be:-

PROJECTED SALES

YEAR	VOLUME IN KILOGRAMS	AMOUNT IN USD
2026	1. Peel banana fibers – 33,280 2. Banana silk – 8,320	113,152 39,104
2027	1. Peel banana fibers – 35,610 2. Banana silk – 8,903	121,074 41,844
2028	1. Peel banana fibers – 38,103 2. Banana silk – 9,526	129,550 44,772
2029	1. Peel banana fibers – 40,389 2. Banana silk – 10,098	411,968 47,460
2030	1. Peel banana fibers – 40,389 2. Banana silk – 10,098	411,968 47,460

It is planned to start with lower selling prices in order to attract more customers and introduce the productst to th emarket at the commencement of the project FOB – Dar es salaam are:

- i. Peel banana fibers USD 3.4 per kilogram
- ii. Banana silk USD 4.7 per kilogram

PROMOTION AND MARKETING STRATEGIES:

The investor intends to take the following measures as the means of entice and convincing the customers:

- i. The project promotor planned to design, prepare and open a website and a social media platform in which he will advertise and market the products.
- ii. To attend local and international trade exhibitions
- iii. To respond to the inquiries of the customers who use the social media business platforms to seek the needed goods/products.
- iv. Direct contact with the users of products
- v. The concept of cooperation with VETA – Ndolage to train in this technology
- vi. Organized community based groups will be trained to use the banana fibers to establish economical projects such as handcrafts, hair extensions, doormats etc.

MARKET BUDGET:

The investor had budgeted to spend Tshs 13,700,000 for marketing purposes in the first year of production.

PRODUCTION PLAN:

I. PRIOR PREPARATION

When the pseudo stems are received at the factory for the purpose of banana fibers' extraction, it is cut into manageable sections of 150cm long (maximum). The outer layers of the pseudo stem are stripped away then banana stem is split or sheath separated from the pseudo stem.

II. DECORTICATION

The sheath are feed into the decorticator machine that separates the fibers from the pulp and other plant matter.

III. CLEANING

The extracted fibers are thoroughly washed to remove any remaining impurities or debris.

IV. DRYING

The fibers are dried naturally in the sun.

V. REFINING

The dried fibers are sent to the combing or carding process to align and clean the fibers improving the quality for spinning stage.

VI. DEHUMIDIFICATION

The dried and combed fibers are dehumidified to remove and control moisture below 14% to prevent mold and degradation.

VII. STORAGE

The processed fibers are often bundled/balled together ready to be sent in spinning factories on other uses. If it is stored it shall be stored on the wooden pallets and kept in a position to avoid prolonged direct sunlight.

FIXED CAPITAL

1. LAND AND BUILDING:

The land in which the factory, warehouse and office buildings are erected belong to Mr. Elias Rwezaula Bulaya. The factory, warehouse and office are made of concrete and cement bricks with reinforced metal grilled doors, windows and gates thatched with zinc cotted iron sheets brown color. The factory main building measure 60m length by 9m width, warehouse measure 2m length by 9m width while the office measure 24m lenth by 6m width. The project building already connected with three phase TANESCO electricity. Lanf, buildings and power supply cost Tshs 187,435,000.

2. MACHINERY:

The machines intended for production will have a capacity of 200kg dried fiber per eight hours shift, which 80% of the production will be peel banana fibers, while 20% will be silk banana type.

Particular	Cost (Tshs)
Cutting machine	5,327,000
Degreener machine	7,183,000
Decorticator/extractor	41,948,280
Combing machine	10,839,015
Dryer	30,097,980
Dehumidifier	12,135,420
Balling tools	1,699,500
Air compressor	5,114,800
Truck box board 4ton	86,021,000
Truck dumper 4ton	87,320,100
Office chairs – 10pcs	1,500,000
Working tables – 10pcs	2,800,000
File cabinet – 2pcs	740,000
PC and Printers	3,743,000
Laptops	2,300,000
Subtotal	301,320,375
Total fixed assets	448,083,375

LIFE OF FIXED CAPITAL

Annual depreciation costs are;

Buildings 5%	7,338,150.00
Machinery 10%	11,689,627.50
Vehicles 15%	26,001,165.00
Furniture 5%	252,000.00
Annual depreciation total cost	45,280,942.50

MAINTENANCE AND REPAIRS

Almost all servicing and repairs will be done at the factory premises by the trained technicians employed by the project. The cost had been taken into consideration during preparation of this project, that is

Maintenance and repair per month Tshs 1,026,664

Maintenance and repair per year Tshs 12,319,968

WHERE TO OBTAIN THE MACHINES/TOOLS

The investor already entered into business agreement dully signed with Ms: VICTORIA RESOURCES of India to supply the needed machines and guarantee availability of spare parts at any time when needed. The cost of the machines and tools included the price of the machines and tools and all necessary duties involved.

The cost per each machine is:

➤ Cutting machine	5,327,000
➤ Degreener machine	7,183,000
➤ Decorticator/extractor	41,948,280
➤ Combing machine	10,839,015
➤ Dryer	30,097,980
➤ Dehumidifier	12,135,420
➤ Digital weighing scale	1,699,500
➤ Air compressor	5,114,800

Transportation and handling of the machines up to point of installation and installation and commissioning charges had been taken into consideration during the preparation of this project document this is amount to Tshs 21,600,000.

CAPACITY OF UTILIZATION

- a) The investor anticipates commencing the factory with a capacity of production at the rate of eighty percent (80%). At the first anniversary, the capacity shall be raised up to 87% at the second anniversary the capacity shall be raised up to 94% and at the third anniversary, it will attain 100%.
- b) The investor anticipate the minimum rate of recovery of finished fibers with reference of pseudo stem to be ten (10) kilograms of banana stem to produce 0.8 kilogram of banana fibers; the product will have two categories namely peel banana fibers 80% and silk fibers 20%.

- c) At the commencement of production i.e at 80% capacity of utilization, it is planned to operate two decorticator machines at the same time. Each machine has a capacity of 200kg per 8hours shift.

TERM AND CONDITIONS OF PURCHASE OF MACHINES

The suppliers of machines does not offer any credit. In the sale/purchase agreement package include:

- One year guarantee at normal working conditions
- Offer 10% of consumable parts
- Offer of s training of two weeks for the operators at the factory premises
- Supervise the installation and commissioning works of the machines

FACTORY LOCATION AND LAYOUT

The factory will be located in a farm No. 17MLB/967 Bushaka, Bulamula village, Kamachumu, Muleba district, Kagera region. The investor planned the machines layout in such a way to easy the production flow smoothly.

The land, banana plantation and buildings are wholly by Mr. Elias Rwezaula Bulaya and has the market value of Tsh 250 million and also form part of his equity.

RAW MATERIALS NEEDED:

BANANA FIBERS PRODUCTS

In the first year of production, operating two decorticator machines per day to produce, at the capacity of utilization of 80% each machine will produce 160kg per day/8hr shift.

$200\text{kg} \times 0.8\text{kg} = 160\text{kg} \times 2 = 320\text{kg}$ of fiber per day

10kg of raw stem yield 0.8kg of fibers

$320\text{kg} = 400 \times 10\text{kg} = 4000 \text{ kg}$ per day

0.8kg

$4,000\text{kg} \times 300\text{days} = 1,200,000\text{kg}$ of raw pseudo stem per year.

AVAILABILITY AND COST OF RAW BANANA STEMS.

The investor planned to commence the production by sourcing not less than ten percent (10%) of banana stem form one of its proponent's farms located in Bushaka, Bulamula village. It is planned to buy the banana stem from the farmers. The investor anticipates the approach to be an economical opportunity to the banana growers ever since the banana stem usually discarded as waste now will utilize the waste to create a new sustainable additional economical source to the banana growers.

Average applicable purchasing price is assumed to be Tshs 50 per kilogram at the collection centers, while at the factory it will be 65 per kilo.

$1,200,000\text{kg} \times 50 = \text{Tshs } 60,000,000$

To meet the planned production of the banana fibers in the first year it will require Tshs 60,000,000 to produce raw banana stems from the banana growers.

Consumables	Tshs
• Fuel	40,200,000
• Perishables	20,971,000
• Chemical/detergents	19,281,000
Total cost	80,452,500

LABOUR REQUIREMENT:

Mr. Elias R. Bulaya fulltime will participate in day-to-day management of the project as a general manager and personnel; he will manage13.....permanent employees. Experienced/expert operations manager will assist him.

DIRECT LABOUR:

The production is planned to start with a single shift (8 hours), direct manpower requirement is planned to be:

1. Operations Manager: (1)

Qualifications

- Expert in chemical engineering
- Processing engineering
- Experienced in factory management
- Experience in quality control of fibers/yarns
- Experience in market needs
- Innovative

2. Quality controller (1)

Qualifications

- Experienced in production
- Trainable character
- Know-how of the market needs
- Quality assurance and production procedures

3. Machine operators (7)

Qualifications

- VETA trained
- Enthusiastic youth to fiber production technology
- Capable to be trained

4. Truck driver (1)

Qualifications

- Experienced driving trucks with class C driving license

INDIRECT LABOUR

The project is planned to employ indirect employees to facilitate a smooth and sustainable economical production.

The manpower requirements are:

1. General manager:
 - Business administrator
 - Technical knowhow of banana fiber production
 - Capable to tackle the challenges in the production of banana fibers with amicable approach
 - Experience in marketing/sales of banana fibers
 - Being innovative in business
2. Accountant/sales
 - Accounts and bookkeeping knowledge
 - Qualified in accounts
 - Registered with NBAA
3. Driver/officer attendant
 - Trained driver
 - Holder of valid driving license class C
4. Security guards (3)
 - Trained in mugambo
 - Physical fit

LABOUR COSTS:

Salaries and wages which include 30% fringe benefits have been set basing on the current level of the cost of living as the country is moving in a free market economy.

DIRECT LABOUR:

Role	Monthly (Tshs)	Annually (Tshs)
1 Operation Manager	1,800,000	21,600,000
1 Quality controller	840,000	10,080,000
7 Machine operators	2,240,000	26,880,000
1 Truck driver	320,000	3,840,000
	5,200,000	62,400,000

INDIRECT LABOUR:

Role	Monthly (Tshs)	Annually (Tshs)
1 General Manager	2,000,000	24,000,000
1 Marketing officer	720,000	8,640,000
1 Accountant/sales	770,000	9,240,000
1 Driver/office attendant	320,000	3,840,000
3 Security guards	840,000	10,080,000
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	4,650,000	55,800,000
Total labor cost	9,850,000	118,200,000

Workers of this type of industry are availability throughout the year. No foreseeable problems as most of the workers require permanent employment.

WORKERS' MOTIVATION:

Additional to the planned starting salaries the investor intend to provide the incentive package to the workers that include

- Good and conclusive working environment
- To provide snacks
- To award deserving workers

The investor is obliged to review the model of the incentive package after the repayment of loan facility. The costs of the motivation and other fringe benefits had been calculated up to 15% of the basic salary.

FACTORY OVERHEAD EXPENSES:

Factory overhead expenses consists of:

- Account/audit charges 151,587.00
- Bank charges 36,380.00
- Certification fee 428,000.00
- Contingences 561,750.00
- Local government levies 26,750.00
- Depreciation of machines/vehicles 31,140,899.40
- Electricity and water bills 85,600.00

• Maintenance and repair	1,026,664.00
• Freight and courier	214,000.00
• Marketing	1,141,667.00
• Land and buildings	611,512.50
• Insurance office	99,169.00
• Indirect labor	3,930,000.00
• Office supplies	1,360,000.00
• Transportation of raw materials and products	2,375,400.00
• Fringe benefits 30%	2,739,000.00
• Communication charges - Telephone, WhatsApp, email	321,000.00
• General expenses	454,170.00
Total	18,703,548.90

PRODUCTION COSTS:

The project is planned to produce two types of products i.e peel banana fibers and banana silk. In order to determine the production cost per unit per every type of product, the formula applicable to calculate the production cost is applied per every type of product.

1. Peel banana fiber product:

Planned production in the first year is 76,800kg and

2. Banana silk product

Planned production in the first year is 19,200 kg. All two types of productions originate from the same banana stem; the peel banana type is process from the shealth layers of the layers of the stem, while banana silk type is processed from the core of the pseudo stems.

Particular	Costs (Tsh)
Raw banana stem 1,200,000kg	60,000,000
Direct labour	62,400,000
Overhead	per year 244,442,586.8
Consumables cost	80,452,500
Indirect Labour	118,200,000

$$\frac{\text{Total Production Cost}}{\text{Total Productions quality}} = \text{Tsh: } \frac{545,495,086.8}{96,000 \text{ kg}} = 5,682.24$$

Average Production cost for a Kilogram of banana fibres is Tsh: 5,682.24

ORGANIZATION AND MANAGEMENT PLAN:

BUSINESS FORMATION:

Digital Agribusiness and investments Limited is a private Limited Company shareholders are:

1. Elias Rwezaula Bulaya owns 100 shares
2. Julius Sebastian Zimbiha owns 100 shares

Digital Agribusiness and investments Limited is the sole have its business address located in a farm plot No.17 MLB/967 in Bushaka-Bulamula Village, Muleba district, Kagera region .The Company is governed by the Board of Directors

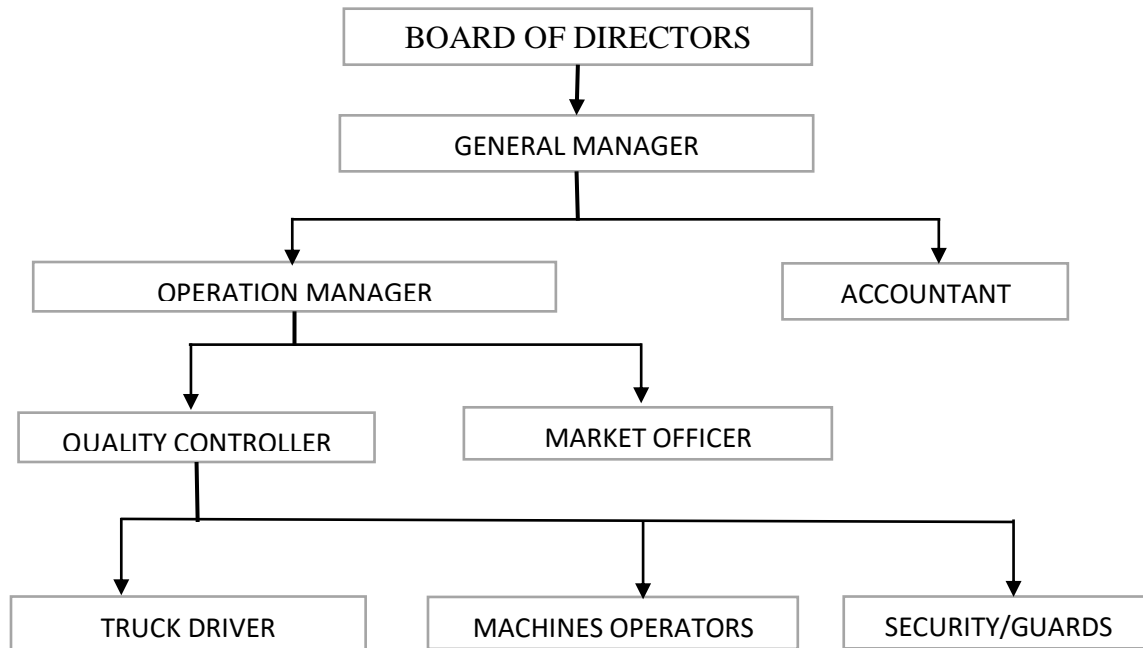
The Board of Directors members are:

1. Elias Bulaya.....Chairman
2. Julius Zimbiha.....Member
3. Eliud Ndyamukama.....Member
4. Edith Kaizamae.....Member
5. Erick Musemakweli.....Company secretary.

This Board directors is the entrepreneur/investor of this project. Under the board of directors, the General Manager will be responsible for day to day management of the project and she/he will be answerable to the Board of Directors.

ORGANIZATION STRUCTURES:

DIGITAL AGRIBUSINESS AND INVESTMENT LIMITED



BUSINESS EXPERIENCE AND QUALIFICATION OF THE BOARD MEMBERS:

1. Mr. Elias.R. Bulaya has been banana grower as heritage means of sustainable assurance of food security in the family. In 1986 Graduated University of Dar es salaam in Bsc Electrical on the same year he was employed by Tanzania posts and Telecommunication College as an Instructor in Technology at posts Telecommunication collage. In 1994 he was resigned from TP & TC employment, he joined as a private company namely company limited as a fulltime Executive Director. He had attended various courses and seminar ,eg in year 2003 attended, Credit and Business management course conducted by International partnership for small entrepreneurship Development ; in year 2007 attended Professional Training Workshop on Entrepreneurship conducted by University of Dar es salaam Entrepreneurship centre (UDEC) etc.
2. Julius Zimbiha, is born in Kishanda village, Muleba district, the village which is among of two famous growers of banana in the district. He graduated at University of Dar es Salaam in 1985 in Bsc. Engineering Mechanics. He was employed by BP - Africa a giant energy company, served in various capacities in The United Republic of Tanzania, South Africa and DRC. Attended several courses and seminars i.e Human Resource Development; Aviation Lubricants Marketing; Negotiation Skills; Safety / Health /

Environment / Quality (SHEQ); Project Management; Oil Spill Management; Modern Safety Management etc.

3. Eliud Ndyamukama

Year 2009 graduated at the University of Dar Es Salaam in Bachelor of Science with Education; in year 2019 graduated at University of Dodoma (UDOM) in Doctor of Medicine

4. Erick Musemakweli

Year 2007 graduated at the Open University of Tanzania in Bachelor of Laws, 2009 graduated in Diploma in Law practice at the Law School of Tanzania; 2010 – 2012, was a Principle Legal Officer in JurisConsult Attorneys; 2012 -2015 Managing Director in Admen Company Ltd; 2025 - to date , Company Secretary in The daily Telegraph Media Ltd; 2023 - to date Company Secretary in EB – Hance Company Limited; 2025 - to date is Associate Advocate in Eminent Attorneys

The Board of Directors had resolved that Mr. Elias R. Bulaya is to be the general manager of the project. Other workers will be recruited according to their qualifications and experiences related to the past in the course of the employment established/organization approved.

PRE OPERATING ACTIVITIES:

The investor had listed down the following activities to be undertaken before the project to operate:

- | | |
|---|----------|
| 1. Business plan preparation | 8 weeks |
| 2. Civil works and fittings | 20 weeks |
| 3. Liaison with TIC | 2 weeks |
| 4. Consulting TIRDO and VETA | 4 weeks |
| 5. Visit machinery suppliers | 4 weeks |
| 6. Purchase and sea transportation of machines to Dar es salaam port | 6 weeks |
| 7. Transport the machines from Dar es salaam port to Bushaka factory site | 2 weeks |
| 8. Recruitment of staff | 4 weeks |
| 9. Installation of machines/equipment | 6 weeks |
| 10. Commissioning of the machines | 3 weeks |

11. Trial production 2 weeks

PRE OPERATING EXPENSES:

Particulars	Cost in Tshs
1. Business plan preparation	5,850,000
2. Business registration and license	1,300,000
3. TIC application form and certificate of incentives (\$1,2000)	3,240,000
4. Civil works and fittings	187,435,000
5. Visiting machineries suppliers	
6. Purchase of machines	76,658,872
7. Sea transport from Mundra Adani Port, India to Dar es salaam	6,504,842.93
8. Road transport from Dar es salaam to factory site Bushaka Muleba	7,200,500
9. Installation and commissioning	7,894,657.07
10. Consulting TIRDO and VETA	1,210,000
11. Marketing and advertising	2,750,000
12. Sponsor of three trainees at VETA Tabora	8,670,000
Total pre operating expenses	Tshs 248,713,872

OFFICE EQUIPMENTS AND FURNITURES REQUIREMENT

➤ Personal computer and printers (1)	3,743,000
➤ Office table and chairs (5)	2,150,000
➤ File cabinets (2)	740,000
➤ Office chairs (4)	600,000
➤ Laptops (2)	2,300,000

Total cost of office equipment and furniture: **5,790,000** monthly depreciation for these equipment/furniture will be **Tshs 289,000** of Tshs 3,474,000 annually

ADMINISTRATIVE EXPENSES

The interpreneur intends to keep the administrative cost low in order to be competitive .

NA	PARTICULARS	TSH
1	Monthly Administrative expenses costs of	3,930,000
	Overhead expenses	14,773,548.90
	Depreciation of office equipments/ furniture	289,500
	Total administrative expenses per month	18,993,049
2	FIXED ASSETS	
	Land and Building	187,435,000
	Machineries and equipments	448,083,375
	office equipments and furnitures	5,790,000
	Total fixed assets	641,308,375
3	PRE OPERATING EXPENSES	248,713,872
4	WORKING CAPITAL	
	(i) Value of a month of raw materials [pseudostems]	
	4,000kg/per day x 30days	
	120,000kg x Tsh50/kg	6,000,000
	Comsumables	9,704,175
	Total Value	15,704,175
	(ii) Value of finished in stock a month:	
	120,000kg produce 9,600kg finished fibres.	
	9,600kg of fibres 20% is silk banana = 1,920kg	
	9,600kg of produced fibre 80% is peel banana = 7,680kg	
	Selling price of silk fibres USD. 4.7 x 1920	USD.9,024
	Selling Price of peel banana fibres _USD 3.4 x 7680	USD .26,112
	Total value of product per month in	USD 35,136
	(iii) Value of work in process in a day:	
	4,000kg/per day x Tsh 50	200,000
	(iv) The cost needed for operations	
	Direct labour per month	15,200,000
	Administrative per month	17,493,151
	Total cost for operation per month	32,693,151
	Total working capital	65,704,375
	Total capital requirement	957,412,622

FINANCING PLAN AND LOAN REQUIREMENT

The investor is aware of that is equity is not enough to meet the total capital required, hence it is planned to raise the total capital required from various financing institutions source:

* Equity - Owner's capital

and

* Loan from Bank/ Financing institutions

I EQUITY:

OWNERS' CAPITAL

The investor's contribution into the project will amount to six hundred sixty nine million nine hundred sixty six thousand one hundred forty seven Tanzania shillings

(Tsh669,966,147) is **69.98%**, this include:

Particular	Costs
• Land and Building	146,763,000
• Machineries and equipment	268,699,275
• Pre-operating expenses	243,673,872
• Office equipment and furnitures	5,790,000
Owner's capital Total TShs	669,966,147

II LOAN FROM BANK/ FINANCING INSTITUTION

The entrepreneur planned to meet the deficit in the total capital required by borrowing from the commercial bank. The project promoter intended to apply for a bank loan amounting up to two hundred eighty-seven million four hundred forty six thousand four hundred seventy five (Tsh 287,446, 475) which is **30.02%**.

PROFIT AND LOSS STATEMENT FOR ONE YEAR

Sales:

• Peel banana fibres	76,800kg x 3.4 USD	=	261,120
• Silk banana	19,200 kg x 4.7 USD	=	90,240
			USD 315,360

N.B: Conversion rate, USD to Tanzania shilling taken into consideration of this project is

1 USD = Tsh 2,600

Equivalent Total sales in Tshs 931,536,000

FOR NEXT FIVE YEARS, PROJECTED CONSOLIDATED COMMERCIAL STATEMENTS
A: PROJECTED PRODUCTION IN KILOGRAM

YEAR	2026	2027	2028	2029	2030
Sales targets	Silk banan fibre 19,200	20,880	22,560	24,000	24,000
Kilograms	Peel banana fibers 76,800	83,520	90,240	96,000	96,000
Capacity	80%	87%	94%	100%	100%

B: PROJECTED REVENUE IN USD

	Silk banana fibers	90,240	98,136	106,032	112,800	112,800
	Peel banana fibers	261,120	283,968	306,816	326,400	326,400
Total		351,360	382,104	412,848	439,200	439,200
Equivalent in Tshs		931,536,000	993,470,400	1,073,404,800	1,141,920,000	1,141,920,000
Raw materials Costs		60,000,000	65,250,000	70,500,000	75,000,000	75,000,000
Labour		118,200,000	128,542,500	138,885,000	147,754,000	147,754,000
Overhead		227,916,586	247,859,288	267,801,989	284,895,733	284,895,733
MANUFACTURING COSTS		406,116,586	441,651,788	477,186,989	507,649,733	507,649,733
GROSS PROFIT		525,419,414	551,818,612	596,217,811	634,270,267	634,270,267

LESS:

Administrative Costs	50,634,000	55,064,475	59,494,950	63,292,500	63,292,500
Bank loan	95,815,491.70	95,815,491.70	95,815,491.70	-	-
Loan interest	86,233,942	57,489,295	28,744,648	-	-
NET PROFIT BEFORE TAX	292,735,980.30	343,449,350.30	358,162,721.30	5,770,977,767	570,977,767
TAX 20%	58,547,196.06	68,689,870.06	71,632,544.26	114,195,553.40	114,195,553.40
NET PROFIT	234,188,784.24	274,188,784,480.24	286,530,177.04	456,782,213.60	456,782,213.60
ACCUMULATED PPROFIT	234,188,784.24	508,948,265.48	795,478,441.52	1,252,260,655.12	1,709,042,868.72

CASH FLOW STATEMENT

PROJECT CASH FLOW STATEMENT FOR FIVE YEARS IN TSHS

PARTICULAR	PRE OPERATING PERIOD	YEARS				
		1	2	3	4	5
Cash flow Equity	669,966	-	-	-	-	-
Borrowing	287,446,475	-	-	-	-	-
Cash sales	-	931,536,000	993,470,400	1,073,404,800	1,141,920,000	1,141,920,000
Total cash flow	957,412,622	931,536,000	993,470,400	1,073,404,800	1,141,920,000	1,141,920,000
CASH OUT FLOW	-	-	-	-	-	-
Pre operating expenses	248,713,872	-	-	-	-	-
Purchase of fixed assets	641,308,375	-	-	-	-	-
Direct materials	-	60,000,000	65,250,000	70,500,000	75,000,000	75,000,000
Direct labour	-	118,200,000	128,542,500	138,885,000	147,754,000	147,754,000
Overhead	-	227,916,586	247,859,288	267,801,989	284,895,733	284,895,733
Marketing	-	1,141,667	1,141,667	1,141,667	1,141,667	1,141,667
Raw materials inventory	-	12,704,375	-	-	-	-
Work in process inventory	-	3,513,500	-	-	-	-
Finished good in stock inventory	-	91,351,000	-	-	-	-
Loan amortization	-	95,815,491.70	95,815,491.70	95,815,491.70	-	-
Interest	-	86,233,942	57,489,295	28,744,648	-	-
Admini expenses	-	50,634,000	55,064,475	59,494,950	63,292,500	63,292,500
TOTAL CASH OUT FLOW	890,022,247	747,510,561.70	651,162,716.70	662,383,745.70	572,083,900	572,083,900.00
NET CASH FLOW	67,390,375	184,025,438.30	342,307,683.70	411,021,054.30	569,836,100	569,836,100
CASH BALANCE BEGINNING	-	67,390,375	251,415,813.30	593,723,497.00	1,004,744,551	1,574,580,651.30
CASH BALANCE ENDING	67,390,375	251,415,813.30	593,723,497.00	1,004,744,551.30	1,574,580,651.30	2,144,416,751.30

Raw material	60,000,000	
Labour	118,200,000	
Overhead	227,916,586	
GROSS PROFIT		525,419,414
LESS:		
Marketing and administrative		
(114,667 + 50,634,000)	51,775,667	
OPERATING PROFIT		473,643,747
LESS:		
Loan amortization	95,815,491.70	
Loan interest	86,233,942	
NET PROFIT BEFORE TAX		291,594,313.30

BANK LOAN REPAYMENT SCHEDULE:

The loan of **Tsh. 287,446,475** together with an interest of 30% per year will be paid in a three year period.

Year	Amount of principal outstanding	Instatement due payable	interest	Total
1.	287,446,475	95,815,491.70	86,233,942.50	182,049,434.2
2.	191,630,983.30	95,815,491.70	57,489,294.99	153,304,786.69
3.	95,815,491.60	95,815,491.60	28,744,647.48	124,560,139.08
TOTAL		287,446,475.00	172,467,884.97	459,914,359.97

BREAK EVEN POINT (BEP):

First year Sales :

Tshs : 931,536,000

First year fixed costs:

- Labour 118,200,00
- Annual interest 86,233,942
- Depreciation 3,474,000
- Overhead 227,916,586
- Marketing and administration 51,775,667

COSTS

Tsh: 487,600,195

First year variables costs:

- Raw materials 60,000,000
- Direct labour 118,200,000

COST

Tsh: 178,200,000

$$\frac{\text{Annual fixed costs}}{\text{Annual sales} - \text{Annual Variable costs}} \times 100\% = \text{BEP (Percentage)}$$

$$\frac{487,600,195}{931,536,000 - 178,200,000} \times 100\% = 64.72\%$$

$$\text{BEP in the 1}^{\text{st}} \text{ year sales} = 64.72\% \times 931,536,000$$

$$= 602,890,099$$

$$\text{BEP in the 1}^{\text{st}} \text{ year Sales} = \mathbf{602,890,099}$$

RETURN ON INVESTMENT (ROT)

$$\frac{\text{Annual net profit}}{\text{Total Capital requirement}} \times 100\% = \frac{234,188,784}{952,372,622} \times 100\%$$

$$= 24.59\%$$

ROT is therefore 24.59%

RETURN ON OWNER'S INVESTMENT (ROOI):

$$= \frac{\text{Annual net profit}}{\text{Owner's investment}} \times 100\% = \frac{234,188,784}{664,926,147} \times 100\%$$

$$= 35.22\%$$

ROOI is therefore 35.22%

BALANCE SHEET (AS OF 31st DECEMBER)

PARTICULARS	PRE OPERATING PERIOD	YEAR				
		1	2	3	4	5
CURRENT ASSETS						
Cash	67,390,375	298,130,813	640,438,496	1,051,459,550	1,621,245,650	2,191,131,250
Raw materials inventory		12,704,375	13,880,465	14,927,640	15,880,468	15,880,468
Work in process inventory			3,820,931	4,128,362	4,391,875	4,391,875
Finished goods inventory		91,351,000	99,344,212	107,337,425	114,188,750	114,188,750
Account receivable		77,628,000	84,480,450	91,212,900	97,035,000	97,035,000
Total current Assets	67,390,375	483,327,688	841,904,554	1,269,065,877	1,852,791,743	2,432,127,843
FIXED ASSETS						
Land Building	187,435,000	146,763,000	146,763,000	146,763,000	146,763,000	146,763,000
Machines	263,659,275	263,659,275	263,659,275	263,659,275	263,659,275	263,659,275
Vehicles	173,314,100	173,341,100.00	173,341,100.00	173,341,100.00	173,341,100.00	173,341,100.00
Office furniture/equipments	5,790,000	5,790,000	5,790,000	5,790,000	5,790,000	5,790,000
Less:						
Accumulated depreciation		45,280,000.00	84,863,979.00	127,921,840.00	186,761,407.00	244,200,886.00
Total fixed Assets	641,308,375	589,553,375	674,417,354	712,264,215	771,103,782	828,543,261
Pre-operating expenses	248,713,872	-	-	-	-	-
TOTAL ASSETS	957,412,622	1,072,884,063.00	1,516,321,908.00	1,981,330,092.00	2,623,895,525.00	3,251,171,104.00