

BUSINESS PLAN FOR

ESTABLISHMENT OF CHEMICAL MIXING FACTORY

AT

KUNDUCHI INDUSTRIAL AREA, TEGETA DAR ES SALAAM CITY, TANZANIA

Prepared by

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Dar Es Salaam

Tanzania.

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EXECUTIVE SUMMARY

LOCATION	Kunduchi Industrial area, IPTL road, Tegeta Dar Es Salaam
IMPLEMENTING COMPANY	BRITAN GROUP LIMITED
NAME OF THE PROJECT	BRITAN Chemical Plant Construction.
RAW MATERIALS/ ASSEMBLY	P&G
	3 phase Electrical/ set up from Machinery
	Lighting / Fire proof
	Engineering/ CIA / Frames /Steel/ Volume
	2 x 1000 litre STAINLESS steel Tanks
	1 x 1000 litre Dispersant Mixers
	1 x 500 litre Dispersant Mixers
	Caster wheel Trolley x 2
	200 lt paint dispersant mixer
	18.5 kw motor/electric lift system
	40mm Solid chrome rod
	Stainless steel shearing blades
	1 x 20 ltr mixer
	300 litre composer
	Pneumatic Paint filing & packing machine
	1 1/2 "diaphragm pump
	Automated lid closing function
	Load cell, Stainless steel actuator / peddle switch
	Colour manual multisperse inks
	Purpose made pallets
Shelving / 3 base 2.4m x 800 x 2.4 / coated	
4x3m x 750mm Steel coated Flow Tables	
Measuring Jugs (assorted sizes)	

Scale to measure weight material
Powder dispensing Funnels
Build work/CIA
Plumbing for water Table & 5000 litre Plastic Tank
Colour/Paddlers/Mixers/ shaker machine 20 litre
White Board markers, and accessories
Hoses plus couplers for cleaning process/ Rags/Soap etc.
4 x Chairs/ stools
Laboratory accessories
Chemical
1 x 1000 litre STAINLESS steel Tanks/with dispenser outlet
2 x 500 litre STAINLESS steel Tanks
1 x 1000 litre Dispersant Mixers
1 x 500 litre Dispersant Mixers
1 x 200 litre Dispersant Mixers
1 x Filling Machine - 1lt - 201lt
Equipment for Chemo – application
300 Bar Horse power fuel - Diesel machine with Rotational nozzle and 60m rubber hose, on wheels
500 Bar Hp Electrical machine with rotational hose and 60m Rubber hose on wheels
1 x Extra Rubber hose 100 metres in length
2 x spray machines (ELECTRICAL) for R500PF product - 21/17 nips with hose on wheels, with hand Gun
Chemo stirrer with Drill
Included in the above - For Miza Manzi/Maji Maji PVA PAINT
Chemical (PVA) - enough to make 2000 litres
200 x 20 LT Water repellent PVA - Made up Lateres -
CIA to supply TDS and MSDS sheets

	CIA to do all Training
	CIA to do all installation
	Excludes Travel & accommodation meals
	Included in the above - For Chemicals
	Chemicals (water based sanitizer - concentrate) - enough to make 2000 litres
	200 x 5lt water based sanitizer - concentrate made up
	Labels - You must do your own labels
	CIA to supply TDS and MSDS sheets - for all chemicals- client to provide info for MSDS sheets
	CIA to do all Training on mixing and canting into containers - for all chemicals
	CIA to do all installation
FINISHED PRODUCTS	<ul style="list-style-type: none"> • BRiTAN Spray Cleaner-Neutral Detergent (Above floor dusting and moping) • BRiTAN Degreaser -Alkaline Cleaner Heavy duty (Removal of grease, grit, stubborn marks, scrubbing hard floor) • BRiTAN Window and Mirror Cleaner -Alcohol base cleaner streak free cleaner (Window, Mirror, Hard floor) • BRiTAN Laundry Liquid • BRiTAN Shower gel – Shower • BRiTAN Toilet and Bathroom Cleaner • Marine Coatings for high corrosive materials • Mosquito repellent (Dawa Ya Maji)
OUTPUT CAPACITY	The Installed system can manufacture 16,000 litres of Chemicals

<p>SHORT DESCRIPTION OF THE PROJECT'S FUND UTILIZATION</p>	<ul style="list-style-type: none"> • Construction of 1,700 square meter building for Chemical plant in Kunduchi Industrial area Dar Es Salaam. • Purchase and installation of Chemical mixing plant allied equipment and instruments including but not limited to finished products line, maintenance of chemical workstation line, sampling inspection of finished products line, • Purchase and installation of plumbing systems, electrical, cooling panels and factory control systems; • Construction of the administration, factory control, storage and WC buildings. • Purchase and installation of standby generator and electrical transformer to stabilize electricity supply. • Working capital to support the project day to day operations
<p>PROJECT BENEFITS</p>	<ul style="list-style-type: none"> • Provision of locally made Domestic and Industrial chemicals mainly for Tanzanian customers however at later stages the products will be exported to other East African Countries market. • Provision of reasonably affordable prices, higher reliability, better quality chemical products, improve production, marketing and trade on our chemical products. • The products are practically cost effective and economically viable in both domestic and industrial use. • The products are environmentally friendly as per regulatory requirements and standards; • The products are astonishingly high quality and produced and mixed professionally to cutter for all CLEANING purposes.

	<ul style="list-style-type: none"> • Local production will save the country forex for importation of same products, as well augment technology and knowledge transfer to the local Chemical engineers. • The products are designed to our local needs and environment in deodorant to colors. • Provide new employment of about 25 people. • The project will add the number of the country industry growth program. • Add revenue base to both promoters and the Government 										
BENEFIT OF THE PROJECT TO THE COMMUNITY	<ul style="list-style-type: none"> • Provision of HIGH quality and affordable domestic and industrial chemicals that define CLEAN which will support small entrepreneurs to make a living by becoming our sales freelancers, hence emulating their living standard quality. • The products will help the government efforts to overcome the current Covid 19 Pandemic by using quality products for spread control. 										
ESTIMATED COST OF PROJECT	<p>BRITAN CHEMICALS & COATINGS CAPEX</p> <table border="1"> <tr> <td>Land and buildings</td> <td>\$820,000</td> </tr> <tr> <td>Office Fixtures</td> <td>\$45,000</td> </tr> <tr> <td>Plant</td> <td>\$385,000</td> </tr> <tr> <td>Pre-expenses</td> <td>\$210,000</td> </tr> <tr> <td>Vehicles</td> <td>\$250,000</td> </tr> </table>	Land and buildings	\$820,000	Office Fixtures	\$45,000	Plant	\$385,000	Pre-expenses	\$210,000	Vehicles	\$250,000
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	<p>Others \$15,000</p> <p>BRITAN CHEMICALS & COATINGS OPEX (Working capital) \$275,000</p> <p>TOTAL INVESTMENT REQUEST \$2,000,000</p>
PROJECT STATUS	<ul style="list-style-type: none"> • The project entails to construct a Chemical Mixing Plant at Kunduchi industrial area in Tegeta Dar es Salaam, where the proposed factory will simply mix concentrates, perform Laboratory test of the mixed products according to Regulated standards and specifications, Pack the mixed products in different packages, Sale to Industries and Domestic customers. • Our strategic partner CI-Africa developed specialized concentrates for both industrial and domestic chemicals. 28 concentrates were developed in consultation with our Chemical Engineers for use in East Africa, the chemicals along with the necessary additives are all mixed, tested, packed, labelled and distributed from our Dar es Salaam plant. • SF Group of Companies Ltd will provide the factory premise located at Kunduchi Industrial area. The plot is not occupied by any builds and that it requires some civil works which involve construction, partitioning, and installation of electricity and electronics facilities to suite the chemical mixing plant machinery operations, construction of adjacent building to facilitate office, factory control, changing rooms, and wash rooms activities.
FINANCIAL STATUS	<ul style="list-style-type: none"> • The project promoters are using their own funds to meet preliminary costs including arrangement, technical

	<p>advisory services, consultancy and legal documentation.</p> <p>The project promoters have already arranged financial facility required for importation of the full factory machinery set from CI-Africa in South Africa</p> <ul style="list-style-type: none"> • Debt arrangement/ Lease model to part finance the proposed project is herein proposed. • Technical evaluation of the anticipated technology and products quality and standard- have already been tested by the inventors and are to be assigned with ISO certification, and some of the anticipated products are currently used in South Africa, • The project building interior design and architectural modification to suite usage - will be carried out using the promoters' funds. • •Basic concept and business plan appraisal is available Building detailed design, drawings, and identification of sources and plan of raw materials supply - are available.
<p>GUIDING PRINCIPLES</p>	<ul style="list-style-type: none"> • Market oriented and customer focused • Responsive to customer needs and requirements • Demonstrating professionalism, transparency, reliability and honesty in all aspects of the business activities • Promoting best practices in innovation and delivery of the products and services; • Stimulating and responding to effective demand, Supporting and responding timely and effective production and delivery of products.

INDUSTRIAL CHARACTER SECTOR	<ul style="list-style-type: none">• The chemical industry is particularly remarkable in Tanzania where total sales reached \$550 million in 2015, ranking it in top 5 contributor in industrial manufacturing sector,• Tanzania bureau of Statistics has it that Tanzania has about 88 registered and licensed chemical trading cum wholesaling companies scattered all across different regions responsible for employing about 172,818 people, the industry is projected to enjoy 42.7% annual growth within 2015 and 2025. It is important to state that no company has the lion share of the available market in this industry
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INTRODUCTION

1.1. BACKGROUND

This business plan provides a detailed investment proposal for establishment of chemical mixing plant for Domestic and Industrial use, with final products like:

- BRiTAN Spray Cleaner-Neutral Detergent (Above floor dusting and moping)
- BRiTAN Degreaser -Alkaline Cleaner Heavy duty (Removal of grease, grit, stubborn marks, scrubbing hard floor)
- BRiTAN Window and Mirror Cleaner -Alcohol base cleaner streak free cleaner (Window, Mirror, Hard floor)
- BRiTAN Laundry Liquids
- BRiTAN Shower gel – Shower
- BRiTAN Toilet and Bathroom Cleaner
- Marine Coatings for high corrosive materials
- Mosquito repellent (Dawa Ya Maji)

Description of the Business.

The project entails the construction of a Chemical Mixing Plant at Kunduchi industrial area where the proposed factory will simply mix concentrates, perform Laboratory test of the mixed products according to the Regulated standards and specifications, Pack the mixed products in different packages, Sale to Industries and Domestic customers.

BRiTAN Group strategic partner CI-Africa developed specialized concentrates for both industrial and domestic chemicals. 28 concentrates were developed in consultation with our Chemical Engineers for use in East Africa, the chemicals along with the necessary additives will all be mixed, tested, packed, labelled and distributed from our Dar es Salaam plant.

SF Group of Companies Ltd will provide the factory premise located at Kunduchi Industrial area; The plot is occupied with the onsite factory building that need some civil works including renovation, refurbishment, partitioning, and installation of electricity and electronics facilities to suite the chemical mixing plant machinery operations, construction of adjacent building to facilitate office, factory control, changing rooms, and wash rooms activities.

Ownership: The Company is privately owned by

SILYVESTRY FRANCIS KOKA, Tanzania 43%

SELINA SILYVESTRY KOKA, Tanzania 14%

KELVIN SILYVESTRY KOKA, Tanzania 14%

ROGER PETER STRINGER, British 14%

Uses and Sources: The project estimated investment cost plan stand as follows

- (a) Civil and Construction works cost is estimated at USD 759,581 comprising of the promoters' contribution towards construction, refurbishment, partitioning and other civil works of the existing onsite factory buildings.
- (b) Purchase of machinery with allied equipment, instruments cost is estimated at USD 275,000 lease to own model financing facility; and
- (c) Working capital is estimated at USD224,638 comprising of USD 25,000 promoter contribution and USD 174,638 bank loan respectively.
- (d) Lease Model financing for initial importation of raw materials: is estimated at USD 183,411 to be arranged by the bank.

The overall project investment costs including working capital and operating capital will be **USD 2,000,000.**

1.2. Target Market.

The project products guided with high standard quality, timely and appropriately price will be consumed largely by the local Industrial and Domestic consumers, Business to Business via pre-determined, tender supply, wholesaling, and international financed projects at factory gate price and delivery arrangements.

Presently, most Industrial Chemicals used in the country are imported – Marine Coatings and Heavy Duty Cleaning chemicals for mega projects, although of recent there are few local players mixing chemicals focusing on domestic use, however their combined production capacity is still low to satisfy the current market demand, especially for the current on-going Mega government projects.

1.3. The industrial sector profile.

The chemical industry is particularly remarkable in Tanzania where total sales reached \$550 million in 2015, ranking it in top 5 contributor in industrial manufacturing sector. Tanzania bureau of Statistics has it that Tanzania has about 88 registered and licensed chemical trading cum wholesaling companies scattered all across different regions responsible for employing about 172,818 people. The industry is projected to enjoy 42.7% annual growth within 2015 and 2025. It is important to state that no company has the lion share of the available market in this industry.

1.3.1 Operations

The project has already recruited the project manager to coordinate the preliminary establishment, compliance, legal and finance arrangements. Upon completion of the setups, the project will employ the BRiTAN Chemical Division Manager with wide experience in specialised Chemical engineering embedded with management, finance and strong entrepreneurial expertise to lead the project operations.

Firmly, the project will also employ the technical team comprised of chemical plant chief operation officer (1), quality control officer (1), technique and equipment engineer (1),

maintenance engineer (1), completed products staff on the chemical mixing line (15) and business and administrative team comprised of sales officer (1), finance officer (1), human resources (1), security, drivers (3) etc. Initially the staff number will be 25, the project technical expertise will also have support of the promoters' technical teams.

1.4. Competitive Advantage and Strategy:

- Provide domestic and industrial local readily available high quality chemicals that define CLEAN which are currently imported at high rates.
- First to supply Marine Coatings and Mosquito repellent coatings.
- Strong directorship and management team with deep knowledge and experience in industrial production management and marketing.
- New and modern chemical mixing machinery that produce quality and high standard products at reasonable cost comparably to imports, hence competitive in the market.
- The project size, technology, output and location place them at convenient order, supply and timely delivery pace.
- The products are environmentally friendly and easy to use and follow all quality standards.

1.5. Financials:

- The Project anticipate to generate revenue of USD 1,069,001.87 in year one, and assumed to continue growing throughout the project lifespan plan, mainly due to fact that, production levels and other operation factors are also assumed to scale up as the sales grow.
- The project anticipates to generate gross profit of USD 302,819 in year one that will also grow throughout the projected lifespan.
- The project anticipates to generate pre-tax and net tax of USD 302,819 and USD 102,294.06 respectively in year one that will increase to USD 187,667.

- Net cash flows anticipate to average at USD 102,294.06 after production, personnel costs, other operating costs and capital costs in the first years and is projected to remain positive throughout the project lifespan.
- The Project requires an equity commitment (both existing and proposed including the initial working capital element) of USD 125,000 million which is recoverable during project implementation.

1.6. Economic Benefits and Social Corporate Responsibility

Successful completion of the project civil works, purchase and installation of machinery, commissioning and operationalization; the project activities will have significant economic and social benefits to the industry sector of Tanzania as follow:

- Creation of new employment opportunities for 25 permanents and 200 business partners and freelancers Tanzanians.
- Provision of income to employees and other service providers (suppliers and individual entrepreneurs) thus contributing to Government efforts on citizens' income generation (wealth creation) and therefore improving their living standards.
- Enhancing production of readily-available local chemicals products subsequently enhancing knowledge transfer to local chemical engineers.
- Add revenue base to both promoters and the Government.
- Substitute to the imported chemical products, hence serving the country forex reserve.

In Consideration of sounding parameters indicated in the project evaluation and analysis, it is recognized that the proposed project is technically feasible, financially viable; economically and socially sound, hence recommended for the bank finance of **USD 2,000,000.**

2. INVESTEMENT PROPOSAL

2.1. BUSINESS DESCRIPTION

The project entails the construction of a Chemical Mixing Plant at Kunduchi industrial area where the proposed factory will simply mix concentrates, Lab test the mixed products according to Regulated standards and specifications, Pack the mixed products in different packages, Sale to Industries and Domestic customers.

- Construction of 1,700 square meter building for Chemical plant in Kunduchi Industrial area Dar Es Salaam.
- Purchase and installation of Chemical mixing plant allied equipment and instruments including but not limited to finished products line, maintenance of chemical workstation line, sampling inspection of finished products line.
- Purchase and installation of plumbing systems, cooling panels and factory control systems.
- Purchase and installation of water systems, sewage for factory chemical waste, communication.
- Construction of the administration, factory control, storage and WC buildings.
- Purchase and installation of standby generator and electrical, transformer to stabilize electricity supply.
- Working capital to support the project day to day operations

The project will be implemented at Kunduchi industrial area, IPTL road in Tegeta, Dar es Salaam city, located about 15 Kms from the city centre; and will be implemented with assistance from the Lease Finance facility (RENTCO), and implementation period is estimated to be 3 months.

The Projects main objective is to provide locally made domestic and Industrial chemicals mainly for Tanzania customers however at later stages the products will be exported to other East African Countries market.

BRiTAN Group limited strategic partner with CI-Africa has developed specialized concentrates for both industrial and domestic chemicals. 28 concentrates developed in consultation with local Chemical Engineers for use in East Africa, the chemicals along with the necessary additives are all mixed, tested, packed, labelled and sold in Tanzania.

Purpose

BRiTAN Chemicals vision is to become one of the leading brands in the chemical wholesaling industry not just in Tanzania but in the whole of the Eastern Africa regions.

Our mission is to establish a one stop chemical trading company that will become a major distributor for topflight chemical products manufacturing companies.

The Company business guiding principles are:

- Market oriented and customer focused
- Responsive to customer needs and requirements
- Demonstrating professionalism, transparency, reliability and honesty in all aspects of the business activities
- Promoting best practices in innovation and delivery of the products and services;
- Stimulating and responding to effective demand
- Supporting and responding timely and effective production and delivery of products.

The company's goals (2021 -2025)

- To satisfy the market with quality products and services offered through a single source solution for domestic and industrial chemical needs,
- To implement production of innovative chemical products through serving knowledge driven solutions.

- To continue researching and developing advanced chemical products that suits targeted market.
- To increase the project cash flow by strengthening linkages to the market.
- To use market forces to increase profitability
- To expand the products market via export to the East African market.

The Rationale and Justification for the Establishment of the Project:

- The project will provide locally made Domestic and Industrial chemicals mainly for Tanzania customers however at later stages the products will be exported to other East African Countries market,
- The project will provide quality, reasonably affordable prices, higher reliability, better quality chemical products, Improve production, marketing and trade on our chemical products
- The products are practically cost effective and economically viable in both domestic and industrial use,
- The products are environmentally friendly as per regulatory requirements and standards,
- The products are astonishingly high quality and produced and mixed professionally to cutter for all CLEANING areas,
- Local production will save the country forex for importation of same products; as well as augment technology and knowledge transfer to the local Chemical engineers.
- The products are designed to our local needs and environment in deodorant, colors to usage.
- Provide new employment of about 25 people.
- The project will add the number of the country industry growth program.
- Add revenue base to both promoters and the Government

Certification and Quality Assurance

- The company is incorporated under Companies Act as Limited Liability Company with Certificate of Incorporation Number 109883 issued on 17th July 2014 and TIN Number 135-416-630.
- Upon completion of Construction works, installation, commissioning and starting commercial operations, the products will be tested and obtain certificates and approval from Tanzania Bureau of Standards (TBS}. The authority is empowered by the law to foresee and act on manufacturers of consumable products in Tanzania to ensure adherence to the set quality and standards.
- The products quality will be achieved through observing specific norms and standards, imposed by consumers, specialized quality agencies, including government departmental requirements.
- It will be a choice of the company to take an active approach on quality for proper raw materials, processing, mixing of chemicals, product identification and traceability throughout the effective production chain to minimize loss of time and logistical lines.

2.1.2. Financial Institution Credit Relationship

The company is a new establishment hence currently has no any bank credit relationship. The promoters are currently using their own source funds to finance the ongoing investments and operation expenses.

However, lease to own Financing Model facilitated by RENTCO which will enable BRi TAN implementation of the project with less burden of Capital Expenditure. With the sound market demand BRi TAN will be in a position to own all the rented facilities in the fourth year. The Promoters have already secured the factory premises and invested \$150,000 RENTCO will facilitate Chemical plant machinery and other costs associated to the chemical plant of **\$2,000,000**.

Table 1: Proposed Costs for the Project Civil construction Works in USD

Item	Existing Investment		Proposed Investment		Total (\$)
	Owners' Equity (\$)	Debt (\$)	Owners' Equity (\$)	Debt (\$)	
Preliminaries	\$25,000.00			25,000	25,000
Land Development				35,000	35,000
Building Construction				750,000	750,000
External works				70,000	70,000
Total land and buildings	25,000			820,000	820,000

Table 2: Proposed Costs for the Project Plant, Machinery, Equipment in USD

Item	Existing Investment		Proposed Investment		Total (\$)
	Owners' Equity (\$)	Debt (\$)	Owners' Equity (\$)	Debt (\$)	
Finished Products Machinery line				184,040	184,040
Maintenance Workstation Machinery line				65,700	65,700
Sampling Inspection of Finished products machinery				15,760	15,760
Production system software line				21,500	21,500
Chemical Concentrates				98,000	98,000
Total Machinery and Equipment Costs				385,000	385,000

2.1.3. Progress of Project Works

The project development including civil works and purchase of machinery status to date stand as follow:

- The promoters have already given land at Kunduchi industrial area, Dar es Salaam city, measuring 1700 square meters' for Constructing the chemical plant. The plot has sufficient space to allow scaling up of buildings and establishment of a factory.
- The project site civil works will start upon conclusion of the rent documentation and signing of agreement and funds release and Certification of environmental assessment by NEMC.
- The project establishment legal documents, registration documents, business plan and financial modelling information are held.
- Supply of machinery quotations with allied price and supply terms are held.
- Payment for importation of the project factory machinery has already been concluded. Awaiting RENTO approvals.

2.1.4. The Project's Contractors and Consultants

The project construction works will be carried out by M/s SF Group of Companies Ltd subsidiary company dealing with construction works. As Building Contractor, the company is capable to perform the construction works professionally, hence saving the related cost.

Installation of the Chemical plant factory with allied machinery and facilities will be carried out by CI – Africa. The technical team from the suppliers will install, train and commission the factory, and thereafter will be proving offsite technical expertise from time to time. The assignment budget will be from the promoters.

2.1.5. Building Construction Works Approval and Permits

The project will be located at Kunduchi industrial area in Tegeta, Dar es Salaam with a land tenure of 30 years. The rental cost will be paid yearly and is budgeted in projected

financial projections. The plot is currently well serviced with water and electricity from the neighbouring utility supply companies; and is easily accessible through the all-weather road services, hence easing logistics of raw materials and products to and from the factory. The budget for the utility services connection is expected to be met by the promoters.

The project construction works will be carried out on existing plot with onsite infrastructure, hence promoters have already required the relevant permit from the Kinondoni Municipal authority to implement the onsite civil works.

2.1.6. Civil works

The entire civil works of the infrastructure at the project site will involve, construction, partitioning and machinery installation, storage of raw materials and produce, fence and allied engineering, electrical, electronic, communication and utility supply facilities. Construction to accommodate administration, control and security systems will also be carried out using the Facilitated funds

The project civil works will include flooring, walling, plastering, painting, partitioning, lighting, ceiling, and ancillary facilities including doors, windows, water, electricity, drainage system, WC and changing room. The civil works have been designed and supervised by the group of qualified Architects and Engineers.

2.2. Management of the Project.

Type of the Organisation; Limited Liability Company

2.2.1. The Project Directors

The promoters and directors of the company are experienced entrepreneurs with over two decades' experience in managing large manufacturing industries, service industries, supply chain industries and many large business organisations. They have been engaged in operation of small, medium and large Service industry, construction works, tendering,

budgeting, scheduling and site operations. Also they are well versed in finance and corporate governance with number of practical years of experience. The directors are herein planning to establish Chemical mixing plant allied with machinery and facilities factory with finance assistance from Lease to own finance model facility because,

- They have extensive knowledge in running small medium and large production industry business with solid years of experience in the sectors.
- They have deep understanding of the project's context and can respond to needs and requirements of the clients.
- They have deep understanding of financial institutions loans uses and repayment challenges.
- They have deep advisory skills to enable the project to run efficiently and profitably.

2.2.2. Management of the Project

The project management will be under the overall company business reporting chart to the board. The board chairman will be responsible for keeping both board and management organised, informed and tasked.

The project operations will be under the BRiTAN Group General Manager who is a qualified and experienced person with solid experience years in large organisations senior management, blended with management, finance skills, Commercial skills and sold years of practical experience; and he/she will be reporting to the BRiTAN Group Managing Director who is part of the Board of the Directors.

The project Group General Manager and the Division Manager will be qualified and experienced team in the Industrial Chemical engineering and production arena. The project will employ a total of 25 staff distributed as follow:

1. Chemical Plant Division manager (1)
2. Quality control officer (1)
3. Technique and equipment engineer (1),

4. Maintenance engineer (1),
5. Completed products staff on the assembling fine (10)
6. Business and administrative team comprised of sales officer (7),
7. Finance officer (1)
8. Human resources (1)
9. Security, drivers (2)

The project technical expertise will also be supported by the promoters' technical teams.

Organization structure

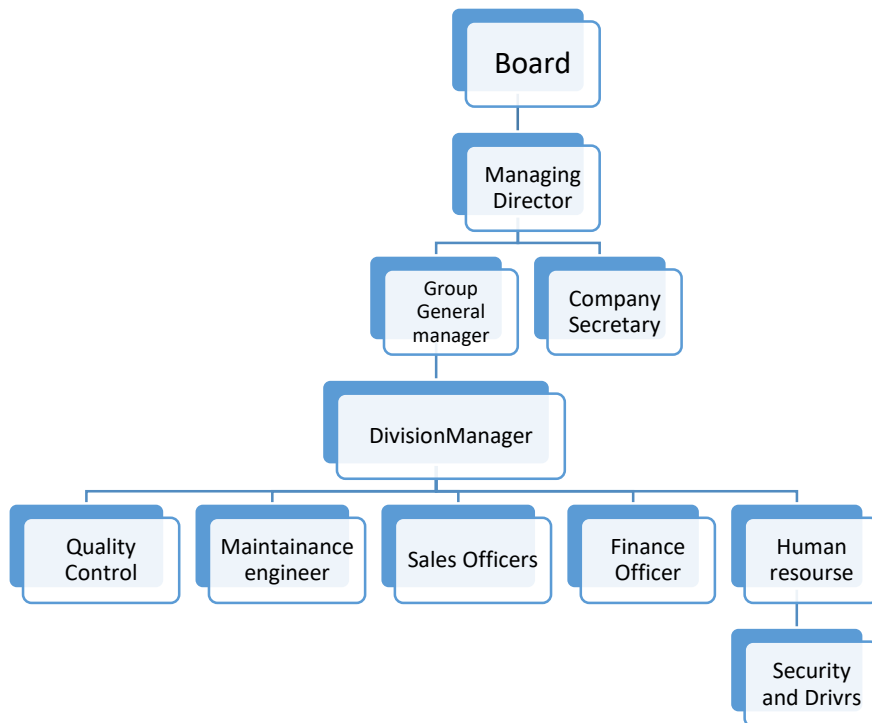


Figure 1: Proposed organogram for the organization.

2.3. Technical Aspect of the Project

2.3.1. Production Planning and Operation Technique

The project envisages to complete construction works, purchase and installation of factory machinery before production, commissioning and starting commercial operations. The chosen machinery technology will be from CI-Africa.

2.3.2. Technical Know-How

The technical know-how for the project machinery will be provided by CI-Africa who will Supply Machinery, install mixing plant, train local technical team, do trial and commissioning of the factory set up. Supply agreement will be executed between the company and the supplier, principally incorporating the follows:

- Taking out successfully trial run and operational of the factory machinery
- Acceptable quality of the final products in the market
- Taking out successfully commercial production for the factory machinery
- Penalty clause for non-performance of the factory machinery
- Performance guarantee for a specified number of years after a commercial production.

2.3.3. Technology

The technology to be used in mixing chemicals that will be installed by CI-Africa requires minimum supervision, low labour cost and acceptable environmental impact. The chemical mixing machinery is used by Ci-Africa in south Africa and is proven in efficiency.

2.4. Production

2.4.1. Plant Capacity

Given the expected demand for domestic and Industrial Chemicals used for Cleaning and Marine Coatings also noting current urbanization, and industrialization, the project is set up to produce an average of 16,000 litres daily, scalable as the demand rises.

Assuming that the envisage factory start operation in September 2021, this capacity will still be below the country projected demand chemical demand. Based on this production capacity, the plant is categorised as a medium sized chemical mixing plant. The project choice of this scale of operation is based on the following factors:

- Adequate capability of the company to raise fund from the external source to finance the proposed project investment, as well as adequate management capability to implement and operate the project
- There is adequate market to absorb daily production capacity of 16,000 liters respectively of produced products per annum.
- At this scale of production, the project parameters will remain financially, economically and commercially feasible.
- Location, timely availability of raw materials, storage, market size of the business and technology in use will be reasonably manageable.

2.4.2. Production Program

The product program schedule is based on consideration that the envisaged factory will work for 263 days in a year, where the remaining days will be for holidays and maintenance. During the first year of operation the plant will operate at 70 percent capacity that will increase progressively to 100% by the second year. This consideration is developed based on the assumption that logistical barriers, staff incompetence, problem for availability of raw materials would be eliminated gradually within the first years of operation.

2.4.3. Raw Materials.

BRiTAN group limited strategic partner CI-Africa developed specialized concentrates for both industrial and domestic chemicals. These concentrates were developed in consultation with our Chemical Engineers for use in East Africa.

We've developed in cooperation with CI-Africa 28 chemicals (with more to come). Each chemical is designed around the best formula to do the job cost effectively, without compromising on quality.

Table 3: A Table showing the list of raw materials to be supplied by CI-Africa.

REF #	SKU #	BRAND	PRODUCT NAME	REF #	SKU #	BRAND	PRODUCT NAME
1	LA001	BRITAN	LLD-Liquid Laundry detergent	15	WR002	BRITAN	H2- Concentrated Air Freshener
2	LA002	BRITAN	LLHCL- Sodium Hypochloride Bleach	16	WR003	BRITAN	H4E-Concentrated Enviro Friendly Toilet Cleaner
3	LA003	BRITAN	LLN-Liquid Laundry Neutraliser	17	WR004	BRITAN	Antibacterial Hand Soap
4	LA004	BRITAN	LFS-Liquid Fabric Softener	18	WR006	BRITAN	Hand Gel
5	FB001	BRITAN	K2-Concentrated Dishwasher Detergent	19	WR007	BRITAN	AFHS 2419 Non-Alcohol Hand Sanitiser
6	FB002	BRITAN	K1-Concentrated Dishwasher rinse Additive	20	WR008	BRITAN	CICPI42 Grease Hand Cleaner
7	FB003	BRITAN	K3-Concentrated Manual Dishwashing Liquid	21	HK001	BRITAN	K5-Concentrated Hard Surface Cleaner
8	FB004	BRITAN	K4-Concentrated Degreaser	22	HK002	BRITAN	K5BAC-Concentrated Bactericidal Floor Cleaner
9	FB006	BRITAN	K5-Concentrated Hard Surface Cleaner	23	HK003	BRITAN	MopIt Floor Cleaner
10	FB007	BRITAN	K6-Concentrated Surface Sanitiser - Nutural	24	HK004	BRITAN	K7-Pine Disinfectant
11	FB008	BRITAN	K6-Concentrated Surface Sanitiser - Fragrant	25	HK006	BRITAN	K6-Concentrated Bactericidal Cleaner
12	FB009	BRITAN	SSS-Stainless Steel Polish	26	HK007	BRITAN	H3-Concentrated Window/Mirror Cleaner
13	FB010	BRITAN	K3-Concentrated Manual Dishwashing Liquid	27	HK008	BRITAN	Restore - Floor
14	WR001	BRITAN	H4-Concentrated Toilet Cleaner	28	GPO01	BRITAN	CI-200 Degreaser/100%

2.4.4. Packaging

BRiTAN Chemicals come in 400 ML, 750ML, 1 ltr, 5 ltr, 25 ltr and 1,000 ltr for the larger consumers of industrial type chemicals. All products are backed by a very strict manufacturing process of which we are continuously monitoring with quality test in our own laboratory. Each chemical comes with its Material Safety Data Sheet and user instructions.

2.4.5. Products and services

Products: The main products of the project will include:

- BRiTAN Spray Cleaner-Neutral Detergent (Above floor dusting and moping)
- BRiTAN Degreaser -Alkaline Cleaner Heavy duty (Removal of grease, grit, stubborn marks, scrubbing hard floor)
- BRiTAN Window and Mirror Cleaner -Alcohol base cleaner streak free cleaner (Window, Mirror, Hard floor)
- BRiTAN Laundry Liquid
- BRiTAN Shower gel – Shower
- BRiTAN Toilet and Bathroom Cleaner

- **Marine Coatings**

Our strategic partner CI-Africa is the sole manufacturer in Africa for CHEMCO INTERNATIONAL, Scotland, United Kingdom. At BRiTAN Coatings we have 72 specialized Chemco coating products which solve a multiple of conditions for corrosion protection and maintenance solutions for:

Table 4: A table showing a range of solutions offered by Chemco coatings.

Ceramic Systems	High Temperature Coatings	Primer Systems
Concrete Repair Systems	Hull Coatings	Structural Coatings
Epoxy and Acrylic Coatings	Industrial Flooring	Tank & Pipe Lining
Glass flake Coatings	Metal Repair	Underwater Coatings

Through our partnership with CI Africa and Chemco International, we have the reach-back to innovative technology with over 35 years' experience in designing and manufacturing the most advanced high-performance coatings in the global coatings industry.

With our proven quality, our products we have the most comprehensive product limited guarantees which is endorsed by industry leaders throughout the world.

With our dedicated support we offer basic technical support here in Tanzania however with our relationships we benefit from years of coating specialists' expertise.

- **Misa-Mansi (Dawa-ya-Maji - Water Repellent Acrylic PVA Paint)**

MISA-MANSI (Dawa-Ya-Maji) is a cost-effective premium INTERIOR & EXTERIOR water-repellent paint system used on un-plastered brickwork, new walls of cured plaster & previously painted surfaces. The paint system is also a brilliant white with good opacity and washable characteristics. The water-repellent additive reduces chalking, fading of the paint film and increases mechanical resistance and life expectancy of the paint film.

- The PVA formula will be a product made up of chemicals from both South Africa and Tanzania.
- The final product Dawa-Ya-Maji Acrylic PVA Paint is mixed at our plant in Dar Es Salaam
- The PVA can be applied by brush, roller or sprayed Per 1ltr of PVA covers approximately 8-9m x 2 coats,
- The 10-year product guarantee is subject to correct application and procedures while being applied.
- The system is best with a two-coat application, being 1 & 2 separate coats of the PVA,
- The shelf life is 6 months in original sealed containers under correct storage conditions
- Flash Point: the product is water based

2.4.6. Production technology

The prominent technology used in production of detergent chemicals for cleaning purposes is the mixing and dilution technology. The mixing technology involves the mixing of various fillers, surfactants, disinfectant agents and chemical agents. These agents are mixed based on the desired end product to be used. However, for the dilution technology it involves dilution of the concentrates at various ratios to obtain the desired product.

The manufacturing process will involve both mixing the raw materials and dilution of concentrates where necessary in large tanks. The process can be in batch as well as continuous, whereas BRITAN chemicals intend to begin with the batch process and later on will expand to the continuous process. Raw materials will be selected based on the form and properties of the desired end product. However, mixing will be done thoroughly using an agitator at defined speed rate based on the end product and additives to offer colour variations and smell will be added to ensure production of quality products. The mix ratios will also be varied accordingly based on the desired end product.

Figure 2: Factory layout with machinery in appendix 1

Echo Friendless and Pollution Control

The proposed processing plant operations are echo-friendly and cost-effective.

2.5. Utilities and operations.

2.5.1. Power

The project will require electricity Kwh connected load of above (KWH) 1000 maximum demand. Already the project has onsite power supply from the local electricity utility supply company. However, to ensure reliable and stable supply of power to the project, purchase and install standby generator and electrical transformer to buffer the electricity break outs has been proposed herein.

2.5.2. Water

The project requires water tank, pipe and accessories, valves, water tank steel plate, water pump to ensure water supply, already water supply system from the city utility company is in place. The project is herein proposing for improvement of water supply capacity to accommodate the anticipated increasing use.

2.5.3. Logistics

The project will use road transportation to carry raw material and processed products to and from the chemical mixing plant site. The project will use leased vehicles for all logistics and transportation until the time when the project cash flows allows acquisition of own trucks and other operation vehicles.

2.5.4. Buildings and other civil works.

The Project proposed refurbishing of auxiliary buildings just adjacent to the existing chemical mixing plant building, and work budget is proposed herein. The project site has already been fenced.

2.5.5. Repair and Maintenance

The cost of repair and maintenance has been estimated at 2.5% for machinery, 0.5% for buildings, 2.5% for vehicles and generator and will remain constant.

2.5.6. Data and Information System Capacity

The project will install the Information system to store and track production, sales, personnel, agents, logistics and clients' data. The budget for the items will be met by the operating capital budget.

2.6. Safety Procedures and Environmental Protection

The project assembling process has chemical wastes that need high and strictly means of disposal. Industrial development protection Regulators including OSHA and NEMC will assess the plant upon completion and commissioning before starting commercial operations to ensure it adheres to the law and regulations.

EIA to determine social and environmental impact will be carried out at later stage to ensure the project is adhering to an acceptable level of soil and processing activities.

The project will also maintain a strict quality control of both incoming raw materials as well as the finished products to meet the regulators requirement.

Factory design is planned not only to be environmentally friendly but also aesthetically appealing. The facility will comprise of the chemical mixing plant, office space, warehouse, an open and reserve water tank, and well-designed roof that allows adequate ventilation and lightning to minimize energy consumption.

Chemical Plant, Machinery and Equipment designs make and capacity ratings have been carefully selected based on their suitability and minimal environmental emissions.

Waste Disposal - production process flow is environmentally friendly as the waste treatment plants will be constructed at a later stage.

2.7. Operational Plan

2.7.1. Current Status

The project promoters are using their own funds to meet preliminary costs including arrangement, technical advisory services, consultancy and legal documentation.

The project promoters have already arranged financial facility required for importation of the full factory machinery set from CI-Africa in South Africa

- Debt arrangement/ Lease model to part finance the proposed project is herein proposed.
- Chemical product testing of the anticipated products quality and standard- have already been tested by the CI-Africa and are to be assigned with ISO certification and TBS and other authorities, some of the anticipated products are currently being used in South Africa.
- The project building interior design and architectural modification to suite usage - will be carried out using the promoters' funds.
- Basic concept and business plan appraisal is available Building detailed design, drawings, and identification of sources and plan of raw materials supply - are available.

2.7.2. Activities and Milestones

The following timeline illustrates the detailed activities planned during the Implementation phase. These activities are a one-time expenditure. Once completed, minimal maintenance will assure a continual working infrastructure for a successful production operation

Table 5: Schedule of Activities According to a 6 Month Timeline:

The implementation of the project for setting up manufacturing facilities will consist

PROCESS	ACTIVITY	TIME FRAME
INVESTOR ANALYSIS	• Generating and selecting business ideas	DONE
	• Business plan Preparation	
	• Business Plan Evaluation	
	• Selection of machinery & Equipment	
	• Project Engineering & design	
	• Identification, application and approval of financing	

	Drawing up legal contracts with respect to:	
FINANCIALS	• Project Financing-Banks/Investors/partners	2 months
	• Acquisition of Chemical plant Machinery	
	• Construction and civil works	
	• Supply of machinery and equipment	
	• Site preparation	
WORKS	• Construction of buildings and partitioning of the factory building civil	1 month
	• Erection and installation of machinery and equipment	2 weeks
	• Training of technicians and workers	1 month
CHEMICAL PLANT OPERATION	• Plant commissioning	
	• Set up Maintenance and operation program	2 weeks
	• Pre-marketing	1 month
SALES	• Commence Commercial Production	
	• Quality control	

2.8. Permits and Regulations

To set up and operate Chemical Mixing plant requires the following permits

- NEMC – Environmental Impact Assessment,
- TBS- Application for a standard mark, premises registration, products registration,
- OSHA – Health and safety workplace registration iv. Municipal Council– business registration and health certificates for employees,
- Fire Inspection – The fire department,
- Radiation Inspection – Tanzania Atomic Energy Commission,
- Factory layout inspection – MIT,
- GCLA- Registration of chemicals and authorization certificates to use and store chemicals.
- WMA – Product volume registration, weighing scale,

- Labor department – workplace registration calibration.

2.9. Project Risk and Mitigations

2.9.1. Substantial Investment

The company intends to make substantial investment in industrial and domestic chemicals. The project success will depend among other things, on ability to secure significant amount of financing, management of the integration process, control of input cost, maintain and enhance of dominance in market, maintain sufficient operational and financial controls.

To mitigate this risk, the project will recruit a competent team with adequate knowledge in operating the project of this nature, training staff to ensure creation and sustainability in the market. The distribution set up of the company will also be geared towards selling of the proposed product and leverage the company's customer base. The project will be producing quality products that matches the market demand and specifications.

2.9.2. Operating risks

The operating risk occurs due to inability to achieve the desired economic production rates likely due to poor quality of products to march incumbent low quality cheap products, inexperience and quality of staff manning the project. The operating risk will be mitigated as follows:

- **Technical risk:** The supplier of machinery will provide a guarantee that the technology will work reasonably during the machinery economic life span, as well will provide training to local staff. In addition to this, the machinery to be installed is proven and has been applied in other countries worldwide.
- **Management risk:** The project will recruit qualified and experienced management team in project of this nature.

- **Cost risk:** This includes the increase in cost of labor, materials, productivity and operating expenses. This will be controlled by employing competent financial manager/controller to oversee financial management for the project.
- **Market risk:** The major buyers of our Chemical products will be Industrial and domestic consumers, who are very sensitive to cost than quality, in case of any incumbent low quality cheap products from oversea the project is likely to suffer from sales decline. This will be mitigated by expanding the products supply market by including other vendors including the export market to other East African Countries.

2.9.3. Completion risk

Like any other project in the chemical industrial sector, this Project is susceptible to the completion risk (also known as Construction, Development, or Cost-Overrun risk). The owner expects the loan proceeds and equity injected to be spent on construction and purchase of the new plant machinery set up on time and budget.

To mitigate this completion risk, the project will be implemented under engineering, procurement and construction (EPC) arrangement. The reputable EPC contractor will be contracted and the appropriate Liquidated Damages Clauses will be set in the contract in order to mitigate the risk completion risk.

3. MARKET POTENTIAL, MARKETING AND COMPETITION

3.1. Overview of the Industrial Sector in Tanzania

The chemical industry is particularly remarkable in Tanzania where total sales reached \$550 million in 2015, ranking it in top 5 contributor in industrial manufacturing sector. Tanzania bureau of Statistics has it that Tanzania has about 88 registered and licensed chemical trading cum wholesaling companies scattered all across different regions responsible for employing about 172,818 people. The industry is projected to enjoy 42.7% annual growth within 2015 and 2025. It is important to state that no company has the lion share of the available market in this industry.

3.2. Marketing

A major factor in profitability of the project will be on its ability to provide effective, affordable and quality products/services. Based on the chemical product selection to be produced in size, quality, colour, and usage with anticipated good management team, and the current supply niche arrangements; the company products will be able to capture a sizable market share; specifically, to mega projects being contracted in Tanzania and services with our sister companies like AKO group and others wholesalers and retail partners.

3.2.1. Required chemical Products

The market survey carried out by the project promoting team shows an increasing trend in domestic and industrial consumption of Chemical CLEAN products, industrialisation and urbanisation, has stimulated the use of quality chemical products hence opening customer supply base to the proposed project. Furthermore, population increase bring growth to all economic sector who heavily rely on chemical products for hygiene.

The BRi TAN Chemicals are suitable to many businesses and industries; below is just a few of the organizations and industries we can assist with cleaning and sanitation chemical and consumable requirements:

Table 6: A table describing potential markets for our products.

Businesses, Industries and Organizations			
1	Automotive and Transport	9	Clubs & Pubs
2	Vehicle Service Centers	10	Hotels & Resorts
3	Fuel Stations	11	Housekeeping
4	Heavy Plant Hire & Contractors	12	Laundries
5	Catering	13	Hospitals & Clinics
6	Food Processing	14	Cleaning and Sanitation
7	Beverage Processors	15	Commercial Cleaning
8	Fast Food Outlets	16	Facilities Management
17	Ablutions and Bathrooms	18	Places of Education
19	Public Facilities	20	Factories
21	Workshops	22	Construction
23	Waste Management	24	Parks & Recreation

According to the market survey analysis, consumers prefer affordable products found locally. The project competitive advantage edge of size, location, competitive ordering, pricing and delivery model and reasonably quality products blended with competent team to be recruited, place the project at good chance of competing effectively in the market.

At BRiTAN Coatings we have 72 specialized Chemo coating products which solve a multiple of conditions for corrosion protection and maintenance solutions for:

The industries we support and offer solutions to but not limited to:

Maritime	Oil & Gas	Mines
Industrial	Petrochemical	Agriculture
Marine	Power Generation	Beverage Manufacturing
Offshore	Rail	Construction

3.2.2. Market Share

The project will initially be focusing on pre-determined supply contracts especially to SF group of companies and their affiliates, and thereafter to Business to Business contracts and the open market.

Currently, there are other 88 other small scale players in Tanzania who are mainly servicing the domestic market, Other service industries import chemical products looking for quality and affordability.

Taking the strong shareholders with considerable capital base, experience in managing similar industrial production using modern technology and quality products, efficiency affordability and marketing strategies, the project anticipate to have reasonably market share. Also to be competitive, the project will prudently handle and determine products pricing, procurement of raw materials, and maintenance of product quality, adoption of promotional measures to match the market demand and supply forces.

3.2.3. Marketing Organization

Marketing personnel: The project will employ competent and experienced Sales and Marketing Officers responsible for marketing of chemical products in the market.

Market strategy: The project will use the over three decade promoters gained experience in importing and distributing the same products in the country to penetrate the market, including selling arrangements with different major buyers.

Sales strategies: The project will offer products that satisfy the need and wants of the end consumers; profitable and with competitive price; select the most efficient means of promotion; and select the most efficient means of bringing the products to the market place at reasonable cost;

Pricing Strategies: In selecting the price of products, the project will take into account the most competitive and profitable price; price that allows to be positioned in the market; and price that can affect demand of consumers positively;

Sales channels and methods strategies: The project distribution plan will be at plant gate delivery, tendering and directly delivery to customers both retailers and wholesalers.

3.3. Products Quality

Maintenance of processed products quality is one of the determinants for a successful marketing of BRiTAN Chemical products. To have better market, quality of the products will be assured, maintained and certified by the regulatory authorities including TBS and ISO, the users of the products generally prefer assurance of proper quality, safety and standard. The proposed production machinery to be installed and experienced personnel team to be recruited will ensure quantity, quality and standard products.

3.4. Output Pricing

Determination of product pricing plays an important role in achieving the market share of the project, hence the plant products price will be competitive and reasonably affordable to create a sizeable market share in the domestic and industrial chemical market. The proposed prices will reasonably match the market forces. The price will be reviewed from time to time to match the market needs and production economic factors.

3.4.1. Price Competitiveness

Special attention has been given to keep the projected products' price at reasonable comparison to the existing market price.

3.4.2. Sales Promotion

Sales promotion will be through advertising on the nature of products. The products advertising cost has been proposed and budgeted for. Since the promoters will also have

personal contacts with major consumers in the sub industry and wholesale market, they will also use personal selling approach as means of products promotion. To create mass awareness. the proposed project will advertise their product through website, paper, stickers, calendars. Social medias etc. after going into commercial production.

3.4.3. Location and Transport issues

The project production plant location is reasonably commendable and easily accessible by all-weather road.

3.5. SWOC analysis

The following SWOC analysis captures key strengths and weaknesses of the proposed Chemical mixing plant and final chemical products as well describes the opportunities and challenges to be faced.

Strengths

- The project locally presence ensures timely supply of the products.
- The project will be carried out by the well-established companies in the Chemical industry.
- The project is self-sustainable with commendable projected cash flows.
- The project promoters are passionate and able to champion the proposed project establishment.
- Takes advantages of sf group of companies use of the projected products
- Unique benefits to consumers not offered by the local competitors
- The project concept is within the country's Industrial Development Strategy

Weaknesses

- Need to employ technical staff
- Skilled personnel

- Dependability on imported raw materials

Opportunities

- Anchor for provision of quality and affordable products.
- Growing market for domestic and industrial chemical products.

Challenges

- Competition from new entrants and imports
- Counterfeit
- Unpredictable changes in the country economy indicators that determines strength of the Government (the major projects sponsor) to continue honoring new mega projects.
- New legislations on chemicals
- Limited market to supply

4. INVESTMENT COSTS AND FINANCING PLAN

4.1. Investment cost

The total investment cost required to establish chemical mixing plant and allied facilities, civil works, mechanical, electrical, electronics, communication and utility services including working capital and letters of credit as detailed in Table 9 is estimated at **USD 2,000,000.**

Table 7: Summary of land and buildings investment Cost in USD

Item	Existing Investment		Proposed Investment		Total (\$)
	Owners' Equity (\$)	Debt	Owners' Equity (\$)	Debt (\$)	
Preliminaries	25,000			25,000	25,000
Land Development				35,000	35,000
Building Construction				750,000	750,000
External works				70,000	70,000
Total land and buildings	25,000			820,000	820,000

Table 8: Summary of the total machinery and equipment cost.

Item	Existing Investment		Proposed Investment		Total
	Owners' Equity (\$)	Debt (\$)	Owners' Equity (\$)	Debt (\$)	
Finished Products Machinery				184,040	184,040
Maintenance Workstation Machinery line				65,700	65,700
Sampling Inspection of Finished products machinery				15,760	15,760
Production system software				21,500	21,500
Chemical Concentrates				98,000	98,000
Total Machinery and Equipment Costs				385,000	385,000

Table 10: Summary of the total investment cost in USD.

ITEM	EXISTING INVESTMENT		PROPOSED INVESTMENTS		TOTAL (\$)
	OWNERS' EQUITY (\$)	DEBT (\$)	OWNERS' EQUITY (\$)	DEBT (\$)	
Land/buildings				820,000	820,000
Plant				385,000	385,000
Vehicles				250,000	250,000
Furniture and fittings				45,000	45,000
Pre-expenses				210,000	210,000
Working capital				275,000	275,000
Others				15,000	15,000
TOTAL INVESTMENT COST					2,000,000

4.2. Financing plan

The project financing plan encompassing purchase and installation of a complete set of the chemical mixing plant, allied facilities and infrastructure will be financed in the form of lease to own model and owners' equity contribution at the ratio of 3%:97% respectively.

All Lease to own finance will be available before ordering and importing chemical plant machinery and chemical concentrate.

The civil works preliminary cost estimated at USD 25,000 will be covered by promoters. Other Operating costs will be covered when the project cash flows improve.

It is expected that the proposed leasing finance will attract an interest rate not exceeding 9% per annum.

4.3. Progress of Works

See para 1.1.3



Note that, technical evaluation of the existing infrastructure has already been carried out to justify its commercial feasibility and value for money viability.

The technical report shows the infrastructures are commercially feasible with reasonably assessable value for money.

5. FINANCIAL ANALYSIS

5.1. Revenue projections

The project's revenue projection is based on the Chemical plant production capacity level

The above systems will manufacture	Hours work per Day	20/5 Litres/h	Per day/ Litres
8 Hours per Day/single shift	8.00	2,000	16,000

The plant will operate 8 hours averagely per day for a total of 263 days per annum. The plant installed utilization capacity is estimated to start at 60% in year one that will increase progressively to reach at maximum rate of 100% from year two.

Generally, the financial analysis has been computed based on 5 years of operation to assess the project financial viability. Other assumptions underlying the financial projections are;

- a) The cost of other accessories has been kept constant throughout the period on the assumption that. increase in raw materials will be offset by increase in selling price of the products.
- b) Selling prices of products are assumed to increase by 2% annually while all other costs are projected to increase by 2.5% per year.
- c) The depreciation/amortization of various assets of the project are considered at normal rates that prevails in the industrial sector (4%)
- d) Insurance premium has been estimated to be charged at 2.5 % of the cost of the fixed asset and raw materials stocks,
- e) Other expenses like power and fuel are charged as per prevailing market price,

- f) General and Administrative expenses are estimated per prevailing market price, and, no tax holiday has been considered hence income tax rate of 30% is expected to remain unchanged during the projected period of 5 years.
- g) The Chemical mixing plant production will start immediately after commission of the plant from CI-Africa finishing machinery installation,
- h) Lease payment will start after three months of operation of the chemical plant

The plant products price will be constant and adjusted accordingly yearly to match changes in market. The applied exchange rate is TZS 2,275 to 1 USD.

Operating Expenses

The main operating expenses include;

- a) plant production costs,
- b) administrative costs,
- c) personnel, and purchases.

5.2. Re-investment Expenditure.

Re-investment expenditure is assumed to occur when an asset/group of assets is/are fully depreciated. These assets are replaced at their initial costs. Despite of consideration of the re-investment costs, repair and maintenance cost is also projected to happen at the rate of 2.5% of all fixed assets except factory buildings, which are assumed to be at 0.5% of construction costs. All these costs will be funded through normal operations.

5.3. Financial Highlights

Financial forecasts over a five years' period of the project have been worked out. Project costs are presented in Appendix 3, whereas the assets depreciation schedule is presented in Appendix 4. Lease repayment schedule is presented in Appendix 5.

Projected sales are presented in Appendix 6. Appendix 7 presents operating expenses, administrative costs and manpower requirements.

The projected income statement is presented in Appendix 8 while cash flow projections in Appendix 9 and discounted cash flow projections (calculation for Net Present Value and Internal Rate of Return -IRR) in Appendix 10.

5.4. Facility Utilization plan

During the first year of operations, the factory production capacity will be at 60% of the installed capacity that will increase progressively to reach 100% by year two.

5.5. Turnover and profit

- The Project anticipate to generate revenue of USD 1,069,001.87 in year one, and assumed to continue growing throughout the project lifespan plan, mainly due to fact that, production levels and other operation factors are also assumed to scale up as the sales grow.
- The project anticipates to generate gross profit of USD 302,819 in year one that will also grow throughout the projected lifespan.
- The project anticipates to generate pre-tax and net tax of USD 302,819 and USD 102,294.06 respectively in year one that will increase to USD 187,667
- Net cash flows anticipate to average at USD 102,294.06 after production, personnel costs, other operating costs and capital costs in the first years and is projected to remain positive throughout the project lifespan.
- The Project requires an equity commitment (both existing and proposed including the initial working capital element) of USD million which is recoverable during project implementation.

The project is considered highly profitable with commendable net cash flows along the project projected life span.

Due to its sound liquidity, the project will be capable and comfortably able to service its term loan liabilities from year two of its operations. Cash Flow projections are presented in Appendix 9.

5.6. Critical Financial Ratios

5.6.1. Ratio Analysis

The critical financial ratios of interest and debt servicing are all above one (1) implying ability of the project to meet its mature financial obligations comfortably. The key financial ratios are presented in Appendix 11.

5.6.2. Net Present Value and Internal Rate of Return Analysis

Through the Discounted Cash Flow (DCF) method the project realizes an attractive and positive NPV and Internal Rate of Return (IRR) of 68.7 %.

which is above the capital investment cost of 9%, hence evidencing the project to be financially viable.