GOLDORIX.TANZ COMPANY LIMITED

BUSINESS PLAN

FOR

MINERALS (GOLD) PROCESSING

PREPARED FOR

GOLDORIX.TANZ COMPANY LIMITED

1.0. Introduction

GOLDORIX.TANZ COMPANY LIMITEDis a new company incorporated in Tanzania with Certificate of Incorporation No. 156853593 dated 20th July 2022 159153037 dated 2nd December 2022 the company is owned by 2 shareholders.

GOLDORIX.TANZ COMPANY LIMITED has acquired land located at **area ifumbo, ward: ifumbo mlima, District: Chunya- Mbeya** The proposed area will be used for minerals processing

GOLDORIX.TANZ COMPANY LIMITEDvision is to offer our clients reliable, secure, and fast Gold processing. GOLDORIX.TANZ COMPANY LIMITED also aim to be amongst the medium size company providing gold processing facility of high quality with environmentally friendly equipment by the year 2025.

GOLDORIX.TANZ COMPANY LIMITED location in **area ifumbo, ward: ifumbo mlima, District: Chunya-Mbeya** is very strategic as is the area with large and good quality various industrial minerals deposit in Tanzania and the availability of skilled workforce is very fundamental for such project, **District: Chunya- Mbeya** is the ideal place where abundant of skilled force are available that will lower overheads in running Gold processing facility.

GOLDORIX.TANZ COMPANY LIMITEDintend to procure the best equipment in order to be able to provide the best for our clients, lower operation cost and increase minerals recovery. GOLDORIX.TANZ COMPANY LIMITED goal is also to ensure that we build a business structure that will aid us in achieving our corporate goals and objectives.

PERMANENT MINERALS CO. LIMITED's intention in running a smooth business with as less hitches as possible are to ensure that we hire the right number of employees who not only have an understanding of the industry and are professionals but also are attuned to our corporate goals and vision and are committed to ensuring that these goals and visions are achieved.

GOLDORIX.TANZ COMPANY LIMITEDintend to provide a conducive and friendly environment for our employees as well as ensure that they get the required training that is continuous in nature so as not only to enhance their skills and increase productivity for the organization but to also ensure that the skills gotten are the best across similar start-up such as ours in the industry.

2.0 **Some Of Few Selected Machines and other items**

The Gold processing equipment primarily includes:

- Gold vertical stirring mill,
- Flotation machine,
- Drum dryer,
- Agent agitation tank,
- Chamber filter press,
- XHGY-B series numerical control agent feeder
- Gold ore crushing stage

3.0 The Sponsors

GOLDORIX.TANZ COMPANY LIMITED will be sponsoring this project. The Company is currently owned by 2 shareholders.

Names of Shareholders	Number of Shares	Nationality
AIHAM BADER	98	Commonwealth of Dominica
MOUHAMAD AL TESBEHJI	2	Lebanese

3.1 Objective of Study

The purpose of this study is to work out the technical and commercial details and financial viability of the project

3.2 Location

There are two considerations on this point. One is referred to as the mine and the other is the treatment plant. Ideally, the first one must be close to the plant, but sometimes the area and accessibility are serious issues. Probably, the most critical aspect is the plant location due to the idea is to have a good foundation for the buildings to be constructed and using the geography of the area. The latter is important because the gravity force must be utilized at maximum because the energy is an operative cost that will influence the economy of the project.

If the plant will be located near cold zones where the temperature can reach low values, the building must

consider special protection due to exists the possibility of having frozen problems with the slurry. This situation is painful if the problem is not considered before. The project location of treatment plant has been selected after considering all factors, the project will be located at **Area ifumbo, ward: ifumbo mlima, District: Chunya- Mbeya 3.3 Profitability**

The economy and profitability of the project is influenced by the mining costs, operative costs, shipping costs, impurity levels, concentrate treatment charges and smelter/refinery returns. These factors have to be projected from the laboratory tests or scaled metallurgical tests. Basically, minerals concentrate has to be related to the mineralized block, minerals distribution, and diluents such as pyrite, Gold , clays, and organic matter. GOLDORIX.TANZ COMPANY LIMITEDhas studied All these factors together in order

to optimize the revenue of the project according to the mineralized zone.

The company's production capacity is estimated to be1000 tone per year and the average selling price is US$20,000 of CSPG Gold

3.0 What Equipment Is Needed for Gold Ore Beneficiation

In recent years, with the strong rise of the new energy industry, related raw materials have received extensive attention. Among them, Gold , as an important battery anode material, is of great significance in the development of new energy, and its beneficiation technology and equipment have been greatly developed. The Gold ore beneficiation process mainly includes the stages of crushing, grinding, and beneficiation.

Gold ore crushing stage

Gold ore is soft in nature. Generally, the hardness of Gold ore is medium-hard or medium-hard and soft. Therefore, the crushing process of Gold is relatively simple, and the crushing process that can usually be used includes two-stage one-closed-circuit crushing, two-stage open-circuit crushing, or one-stage open-circuit crushing process. A small number of new Gold ore processing plants may also adopt a three-stage closed-circuit crushing process.

The first-stage crushing of Gold ore usually uses a. The secondary crushing can use a cone crusher to further reduce the particle size of Gold ore. Screening equipment can use circular vibrating screen

Crystalline Gold ore grinding stage

Since Gold has a flake structure, it is necessary to ensure that the Gold concentrate has as many large

flakes as possible in the grinding stage to improve the large flake rate of the concentrate. At this stage, the shape of the grinding medium and the form of the mill has a great influence on the large flake rate of the Gold concentrate. In the selection of, rod mills, vertical stirring mills, and other equipment can be selected as the main grinding equipment.

Crystalline Gold ore beneficiation stage

According to the properties of raw Gold ore, the beneficiation of crystalline Gold can be divided into four types: coarse flake Gold ore, medium flake Gold ore, fine flake Gold ore, and cryptocrystalline Gold ore. Due to the different properties, the four types of Gold have different sorting methods, and flotation is the main sorting method.

①Coarse flake Gold ore has large Gold flakes and good floatability. The Gold particle size is generally 0.6~2mm, the Gold content is 1%~10%, and the raw ore contains a certain amount of mica. In the separation of this kind of Gold ores, the main purpose is to protect the large scales. The grade of Gold concentrate is above 87%.

②In the medium flake Gold ore, the raw Gold flakes are medium in size and have good floatability. The Gold particle size is 0.2~0.6mm, and the Gold content is 4%~15%. This kind of ore contains less mica, and the beneficiation is mainly to protect the existing Gold flakes and improve the yield of large flake Gold . Its Gold concentrate grade is controlled at 86% to 90%.

③ The Gold flakes of fine flake Gold ore are smaller, and the floatability is poorer than that of medium flake Gold . The particle size of Gold in the raw ore is

0.03~0.2mm, and the Gold content is 6%~15%. The selection of this kind of Gold ore is mainly to improve the purity of Gold . At the same time, the Gold flakes are protected from damage, which can reduce the requirement of Gold recovery rate. The grade of Gold concentrate is generally around 90%. Multi-stage grinding and multi-stage beneficiation process are often used in this kind of ore separation to strengthen the beneficiation process.

④ The Gold particle size of cryptocrystalline Gold is generally below 1 μm. Due to its fine Gold particle size, other beneficiation methods can also be used in addition to the flotation method, such as alkaline acid method, hydrofluoric acid method, high temperature purification method, etc.

In the process of Gold ore flotation, the flotation equipment selected can be aerated agitated flotation

machine, mechanical agitated flotation machine, flotation column, etc. Among them, KYF-type flotation machine and XCF-type flotation machine can be selected for aerated stirring flotation machine, and SF-type flotation machine, JJF-type flotation machine, BF-type flotation machine, etc. can be selected for mechanical stirring flotation machine. Among them, the XCF flotation machine can form a flotation unit with the KYF flotation machine. The horizontal configuration of the flotation unit can be realized without the need to use a foam pump, and the capital construction cost required for the stepped configuration can be reduced.

The above is about the content of Gold ore beneficiation equipment. In actual beneficiation production, scientific and reasonable beneficiation process and beneficiation equipment should be determined according to the properties of Gold and

the test results after , so as to ensure the economic benefits of the beneficiation plant and the rational utilization of resources.

4.0 Gold Production Process

- **Mining**

Gold ore is mined using excavating machines that carry dump trucks with raw ore.

The entire extraction process follows a mining plan, facilitating the selection of the most suitable one for final products.

- **Homogenization**

The deposition of this ore on the feeding plant is systematized to form feeding piles in layers.

The goal is to reduce the natural variability of the ore.

- **Mechanical Concentration**

The ore is subjected to successive grinding and a mechanical process separating impurities from the Gold

. The mechanical concentration aims for maximum recovery of the Gold present in the ore, preserving its physical features.

- **Chemical Concentration**

The chemical concentration is used to remove the remaining impurities in the previously Gold mechanically concentrated. Nacional de Grafite uses and treats the residues of the chemical concentration in order not to pollute the environment.

- **Filtering and drying**

After the chemical concentration, the Gold is washed extensively with demineralized water, reaching a neutral pH. The remaining moisture is removed in Press-type filters and rotary dryers.

- **Classification**

Screening techniques are used to classify the particles of the concentrated Gold , reaching the desired particle size distribution.

- **Milling**

Jet and hammer mills grind the concentrated Gold until it reaches the desired size. The ground particles are classified, enabling control of the particle size distribution of the product generated. The different methods of grinding and classification allow for the shaping of the particle, giving the Gold distinct characteristics of density and a specific surface.

- **Briquetting**

In this process, agglomerated Gold grains are produced for use as carburized and carbon additives.

- **Intercalation**

Due to its extreme anisotropy, the Gold crystal enables salts to be intercalation in its structure. When heated, these salts evaporate, causing the disruption of inter-

planar connections, "expanding" the Gold . Nacional de Grafite developed Gold intercalation and expansion processes compatible with the environment.

GOLDORIX.TANZ COMPANY LIMITEDCOST STRUCTURE US$

Land and Buildings	400,000.00
Machinery & Equipment	2,500,000
Motor Vehicles	500,000
Furniture & Fixtures	5000
Pre exp	45,000.00
Others	50,000.00
Working Capital	1,500,000.00
TOTAL	**5,000,000.00**

For the project to be a reality a total investment amounting to US $5,000,000. is needed

(i) Land and Building (industrial premises): US$400,000

The project has identified and secured a long-term lease to accommodate machinery and be used as a project office.

(ii) Machinery and Equipment: US$ 2,500,000

Some US$2,500,000 is anticipated to be spent on the purchase of different types of machines, working tools, and equipment accommodating new technology

(iii) Motor Vehicles: US$500,000

The project will need 10 trucks, 2 Land Cruisers, and 2 double cabin picks. These vehicles will be used to facilitate project business and double cabin pick-up for administrative purposes.

(iv) Furniture: US$5,000

This investment cost item has been estimated to cost US $5,000. It will consist of office furniture such as tables, chairs, telephone, fax, machines, file cabinets, sofa chairs, etc.

(v) Pre-Operational Expenses: US$ 45,000

They cover things like company registration, and expenses spent in exploring the viability of the project, especially the market/client identification exercise. Also included under this item are issues like consultancy fees, legal fees, and recruitment and training costs of personnel.

(vi) Initial Working Capital: US$1,500,000

Assumptions for working capital requirements have been estimated that it will cost US$1,500,000. This will involve purchasing raw materials, daily operating costs, etc.

7.1 Financing pattern

The project will be financed by a US$3,000,000 loan and the remaining 2,000,000 contributions from company shareholders and cash flow from business

8.0 Financial Analysis

8.1 Considerations and Assumptions:

The corporate tax charged is 0% of the profits for 8 years. The capital investment allowance is 50%. The capital assets are exempted from customs duty and Value Added Tax. The straight-line method to depreciate the project's capital items has been applied.

Revenues have been conservatively estimated based on the experience of the promoters and trends in the industry.

8.2 Projected Profit and Loss Statement

The Income and Expenditure Statement shows the projected income for the 5 years period. The position depicted is that the project earns profit throughout its life. Accumulated after profits grow from. US$1,891,050 in first year to US $ 10,559,076 in the 5th year

GOLDORIX.TANZ COMPANY LIMITEDPROJECTED INCOME & EXPENDITURE STATEMENT (US$)

-	1	2	3	4	5
Revenue	**20,000,000.00**	**21,000,000.00**	**22,050,000.00**	**23,152,500.00**	**24,310,125.00**
Operating Expenses:	**17,000,000**	**17,850,000**	**18,742,500**	**19,679,625**	**20,663,606**
Gross Profit Before Interest and Depreciation	**3,000,000**	**3,150,000**	**3,307,500**	**3,472,875**	**3,646,519**
Interest	**240,000**	**240,000**	**240,000**	**240,000**	**240,000**
Depreciation	**58,500**	**58,500**	**58,500**	**58,500**	**58,500**
Gross Profit	**2,701,500**	**2,851,500**	**3,009,000**	**3,174,375**	**3,348,019**
Tax (30%)	**810,450**	**855,450**	**902,700**	**952,313**	**1,004,406**
Profit After Tax	**1,891,050**	**1,996,050**	**2,106,300**	**2,222,063**	**2,343,613**
Accumulated Profit	**1,891,050**	**3,887,100**	**5,993,400**	**8,215,463**	**10,559,076**

7.5 Projected Cash Flows

This is shown in the financial statements. The project has a positive end-of-year cash flow from year 1st, i.e., US$ 2,189,550 of operation to the 6th year i.e., US$ 12,051,575

GOLDORIX.TANZ COMPANY LIMITEDPROJECTED CASH FLOW " US$"

	0	1	2	3	4	5
SOURCES:						
Profit before interest and depreciation	-	**3,000,000**	**3,150,000**	**3,307,500**	**3,472,875**	**3,646,519**
Equity	2,000,000					
Loan	3,000,000					
Total Sources	**5,000,000**	**3,000,000**	**3,150,000**	**3,307,500**	**3,472,875**	**3,646,519**
Applications:						
Capital expenditure	3,405,000		-	-	-	-
working Capital &Others	1,595,000					
Cash	-	2,189,550	2,294,550	2,404,800	2,520,562	2,642,113
Tax	-	**810,450**	**855,450**	**902,700**	**952,313**	**1,004,406**
Subtotal	**5,000,000**	**3,000,000**	**3,150,000**	**3,307,500**	**3,472,875**	**3,646,519**
Total applications	**5,000,000**	**3,000,000**	**3,150,000**	**3,307,500**	**3,472,875**	**3,646,519**
Accumulated cash		2,189,550	4,484,100	6,888,900	9,409,462	12,051,575

7.6 Projected Balance Sheet Statement

The projected shareholder's equity increases from US$ 2,000,000 in 1st year to loan US $12,559,076 in 5th

GOLDORIX.TANZ COMPANY LIMITEDPROJECTED BALANCE SHEET " US $"

Fixed Assets	**1**	1	2	3	4	5
Opening balance	-	**3,405,000**	**3,346,500**	**3,288,000**	**3,229,500**	**3,171,000**

Total Long-term Assets	**-**	**3,405,000**	**3,346,500**	**3,288,000**	**3,229,500**	**3,171,000**
Less depreciation	**-**	**58,500**	**58,500**	**58,500**	**58,500**	**58,500**
Closing balance	**-**	**3,346,500**	**3,288,000**	**3,229,500**	**3,171,000**	**3,112,500**
Working capital	1,595,000	7,550,000	7,550,000	7,550,000	7,550,000	7,550,000
Accumulated cash	-	2,189,550	4,484,100	6,888,900	9,409,462	12,051,575
Total assets	**1,595,000**	**1,595,000**	**1,595,000**	**1,595,000**	**1,595,000**	**1,595,000**
Financed by						
Equity	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Accumulated profit	-	1,891,050	3,887,100	5,993,400	8,215,463	10,559,076
Total equity	2,000,000	3,891,050	5,887,100	7,993,400	10,215,463	12,559,076
Bank Loan	3,000,000	2,500,000	2,000,000	1,500,000	1,000,000	5,000,000
Total debts	**3,000,000**	**2,000,000**	**2,000,000**	**1,500,000**	**1,000,000**	**5,000,000**
Total equity and debts	**5,000,000**	**5,891,050**	**7,887,100**	**9,493,400**	**11,215,463**	**17,559,076**

7.7 Projected payback period

Total investment is US $ 5,000,000 cash accumulation in 3rd year is US 6,168,900 which is more than the initial investment of US$1,168,900 the project payback period is within 3 years,

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GOLDORIX.TANZ COMPANY LIMITEDPAYBACK PERIOD

Year	Profit After Tax	Depreciation	Total Cash Flow	Accumulated Cash Flow
1	1,891,050	**58,500**	**1,949,550**	1,949,550
2	1,996,050	**58,500**	**2,054,550**	4,004,100
3	2,106,300	**58,500**	**2,164,800**	6,168,900
4	2,222,063	**58,500**	**2,280,563**	8,449,463
5	2,343,613	**58,500**	**2,402,113**	10,851,576

8.0 **Economic Aspects**

Implementation of this project will have the following social and economic values

- The project is an ideal option for the utilization of the available mineral's mineral resources
- The project will create employment for **80** people on a permanent contract basis as well as on a temporary basis.
- It will create more business opportunities for local suppliers which will also have an economic trickledown.

- It will generate substantial revenue for the government in the form of corporate tax, value-added tax, and pay-as-you-earn.
- The project will have the transfer of knowledge and skills to minerals process management
- Increase in foreign currency

9.0 Implementation

Project implementation is expected to be relatively very short once the project has been approved it is estimated that the project will be completed within one year: -

GOLDORIX.TANZ COMPANY LIMITEDIMPLEMENTATION

S/N	ACTIVITY	PERIOD
1	Processing TIC Certificate	August 2023
2	Placing order of machines	September- September 2023
3	Installing machines	September –April 2024
4	Recruitment	April 2024
5	In house training	April- May 20234
4	Testing production	May 2024
6	Commercial operations	June 2024

10.0 Conclusion & Recommendations

The project is technically feasible, financially viable, and economically sound, provided the sponsors will manage it efficiently.

It is recommended that the project be approved by Tanzania Investment Centre and be granted the TIC Certificate of Incentives with its associated privileges and benefits as provided for under the Tanzania Investment Act, 1997.