

**LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED**

Business Plan

for

Gold Processing Plant Project

*PREPARED FOR*

*LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED*

*Dar es Salaam*

## 1.0 EXECUTIVE SUMMARY

LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED is a company registered in the country under the Companies Act 2002 and bears Certificate of Incorporation No.181112441 issued on 10th January, 2025.

The proposed project involves establishing gold processing plant with a capacity of ~250,000 tons of ore per year, achieving high gold recovery and profitable operations while complying with Tanzanian mining and environmental regulations.

- The proposed investment is estimated to cost US\$ 5.5 million
- Expected annual gold output IS 675kg
- projected revenue: ~US\$ 40.5 million/year
- Price is estimated to be USD\$ 60,000/kg gold

### 1.1 COMPANY OWNERSHIP

LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED is promoted by local and foreign investors who are very experienced in transport and logistic business

Shareholder Name	% of ownership	Nationality
SOKHILAL PANDIT	75	India
JIMMY JOHN SHAO	25	Tanzania

## 1.2 PROJECT LOCATION

The project head office will be located at un surveyed land at Mpomvu Area, Geita District, Geita Region.

**1.3 Vision:** To become a leading gold processor in Geita, providing high-quality doré bars.

**1.4 Mission:** To process gold efficiently, responsibly, and profitably while creating employment and contributing to Tanzania's economy.

## 2.0 Business Description

LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED will establish a gold processing plant to serve the growing gold mining sector in the Geita region. The plant will:

- Process gold-bearing ore into doré bars (approx. 90–95% pure gold).
- Use gravity separation, cyanidation, and smelting.
- Ensure environmental compliance and safety in operations.

## 3.0 Gold Industry Overview

### 3.1 Global Gold Industry

- Market Size:
  - Global gold production is ~3,300–3,500 tons per year.

- Major producers: China, Australia, Russia, USA, and South Africa.
- Global gold market value: ~USD 200–250 billion annually.
- **Uses of Gold:**
  - Jewelry: ~50% of global demand.
  - Investment: Bullion, coins, ETFs (~30%).
  - Industrial: Electronics, medical devices (~10–15%).
- **Price Trends:**
  - Gold is a hedge against inflation and currency fluctuations.
  - Price fluctuates based on economic conditions, geopolitical tensions, and central bank policies.
  - Average price 2025–2026: USD 60,000–65,000 per kg (~\$1,900–\$2,100 per oz).

### **3.2 Industry Structure:**

- Large-scale mining companies: Own major mines, advanced processing, global supply chains.
- Medium-scale operations: Serve local/regional markets.
- Artisanal and small-scale miners (ASM): Often informal, provide raw ore to local processors or exporters.

### 3.3 Gold Industry in Africa

- Africa contributes ~20% of global gold production.
- Key African producers: South Africa, Ghana, Mali, Sudan, Tanzania.
- Mining is a major source of foreign exchange, government revenue, and employment.
- Challenges: illegal mining, environmental degradation, infrastructure gaps.

### 3.4 Gold Industry in Tanzania

- **Production:**
  - Tanzania is Africa's 4th largest gold producer.
  - Annual production: ~50–55 tons.
  - Main gold-producing regions: Geita, Mwanza, Shinyanga, Mara, Lindi.
  - Both large-scale mines (e.g., Geita Gold Mine, Bulyanhulu) and artisanal miners operate.
- **Economic Contribution:**
  - Gold accounts for ~30% of Tanzania's export earnings.
  - Provides employment to thousands of people.
  - Supports local infrastructure and social projects via corporate social responsibility (CSR).

- **Mining Structure:**

- Large-scale: Operated by multinational companies with advanced processing plants.
- Small-scale/artisanal mining (ASM): Contributes ~20–25% of total production; often informal and less regulated.

### 3.5 Processing & Refining

- Most gold is exported as doré bars or concentrate.
- Some medium-scale processing plants (like the one you plan) exist to serve ASM miners.
- Environmental and regulatory compliance is increasingly emphasized.

### 4.0 Challenges in Tanzania’s Gold Industry

Challenge	Impact
Illegal mining & smuggling	Loss of revenue, unsafe practices
Environmental degradation	Deforestation, water pollution, tailings risks
Fluctuating gold prices	Profit margin uncertainty
Energy & infrastructure	High cost of electricity, water, transport

## **5.0 Opportunities**

- High global demand for gold, especially in jewelry and investment.
- ASM miners need reliable processing facilities—great market for small-to-medium processing plants.
- Government incentives for formalization and value addition.
- Growing export potential to international refineries.

## **6.0 Future Outlook**

- Gold demand is expected to remain strong due to investment and jewelry markets.
- Tanzania is likely to increase production as regulations improve and large-scale investments continue.
- Medium-scale processing plants like yours are well-positioned to serve artisanal miners, capture value locally, and provide employment.
- Environmental compliance and modern technology adoption will be key differentiators.

## **7.0 Market Analysis**

### **7.1 Industry Overview:**

- Tanzania is Africa's fourth-largest gold producer.
- Geita is the leading gold-producing region.
- High demand for gold both locally and internationally.

## **7.2 Target Market:**

- Local gold miners needing processing services.
- Export markets (gold refineries and bullion traders).

## **8.0 Marketing & Sales Strategy**

- Establish agreements with local miners for ore supply.
- Direct sales to Tanzanian gold exporters or licensed refineries.
- Promote reliability, security, and high gold recovery rates.
- Maintain relationships with financial institutions for secure gold trading.

## **9.0 Competitive Analysis:**

- Competitors include local small-scale processors and large-scale mining companies.
- Our competitive advantage: modern processing technology, high recovery rates, compliance with environmental regulations, and strong security measures.

## 10.0 Risk Analysis & Mitigation

Risk	Mitigation
Gold price volatility	Hedging, forward contracts
Ore grade variability	Detailed sampling, flexible process
Cyanide handling risks	Proper training, detox systems
Power shortages	Backup diesel generators
Theft / Security	Fencing, CCTV, secure storage

## 11.0 Technical Plan & Operations

### 11.1 Ore Source

- Local gold-bearing ore from Geita mines.
- Average grade: 2–5 g/t.
- Expected processing capacity: 250,000 tons/year.

### 11.2 Processing Technology

- **Crushing & Grinding:**
  - Jaw crusher → cone crusher → ball mill.
- **Concentration:**
  - Gravity separation: jigs, shaking tables, centrifuges.

- Flotation (if required for sulfide ore).
- **Cyanidation / Leaching:**
  - Carbon-in-Leach (CIL) or Merrill-Crowe process.
  - Recovery: 90–98% depending on ore type.
- **Smelting & Refining:**
  - Produces 90–95% pure doré bars.
  - Optional electro-refining for 99.99% purity.

### **11.3 Infrastructure & Equipment**

- Plant buildings: crushing, grinding, processing, gold room.
- Tailings storage facility (TSF).
- Diesel generators / grid connection.
- Water treatment system.
- Security: fencing, CCTV, secure storage.

### **12.0 Environmental & Regulatory Compliance**

- Comply with Tanzanian Mining Act, Environmental Management Act, and Mineral Rights Act.
- Conduct Environmental Impact Assessment (EIA).
- Tailings management and cyanide detoxification.
- Air and water pollution control measures.

### 13.0 Organizational Structure

Position	No. of Staff
Plant Manager	1
Metallurgists / Engineers	3
Operators & Technicians	20
Security & Administration	10
<b>Total Staff</b>	<b>34</b>

### 14.0 Implementation Timeline

Phase	Duration (Months)
Feasibility study, licensing	1-3
Procurement of equipment	4-6
Civil works & plant installation	7-12
Trial runs & commissioning	13-15
Full-scale production	16-18

### 15.0 Project Operating Cost

The company has estimated that the project operating cost and other cost to be 75% of the total annual revenue.

#### 15.1 PROJECT FINANCING

The company has estimated that the project will be financed by long term loan amounting to US\$2,000,000 with interest rate of

8% repaid within 4 years and remaining US\$ 1,800,000 will be shareholders contribution and cashflows generated from business.

## 12.2 PROJECT COST

The project has budgeted to cost the followings:

Land and Buildings	900,000
Machinery & Equipment	2,000,000
Motor Vehicles	800,000
Furniture & Fixtures	15,000
Pre exp	50,000
Others	135,000
Working Capital	1,600,000
<b>TOTAL</b>	<b>5,500,000</b>

## 12.3 Revenue & Profit Estimate

- Ore Processed: 250,000 tons/year
- Average Grade: 3 g/t → 170 kg gold
- Recovery Rate: 90% → 170 kg gold
- Gold Price: USD 60,000/kg → Revenue
- Operating Costs 75%

## 13.0 FINANCIAL ASPECTS FOR THE PROJECT

- **Projected Profit and Loss Statement**

The attached Appendix I shows the projected income for the 8years period. The position depicted is that the project earns profit throughout its life. Accumulated after tax profits grow from. **US\$ 1,589,350** in the 1<sup>st</sup> year to **US\$ 9,109,002** in the 5<sup>th</sup> year.

- **Projected Cash Flows**

The project's cash flows are shown in Appendix II. They depict a good liquid position right from the first year. Cash accumulation builds up from **US\$ 1,868,850** in the first year to **US\$ 10,186,502** at the end of 5<sup>th</sup> years of the project's operations.

- **Projected Balance Sheet**

The project's assets cash flows are shown in Appendix III. Owners' equity grows from **US\$ 3,500,000** in the first year to **US\$ 12,609,002** at the end of 5<sup>th</sup> years of the project's operations based

- **Payback Period**

Total investment is **US\$ 5,500,000** cash accumulation in 3<sup>rd</sup> year **US\$ 5,849,963** which is more than the initial investment. The project payback Period is exactly 3years. The project has a relatively short payback period.

- **Loan repayment**

Total investment loan is **US\$2,000,000** to be repaid within 5 years.

#### 14.0 **ECONOMIC ASPECTS OF THE PROJECTS**

Besides the financial/monetary returns to the owners, there are other benefits to be derived for the whole country viz.

- **Employment Opportunities**

Employment and poverty reduction are among the major concern of the Central and the Local Government authorities. It is gratifying to note that the company, is going to provide additional employment to 34 people. This is a significant contribution coming from investors.

- **Revenue to the Government**

The Project is expected to pay a substantial annual amount in the form of corporation tax and other taxes

- **Foreign Exchange Earning**

Project is planning to export to neighbouring countries the project will thus earn foreign currency for the United Republic of Tanzania.

#### 15.0 **CONCLUSION**

- The project is profitable and contributes to government revenue by way of taxes.
- The project provides employment to 34 people.
- The project is an encouraging sign to prove that we have good business environments and we have investors who have

confidence in their country. Tanzania so much so that they are ready to invest such large sums of investment despite the odds of the sector in question.

## **16.0 RECOMMENDATION**

After the foregoing economic and financial evaluation of the project, we strongly recommend that this project be implemented and be given all the support required by all the concerned Government Ministries and Agencies, including the Tanzania Revenue Authority, TRA and the TISEZA. The project deserves this support because of its viability, since it is technical feasible, economically viable and socially acceptable.

## LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED PROJECTED PROFIT AND LOSS STATEMENT US\$

	1	2	3	4	5
Revenue	10,200,000	10,710,000	11,245,500	11,807,775	12,398,164
<b>Total Cost</b>	7,650,000	8,032,500	8,434,125	8,855,831	9,298,623
<b>Profit before Depreciation &amp; Interest</b>	2,550,000	2,677,500	2,811,375	2,951,944	3,099,541
<b>Interest</b>	160,000	128,000	96,000	64,000	32,000
<b>Depreciation</b>	119,500	119,500	119,500	119,500	119,500
<b>Gross Profit</b>	2,270,500	2,430,000	2,595,875	2,768,444	2,948,041
Tax (30%)	681,150	729,000	778,763	830,533	884,412
<b>Profit After Tax</b>	1,589,350	1,701,000	1,817,113	1,937,911	2,063,629
Accumulated Profit	1,589,350	3,290,350	5,107,463	7,045,373	9,109,002

## LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED PROJECTED CASH FLOWS US\$

SOURCES:		1	2	3	4	5
Profit before interest and depreciation	-	2,550,000	2,677,500	2,811,375	2,951,944	3,099,541
Equity	3,500,000					
Loan	2,000,000					
Total Sources	5,500,000	2,550,000	2,677,500	2,811,375	2,951,944	3,099,541
Applications:						
Capital expenditure	3,715,000	-	-	-	-	-
working Capital & Others	1,785,000					
Cash	-	1,868,850	1,948,500	2,032,613	2,121,411	2,215,129
Tax	-	681,150	729,000	778,763	830,533	884,412
Sub total	5,500,000	2,550,000	2,677,500	2,811,375	2,951,944	3,099,541
Total applications	5,500,000	2,550,000	2,677,500	2,811,375	2,951,944	3,099,541
Accumulated cash		1,868,850	3,817,350	5,849,963	7,971,373	10,186,502

## LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED PROJECTED BALANCE SHEET US\$

Fixed Assets		1	2	3	4	5
Opening balance	-	3,715,000	3,595,500	3,476,000	3,356,500	3,237,000
Additions	-					
Total Long-term Assets	-	3,715,000	3,595,500	3,476,000	3,356,500	3,237,000
Less depreciation	-	119,500	119,500	119,500	119,500	119,500
Closing balance	-	3,595,500	3,476,000	3,356,500	3,237,000	3,117,500
Working capital	1,785,000	1,785,000	1,785,000	1,785,000	1,785,000	1,785,000
Accumulated cash	-	884,850	1,801,260	2,751,288	3,737,095	4,760,950
Total assets	1,785,000	6,265,350	7,062,260	7,892,788	8,759,095	9,663,450
Financed by						
Equity	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Accumulated profit	-	1,589,350	3,290,350	5,107,463	7,045,373	9,109,002
Total equity	3,500,000	5,089,350	6,790,350	8,607,463	10,545,373	12,609,002
Long term loan	2,000,000	1,600,000	1,200,000	800,000	400,000	-
Bank overdraft	-	-	-	-	-	-
Total debts	2,000,000	1,600,000	1,200,000	800,000	400,000	-
Total equity and debts	5,500,000	6,689,350	7,990,350	9,407,463	10,945,373	12,609,002

## LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED DEPRECIATION SCHEDULE US\$

NAME OF ASSETS	1	2	3	4	5
Land And Buildings	900,000	882,000	864,000	846,000	828,000
Machinery, Tools & Equipment	2,000,000	1,980,000	1,960,000	1,940,000	1,920,000
Motor Vehicles	800,000	720,000	640,000	560,000	480,000
Furniture & Fixtures	15,000	13,500	12,000	10,500	9,000
Total	3,715,000	3,595,500	3,476,000	3,356,500	3,237,000
DEPRECIATION	160000	2	3	4	5
Land and buildings	18,000	18,000	18,000	18,000	18,000
Machinery tools & Equipment	20,000	20,000	20,000	20,000	20,000
Motor Vehicles	80,000	80,000	80,000	80,000	80,000
Furniture & Fixtures	1,500	1,500	1,500	1,500	1,500
ANNUAL DEPRECIATION	119,500	119,500	119,500	119,500	119,500

## LAKE ZONE GOLD MINERS AND EXPORTERS LIMITED PROJECTED LONG TERM LOAN REPAYMENT

Year	Principle	Loan Interest (8%)	Total Amount Paid	Loan Balance
1	400,000	160,000.00	560,000.00	2,000,000.00
2	400,000	128,000.00	528,000.00	1,600,000.00
3	400,000	96,000.00	496,000.00	1,200,000.00
4	400,000	64,000.00	464,000.00	800,000.00
5	400,000	32,000.00	432,000.00	400,000.00

