

GOLD MINING AND REFINERY PROJECT



BUSINESS PLAN OF GOLD MINING AND REFINING PROJECT IN CHUNYA

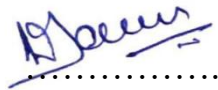
**VINAYAKA GOLD LIMITED
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April, 2024

APPROVAL OF THE BUSINESS PLAN

We confirm that the preparation of this business plan has been according to vision and mission of our company and that all information within this plan is correct based on our understanding. We, therefore, confirm that this is the company's business plan for the proposed project.

Approved by



.....

Chief Executive Officer

VINAYAKA GOLD LIMITED

ACRONYMS

USD:	United States Dollar
TIC:	Tanzania Investment Centre
GDP:	Gross Domestic Product
OTC:	Over the counter
US:	United States
IRR:	Internal Rate of Return
ROI:	Return on Investment
R&D:	Research and Development
CBD:	Central Business District

MEASUREMENTS

1 ounce=	28.35 grams
1kilogram=	1000 grams
1 ton=	1000 kilograms

CURRENCY EXCHANGE

1 USD= TZS 2584.95

(Based on 18 April 2024, BOT Exchange Rates)

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EXECUTIVE SUMMARY

The VINAYAKA GOLD LIMITED Company would be involved in Gold mining in Chunya district in Mbeya region, Tanzania. According to the World Gold Council, Tanzania has an estimated 45 million ounces (1400 tons) of gold reserves, making it one of the largest gold reserves in Africa and Chunya district is the second largest producer of Gold in Tanzania and has gold reserve of 3.3 million ounces. This means there is still significant potential for the country's gold mining industry to grow.

The Tanzanian government has recently implemented several policies to attract foreign investment in the country's mining sector. For example, in 2017, the government passed new mining laws that require mining companies to list on the Dar es Salaam Stock Exchange and increase the government's stake in mining companies. These policies have helped to attract new investment in the country's mining sector, including its gold mining industry.

The proposed project intends venture into gold mining and refinery to produce high quality gold for exports. Tanzania gold accounts for approximately 90% of the country's total mineral exports. Tanzania gold export market value is likely to reach a value of USD 3.15 billion in 2024 following the export trends of previous years. For instance, the export values was USD 1.6 billion in 2015 which increased to USD 2.2 billion in 2019 , to USD 2.84 billion in 2020, USD 2.84 billion in 2021 , USD 2.85 billion in 2022 and USD 2.95 billion 2023 according to the Bank of Tanzania (BOT).

The feasibility study report presents the justification of the project, market analysis, resources required, project location, implementation of the project, cost presentation and financial analysis

Summary of financial analysis

- ❖ *Internal Rate of Return : 377.26%*
- ❖ *Return On Investment: 542.40%*
- ❖ *Annualized ROI: 45.06%*
- ❖ *Payback Period: 2months*
- ❖ *Discounted Payback period (18%): 3 months*
- ❖ *Cash Flow Return Rate:377.26%*
- ❖ *Investment gain in 5 years: USD 2,809,609/=*

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CHAPTER ONE

ABOUT VINAYAKA GOLD LIMITED

Legal Formation

The company was incorporated on **26th March 2024** with registration number **173368526** as a private company limited by shares. The company registered office is located in Chunya ViewPoint, Chokaa Ward, Chunya, Mbeya.

Capital

VINAYAKA GOLD LIMITED has been ventured by two shareholders, whom are also the first directors of the company, Dilip Kumar Jain holding 3750 shares & Rekha Jain holding 1250 shares with market value (Market capitalization) of Tanzania Shillings Three Hundred Million (TZS 300,000,000). The company is planning to increase its capital to achieve its objectives

Ownership/Directors/Shareholders/ Shareholdings

VINAYAKA GOLD LIMITED is owned by Dilip Kumar Jain holding 3750 shares & Rekha Jain holding 1250 shares of the company with market capitalization of Tanzania Shillings Three Hundred Million (TZS 300,000,000) valued at Tanzania shillings 30,000 per share. Both owners the first directors of the company. (Please edit the page and fill some important information.

CHAPTER TWO

PROJECT LOCATION

The project location is Chunya. Chunya District is one of the seven administrative districts of Mbeya Region, Tanzania. It is bordered to the north by Tabora Region, to the northeast by Singida Region, to the east by Mbarali District, to the south by Mbeya Rural District, and to the west by Songwe District.

Chunya is the second largest producer of Gold in Tanzania passing Kahama and Mara which both have large-scale mines. Mining in Chunya district is majorly by undertaken by small miners but there are medium and large scale miners too. Despite the fact that, the district has variety of mining deposits, only gold is mined and sold to legal buyers.

Organised and systematic gold mining in Chunya area started as early as in 1930's under British Companies, at Itumbi and Saza. Both surface alluvial mining and deep-shaft mining methods were practiced as early as 1939. Surveys done by Russians in 1974 showed a high potential of the gemstones. The Techno-Export of Evaluation Report of 1974 indicated reserve of 3.3 million ounces of gold.



Figure no. 1: Map of Chunya, Mbeya, Tanzania

CHAPTER THREE

PROJECT OBJECTIVES

The VINAYAKA GOLD LIMITED Company plans undertake gold mining and refining project in Chunya, Mbeya region. The objectives of this project are as follows;

- i. Production of high quality gold. The company will involve in mining , crushing winning, getting, quarrying, smelting calcining, refining, dressing, amalgamating, manipulating and preparing for market of utilization gold ore metal and beneficiation and up gradation of gold to obtain high quality gold demanded on the international markets.
- ii. Manufacturing of gold-based value added product. R & D work on various minerals have been undertaken by the company. Based upon R & D work, the company will set up gold based industries to produce value-added products of economic importance such as jewelry.
- iii. Expansion of market of the gold and value added product: VINAYAKA GOLD LIMITED will produce quality gold and unique gold-value added products to explore firm and regular market for the products.
- iv. Human resource development. The company's plan is to help employees develop their abilities, skills, and knowledge. This is to ensure the effectiveness and advancement of individual employees, collective departments, and the company itself.
- v. Environmental and Social Responsibility. The company will assure promotion of systematic development of various mines with a view to conserve the environment and mineral wealth of the nation. The company will minimize risk from the generation, management, transportation, handling and disposal of hazardous wastes in mining site as Directed by National Environmental Management Council of Tanzania. The company will carry out various social responsibility programs in the community in the project areas
- vi. Job creation. The company will employ abroad set of workers and talented individuals from operators, technicians, surveyors , environmental professional and casual labors

CHAPTER FOUR

INDUSTRY ANALYSIS

Tanzania is one of Africa's largest gold producers, with gold accounting for approximately 90% of the country's total mineral exports. The country is the fourth largest gold producer in Africa after South Africa, Ghana and Mali. Mining activities contributes largely to Tanzania's Gross Domestic Product. According to Tanzania Investment Centre (TIC), government plans to have this sector contribute to 10% of GDP by 2025. The country's gold mining industry is primarily concentrated in three regions: the Lake Victoria Goldfields, the Handeni Goldfields, and the Mpanda Mineral Field. The Lake Victoria Goldfields, located in the northwestern part of Tanzania, are the most significant gold-producing region in the country.

According to the World Gold Council, Tanzania has an estimated 45 million ounces (1400 tons) of gold reserves, making it one of the largest gold reserves in Africa. This means there is still significant potential for the country's gold mining industry to grow.

Another prospect for Tanzania's gold mining industry is the government's efforts to attract foreign investment. The Tanzanian government has recently implemented several policies to attract foreign investment in the country's mining sector. For example, in 2017, the government passed new mining laws that require mining companies to list on the Dar es Salaam Stock Exchange and increase the government's stake in mining companies. These policies have helped to attract new investment in the country's mining sector, including its gold mining industry.

Tanzania's gold mining industry also benefits from the rising price of gold. For instance, this April 2024, the price of gold has reached USD 2,117.50 per ounce. The rise of price helps to boost the profitability of the country's gold mining industry. This has also encouraged new investment in the industry as investors seek to take advantage of the high gold prices

Tanzania Gold Production currently stands at roughly 50 tonnes per year. Statistics show that Gold production increased from 43 tons in 2015 to 56 tons in 2022. The export values increased from USD 1.6 billion in 2015 to USD 2.95 billion in 2023 according to the Bank of Tanzania (BOT). The Gold export in 2023 represented about 39% of value of good exported. The main destinations of Tanzania gold exports are India, United Arab Emirates and Rwanda.



Figure no. 2: Gold Production 2015-2022

Tanzania’s gold mining industry is dominated by large-scale mining companies, including Barrick Gold Corporation, AngloGold Ashanti, and Acacia Mining. These companies operate several mines in the country, including the Bulyanhulu, North Mara, and Geita mines. In addition to these large-scale mining companies, many small-scale miners work in the country’s gold mining industry. According to 2020/2021 production, large scale miners produced 59 percent, medium scale miners produced 10 percent and small scale miner produced 31 percent of total gold production

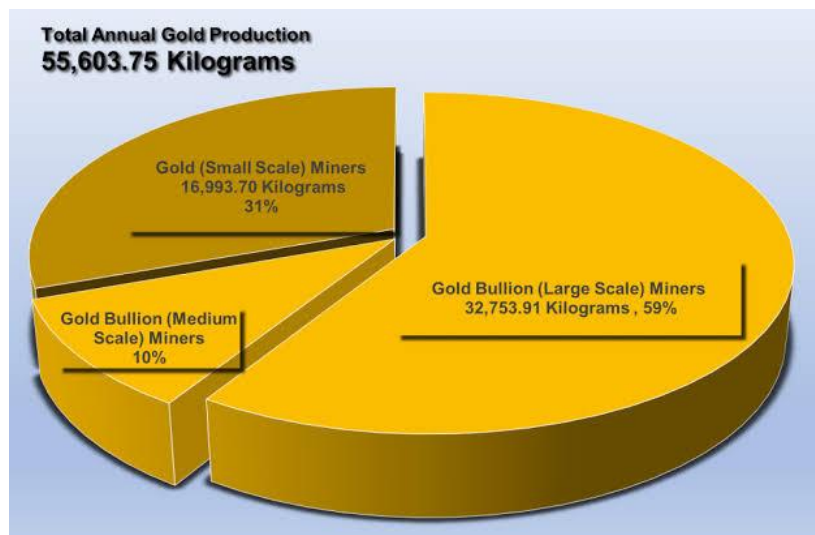


Figure no. 3: Gold Production Contribution 2020/2021

CHAPTER FIVE

MARKET ANALYSIS

5.1 Market overview

Tanzania gold export market value is likely to reach a value of USD 3.15 billion in 2024. The export values was USD 1.6 billion in 2015 which increased to USD 2.2 billion in 2019, to USD 2.84 billion in 2020, USD 2.84 billion in 2021, USD 2.85 billion in 2022 and USD 2.95 billion 2023 according to the Bank of Tanzania (BOT).



Figure no. 4: Gold Production and Export volume and values 2015-2022

5.2 Export Markets

According to the World Gold Council, the three most important gold trading centres are London OTC market, the US future market and the Shanghai Gold Exchange. These markets comprise more than 90 percent of global trading volume. The London OTC market comprises approximately 70 percent of global gold trading. The other important markets include Dubai, India, Japan, Singapore and HongKong. The major export markets for Tanzania gold are India, United Arab Emirates, South Africa, Switzerland and Rwanda. The fastest growing export markets for Gold of Tanzania are India, HongKong and Rwanda.

5.3 Price Trends of Gold

The current price of one ounce gold as April 2024 is USD 2117.50. The average closing price in 2023 was USD 1,943 per ounce, USD 1801.87 in 2022, USD 1,798.89 in 2021 and USD 1773.73 in 2020. The price in 2020 recorded the first highest price in this current era.

CHAPTER SIX

PROJECT DESCRIPTION

6.1 Project Overview

The proposed project is about gold mining and refinery to produce high quality gold for exports. The mining and refinery activities will be carried out in Chunya district in Mbeya region, Southern highland of Tanzania. The area (Chunya) is the second largest producer of Gold in Tanzania passing and it is estimated to have a gold reserve of 3.3 million ounces.

The company will involve in mining and refining of gold ore metal, beneficiation and up gradation to obtain pure gold demanded on the international markets. The company will also involve in manufacturing of gold-based value added product. The company will set up gold based industry to produce value-added products of economic importance such as jewelry.

6.2 Annual Production

The company will primarily produce gold for export markets. The company also will produce gold- value added products such as jewelry. The company's annual production of pure gold is projected to 50,424 grams (50.424 kg) in the first year of production. The company will have 73 percent share which will be equal to 36,804 grams in the first year of production. The company will continue increasing its production reach a share of 38298.38grams of pure gold in fifth year of operation.

6.3 Employment creation

One of the core objectives of the company is to create employment to the locals. The company policy is employ more than 75 percent of local employees putting emphasis on the gender equality in employment opportunities. It is expected that the company in first year of operation is going to employ 20 direct employees and 100 workers indirectly.

6.4 Technology and Skills Transfer

The company policy is to make sure skills and technology used in the operations are transferred among employees .The company will sure all the operations are run by locals and by so doing the company will enable the local employees learn the skills and technology used in the company and be able to manage and run operations after 5 years of operations.

6.5 SWOT Analysis

<p>STRENGTH</p> <p>1: Abundant gold resources. The project will be location is Chunya. The area is the second largest producer of Gold in Tanzania passing and it is estimated the area has a gold reserve of 3.3 million ounces.</p> <p>2: Using local technical experts. Tanzania has been in mining for long time and has significant technical mining experts which the company can use. This will reduce the cost of hiring foreign experts</p>	<p>WEAKNESS</p> <p>1: Inadequate local mining technology. The company will need to import technologies for mining and refinery from abroad.</p> <p>2: Negative Public perception. Mining companies face challenges of negative public perception on social welfare and environment issue</p>
<p>OPPORTUNITY</p> <p>1: High demand and Market value of gold and gold value added products. This means the company will be able to sell the gold and gold products easily and benefits from sales.</p> <p>2: Public awareness. Chunya is area which mining activities have carious since 1930, the public is well informed about mining thus reduce social conflicts and negative perception.</p> <p>3. Rising of price of Gold on export Market. Tanzania's gold mining industry has benefited from the rising price of gold. This may help to boost the profitability of the company.</p>	<p>THREAT</p> <p>1. Environmental lawsuits. Mining company is likely facing lawsuits by environmental rights groups and community leaders</p> <p>2. New regulation and permits. Change of government regulations and permit issuance may threaten the company operations</p> <p>3. Bureaucracy. Delay or long processes of obtaining permits face many mining companies so the company is like to face this</p> <p>4: Social conflicts in mining area/community. Social conflicts are a common acts between mining companies and community that the company may likely to face.</p>

CHAPTER SEVEN

PROJECT FINANCIALS

7.1 Project Costing

The project costs will involve office and administration and factory building costs, land cost ; rental and legal costs, mining survey and documentation costs; machinery and other operation costs as stipulated below;

7.1.1 Total Project Investment Costs

Project Costs		
PARTICULARS	QUANTITY	TOTAL AMOUNT (USD)
Office and administration & factory land & Building Cost		35,000
Land, Rental and Legal fees		25,000
Mining survey and Legal Documentation		25,000
MACHINERY		
Diesel Generator	2	22,000
Compressor	2	20,000
LD 4 Driller / Waging Driller	3	27,000
Winch 3 TON 4	3	30,000
Backhoe Loader	1	53,000
Crusher /Ball Mill	2	110,000
VAT Leach Plant	1	20,000
Elusion plant	1	26,000
Refinery machine	1	10,000
Jewelry Casting Machine	1	25,000
Installation / Fabrication of shaft		40,000
Working capital for 3 months		50,000
TOTAL INVESTMENT COST		518,000

7.2: Project Financing Plan

The project will be financed 38.5% in terms of loans that will be obtained from Banks, 23% by Shareholder's sister company and 38.5% of total investment will be financed by company's shareholders.

S/N	Source of Fund	Amount (USD)	Date of disbursement	Remarks
01	Shareholders Contributions	200,000	2024/2025	-
02.	Bank loans	200,000	2024/2025	-
03	Others	118,000	2024/2025	-
	TOTAL	518,000		

7.3: Implementation Plan

S/N	ACTIVITIES	Time
1	Company registration, establishment, Feasibility study development of project proposal and Processing permit, licenses and other compliances	January –April 2024
2.	Obtaining Fund	July 2024-May 2025
3.	Construction of factory building	August- October 2024
4	Purchase of machinery	November 2024
5	Installation of machinery and other works	December2024
6.	Purchase of other materials	January 2025
7.	Hiring of employees	February 2025
8	Preparation Start operation	March- June 2025
9	Start of operation	July 2025

7.4 Summary of Cost presentation and financial analysis

Fixed Cost	USD 468,000
Working Capital	USD 50,000
Total Investment	USD 518,000
Internal Rate of Return (IRR)	377.26%
Return On Investment	542.40%
Annualized ROI	45.06%
Payback Period	2 months
Discounted Payback period	3 months
Cash Flow Return Rate	377.26%
Investment gain in 5 years	USD 2,809,609/=

7.5: Financials

7.5:1 Projected Income Statement (Currency in USD)

Projected Income Statement								
Income	1MONTH	3 MONTH	6 MONTH	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Gold production	3,067	9,201	18,402	36,804	37,172.04	37,543.76	37,919.2	38,298.39
Price	67	67.67	68.3467	69.03017	69.72047	70.41767	71.12185	71.83307
Total sales	205,489	622,631.7	1,257,716	2,540,586	2,591,652	2,643,744	2,696,884	2,751,091
EXPENSE								
Labor Salaries	10,000	30,000	60,000	120,000	121,200	122,412	123,636.1	124,872.5
Management staff salaries	6,000	18,000	36,000	72,000	72,720	73,447.2	74,181.67	74,923.49
Labor food, welfare and medical expense	2,000	6,000	12,000	24,000	24,240	24,482.4	24,727.22	24,974.5
Fuel	6,000	18,000	36,000	72,000	72,720	73,447.2	74,181.67	74,923.49
Depreciation	17,000	51,000	102,000	204,000	206,040	208,100.4	210,181.4	212,283.2
Chemicals expense	121,490	36,4470	728,940	1,457,880	1,472,459	1,487,183	1,502,055	1,517,076
Total	162,490	487,470	974,940	1,949,880	1,969,379	1,989,073	2,008,963	2,029,053
GROSS PROFIT	42,999	135,161.7	282,776	590,706.3	622,273.3	654,671.7	687,920.2	722,037.9

7.5.2: Projected Cash flow for 5 years (Currency in USD)

Currency: USD	Projected Cash Flow Statement						
	Income	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Cash in the beginning	Cash in bank	18,000	50,000	640,706.3	1,262,980	1,917,651	2,605,571
	Shareholders cash	0					
	Loan	500,000					
Cash inflows	Sales		2,540,586	2,591,652	2,643,744	2,696,884	2,751,091
Cash available		518,000	2,590,586	3,232,358	3,906,724	4,614,535	5,356,662
Cash Outflows	Labor Salaries		120,000	121,200	122,412	123,636.1	124,872.5
	Management staff salaries		72,000	72,720	73,447.2	74,181.67	74,923.49
	Labor food, welfare and medical expense		24,000	24,240	24,482.4	24,727.22	24,974.5
	Fuel cost		72,000	72,720	73,447.2	74,181.67	74,923.49
	Depreciation		204,000	206,040	208,100.4	210,181.4	212,283.2
	Chemicals expense		1,457,880	1,472,459	1,487,183	1,502,055	1,517,076
	Fixed cost	468,000					
	Total	468,000	1,949,880	1,969,379	1,989,073	2,008,963	2,029,053
Net Cash flow		50,000	640,706.3	1,262,980	1,917,651	2,605,571	3,327,609

7.5.3 Total Working Capital (Currency in USD)

Working Capital Costs						
PARTICULARS	QUANTITY	AMOUNT (USD)	1 MONTH	3 MONTH	6 MONTH	12 MONTH
Labor Salaries	20	500	10,000	30,000	60,000	120,000
Management staff salaries	4	1,500	6,000	18,000	36,000	72,000
Labor food, welfare and medical expense	1	2,000	2,000	6,000	12,000	24,000
Fuel	1	6,000	6,000	18,000	36,000	72,000
Depreciation	1	17,000	17,000	51,000	102,000	204,000
Chemicals expense	1	121,490	121,490	364,470	728,940	1,457,880
TOTAL			162,490	487,470	974,940	1,949,880