

**GOLD ORE MINING VALUE ADDITION & PROCESSING
PROPOSED MEDIUM CIP/CIL PLANT FOR GOLD ORE PROCESSING**

PROJECT REPORT & BUSINESS PLAN

February 2024

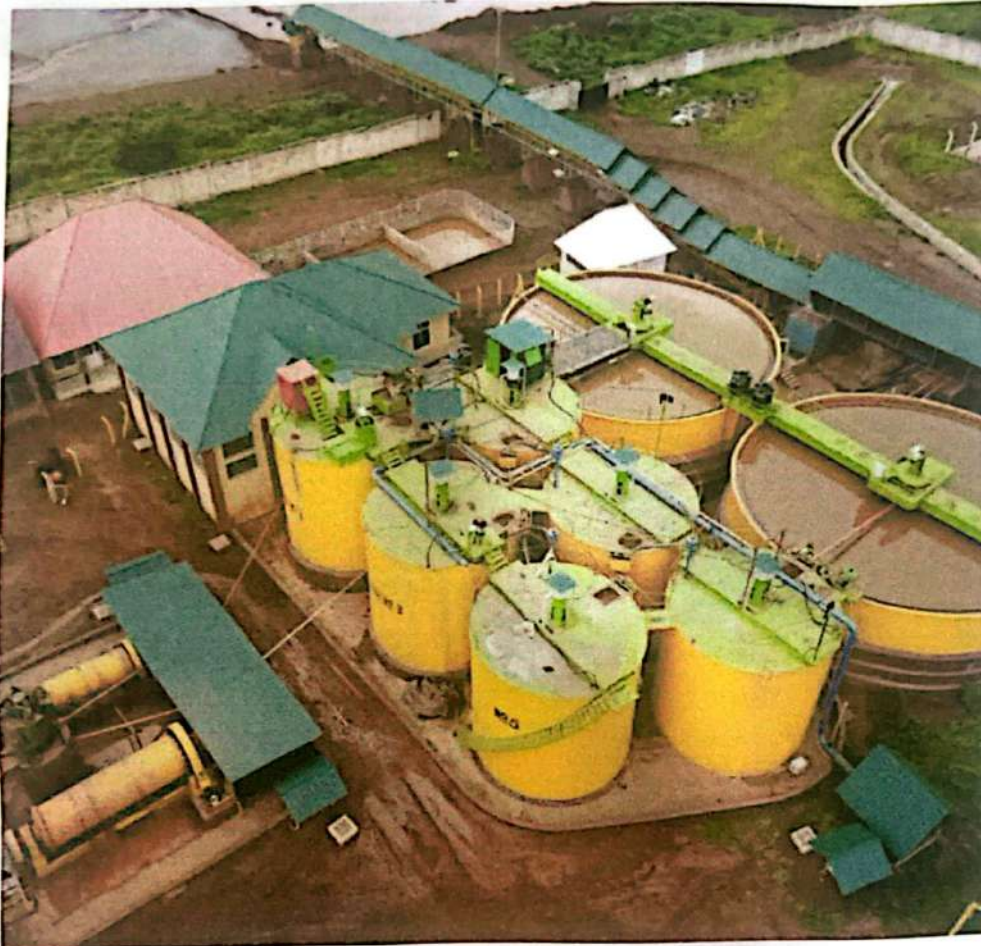


Photo for

illustration purpose only

Submitted by: **GOLDEN MAMA Company Limited; CIC No.: 170305256**
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**GOLDEN
MAMA**

Company Limited
Tanzania CIC no. 170-305-256



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All inquiries relating to the proposed project and any requests for additional information should be directed to Golden Mama Company Limited.

The opinions contained in this document have been compiled based on the information, both written and verbal, details and documents mentioned in this report, and from the directors and their associates of the project and the company and these have been believed by us to be true and reliable.

The information and opinions contained in this document are given as of the date of this report and are subject to change without notice.

The Financial Data mentioned herein is indicative in nature and should not be taken as a confirmation of the future financial position/projections of the company. It must not be issued, circulated or distributed except with the explicit permission of Golden Mama Company Limited.

1. BASIC INFORMATION

1	NAME OF COMPANY	Golden Mama Company Limited (GMCL)
2	REGISTERED OFFICE / POSTAL ADDRESS	Registered office and Postal address: P.O. Box no.: 77, Near Butuja Primary School, Ward: Ilemela, District: Ilemela, Mwanza 33205 TANZANIA
3	SHAREHOLDERS & DIRECTORS	<p>Mr. Beer Vikram Singh, Shareholder & Director Tel.:+91-93134-72309; Email: anoopsingh71@yahoo.com</p> <p>Mr. Siddhartha Tantia, Shareholder & Director Tel.:+91-99039-00412; Email: stantia80@gmail.com</p> <p>Mr. William Kulindwa George, Shareholder & Director NIDA No. 19710721-14130-00001-22 Tel.:+255-784-276-229; Email: stebo12012@gmail.com</p> <p>Mr. Deogratus Juventine Dotto, Shareholder & Director NIDA no. 19800829-11468-00001-28 Tel: +255-622-051-043; Email: deo1@me.com</p> <p>Ms. Rhobi Simangwi Ragero , Shareholder & Director NIDA no. 19800711-14130-00003-14 Tel: +255-755-997-173; Email: stebo12012@gmail.com</p>
4	PROPOSED BUSINESS OPERATIONS	Gold mining value addition & Medium Scale Gold Processing Plant CIL/CIP method
a	FINISHED GOODS	Gold 93% to 99.99% purity
b	PROPOSED MINING & PROCESSING CAPACITY	Phase 1: CIP/CIL processing plant of 200 tons per day Phase 2: Expansion to 400 tons per day
5	PROPOSED ADDRESS FOR MINING & PROCESSING	Village: Mwamboke, Shilalo Hills, About 20km from Misasi, Misungwi region, Tanzania.
6	PROPOSED DATE OF START OF OPERATIONS	1 st March 2024

DETAILS OF STATUTORY DOCUMENTS, PERMIT REQUIREMENTS

1	CERTIFICATE OF INCORPORATION DETAILS	CIC No. : 170-305-256 dated 24 th November 2023
2	TAX REGISTRATION DETAILS	TIN No.: 170-305-256, TRA Location: Mwanza, Tax Office: Nyamgana
3	MEMORANDUM OF ARTICLES OF ASSOCIATION	Executed having following primary objectives: i. To do business of buying, selling, trading, import, export of minerals, metals, and gemstones ii. To do business of mineral mining, crushing, processing, refining, and plant and machinery facility for doing the same and/or other in similar nature iii. To do business, buying selling, trading of agricultural products, metals, commodities, plant and machinery, and other trading items. iv. To do business of providing the above services on contractual basis to miners of small, medium sector.
4	MAIN BANK ACCOUNT	DTB Bank Mwanza Main Branch Account nos. 0301664002 USD 0301664001 TZS
5	OTHER LICENSES	
a	BUSINESS LICENSE	Business License no. dated 1/2/2024
b		
c	LICENSE UNDER THE MINING ACT 2010, THE MINING (MINERAL TRADING) REGULATIONS 2010	To be applied
d	ENVIRONMENTAL CLEARANCE	To be applied



2. ORGANIZATIONAL ASPECTS

COMPANY MANAGEMENT

Golden Mama Company Limited (GMCL) is having the following Shareholder Directors.

Names	Description	Shareholding
BEER VIKRAM SINGH	Director Shareholder	40%
SIDDHARTHA TANTIA	Director Shareholder	40%
WILLIAM KULINDWA GEORGE	Director Shareholder	7%
DEOGRATIUS JUVENTINE DOTTO	Director Shareholder	5%
RHOBI SIMANGWI RAGERO	Director Shareholder	8%

The directors of the company all have specific expertise and resources that they bring on board for the strategic guidance and operations of the company. Their individual skills complement each other in the board of directors. The directors also share a common purpose and desire to ensure that their venture into the Gold processing and trading is successful. Each of the directors has had an illustrious background of participation of public and private businesses in the mining and construction industry and the corporate world. Their profiles are as follows:

Mr. BEER VIKRAM SINGH

Director (Business Development)

Age : 52 years

Nationality : INDIA

Passport No. : Z7193810

Qualification : Bachelors in Political Science and History



Vikram has worked with United Nations. He has been an active member of the Students association during college time. He has received several awards as speaker in Seminars and debates on current issues. With an impressive social and corporate network, he is involved in many social causes related to cultural, social as well as economic betterment of poor. Vikram has been involved in the infrastructure construction, granite mining sector, and trading in India since last over 25 years. He has had the unique privilege to have travelled and deeply interacted with companies in Korea and Turkey, and developed partnerships with several multinational companies for infrastructure and technological projects in India.



Mr. SIDDHARTHA TANTIA

Director (Techno-commercial)

Age : 42 years

Nationality : INDIA

Passport No. : Z5235698

Qualification : Bachelor in Engineering from USA



Siddhartha is a professional with over 20 years of experience in various sectors of Agri-processing, agri-marketing, mining, infrastructure construction of roads and bridges, etc. He was involved in establishment and running of Corn Processing plant in India, producing Maize Starch, Liquid Glucose, byproducts and derivatives. He worked as VP in an Infrastructure company looking after road, bridge, water supply construction. He has also headed a company doing Design, Build, Finance Operate and Transfer (DBFOT) PPP project of 68 km road project.

Mr. WILLIAM KULINDWA GEORGE

Director (Public relations)

Age : 51 years;

Nationality : TANZANIA

Tanzania NIDA No.: 19710721-14130-00001-22

Qualification : Masters in Business Administration with Finance specialization



William, one of the Director Shareholders is the captain and guiding force of GMCL. He is a successful gold trader and businessman in Tanzania. He has worked in Gold Mining and trading Industry for over 30 years. He has a desire to contribute to the untapped potential of Tanzania in the mineral mining, processing and trading sectors, and has identified Gold and Diamond as the sectors for growth. He will play a pivotal role in the establishment of linkages with small and medium producers, and providing and controlling the extended team on the field, along with necessary guidance for the success of the project.

Mr. DEOGRATIUS JUVENTINE DOTTO

Independent Director

Age : 43 years;

Nationality : TANZANIA

Tanzania NIDA No.: 19800829-11468-00001-28

Qualification : Master of Arts Degree in Political Science and
Public Administration



Mr. Dotto is a versatile diplomat with breadth of experience in international relations, public policy and governance. Prior to taking up this role, he worked at the Tanzania's Ministry of Foreign Affairs in different capacities and managed both technical and leadership responsibilities. He also worked in the private sector for about 4 years before joining diplomatic services. He has a proven ability to establish credible and effective partnerships with diverse stakeholders.

Mrs. RHOBİ SIMANGWI RAGERO

Independent Woman Director

Age : 43 years;

Nationality : TANZANIA

Tanzania NIDA No.: 19800711-14130-00003-14

Qualification : Bachelors in Banking and Finance



Mrs. Rhobi is a woman entrepreneur having small scale gold mineral processing setup at Geita and Shilalo. She is having small scale ball mill grinding and washing setup wherein she runs an independent business. She is an inspiration to this business which is aimed as a socio-economic development for benefit of small scale miners. Besides her strong willpower and experience, she will also bring the feminine touch to the public relations with the small scale miners.

In Tanzania, the Director Shareholders wish to invest in the mineral mining and trading sector, and use their contacts to further the potential of Tanzania and its resources utilization for the world economy. The directors have done extensive field visits in Mwanza, Geita, Mbeya, Mpanda, etc. in Tanzania, covering all gold producing areas and trading centers. They have also traded and handled consignments to Dubai to test the waters. Vikram has developed business links with customers in Dubai, who have gained confidence in the GMCL team to deliver the products with integrity and quality. The business operations will be managed by a lean team, headed by the Directors. They will be assisted by Geologists, Mining Engineers, Field officers, Lab Technicians, Plant operators, Supervisors, etc. Each person will have specific function.

3. LOCATION OF PROPOSED UNIT & TIMELINE

GMCL has entered into a Memorandum of Understanding with Small scale miners Mr. John Kingi Balole, having NIDA no. 19681005335270000220, and Mr. Erick Msuma Mantakara, having NIDA no. 19700103332010000224 holding PML0448MZA, PML0449MZA, PML0450MZA, PML0451MZA, PML0452MZA, PML0453MZA. The PMLs are held in the Mwamboku village area in Shilalo, about 20 km from Misasi village in Misungwi district, QDS 48/1. The licenses are held in the geographic coordinates in and around

- A) From Latitude of 3 Deg 8 Min 1 Sec (South) to 3 Deg 8 Min 52 Sec (South)
- B) From Longitude of 33 Deg 1 Min 5 Sec (East) to 33 Deg 1 Min 43 Sec (East)

The CIP/CIL plant for Gold ore processing is proposed to be set up on and about the location of the PML land, as in the above GPS coordinates.

	TIMELINE	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
A	STATUTORY								
1	Approval of TIC								
2	Work Permits								
B	CIP/CIL PLANT								
1	EIA Approval for CIP/ CIL								
2	Electric Connection at site								
3	Order of Machines								
4	Delivery of Machines to site								
5	Civil works at site								
6	Installation of Machines at site								
7	EIA Approval for CIP/ CIL								
8	Trial Runs								
9	Commissioning								
C	MINING ACTIVITIES								
1	Exploration								
2	EIA Approval for Mining Activities								
3	Purchase of Machinery								
4	Import and Delivery of machinery								
5	Mine preparation								
6	Mining activities								

4. GOLD INDUSTRY IN TANZANIA

Tanzania accounts for 1.3% of global Gold production, with the largest producers being China, Australia, Russia and Canada. Tanzania is the 4th largest gold producer in Africa after South Africa, Ghana and Mali. Gold production currently stands at roughly 40 tonnes a year.

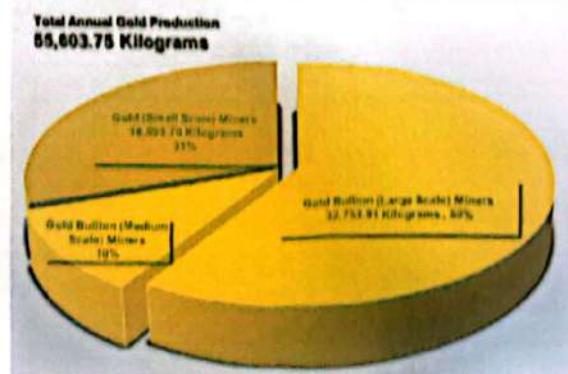
Tanzania's gold reserves are estimated at about 45 million ounces and Tanzania's gold production in Tanzania stands at around 50t per year. Gold exploration is mostly centred mostly on the greenstone belts around Lake Victoria, where several large deposits have been discovered and are being developed. Tanzania's total gold production reached 55.6 tonnes in the financial year 2020-21, versus 53.7 tonnes in the financial year 2019-20, and 42 tonnes in the financial year 2018-19.

Gold exploitation is done by both large and medium-scale miners as well as small-scale miners

ARTISANAL MINERS (ASM)

ASMs in Tanzania also make a major contribution to the gold production in Tanzania, and hold the vision for local self-development and human alleviation from poverty. Unlike the mining companies, ASMs are difficult to regulate because of the way in which their mining operations spread and the lack of proper and easily identifiable management. ASMs often explore areas suspected of containing gold deposits with taking PMLs in their individual name. However, their means limit their capability to extract minerals in good quantity and process them for the benefit of the Artisanal miners. Furthermore, financial rewards of gold miners are often obtainable only at depths close to about 100 metres. As the tonnage of extracted rock is enormous and not affordable, ASMs take shortcuts by using narrow pits and tunnels that are prone to collapse. The lack of proper tools also means that many excavations do not go deep; instead shallow ones spread on the surface, covering many hectares and degrading large tracts of surface land.

Gold Production Contribution by Large & Medium Scale and Small Scale Miners in the Financial Year 2020/21



Leading producers of gold in Tanzania are AngloGold Ashanti and Barrick Gold, contributing more than 55% of Tanzania's production. The major contributors to the gold production in Tanzania in the financial year 2019-20 were Geita Gold Mining Limited (GGM) which contributed 43% as a leading producer followed by North Mara Gold Mine (NMGM) with 21%; Buzwagi Gold Mine (BZGM) with 10%; Shanta Mining Company (SHNT) with 6%; Bulyanhulu Gold Mine (BGM) with 3%; and Stamigold-Biharamulo Gold Mines (SBGM) with 1%.

Major operating gold mines in Tanzania

(Source: GlobalData's Global Gold Mining to 2026 report)

Mine/project name	State	Mine method	Owners
Geita Mine	Mwanza	Open Pit	AngloGold Ashanti
North Mara Mine	Mara	Open Pit	Barrick Gold; Government of Tanzania
Bulyanhulu Mine	Shinyanga	Long Hole Stopping	Barrick Gold; Government of Tanzania
New Luika Mine	Mbeya	To be confirmed	Shanta Gold
Mazizi Gold Mine	Dar es Salaam	Open Pit	Mutus Liber International
Biharamulo Gold Mine	Kagera	Open Pit	State Mining
Buckreef Gold Mine Re-Development Project	Kagera	Open Pit	TRX Gold; State Mining

Major gold mines in development in Tanzania

(Source: GlobalData's Global Gold Mining report)

Mine/project name	State	Mine method	Stage	Owners
Nyanzaga Project	Mwanza	Open Pit/Long Hole Stopping	Feasibility	OreCorp
Nyakafuru Project	Shinyanga	Open Cut	Feasibility	Caracal Gold
Saza Makongolosi Gold Project	Mbeya	Open Pit	Prefeasibility	Winshear Gold
Bulyanhulu Reef 1 and 2 East Project	Shinyanga	Long Hole Stopping	Feasibility	Barrick Gold; Undisclosed
Inweru Project	Mara	Open Pit	Feasibility	Lake Victoria Gold; Katoro Gold
Itetemia Project	Mwanza	Open Pit	Feasibility	TRX Gold; State Mining
Singida Project	Singida	Open Pit	Construction	Shanta Gold; GL Jossue & JB Joel
Miyabi Project	Mwanza	Open Pit	Feasibility	Pensana

Tanzania's gold exports reached USD 2.743 billion in the year ending December 2021, compared to USD 2.957 billion in 2020 and USD 2.215 billion in 2019. Gold accounted for 89.85% of all mineral revenues of Tanzania in the financial year 2020-21. Tanzania exports gold mainly to South Africa, India, and Switzerland.

GOLD TRADING AND GOVERNMENT INITIATIVES

Tanzania has multiple regions that produce gold: Geita, Mbeya, Musoma, Singida, Shinyanga. Geita is the largest gold producing region In Tanzania with some of the largest mines operating there. Mwanza has been a Gold trading hub since long time. There were a number of gold Elution plants in Mwanza in 2014, which were shifted to Geita and Kahama as per the new government norms.

Gold comes in the form of Dore bars having a purity of 75-84% in the mining regions. Gold is priced at \$20-\$30 less than LME spot rates. Gold bullion is not available in the mining regions as there are no proper medium scale refineries. Gold has to be sourced through reputable dealers who have a valid business license, dealer license and mining commission approved premises.

To legally procure and trade in gold within Tanzania, a dealer license or broker license is required. A fully functional office with testing equipment is also recommended.

The government has established gold centers all across the country which is easily accessible and offer competitive prices slightly below world market prices to support Artisanal Miner (ASM). As of 2020 two model gold smelters were built in Lwamgasa and Katente, a one stop mineral processing and export center, strengthening of mineral control and reduction of smuggling

One of the few ways to get gold directly from Artisanal Miners at low prices is to fund / partner in their operations. This needs knowledge on the local methods of gold processing and life experience in Tanzania, and how the ASM sector operates. The ASM in Tanzaina has huge potential but has to be tapped in the right manner. Just by providing funds for the operations would not cut it. Processes have to be put in place and milling efficiency has to be increased.

2. PROCESSING UNIT: MEDIUM CIP/CIS PLANT FOR GOLD ORE PROCESSING

The project shall be described as follows with its:

- Plant 1 capacity of processing 100 tonnes per day (TPD) of G.O.
- Plant 2 capacity of processing 200 tonnes per day (TPD) of G.O.

The grade of the ore being:

- Low grade of 1.0 g/t G.O.
- Medium grade of 1.5 g/t G.O.
- High grade of 2.0 g/t G.O.

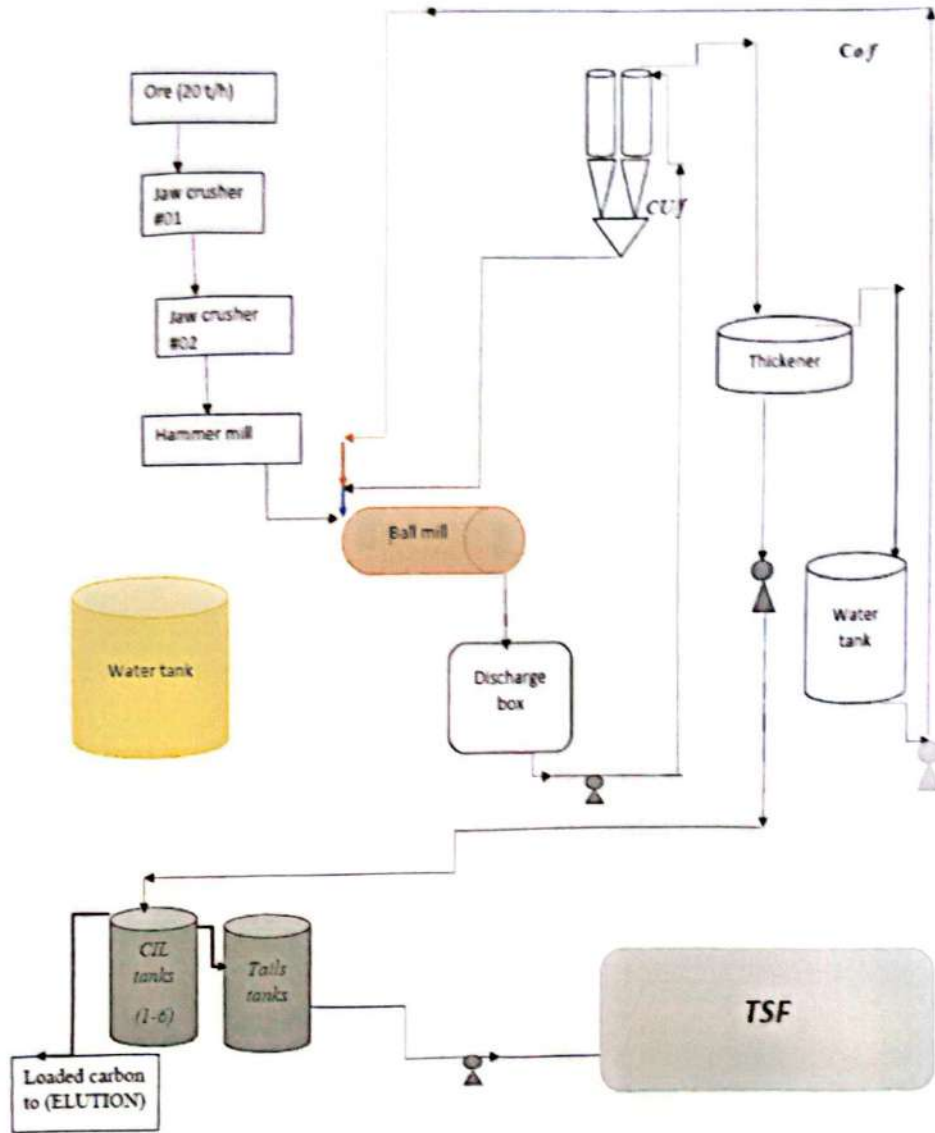
The area of location being Mountain Province, Benguet Province, Baguio City, Baguio Region.

Medium CIP/CIS gold processing plant will be designed and installed with capacity of 100 tonnes per day (TPD) of G.O. and 200 tonnes per day (TPD) of G.O. with and the following equipment:

The process unit design planned to be installed will include the following processing equipment:

1. Jaw crusher (1000)
2. Hammer mill
3. Vibrating screen
4. Ball mill
5. Ball mill
6. Hydrocyclone
7. Counting tank
8. Agitator, pump, trough
9. Station bucket
10. Trolley, energy system
11. Distribution, Machine, bucket
12. Trucking, transport
13. Compressor, self-heating, milling machine

PROJECT DESIGN FLOW





RAW MATERIAL

The raw material will mainly consist of following:

- a) Rock ore from Small scale miners having PMLs in their name.

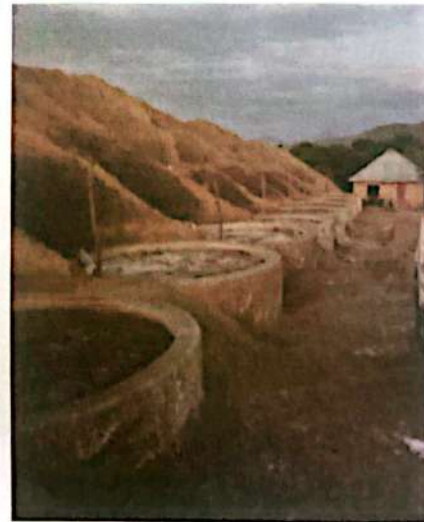
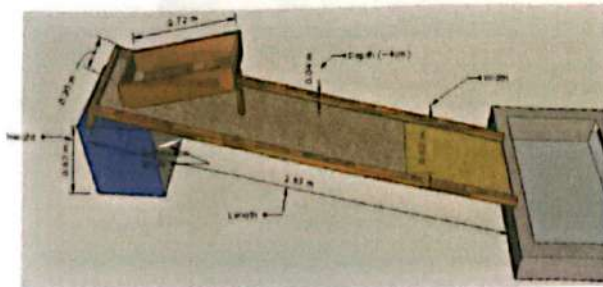
GMCL will assist local small scale miners in a radius of upto 20 km with technology, machines such as excavators, rock breaking, compressors, consumables such as explosives, finance to increase their ore production capacity.

The rock ore and tailing shall be obtained from them on mutually agreed terms such as processing costs related to finished gold production output.



- b) Processed material and tailings from Small scale miners

In order to enhance the output of small miners, we proposed to do processing for their output material which may be obtained from washing or leaching.



PROCESSING:

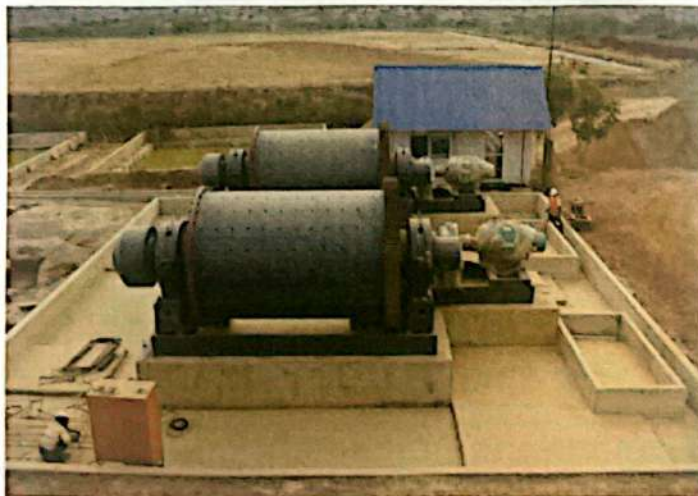
1) CRUSHING, GRINDING, MILLING

In CIP/CIL design and installation it is very much important to consider the effect of particle size in gold recovery, grinding circuit also depend on the required plant throughput (amount of material treated per day).

The Crushing section consists of Primary and Secondary Crusher. Grinding is further done by Hammer Mill disintegrator. Milling is done by the ball mill using manganese steel liner and balls based grinding media. The section will have vibratory screens and conveyors and hoppers for smooth material handling.

A complete matching set up of 10tons/hour is proposed to be setup for CIP gold processing plant,

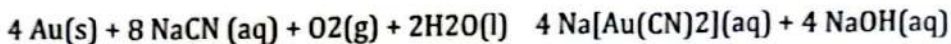
Tailings from artisanal miners are characterized with different particle size roughly ranging from 120-250 μ m, this range is too much greater to be subjected in cyanidation process thus it is required to be reduced to less than 130 μ m, the particle size is a key factor to facilitate CIL/CIP reaction since the smaller the particle size the higher the surface area for gold cyanide reaction.



2) LEACHING AND ADSORPTION

CIP/CIL is mostly used in gold dissolution. This project will be using cyanide technology in recovering gold from its ores, to control the following dissolution equation the below listed factors need to effectively controlled.

The chemical reaction for the dissolution of gold, the "Elsner Equation", follows:



Dissolution of gold from its ore is a chemical process that depends on numbers of factors to complete the mechanism and these factors includes

- liberation of particles into required size for better reaction of the cyanide and gold particles
- pH of leaching medium(addition of lime)
- Agitations (mixing efficiency using the agitators)
- Oxygen gas(addition of air into leaching tanks)
- Cyanide concentrations (addition of cyanide solution)
- Leaching time (approximately 24 hours per batch)
- Temperature and pressure
- Pulp density

The adsorption of gold into carbon, Gold is removed from the pulp or slurry flowing through the tanks in a treatment plant by contacting it with activated carbon, which adsorbs the gold that has been leached into solution, adsorption is the reaction between the leached gold, in the form of a gold-cyanide complex, and the surface of the carbon.

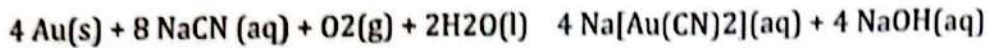


GOLD RECOVERY DEPENDING ON CYANIDE LEACHING AND CARBON LOADING
This kind of estimation is the actual production of any CIP or CIL gold processing plant as it accounts the actual amount of gold loaded into activated carbons, therefore based on the amount of carbon treated we can be able to estimate the actual production of gold in grams, kilograms or ounces. The focus should only remain the *grade of the material and amount of carbon used in CIL*

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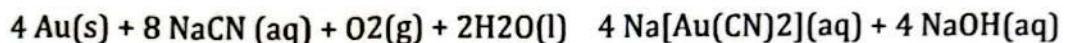


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6. PRODUCTION ESTIMATE & MACHINERY REQUIREMENT

The annual production is dependent on the following:

MINING RAW MATERIAL PRODUCTION

Mining activity is primarily possible at daytime only in order to ensure efficiency and safety. Also, the machines need to be given breaks and rest. One Excavator of 20-22 tons capacity can do about 150 to 200 tons per day. Out of the output, 75% is generally overburden, and only about 25% is useable ore. Therefore, on an average, the mining output for one excavator will be 50 tons per day. The designed plant capacity is 200 tons per day, therefore, 4 excavators will be needed, plus 1 spare excavator shall be needed.

For machine balance purpose, so that work can go on simultaneously at all excavation sites, 4 nos. backhoe loaders, 4 nos. air compressors, 12 nos. Drilling machines, shall be required. The excavators will require attachments such as Drum cutters 8 nos. and Rock breakers 6 nos.

2 nos. Backhoe loaders will also be required at the crusher and processing site to feed the material to the crusher, as 10 tons per hour cannot be fed manually.

Small 10 ton trucks and 5 to 8 ton tractor trailers shall be used depending on terrain and accessibility. For carrying average distance of 15km x two way, the vehicles will be able to do about 4 trips per day, or 40 tons per truck or 25 tons per tractor trailer. Also, extra vehicles will be needed in case of breakdown.

Therefore, for carrying of 200 tons per day, 6 nos. of trucks and 10 nos. of tractor trailers shall be needed.

It is proposed that the machines will be bought in phases, depending on the progress of the mining activities and tie-ups with small miners PMLs.

Description	Unit	Qty.	Unit Price (US\$)	Total Price (US\$)
MINING MACHINES/ MOVABLE ASSETS				
Backhoe Loader at Mine Site	Nos.	4	75,000	300,000
Backhoe Loader at Crusher Site	Nos.	2	75,000	150,000
Excavator at Mine Site	Nos.	4	120,000	480,000
Compressor	Nos.	4	20,000	80,000
Drill Hammers	Nos.	12	4,000	48,000
Drum Cutter attachment	Nos.	8	20,000	160,000
Rock breaker attachment	Nos.	6	10,000	60,000
Trucks 10 MT	Nos.	6	80,000	480,000
Tractor with hydraulic trailer	Nos.	10	35,000	350,000
Pickup Van	Nos.	2	30,000	60,000
SUV Vehicle	Nos.	1	50,000	50,000

CIP/CIL PLANT PRODUCTION UTILIZATION

The production is dependent on following factors

- Quantity of rock ore processed per day
- No. of days running per year
- Average Gold feed grade of Rock Ore
- CIP/ CIL efficiency

Production estimate calculations are shown below:

ITEM		Year 1	Year 2	Year 3
INSTALLED CAPACITY	tons/day	200	200	200
Utilisation	%	40%	50%	60%
Production per day	tons/day	80	100	120
Operational days per year	days/year	200	200	200
Production per year	tons/yr	16,000	20,000	24,000
FINISHED GOODS				
Average Gold Feed Grade	gm/MT	3.00	3.00	3.50
CIP Efficiency	%	85%	85%	85%
Recoverable Gold recovery		2.55	2.55	2.98
Finished Gold recovered	kg/year	40.80	51.00	71.40

GRINDING & MILLING SECTION

The tentative machinery list for the Grinding & Milling section is given below:
(The list is for 2 sets for 2 phases. Only one set shall be purchased in phase 1)

GRINDING, MILLING SECTION	Unit	Qty	Unit Price (US\$)	Total Price (US\$)
Skip Hopper	Nos.	2	10,000	20,000
Primary Crusher	Nos.	2	20,000	40,000
Conveyor - 24m	Nos.	2	14,000	28,000
Intermediate hopper	Nos.	2	10,000	20,000
Secondary Crusher	Nos.	2	22,000	44,000
Conveyor - 24m	Nos.	2	14,000	28,000
Intermediate hopper	Nos.	2	10,000	20,000
Disintegrator with Bag filter	Nos.	4	35,000	140,000
Feeder	Nos.	2	8,000	16,000
Ball Mill 1.8m diameter x 4.65m length with 150-200HP Motors, Panels, 20 MT Hychrome Grinding media	Nos.	2	90,000	180,000
Motors, Panels for above	L.S	2	30,000	60,000
Steel joist, angle, channel, structural and plates for making Hoppers, etc.	MT	160	1,000	160,000

LEACHING & ADSORPTION SECTION

Leaching & Adsorption section consist primarily of CIP/CIL tanks with agitators, pumps, blowers, etc. The tentative machinery list is given below:

(The list is for 2 sets for 2 phases. Only one set shall be purchased in phase 1)

LEACHING & ADSORPTION SECTION	Unit	Qty.	Unit Price (US\$)	Total Price (US\$)
Steel plates and structures for CIP/CIL Tanks, platforms, stairs, supports, etc.	MT	200	1,000	200,000
Geared Motors	Nos.	20	4,000	80,000
Stainless steel Pipes and fittings	MT	40	4,000	160,000
Valves	L.S	1	15,000	15,000
Roots Blowers	Nos.	6	6,000	36,000
Slurry Pumps and Carbon lifting pumps	Nos.	12	8,000	96,000
Water Pumps	Nos.	6	3,000	18,000
Dosing Pumps	Nos.	6	6,000	36,000
Nuts bolts, misc hardware items	L.S	1	10,000	10,000
Stainless steel Micron Mesh	MT	10	6,000	60,000
Hydrocyclone	Nos.	2	12,000	24,000
Tailing Storage facility plastic sheet	sqm	10,000	10	100,000

ESTABLISHMENT, UTILITIES AND WORKSHOP SECTION

Establishment will require Staff accommodation and Office containers along with workshop related setup for proper operations management.

UTILITIES SECTION & WORKSHOP EQUIPMENT	Unit	Qty.	Unit Price (US\$)	Total Price (US\$)
Accommodation Container	Nos.	12	5,000	60,000
Office Containers	Nos.	4	5,000	20,000
Furniture, Electronic items	L.S	1	30,000	30,000
Transformer - 500 kVA	Nos.	1	10,000	10,000
HDPE 10000 ltr Tank for Water for plant and accommodation with pipelines, valves, etc.	Nos.	4	2,500	10,000
Workshop tool box	Nos.	3	1,000	3,000
Lathe & Grinding machine	Set	1	4,000	4,000
Welding machines	Nos.	6	3,000	18,000
Incoming Panel with Breaker	Set	1	4,000	4,000
Distribution Panel - Crusher, Ball Mill, Leaching, TSF area	Set	3	2,500	7,500
Generator - 150 KVA	Nos.	1	25,000	25,000
Generator - 500 KVA	Nos.	1	80,000	80,000
Electrical wiring	Set	1	30,000	30,000
Fire Fighting Equipment, Extinguishers	Set	1	12,000	12,000

LABORATORY & OFFICE SECTION

LAB EQUIPMENT	Unit	Qty.	Unit Price (US\$)	Total Price (US\$)
Assorted Lab Furniture	Set	1	2,500	2,500
Compass, GPS, Geological hammer set	Nos.	5	1,000	5,000
Weigh Balance - measurement in milli-grams	Nos.	1	2,000	2,000
XRF	Nos.	1	20,000	20,000
Surface Scanner	Nos.	1	10,000	10,000
Beakers, Lab utensils, etc.	Nos.	1	2,000	2,000
Initial set of chemicals	Set	1	1,500	1,500
OFFICE FURNITURE & EQUIPMENT				
Office computer	Nos.	3	800	2,400
Software Licenses	Nos.	3	600	1,800
Attendance machine	Nos.	1	300	300
CCTV	Nos.	1	10,000	10,000
Xerox machine	Nos.	1	4,000	4,000
Water filter, Tableware, etc.	Set	1	1,000	1,000

SPARES, CONSUMABLES AND CHEMICALS

Spare parts for the machines, and chemicals for processing will be required on regular basis. The quantity cannot be estimated right now. But the tentative list is given below:

TENTATIVE SPARES LIST
Picks for drum cutter excavator attachment
Drilling rod and Chisel for rock breaker
Explosives for mining
Machine Air filters, transmission parts, engine parts
Crusher Jaw plates
Ball Mill Liner and grinding media
Pump impeller, seals, housing, etc
Spares of Roots Blower, Motor, Gears

TENTATIVE CHEMICALS LIST
Activated Carbon, Coconut shell charcoal
Sodium Cyanide
Flocullants
Lead Nitrate, Silver Nitrate
Hydrochloric acid, Nitric Acid, Sulphuric acid
Sodium Thiosulphate, Potassium Iodide
Zinc powder

7. FINANCIAL PROJECTIONS

(A) INVESTMENT STRUCTURE (Figures in USD'1000)

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	TOTAL
INVESTMENT	1,000	300	300	3,000	300	300	300	5,500
EQUITY	900	100	100	1,000	100	100	100	2,400
DEBT	100	200	200	2,000	200	200	200	3,100
CUM. DEBT	100	300	500	2,500	2,700	2,900	3,100	
INTEREST @ 13% ON DEBT	13	39	65	325	351	377	403	

(B) ESTIMATED PRODUCTION

ITEM		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
INSTALLED CAPACITY	tons/day	200	200	200	200	200	200	200
Utilisation	%	40%	50%	60%	70%	80%	80%	80%
Production per day	tons/day	80	100	120	140	160	160	160
Operational days per year	days/year	200	200	200	200	200	200	200
Quantity of Rock ore Processing per year	tons/yr	16,000	20,000	24,000	28,000	32,000	32,000	32,000

(C) ESTIMATED FINISHED GOODS & SALES

FINISHED GOODS		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Average Gold Feed Grade	gm/MT	3.00	3.00	3.50	4.00	4.00	4.00	4.00
CIP Efficiency	%	85%	85%	85%	85%	85%	85%	85%
Recoverable Gold	gm/MT	2.55	2.55	2.98	3.40	3.40	3.40	3.40
Finished Gold	kg/year	40.80	51.00	71.40	95	109	109	109
AVERAGE SELLING PRICE	USD/gm	57.00	57	57	57	57	57	57
TOTAL SALES	USD'1000	2,326	2,907	4,070	5,426	6,202	6,202	6,202

(D) ESTIMATED COST OF PRODUCTION

COST OF PRODUCTION		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
TAXES PAYABLE TO GOVT. (7.3%)	USD/kg	4.16	4.16	4.16	4.16	4.16	4.16	4.16
SHARING WITH MINE OWNER (20%)	USD/kg	11.40	11.40	11.40	11.40	11.40	11.40	11.40
TAX PAYABLE TO GOVT.	USD'1000	170	212	297	396	453	453	453
SHARING WITH MINE OWNER	USD'1000	465	581	814	1,085	1,240	1,240	1,240
FIXED COST - SALARIES & OVERHEADS	USD'1000	480	600	720	840	960	960	960
Mining Cost	USD/MT	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Processing Cost	USD/MT	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Elution Electrolysis Cost	USD/MT	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SUB-TOTAL OF PROCESSING COST	USD/MT	50.0	50.0	50.0	50.0	50.0	50.0	50.0
PROCESSING COST	USD'1000	800	1,000	1,200	1,400	1,600	1,600	1,600
TOTAL COST	USD'1000	1,915	2,394	3,031	3,721	4,253	4,253	4,253

(E) ESTIMATED PROFIT/LOSS PER YEAR (Figures in USD'1000)

PROFIT/ LOSS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
EBIDTA	411	513	1,039	1,705	1,949	1,949	1,949
Interest on Loan	13	39	65	325	351	377	403
EBDT	398	474	974	1,380	1,598	1,572	1,546
Depreciation	125	163	200	575	613	650	688
Profit before Tax (PBT)	273	312	774	805	985	922	858
Tax - 30%	34	39	97	101	123	115	107
Profit after Tax (PAT)	239	273	677	704	862	806	751

(F) ESTIMATED CASHFLOW & VIABILITY (Figures in USD'1000, except for DSCR)

CASHFLOW & DSCR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Loan repayment	-	100	300	300	500	500	500
CASHFLOW (PAT + Depreciation - Loan repayment)	364	335	577	979	974	956	938
Debt Service Coverage Ratio (DSCR)		3.41	2.58	2.57	2.15	2.09	2.04
Average DSCR	2.56						

8. **RISK & SWOT ANALYSIS, ENVIRONMENTAL IMPACT**

RISK & SWOT ANALYSIS

SWOT stands for strengths, weaknesses, opportunities and threats. The following SWOT analysis identifies the internal and external factors that are favourable and unfavourable to Company's objectives.

STRENGTHS

- The owners have collectively average of 25+ years' of diverse experience, and have demonstrated the proven ability to run, manage and operate the Company.
- The owners have their own source of fund for capital investments.
- All operations will be conducted and witnessed by complying with government policy according to the current Mining act.

WEAKNESSES

- Although the owners have years of industry experience, this is still considered a startup as it is a new company. Startup carries the risk of a business which is to be set up and has its initial sets of hurdles and risks associated with it.
- There is always initial constraint of limited staffing and capital fund budgeting. But over the time, they can build their office staff and revenues as well.

OPPORTUNITIES

- Tanzania has a wide variety of opportunities with several small scale miners who have the PMLs of mines and minerals but with limited processing capability. The value addition to them in a technical cost effective manner will yield significant benefit. It is therefore a strong local untapped business market to draw from.
- Partnering with small scale miners will provide business opportunity and meet unmet needs.

THREATS

- Economic downturns, regulations, changes and natural disasters
- Though that region of Tanzania is a proven source of gold, the Quality of rock ore is uncertain in various locations due to geological differences. However, since the unit is sourcing raw material from 20km radius, the chances of non-availability of suitable raw material is less.

ENVIRONMENTAL IMPACT

This being a gold mineral processing unit, it envisages establishment of Vat leaching and Cyanide leaching systems. It will have to abide and follow the necessary Environmental Impact Assessment (EIA) procedure and considerations. The project involves Cyanide leaching for gold recovery, and therefore the tailings so produced will have to be necessarily stored and treated in a proper manner in Tailing Storage Facility (TSF) to be made and maintained as per the Tanzanian laws. The spread of harmful pollutants thus will be restricted and controlled.

The unit will consume approximately 200,000 litres of water daily. The project being a wet process plant with leaching and adsorption method. All the water shall be recycled. The facility will therefore be a zero discharge unit.

The machines and floor shall be washed on a daily basis for which maximum of about 5,000 litres of water shall be consumed, resulting in wash water generation which shall be used for gardening purposes at the factory premises. Rain water collection system shall also be provided.

Besides the above, the premises is proposed to have 3 toilets for workers, which will be attached to Septic Tank and soak pit.

9. CONCLUSION

The proposed business plan is found feasible in terms of potential and findings in technology being used, the production method, the industry segment market.

The characteristics of artisanal miners in Tanzania, on average, are in compassing both young and old generations, with medium education levels, owned small acres of PMLs , for which it is recommended that the artisanal miners tie-up with potential medium CIP/CIL processing plants to enhance their production and output capacities through organized processing, through organizing miners and processors partnership program to organize and assist in providing mining technology and any support.

The company offer good partnership to miners by sending advanced technology and machinery team that will handle and strengthen the mining technologies and activities for good mining practices and providing necessary needs in coordination with the Mines and Minerals department, Government of Tanzania.

The company has already taken care of the risk factors associated with land, electricity, water, etc. The manpower requirements have been identified in detail and the gaps fulfilled.

The technology and machines are being sourced from a reputed manufacturer approved and recognised worldwide and acknowledged by processors worldwide.

The financial model based on the capital cost, production outputs, and global and domestic selling prices has been formulated. It is observed that the same is found feasible.

The risk factors being adequately addressed, and the financial feasibility being established, it can be concluded that the Medium CIP/CIL plant for Gold ore processing proposed to be set up, will be a boost to the Artisanal smaller miners in the Mwamboke, Shilalo, Misasi region. Besides earning foreign exchange for Tanzania, and providing employment to Tanzanians, it will lead to Tanzanian Small Miners productivity gain visibility in global market.



ANNEXURE – INTRODUCTION OF COMPANY BY RESIDENT MINES OFFICER (RMO)



THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF MINERALS
THE MINING COMMISSION



In reply please quote:

Ref. No.....

Date: 19/01/2024.

To Whom It may Concern

Dear Sir/Madam,

RE: **INTRODUCTION OF GOLDEN MAMA COMPANY LIMITED**

I am writing to introduce **GOLDEN MAMA COMPANY LIMITED**, a reputable mining company specializing in gold mining activities. They are reaching out to inquire about the process of obtaining an export business license for the gold products.

GOLDEN MAMA COMPANY LIMITED has been operating in the mining industry, and they have established a strong reputation for the expertise and commitment to excellence. The team of experienced professionals ensures that all the mining operations are conducted with utmost care, adhering to the highest industry standards.

With the state-of-the-art equipment and advanced mining technologies, they are able to extract gold ore efficiently and effectively. The focus on sustainable practices and responsible gold mining sets them apart from other companies in the industry. They prioritize environmental protection, health, as they aim to expand the operations globally, they are seeking to secure an export business license for the gold products. They are aware that such a license is of utmost importance to engage in international trade and comply with the legal requirements of exporting gold.

They kindly request the guidance on the necessary procedures and documentation needed to acquire the export business license for the gold products. The company is fully committed to adhering to all regulations and legal frameworks governing the export of gold, and they will ensure compliance with all applicable laws and regulations related to the export process.

They believe that by obtaining the export business license, they will be able to contribute significantly to the growth and development of the gold mining sector while fostering beneficial trade relationships with international partners.

Thank you for the attention to this matter. They would greatly appreciate the assistance in guiding us through the process of obtaining the export business license for the gold products. They look forward to the prompt response and the opportunity



to collaborate with the esteemed organization.

Your faithfully,

A handwritten signature in black ink, appearing to read 'Evans'.

Eng. Evans N. Tarimo

For: Resident Mine Officer

MWANZA

CONFIDENTIALITY AGREEMENT

The undersigned reader acknowledges that the information provided in the business plan is confidential; therefore, the reader agrees not to disclose it without the express written permission of Golden Mama Company Limited Directors.

It is acknowledged by the reader that information to be published in this project report and business plan is in all respects confidential in nature other than the information that is in public domain through other means and that any disclosure or use of this confidential information by the reader may cause severe damage to Golden Mama Company Limited or its shareholders.

Mr. WILLIAM KULINDWA GEORGE

Mrs. RHOBİ SIMANGWI RAGERO

.....
Director Signature and Date


.....
Director Signature and Date

These Financial statement projections estimate were approved by the Management team and were signed on its behalf by

Mr. WILLIAM KULINDWA GEORGE

Mrs. RHOBİ SIMANGWI RAGERO


.....
04/02/2024.
Director Signature and Date


.....
4-2-2024
Director Signature and Date

GOLDEN MAMA COMPANY LIMITED
P.O. Box 77
MWANZA