

**TANJINKUANGYE COMPANY LIMITED**  
**BUSINESS PLAN**  
**FOR**  
**THE ESTABLISHMENT OF GOLD PROCESSING PLANT**  
**PLOT NO 423 BLOCK N MISUNGWI MWANZA**  
**TANZANIA.**

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## List of Abbreviations

CAPEX - Capital Expenditure  
CIF - Cost Insurance and Flight  
CSI - Corporate Social Investment  
MWAUWASA- Mwanza Water Supply and Sewerage Authority  
EIA - Environment Impact Assessment  
GDP - Growth Domestic Products  
GOT- Government of Tanzania  
ICT -Information Communication Technology  
IRR - Internal rate of return  
KVA - Killo Volt Ampere  
NBS - National Bureau of standard  
NEMC - National Environment Management Council  
NGO - Non Governmental Organization  
OPEX - Operating Expenditure  
SWOC - Strength Weakness Opportunity and Challenge  
TANESCO - Tanzania Electric Supply Company  
TZS - Tanzania Shilling  
USA - United state of America  
USD - United State Dollar  
VETA - Vocational Educational Training Authority  
QTS - Quantity  
VAT - Value Added tax

## **EXECUTIVE SUMMARY**

This writeup represent the extract of the Gold Processing business component from the main Feasibility study for Tanjinkuangye Company Limited which is a legally incorporated mining company based in Plot No 423 Block N, Mbela B, Misungwi District, Mwanza.

As a matter of fact, this business plan is our business forecast for the gold minerals processing component of the company for the next five years. In fact, it is our administration and mining operation manual for the period covered. In this plan are our company profile, products, production flow chart, and our market and marketing strategies.

The feasibility analysis of our operation for the period under consideration are also covered here. So, the feasibility analysis covers all the cost of operation, marketing, and turnover forecast. All of these are finally presented in the company income statements for projected gross income and net profit propositions. The balance sheet and the cash flow statement speak volume for our capacity to operate seamlessly without any financial hitch in the next three years.

## **1.0. THE MINING SECTOR OVERVIEW IN TANZANIA.**

### **1.1. The Mining sector in Tanzania**

Tanzania is a land rich in minerals, mining is a leading industrial sector in Tanzania with the value of mineral exports constantly increasing for the past several years. The sector is comprised of both small- and large-scale operations. Mining in Tanzania includes metals (gold, iron ore, nickel, copper, cobalt, silver), industrial minerals (diamonds, tanzanite, ruby, garnet, limestone, soda ash, gypsum, salt, phosphate, gravel, sand, dimension stones and graphite), and fuel minerals (coal, uranium). Tanzania is also home to many rare earth and critical minerals that are currently in the exploration stage. Mining makes up more than 50% of the country's total exports, of which a large part comes from [gold](#).

Tanzania earned around 2.3 billion U.S. dollars with minerals exports in 2019, a significant increase over 2018 level of 1.6 billion U.S. dollars. Gold had the highest contribution to the value of mineral exports. Tanzania is the 4th largest gold producer in Africa after South Africa, Ghana and Mali and is the world's sole producer of the precious stone Tanzanite. Gold production currently stands at roughly 40 tonnes a year, copper at 2980 tonnes, silver at 10 tonnes and diamond at 112,670 carats.

Mining and quarrying activities had a very large contribution to Tanzania's Gross Domestic Product (GDP) growth in the first quarter of 2021. The sector recorded 10.2 percent of the GDP equivalent to 1,473,804 million TZS.

The Tanzania mining industry remains attractive to investors, given the next few years of significant diversification to the mining of nickel, uranium and coal as well as attractive investment packages available in the value. There is also availability of investment incentives and supply chain opportunities in the mining sector.

The mining sector depends on imported machinery and supplies, and investors can import capital goods at zero duty. There are significant opportunities for the export of U.S. technology, machinery, and services. Mining companies have significant demand for better power alternatives as they currently rely on diesel generators. The Tanzanian Government encourages mining companies to procure local goods and services whenever possible, and many of the foreign mining executives would like to increase local consumption to support the Tanzanian economy. There is significant opportunity to supply foodstuffs, clean water,

training, consultancy and other services. With an unreliable power grid and rail system, alternative energy and transport solutions are also in high demand.

#### **1.4. Gold processing factories**

Tanzania is the 4th largest gold producer in Africa after South Africa, Ghana, and Mali and accounts for 1.3% of the total global gold production. 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 centered 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 tons in the financial year 2020/21, versus 53.7 tons in the financial year 2019/20, and 42 tons in the financial year 2018/19. Gold exploitation is done by both large and medium-scale miners as well as small-scale miners.

#### **1.5. Proposed plant capacity of Tanjinkuangye Company Limited.**

Investors plan to establish a gold processing plant that will set up a maximum capacity of processing 18MT of raw gold processing per year. The working day of the plant is 300 days excluding public holidays and Sunday. The raw gold from our plant will be refined in the local refineries before exporting.

#### **1.6. Capital Investment and Financing Plan**

The proposed Establishment of the plant will attract investment capital of 500,000USD (excluding interest and depreciations of machineries and equipment's). The project promoters are planning to finance project cost by 35.6% which includes project initial operational cost and pre operational cost amounted to 178,000USD. The 64.4% investment capital will be purchased from commercial banks at a long-term payment not less than 5 years project economic life, all these will be for major construction of the site, purchase of machineries and equipment's, purchasing of cold room trucks and Light vehicles, furniture's, pre operational cost and initial working capitals of project. The proposed long-term loan is approximated to 322,000USD.

## 2.0. PROJECT OVERVIEW

### 2.1 The project location and ownership structure

Tanjinkuangye Company Limited is a limited liability company incorporated in Tanzania under the Companies Act, 2002 with Certificate of Incorporation No.175276572 from Registrar of Companies with effect from 06<sup>th</sup> June, 2024. The office of the company is located at Mwanza Region.

The initial Authorized Share Capital of the company is TZS 200,000,000/= divided into 2,000 ordinary shares of TZS 100,000. each and the company have the power to divide the original or any increased capital into several classes, and to attach thereto any preferential, deferred, qualified or other special rights privileges, restrictions or conditions. Unless the conditions of issues shall otherwise expressly declare, every issue of shares, whether preference or otherwise, or any such rights, privileges or conditions shall not be altered or modified except in accordance with the registered Articles or Association. The liability of the members is limited and the following names compromise the company ownership and principal shareholding as illustrated on Table 2.1 below.

**Table 2.1: Company Ownership and Principal Shareholders**

S/No	Shareholder's Name	Occupation of Subscriber	Number of Shares
1.	OU ZAKE (Chinese) (BUSINESS MAN)	Private Company By Share, Domicile In Tanzania- Incorporate Number 175276572	1400
2.	WU BANCHU (Chinese) (BUSINESS MAN)	Private Company By Share, Domicile In Tanzania- Incorporate Number 175276572	600

### 2.2. Project site analysis

Based on physical inspection of the proposed site, the availability of basic and essential industrial infrastructure such transport, water supply, effluent disposal, electric power supply, telecommunication system and security were all checked out. The current physical condition of infrastructure and utilities on the proposed site is as shown on the pictorial overview of the project site as follows:

### **2.2.1. Utilities and Other supporting Facilities**

The realization of the project development requires successful completion of a number of necessary activities and facilities to enable a successful development of the project. Strategic and situational analysis of project, the project needs reliable supplies of energy, water, transportation, telecommunications services, waste disposal and other services. The regional government under “Mwanza Urban Water Supply Authority” and TANESCO has distributed power and water to ensure water network reaches peri urban areas especially where the project will be located. The following are reliable utilities found at the site;

#### **A. Electricity and water supply**

The proposed site will be supplied with industrial production 2-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line. As part of project budget, the factory will be installed with a stand by generator with a capacity of 50KVA that will be installed for power supply. Solar energy will be alternative source for administration and other miscellaneous activities and not processing activities.

## B. Transportation network and communication system

The proposed project is located in Plot No 423 Block N Mbela B Misungwi, Mwanza. The village is connected to the nearby District by good road passable throughout the year the project is accessible in all mean of ground transport, such as heavy vehicles, Light Vehicle and public transports. The mobile tower operators and service providers available to the project area are such as Vodacom, Tigo, Airtel and Halotel The particular business communication system with external world/entities is expected to improve once the company becomes operational. The National Fibre Optical line transmission is closer the project area, actually just close to project area.

### 2.3. Project Description

#### 2.3.1. Basic requirement of the project establishments

Tanjinkuangye Company Limited is a private company based in Mwanza Region. Tanjinkuangye Company Limited is intending to establish a gold processing plant in Mwanza region. The factory's objective includes; To carrying out business in the mining sites and processing of gold for export.

The plant that will be set up will have a maximum capacity of processing 18MT of Gold per annum. The company will start by constructing administration block, importation and installation of the CIP, building quality laboratory and develop a waste disposal. The proposed land and structure is estimated to 60,000USD

The Business Plan report explores the viability of the proposed Establishment and modernization project in an economy whose liberalization in recent years has witnessed private sector increasing in number and the demand of these commodities. In addition, the study will enable the sponsors to present the parameters and objectives of the proposed project to external financiers such as development and commercial banks, NGOs etc based in Tanzania.

### 2.4. Project Cost & Financing Pattern

The proposed project is estimated to cost a total of USD 500,000 which includes 35.6% (178,000USD) owner's equity and long-term loan of 64.4% (322,000USD) as proceeds from capital contribution of the project, anticipated current assets of 203,212USD, liquidity of 351,724USD, total assets 875,936USD after incorporate project income and operational cost. The project has no provisioning and reserves. The project fixed assets is 321,000USD - see Annex I and III,

EQUITY + LOAN		USD
1	EQUITY (35.6%)	178,000.00
2	LOAN (64.4%)	322,000.00
TOTAL FINANCING		500,000.00

## **2.5. Business Plan Objectives**

The objectives of this study are three-fold. First is to determine the viability of the proposed integrated project and serve as a business plan for the company's development program. Secondly, it is meant to facilitate initial Joint-venture process to local and Chinese investors.

Thirdly, the business plan will act as a supporting document in the company's application for Tanzania Investment Centre (TIC) Certificate of Incentives so as to access exemptions on duties, VAT deferments and other benefits and protections as statutorily provided for under Tanzania Investment Act (1997).

## **2.6. Market and pricing Analysis**

Furthermore, the market trend is encouraging. In fact, gold mining in Tanzania has shown to be a lucrative business. Ghana has continued to maintain the market lead in Africa for a long time and up to now. South Africa is another major producer in the Africa. Until recently, Tanzania's gold-mining industries may be considered number three in Africa but had witnessed poor investment in the recent years. It failed to operate as well-oiled machines. In fact, the miners have not considered it wise to put forth sizeable capital towards exploration and development. But with recent government policy and legal reforms and incentives in place, exploration will be successful and will extend to renewing and growing the reserves that were being mined.

In fact, it's hoped that a continual expansion and new development of mining sites will be sustained leading to growth in production. It is common trend in the gold ore mining line of business to find mining companies positioning for business in locations and communities where they can easily have cheap access to mines and labour. This policy is like an industrial standard. It actually, enables miners make profits and maintain overhead and logistics.

## **2.7 Technical aspect and related cost**

### **2.7.1. Land acquisition and Buildings**

The project is located at Misungwi District, Mwanza , based on physical inspection of the proposed site, the availability of basic and essential project Establishment development is in place. The shareholder will build some of the administration building and water treatment plant 12,800USD.

Office buildings and other related structures will be renovated by provision of loanable facilities, the proposed structure is designed to meet highly security this will total to 60000 USD.

### **2.7.2. Machinery and Equipment.**

Proper machinery and equipment selection is one of the key problems in the production of high-quality products in Tanzania. To increase effectiveness and production efficiency one needs to have a modern technology machinery. In view of the foregoing, an effort has been made to choose from modern technological alternatives, a level that strikes a balance between fixed costs based on depreciation and variable costs based essentially on wages.

While working out details of equipment required, it has been assumed that the factory will work 300 days in a year. The projects machinery and equipment will be sourced from China and local market in Tanzania Estimated total cost is 200,000USD. Calculated depreciation of buildings, machines and other working facilities is estimated to cost USD 24,621 please see Appendices I on income statement.

### **2.7.3. Motor Vehicles**

The project anticipated to purchase motor vehicles costing to 42,000USD, these includes trucks costing to 36,000USD and two light vehicles costing to 6,000USD. All these vehicles will facilitate plant operations and management of the project. Hence increases plant performance and administrative work.

### **2.7.4. Furniture & Fittings and office equipments**

The project building and structures are not enough to run smoothly project implementations; promoters during assessment keep asides a total budget of 1,000USD. The cost of furniture and fittings. Apart from furniture and office equipment, the project will allocate 19,000USD for unforeseen other office facilities in case the budget goes above limit.

### **2.7.5. Pre-Operational Expenses and initial working capital**

Under pre-operational expenses are considered costs like company formation, preliminary project studies, business plan preparation costs, licenses, permits and authorization, including processing of Incentives, legal fees, etc set aside of 8,000USD. While 170,000USD for Initial working capital of the project which includes initial imports of consumable goods and material estimated to last for the 1<sup>st</sup> three months of operations. Otherwise, raw materials will generally be maintained at one month's stock and debtors at one month's sales volume total 178,000USD set aside.

### **2.7.8. Project Financing**

The project costs, including fixed costs (machinery, equipment, building renovations, motor vehicles, office furniture and equipment and pre-operation expenses will be financed by a combination of bank term loan and shareholders own

resources. Working capital requirements will be financed by short term bank financing in form of overdraft facility:

### **2.7.9. Explanatory Notes.**

The plant will operate for 300 days in a given year of operation. The forecast has made for the duration of five years of operations, Extraction rate is 62.57% gold processing from fresh gold ore, capacity utilization of the project. The proposed project is a complete set of latest processing gold processing machine, equipment and tools. All these will be imported from china and local made with life span 2 to 5 years project economic life.

### **2.7.10. Operating and Administrative Costs**

The major operating costs are salaries, wages and allowances; and food and beverages for hostel students. Consumable goods and material like chemicals, administrative expenses, fuel and lubricants, general cleanness and security, uniforms and other related goods, insurance, licensing, tax, utilities have been stipulated to this report (see income statement Annex I) total operational and administrative cost 1,148,276USD

### **2.7.11. Auxiliary Materials/ services**

Falling under this category of factory, utilities and service facilities must be considered,

**Utilities and service facilities that will need to be provided in this plant are as follows:**

- (i) Workshop
- (ii) Electric power
- (iii) Water supply
- (iv) Miscellaneous facilities {Canteen; First Aid Kit, Storage and transport and Office Facilities}

#### **(i) Workshop**

It is necessary to make provision for a small workshop in the factory premises so that certain maintenance operations could be carried out following sudden breakdowns and major routine matters.

The facility will comprise of necessary machines like small centre lathe, drilling machine, welding set, soldering and gas-cutting equipment including complete electrical kit to take care of necessary electrical maintenance as well as to replace worn-out parts and periodic oil and greases needs for the factory. Equipment provision has been restricted to the minimum.

#### **(ii) Electric Power and Generator**

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line. As part of an alternative power supply, the factory will heavy duty 50KVA power generator automated generator that will be connected to the all-necessary factory compound for standby power supply. The factory will install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems.

### **(iii) Water Supply**

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed site has close to water network, the agency is major supplier of water to urban and peri urban area in the city

### **(iv) Miscellaneous Facilities e.g. First Aid Kit, Storage and Transport, Office Facilities etc**

- Provision has been made in the project costs for necessary facilities for external telephones and fire alarm system;
- Sickness and ill-health are recognized to be among the cause of absenteeism and low morale leading to decreased provision of factory, increased waste and bad employee-management relations. Therefore, necessary provision has been made for the canteen and first aid facilities in case of accidents, sudden sickness etc.
- Storage and transport needs of the factory have been duly recognized and been attempted mostly manual. Regarding transport, 3 light vehicles will be purchased and some will be hired during the start of project
- Necessary provision for furniture and office equipment has been made in the Capital Cost estimates.

### **2.7.12. Waste management for the project**

In order to create a sustainable society, it is necessary to develop effective utilization of all sorts of wastes. One of the major wastes from our project site is chemicals used in the processing of gold and mud waste. The mix of chemical and water waste will be treated before disposing to avoid effects to the living organisms. In modern times, environmental protection is being implemented not because it is enforced law, but as an administrative philosophy.

### **3.0. PROPOSED SALARY BUDGET AND MANPOWER**

#### **3.1. Employment**

The plant is looking at providing direct employment to 82 peoples on full implementation and operation of the project and 173 as part time employments basically these will be engineers and geologist in the gold processing plant. The company will have 9 foreign works, and the remaining are from local perspectives. The project is divided into 3 Departments; Administration (13), Finance and marketing departments (5), Operational department (64).

#### **3.2. Recruitment**

Recruitment of the 73 persons will be carried out by recognized institutes SIDO and VETA by recruiting qualified operational department especially geologist and factory engineers.

#### **3.3. Training and the use of consultants**

The Tanjinkuangye Company Limited plans to initially carry out on the job training for most of the technical staff to be dispatched to the project site by the suppliers of the machineries and equipment's of the factory which will be specified under sales agreement. In general, the factory will ensure that employees acquire new skills and procedures to increase their productivity fourfold. Educational materials will be subsidized or paid for to motivate the workers to develop themselves.

Whereas the factory will endeavor to obtain the best talents to fill the permanent posts in the organization, it is intended where necessary, to continue with the policy of hiring out some specialized skills by way of consultants. Alternatively, those skills not required throughout the year will be left to consultants. To ensure efficient and scientific management, operational manuals will be prepared for the core functions of the factory.

The project will be managed by qualified professionals given the vast experience that the promoters have acquired over years in running and managing similar businesses, guidance to management and regularly monitor and evaluate performance of the project.

**Table 3.1. Manpower requirement:**

<b>A.ADMINISTRATION DEPARTMENT</b>	<b>FULL TIME STAFF</b>	<b>MONTHLY SALARY FULL TIME STAFF</b>	<b>MONTHLY ALLOWANCE</b>	<b>TOTAL ANNUAL SALARY</b>
<b>DEPARTMENT</b>	<b>POSTS</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>
EXCUTIVE DIRECTOR - FOREIGN	2	1,800		43,200
DIRECTOR ADMINISTRATION	1	800		9,600
LOGISTIC - FOREIGN	2	900		21,600
DRIVER	3	270		9,720
SECURITY GUARD	5	250		15,000
<b>SUB TOTAL</b>	<b>13</b>	<b>4020</b>	<b>0</b>	<b>99,120</b>
<b>B.FINANCE AND MARKETING DEPARTMENT</b>	<b>FULL TIME STAFF</b>	<b>MONTHLY SALARY FULL TIME STAFF</b>	<b>MONTHLY ALLOWANCE</b>	<b>TOTAL ANNUAL SALARY</b>
<b>DEPARTMENT</b>	<b>POSTS</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>
DIRECTOR FINANCE- FOREIGN	1	1,000		12,000
ACCOUNTANT	1	600		7,200
PROCUREMENT OFFICER	2	500		12,000
DRIVER	1	350		4,200
<b>TOTAL</b>	<b>5</b>	<b>2450</b>	<b>0</b>	<b>35,400</b>
<b>C. OPERATIONAL DEPARTMENT</b>	<b>FULL TIME STAFF</b>	<b>MONTHLY SALARY FULL TIME STAFF</b>	<b>MONTHLY ALLOWANCE</b>	<b>TOTAL ANNUAL SALARY</b>
<b>DEPARTMENT</b>	<b>POSTS</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>	<b>AMOUNT USD</b>
Geologists - Local and Foreigner	2	1,000		24,000
PLANT ENGINEERS - FOREIGN	2	1,000		24,000
Casual labors	60		90	64,800
<b>TOTAL</b>	<b>64</b>	<b>2000</b>	<b>90</b>	<b>112,800</b>
<b>GRAND TOTAL</b>	<b>82.00</b>	<b>8,470.00</b>	<b>90.00</b>	<b>247,320.00</b>

## 4.0. FINANCIAL ANALYSIS

### 4.1. Production, Revenue and project viability

- ❑ The estimated revenue gain from Gold is estimated to be 1,500,000USD annually excluding Value Added Tax during the first year in operation of the factory,
- ❑ Net profit before tax is 351,724USD for the first year, and increases to second year to the fifth years of economic production life of project
- ❑ Percentage of gross contribution for the first year 23% and increases tremendously as shown in income statement,
- ❑ Net profit after tax and depreciation for the first years in operational is 203,212USD and increases positively, the project is able to pay corporate tax 98,131USD which has positive contribution to GDP of the country,
- ❑ The expected sales increase annually is 5% while expenses increase by 3% which depends on inflation rate of the country
- ❑ Total investment cost of the project is 500,000USD whereas the own equity is 35.6% while remaining percentage will be borrowed from commercial banks,
- ❑ Project current assets for the first year is 203,212 USD and is increases positively, project has a good liquidity in case the shareholders will quit the project its easily to sales shares.
- ❑ The end balance of project in cash flow statement is positive and increases tremendous. And Cash generated from operation and net cash from operational activities increases positively of project (see cash flow sheet)
- ❑ The Discounted Cash flow yields an Internal Rate of Return (IRR) of 13.59% which is above discounted bank interest rate of 8%, and payback period of project is within 3 years. This confirms the financial viability of the proposed project.
- ❑ Return on Investment is anticipated to 26.49% which is increases positively to 33.9% to the fifth year of project economic life - see balance sheet,
- ❑ Depreciation of fixed assets and amortization of the pre-operational expenses rates used are as follows: land 5%, Civil Works/ Structures/Buildings 5.00% on straight line basis, Plant Machinery & Technical Equipment 12.50% on straight line basis, Motor Vehicles. 20.00% on straight line basis. The business plan use 12.5% as depreciation factors. To this project after including depreciation factors, the first-year depreciation value is 24,621USD and increases gradually due to wear and tear of fixed asset. Whereas asset value decreases with time – see annex I and III
- ❑ Salaries and Wages have been based on the prevailing scales in the project. There is provision of 20% to cover company contribution to NSSF (10%) and other social welfare (10%). Included to the total amount (see Income statement)

## 5.0. RISK ANALYSIS

### 5.1. Risk Analysis

Risk is the probability that an event or action will adversely affect the organization. Risk assessment is the identification and analysis of risks associated with the achievement of operations, financial reporting and compliance goals and objectives. Risk management is a central part of the factory. The factory's management will determine the level of operations, financial and compliance risk they are willing to assume. Risk assessment is one of the Factory's management responsibilities.

### 5.2. Macroeconomic risk analysis

Since early 1986, the government of Tanzania has launched a comprehensive economic policy and stabilization plan with the aim to enhance the amount of infrastructure construction and improve the lives of the poor. During this time the main economic indicators significantly improved. However, uneven development of various region in the country, lack of relevant infrastructure in transportation, telecommunications, networking, factory facilities, electricity and water supplies have proven to be investment barriers. Overall, Tanzania has a weak economic foundation but the project can achieve a greater impact in attaining social and economic goals for the country.

### 5.3. Finance risk analysis

- a) **Supply Risk:** The risk in consumable good relates to supply of raw material, transportation and price fluctuations. There is no assurance of enough supply of raw materials in the local market instead mostly of raw materials are imported.
- b) **Processing Risks:** The technology, machines and equipment used in factory are in rudimentary stages all of which contribute to reducing output efficiency.
- c) **Sales/market risk:** Placing on the tuition fees markets bears risk of demand fluctuations and rejections through the implementation. Furthermore, beneficiaries/students are not aware of the factory and are usually very pricing sensitive.

### 5.4. Other potential external risk

- a) **Lack of Governance:** the governance mechanism is underdeveloped, actors operate in an uncoordinated and unorganized fashion, and if rules exist they are often ignored;
- b) **Lack of market coordination:** No lead organization has a coordinating role in relation to markets, technology and information such no incentives for improving mental health education and promote sustainable income earning opportunities;

- c) **Unclear and conflicting roles regulatory authorities:** Regulatory Agencies are responsible for quality control education and as well as enforcing such as NEMC, TBS, TMA, Ministry of industries etc, are regulatory role in issuing licensing etc
- d) **Operating procedures:** Standard procedures are inadequately enforced, or not enforced at all, because of relaxed regulations; and
- e) **Integration:** there is little vertical integration of education system

### 5.5. Mitigating potential risk

The development of a large and complex project such as Tanjinkuangye Company Limited is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach to manage the project in a manner which is fairly and adequately address the multiple risks in a comprehensive as well as systematic manner is to use the risk analysis and management methodology which identifies the risk issues and their instrumental cause. In this regard, the risk is eliminated or effectively managed by the party best suited with capacity to handle or deal with the risk factors.

## 6.0. FINANCIAL MODELLING AND ANALYSIS

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the Tanjinkuangye Company Limited. The analysis is based on the assumptions that have been taken for the implementation of the site development, demand and the associated potential investment requirements for a 5-year time period. The purpose of Establishment of the factory will speed up the country's economic development by being a catalyst for restructuring the existing factory to set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

### 7.2. Project investment summary.

INVESTMENT SUMMARY - TANJINKUANGYE COMPANY LIMITED				
S/NO.	CAPITAL ITEM	No. OF UNITS	UNIT OF MEASURE	ESTIMATED COST (USD)
NB	ALL FIGURES IN "USD"			
	<b>A. LAND AND BUILDINGS</b>			
1	Land Acquisition	4000+	M <sup>2</sup>	12,800
2	Building	100	M <sup>2</sup>	47,200
	<b>SUB TOTAL</b>			<b>60,000</b>
	<b>B. MACHINERY EQUIPMENT</b>	<b>No. OF UNITS</b>	<b>UNIT OF MEASURE</b>	<b>ESTIMATED COST USD</b>
11	Plant and Machineries	1	set	170,000
12	Other equipments	5	unit	30,000
	<b>SUB TOTAL</b>			<b>200,000</b>
	<b>C. MOTOR VEHICLES</b>	<b>No. OF UNITS</b>	<b>UNIT OF MEASURE</b>	<b>ESTIMATED COST USD</b>
28	Trucks	2	Unit	36,000
29	Light Vehicles	2	unit	6,000
	<b>SUB TOTAL</b>	<b>4</b>		<b>42,000</b>
	<b>D. FURNITURE</b>	<b>No. OF UNITS</b>	<b>UNIT OF MEASURE</b>	<b>ESTIMATED COST USD</b>
30	Tables	20	unit	400
31	Office Furniture	set in lump sum		600
	<b>SUB TOTAL</b>			<b>1,000</b>
	<b>E. OTHER COST/CHARGES</b>	<b>No. OF UNITS</b>	<b>UNIT OF MEASURE</b>	<b>ESTIMATED COST USD</b>
32	Contiguous			19,000
	<b>SUB TOTAL</b>			<b>19,000</b>
	<b>TOTAL FIXED ASSET</b>			<b>321,000</b>

	F. CURRENT ASSETS	No. OF UNITS	UNIT OF MEASURE	ESTIMATED COST USD
33	Pre operational expenses			8,000
34	Initial working capital			170,000
	<b>SUB TOTAL</b>			<b>178,000</b>
	<b>TOTAL INVESTMENT</b>			<b>500,000</b>

## 7.2. Objective and Scope of Financial Model

### 7.2.1. Objective

The main objective of the financial modelling and analysis is to setup a financial model framework for potential generated revenues and operational & maintenance costs for the full operation of Tanjinkuangye Company Limited based on the assumptions taken for the Market Analysis, the plan for the facility development, unit production costs and other overhead and operational charges.

### 7.2.2. Scope

The scope consists of a financial model that will be used to analyse the potential financial viability of the project based on the assumptions taken for the concept and scope of the factory on the Market Analysis. The financial model has been developed in excel spread sheet and include information on costs, expenses and the subsequent sales revenue based on the average market prices and linked to the financial cash flow.

## ANNEX I - INCOME STATEMENT

(all numbers in USD)

<u>Revenue</u>							
	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>TOTAL</u>
Gross revenue from sales of Gold processing		1,500,000	1,575,000	1,653,750	1,736,438	1,823,259	8,288,447
<b>Total Operating Revenue</b>	-	<b>1,500,000</b>	<b>1,575,000</b>	<b>1,653,750</b>	<b>1,736,438</b>	<b>1,823,259</b>	<b>8,288,447</b>
<u>Expected Expenses</u>							
	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Salaries		247,320	254,740	262,382	270,253	270,253	1,304,948
Social Charges & Pension Payments		49,464	50,948	52,476	54,051	54,051	260,990
Consumable goods - raw materials (gold ore)		689,392	710,074	731,376	753,317	753,317	3,637,476
Administrative / expenses and management system		36,000	37,080	38,192	39,338	39,338	189,949
Fuel and lubricants for cars and generators		48,000	49,440	51,912	54,508	54,508	258,367
General Cleaness and security services		9,600	9,888	10,185	10,490	10,490	50,653
transportation		24,000	24,720	25,462	26,225	26,225	126,632
Cost of sales and marketing		15,000	15,450	15,914	16,391	16,391	79,145
Insurance/licensing/healthy premium/other charges		6,000	6,180	6,365	6,556	6,556	31,658
Utilities - Electricity and water services		13,500	13,905	14,322	14,752	14,752	71,231
Other Costs		10,000	10,300	10,609	10,927	11,213	52,764
<b>Total Operating Costs</b>		<b>1,148,276</b>	<b>1,182,724</b>	<b>1,219,195</b>	<b>1,256,809</b>	<b>1,256,809</b>	<b>6,063,813</b>
<b>Operational Net Earnings before Depreciation, Interest &amp; Tax</b>		<b>351,724</b>	<b>392,276</b>	<b>434,555</b>	<b>479,629</b>	<b>566,451</b>	<b>2,224,634</b>
<i>%age Gross Contribution</i>		23	25	26	28	31	1
<b>Depreciation at12. 5% (Machines, Equipments)</b>		<b>24,621</b>	<b>27,459</b>	<b>30,419</b>	<b>33,574</b>	<b>39,652</b>	<b>200,217</b>
<b>Net Earnings before Tax &amp; Interest</b>		<b>27,103</b>	<b>64,816</b>	<b>04,136</b>	<b>446,055</b>	<b>26,799</b>	<b>,024,417</b>
<b>Interest Paid (Bank Loan)</b>		<b>25,760</b>	<b>21,369</b>	<b>16,627</b>	<b>11,505</b>	<b>5,974</b>	<b>81,235</b>
<b>Tax (30%)</b>		<b>8,131</b>	<b>109,445</b>	<b>121,241</b>	<b>133,816</b>	<b>158,040</b>	<b>620,673</b>
<b>Net Earnings</b>		<b>03,212</b>	<b>234,002</b>	<b>266,269</b>	<b>00,733</b>	<b>362,785</b>	<b>1,367,002</b>

## ANNEX II -CASH FLOW FROM OPERATING ACTIVITIES

<b>Cash Flow statement from Investing Activities for five years</b>					
(all numbers inUSD)	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b><u>CASH FLOW FROM OPERATING ACTIVITIES</u></b>					
Cash receipts from Sales	1,500,000	1,575,000	1,653,750	1,736,438	1,823,259
Cash paid to suppliers and employees	(1,148,276)	(1,182,724)	(1,219,195)	(1,256,809)	(1,256,809)
Cash generated from operations	351,724	392,276	434,555	479,629	566,451
Dividends received*	0	0	0	0	0
Interest received	0	0	0	0	0
Interest paid	(25,760)	(21,369)	(16,627)	(11,505)	(5,974)
Tax paid	(98,131)	(109,445)	(121,241)	(133,816)	(158,040)
<b>Net cash flow from operating activities</b>	<b>227,833</b>	<b>261,462</b>	<b>296,687</b>	<b>334,307</b>	<b>402,437</b>
<b><u>CASH FLOW FROM INVESTING ACTIVITIES</u></b>					
Replacement of equipment	0	0	0	0	0
Proceeds** from sale of equipment	0	0	0	0	0
<b>Net cash flow from investing activities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><u>CASH FLOW FROM FINANCING ACTIVITIES</u></b>					
Proceeds from capital contributed	178,000	0	0	0	0
Proceeds from loan	322,000	0	0	0	0
Payment of loan	(80,647)	(80,647)	(80,647)	(80,647)	(80,647)
<b>Net cash flow from financing activities</b>	<b>419,353</b>	<b>(80,647)</b>	<b>(80,647)</b>	<b>(80,647)</b>	<b>(80,647)</b>
<b><u>NET INCREASE/ DECREASE IN CASH</u></b>	<b>647,186</b>	<b>180,815</b>	<b>216,041</b>	<b>253,660</b>	<b>321,790</b>
Cash at the beginning of the period	203,212	234,002	266,269	300,733	362,785
Cash at the end of the period	<b>850,398</b>	<b>414,817</b>	<b>482,309</b>	<b>554,393</b>	<b>684,575</b>

### ANNEX III - PROFOMA BALANCE SHEET

Pro forma balance sheet					
(all numbers in 000)	Year 1	Year 2	Year 3	Year 4	Year 5
<b>ASSET</b>					
Current asset	203,212	234,002	266,269	300,733	362,785
Fixed asset	321,000	296,379	293,541	263,122	259,967
Liquidity	351,724	392,276	434,555	479,629	566,451
<b>TOTAL ASSET</b>	<b>875,936</b>	<b>922,657</b>	<b>994,365</b>	<b>1,043,484</b>	<b>1,189,203</b>
<b>NET ASSET MINUS DEPRECIATION</b>	<b>851,316</b>	<b>895,198</b>	<b>963,946</b>	<b>1,009,910</b>	<b>1,149,551</b>
<b>EQUITY &amp; LIABILITIES</b>					
Equity	770,669	814,551	883,299	929,263	1,068,904
Reserves	0	0	0	0	0
<b>Total Own Equity</b>	<b>770,669</b>	<b>814,551</b>	<b>883,299</b>	<b>929,263</b>	<b>1,068,904</b>
Provisions					
Long term loan	80,647	80,647	80,647	80,647	80,647
Short term Liabilities					
<b>Total Equity &amp; Liabilities</b>	<b>851,316</b>	<b>895,198</b>	<b>963,946</b>	<b>1,009,910</b>	<b>1,149,551</b>
NET FA/CL	3.98	3.68	3.64	3.26	3.22
CL/CA	0.00	0.00	0.00	0.00	0.00
<b>DEBIT/CAPITAL RATIOS</b>	<b>0.09</b>	<b>0.09</b>	<b>0.08</b>	<b>0.08</b>	<b>0.07</b>
ROI	26.4	28.7	30.1	32.4	33.9
<b>BREAK EVEN POINT</b>	<b>0.91</b>	<b>0.76</b>	<b>0.68</b>	<b>0.55</b>	<b>0.46</b>
<b>BREAK EVEN RATIO</b>	<b>3.49</b>	<b>3.22</b>	<b>2.99</b>	<b>2.79</b>	<b>2.36</b>
<b>EQUITY/TOTAL LIABILITIES</b>	<b>91</b>	<b>91</b>	<b>92</b>	<b>92</b>	<b>93</b>

## ANNEX IV - LOAN PAYMENT SCHEDULES

Loan Information and Payment Schedule			
Loan Data	All number in USD		Loan Summary
Original Principal	322,000.00		Scheduled Payments
Loan Term (Years)	5.00		Scheduled number of payment
Annual Interest Rate	8%		Actual number of payment
Payments per Year	1.00		Total Early Payment
Payment	80,646.98		Total Interest
			80,646.98
			5.00
			5.00
			81,234.89

Year	Payment	Interest	Cumulative Interest	Principal	Balance
-					322,000.00
1.00	\$80,646.98	25,760.00	25,760.00	54,886.98	267,113.02
2.00	80,646.98	21,369.04	47,129.04	59,277.94	207,835.08
3.00	80,646.98	16,626.81	63,755.85	64,020.17	143,814.91
4.00	80,646.98	11,505.19	75,261.04	69,141.79	74,673.13
5.00	80,646.98	5,973.85	81,234.89	74,673.13	0.00
		81,234.89			

## ANNEX V- INTERNAL RATE OF RETURN

IRR for the Project		
(all numbers in USD)		
	Initial Investment	-500,000
Year 1	Additional Annual Net Profit	203,212
Year 2	Additional Annual Net Profit	234,002
Year 3	Additional Annual Net Profit	266,269
Year 4	Additional Annual Net Profit	300,733
Year 5	Additional Annual Net Profit	362,785
	<b>IRR (in 5 years)</b>	<b>13.59%</b>

The IRR above indicates that the expected return on the 500,000USD initial investment after 5 years is 13.5962%.

**ANNEX VI - PAYBACK PERIOD**

<b>Payback Period Analysis</b>				
	<b>Year</b>	<b>Beginning Balance</b>	<b>Net Cash Flows</b>	<b>Ending Balance</b>
Cost of investment	0.00	500,000.00	0.00	500,000.00
	1.00	500,000.00	203,212.32	296,787.68
	2.00	296,787.68	234,002.45	62,785.22
	3.00	62,785.22	266,268.62	203,483.40
	4.00	203,483.40	300,733.10	504,216.49
	5.00	504,216.49	362,785.43	867,001.92

<b>Payback Period =</b>	<b>3.00</b>	<b>Years</b>
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