FLAS GOLD MINE LIMITED

BUSINESS PLAN FOR LEASING OF HEAVY MACHINE/EQUIPMENTS

FLAS GOLD MINE LIMITED
P O BOX 76830
DAR ES SALAAM

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 BACKGROUND

This study covers the carrying out of the project for Integrated Leasing/Hiring of Heavy Equipment/Machinery undertaking. This is intended for the usage/ application in the construction and mining sectors.

Essentially the ultimate purpose of this write up is to ascertain the financial and techno- economic statuses of the undertaking

1.2 PROJECT SPONSORS

The project sponsors are FLAS GOLD MINE LIMITED whose shareholder directors are experienced in the initiation/operation of multi projects, the one in question inclusive.

1.3 BRIEF DESCRIPTION OF THE STUDY

This report presence a full-fledged financial and techno- economic analysis status relevant to the project of integrated hiring / leasing of the heavy machinery equipment in the construction/ mining sectors.

2.0 EXECITIVE SUMMARY

2.1 INTRODUCTION

The report accounts for the financial and techno- economic analysis on the Integrated Leasing/ Hiring of heavy equipment/Machinery undertaking based in Dar es Salaam

The project undertakers are M/S FLAS GOLD MINE LIMITED whose shareholder. Directors are renowned for experience in initiating operating multitude of projects, the one in question inclusive

2.2 MARKET AND MARKET ASSESSMENT

The market analysis has revealed that there is adequate demand for hiring/ leasing of heavy equipment and machinery in the sectors of construction and mining

The same market analysis reveals that there is substantial demand-supply gap because such machinery/ equipment happened to be expensive and not all players in the construction/ mining sectors have adequate financial resources to meet their own requirements.

In order to reflect the demand of such equipment/ machinery in the construction sector has been made to cover the market situation on leasable and rentable premises in the country, especially for Geita and Mwanza all upcountry need.

2.3 LOCATION/ SITE FOR HEAQUARTERS

The Headquarters are based at Nyarugusu Geita Region

The management of M/S FLAS GOLD MINE LIMITED is conscious so as to ensure their hiring/leasing rates are at competitive price levels. The observance of these aspects in turn enables M/S FLAS GOLD MINE LIMITED to secure its rightful market share of services in question.

2.4 FUNCTIONAL BASIC NEEDS

The project is involved the purchase of heavy machinery and equipment appropriate for road construction/ mining works .These include:

- Stone crushers with supplementary equipment
- Field equipment:
  - Graders
  - Bulldozers
  - Excavators
  - Compactors
  - Compressors
  - Low Loaders
  - Trucks
  - Tippers
  - Field Generators
  - Assortment of Spares
  - Work shop equipment tool and field hand tools

2.5 MANPOWER REQUIPMENTS

Manpower needs according to the proposed organization, it has been estimated at 50 persons. This again has been derived taking into account the types of activities that are intended to be undertaken..

However when the project is in full swing more people will be recruited and the envisaged level will be 80 people

2.6 IMPLEMENTATION SCHEDULE

The project will need a total of 36 months to carry out the implementation and taking off.

2.7 INVESTMENT STRUCTURE

Then investment in fixed assets and working capital is estimated at USD 1,627,538. The breakdown of which will be in Annextures

2.8 INVESTMENT STRUCTURE

The total additional investment costs on the project will be at the level of US$ 1,627,538as annexted.

2.9 OPERATION COSTS

The structure of operating costs in the context of the renovated rentable premises is as hereafter presented.

TABLE 2.3 OPERATIOANL COSTS BREAKDOWN

ITEM	US$
Salaries and wages	124,538
Vehicles running expenses	40,000
Electricity	2,000
Water	600
Office Rent	2,000
Equipment Shed Rent	8,000
Maintenance Furniture and fittings	800
Maintenance Machinery /Equipment	30,000
Marketing/Advertisement	30,000
Administrative overheads	50,000

2.10 FINANCIAL INDICATORS

The financial indicators show that the project is viable as hereafter confirmed here below:

2.10.1 Internal Rate of Return (IRR)After Tax

The project's internal rate of return after tax is 21% well above the lending rate of 10% for long term loan and 14% for the bank overdraft.

2.11 ECONOMIC BENEFITS

The successful carrying out of this expansion in its rightful position contributes economic benefits to the Dar es Salaam region people and the whole country. In summary the benefit being realized are as follows:

i. The executive of this expansion will improve creation of additional direct employment opportunities for 50 employees that will man the various operation of the project.

ii. Provides better availability of heavy machinery/equipment that are needed the various functional roles in the constructions/ mining sectors

iii. The income earned by the employees will bring about the improvement of standard of living of these very workers along with their families.

iv. The operation of this undertaking will have a positive impact on the performance of the construction/ mining sectors

v. In a way the undertaking also contributes to the expanded tax base to the Treasury and local Government authorities.

2.12 CONCLUSION

This document has provided a full analysis on the financial, Techno- economic viability on the continued operation of the integrated Leasing /Hiring of Heavy Equipment/Machinery undertaking along with the financial requirements/parameters have been considered. It has been established that this project is technically sound, financially viable, and economical / social beneficial

3.0 MARKET ANALYSIS BRIEF UP

3.1 GENERAL

The marketing for the hiring/ leasing services of heavy equipment/ machinery to be offered by **M/S FLAS GOLD MINE LIMITED** will be such that all efforts will be geared securing the needs of the construction / mining sector. It is a known fact that there are not less than 300 construction firms 20 medium to large scale mining firms and thousands small scale miner operation the country.

The majority of these, with the exception of a few of them, do not own any of the standard heavy machinery/ equipment that are needed for the various operations. Thorough analysis to establish quantified requirements in the context of such machinery/equipment is beyond the needs of the study in question .However such needs run into several units of each category of machinery/equipment.

The company will operate its service covering the whole country, with deports situated in appropriate locations. A reflection of the market potential has been attempted in the context of a construction company with an assumed market share of six percent, as here after presented

A company can operate in any zone of Tanzania such as Central and North East Zones .In these zones all types of roads may require services at any particular period in ayear.It has thus been projected that the total length of roads and the relative market for each type will be as follows:

Type of Roads and Production Programme		Year 1	Year 2	Year 3	Year 4
Available Market (km)		Market Share	Market Share	Market Share	Market Share
Capacity Utilisation	**@100%**	**(6%)**	**(8%)**	**(10%)**	**(10%)**
Type of Road					
Trunk Road Paved	330	20	26	33	33
Trunk Road -Gravel	1410	85	113	141	141
Regional Roads- Earth	460	28	34	43	43
Region Roads - Gravel	300	18	23	26	30
Rural Roads - Earth	1050	24	24	30	30
District Road- Earth	480	63	84	105	105
Bridges and Culverts	4030km	29	38	48	48

3.2 SOURCE OF WORKS

It is anticipated that most of the road works will be sourced from the Ministry of Infrastructure which is responsible for all trunk and Regional road works through Regional engineers where the respective road section exist .Most of these roads are donor funded and fall under the IRP(Project)

In 1998 the country suffered heavy destruction on roads and bridges caused by the EL Nino rains disrupting road communication substantially and affecting social- economic development. The Government is making all efforts to restore the road conditions by hiring private road contractors in order to speed up the completions of such works. Donors have responded positively to the Government's request for funds to facilitate the reconstruction or rehabilitation of the destroyed roads.

A part from the Central Government, the company will also source road works form Municipal and District councils which are responsible for road works on rural feeder and urban roads. Such roads usually have funds allocated for periodic maintenance and rehabilitation works

Some of the areas in which the company will operate has plenty of agriculture and livestock activities as well as manufacturing and mining. The need for road communication in these areas is vital and so is the need to maintain the road in these areas.

4.0 PROJECT ENGINEERING

4.1 GENERAL

As stated elsewhere in this report the Headquarters of M/S FLAS GOLD MINE LIMITED are in Dar es Salaam

The company will execute hiring/leasing of its property selected/ acquired heavy equipment machinery throughout Tanzania especially the following zones:

a) South Western Zone (Iringa ,Mbeya, Rukwa)
b) South Zone (Lindi, Mtwara)
c) Eastern Zone (Dar es Salaam, Morogor, Coast)
d) Lake Zone (Mara, Mwanza, Shinyanga, Kagera)
e) Mid- West Zone (Tabara, Kigoma)
f) Central Zone (Dodoma, Singida)
g) North- East Zone (Arusha, Kilimanjaro, Tanga)

It is assumed that the company when in full operation will be able to secure adequate requests for its heavy machinery / equipment by the various construction/ mining firms, and individuals.

4.2 MACHINERY / EQUIPMENT

The company will have adequate machinery and equipment with which to meet the hiring/ leasing needs. The machinery and equipment will include:

- Complete sets of mobile crusher on viberti- trailer with supplementary equipment
- Graders
- Grader caterpillars
- Rollers (compactor)
- Excavators
- Concrete mixers
- Chain loader caterpillars
- Low loaders
- Compressors
- Bulldozers
- Tipper with cranes
- Semi-trailers
- Field hand tools
- Trucks
- Administration

5.0 CIVIL WORKS AND BUILDINGS

5.1 GENERAL

As noted elsewhere in this report the project operation are based on Nyarugusu Geita region

5.2 ACCESSIBILITY OF THE SITE

The project site is accessible full provision of all the basic necessities Electricity and Water

5.3 AUXILIARY SERVICE REQUIREMENTS

5.3.1 Power Supply System

- **Main Power System**

  It power supply is through the national grid prevailing in the Municipal .This power sometimes can prove highly unreliable because of the frequent cuts and fluctuating voltages

- **Emergency Power Supply**

  A standby generator is provided to supply all the essential loads in and event of TANESCO power failure.

- **Power Distribution**

  Power distribution in the compound is via underground cables installed with TANESCO requirements

- **Fire Protection**

  Is provided in terms of fire detection and fire fighting systems. Fire detection system is consist of automatic and manual detection devises, alarm and communication system whereas fire fighting system is feature portable extinguishers , hose reels , wet and dry rises and automatic sprinkler system

5.3.2 Access Entrance

Wide inlet/ entrance is provided so as to facilitate smooth passage of the workers and vehicles.

5.3.3 A Parking Space for the plant

The compound has ample parking space adequate to accommodate several vehicles at any given time

5.3.4 Water Supply

- **Source of Water**
  The source of potable water for the premises is through the Dar es Salaam water supply system

5.3.5 Storm Water Drainage and Sewerage System

- **Storm Water Drainage**
  Storm water- run- off is collected from the building by means of spouts and full boras through down pipes and is discharged into the open channel and deposited into the road side drains.

- **Sewerage System**
  Waste and foul water is collected from building by means of UPVCP pipes of different sizes e.g 75 mm and 150 mm to the municipal sewer lines.

6.0 IMPLENTATION SCHEDULE

6.1 GENERAL

Both local and external factors have been taken into account when drawing out the proposed schedule of implementation. Factors such as acquisition of machinery and equipment, recruitment of qualified personnel and other factors have been looked into.

6.2 PRELIMINARY FORMALITIES

On the finalization of the study duration of about 4 weeks will be needed for executive of the preliminary formalities of the project.

6.3 PROJECT STAGE

6.3.1 Ordering of Machinery/Equipment / Vehicles/ Furniture

On having secured rented premises for the initial housing of the operation then will follows timely ordering, that will have to be executed to match the rate of project implementation which basically means that executive of jobs acquisition efforts. Time needed will run into several weeks.

6.3.2 Setting up of Machinery/ Equipment/ Furniture

This will be done in rented premises in the context of both office and machinery / equipment storage sheds. However as already noted elsewhere in this report on completion of the own premises, all these wil be shifted.

6.3.3 Carrying put of the hiring/ leasing requests- acquisition efforts

This will be a continuous undertaking right from the time when the company is fully registered and licensed

7.0 MANPOWER REQUIRMENTS

7.1 M**ANAGEMENT**

The success of venture of this kind depends on the competence of the personnel recruited to manage. It is assumed that relevant personnel with requisite skills shall be available within the country. There will be need of recruiting expatriates in some key positions

The overall in charge, responsible for the day to day operations are under the Project Manager who will in turn is answerable to the Board of Directors.

7.2 ORGANIZATION SET UP

The operation are broadly be divide into the following:-

- Finance Department
- Administration Department
- Operation Department
- Marketing Department

7.3 MANPOWER REQUIREMENTS

7.3.1 Total Manpower Requirements

Based on the organization structure in place the project was initially to employ a total of 50 persons

The breakdown down of the initial work force in terms of its categories is an after presented in table 7.1

7.3.2 Salaries and Wages

Total wage bill for the proposed resort has been computer at US$124,538

7.4 RECRUITMENT AND TRAINING

7.4.1 Recruitment

All new staff would be recruited at least one month before the completion of the expansion

7.4.2 **Training**

The Management of the plant would strive to employ competent and qualified personnel in the hiring/ leasing of heavy machinery/ equipment business. To reduce cost few senior staff will be trained at the selected locally available institutions

All other supporting staff will be trained on the job .However , it is expected that most of them will have some basic knowledge and experience in hiring/ leasing of heavy machinery/equipment business

8.0 INVESTMENT AND FINANCING

8.1 ASSUMPTIONS

- The project construction time is assumed to be one year
- The economic life of the project is 10 years
- The currency exchange rate of Tsh 2,330/= to in US$ has been adopted
- Re- investment in vehicle shall be done after every four years
- Interest on OD is 14% and on long term loan is 10%
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8.2 INVESTMENT STRUCTURE

The total initial investment in fixed assets is estimated at US$ 1,627,538whose of which is as at appendixes.

8.2.1 Machinery and Equipment

The additional machinery/ equipment needs for the undertaking are estimated at cost of US$ 1,800,000

8.2.2 Vehicles

These are estimated at US$ 300,000

8.2.3 Land and rent

These are estimated at US$ 80,000

8.2.4 The Working Capital

The initial working capital is computed as annexted

8.3 RE- INVESTMENT

There shall be need for re- investment in vehicles after every four years, ie in year 4 and year 8

8.4 FINANCIAL PATTERN

The initial total investment of US$ 1,627,538shall be financed as here after presented in Table 8:2 and further outlined in Appendixes

9.0 OPERATION COSTS

9.1 ASSUMPTION

The prices of inputs are assumed to remain constant over the ten years period because under rising inflation the prices and services will rise including those of output hence laving the profit margin unchanged

9.2 OPERATION COST STRUCTURE

The main items which will constitute the operating costs are as hereafter outlined in Table 9.1 when unit will be in full operation

TABLE 9;1 OPERATIONAL COSTS BREAKDOWN

ITEM	US$
Salaries and Wages	124,538
Vehicles running expenses	40,000
Electricity	2,000
Water	600
Office Rent	2,000
Equipment Shed Rent	8,000
Maintenance: Furniture and fittings	800
Maintenance: Machinery / Equipment	30,000
Marketing/ Advertisement	30,000
Administrative Overheads	50,000

9.3 BREAKDOWN ON THE OPERATING EXPENSES

The main cost items will include salaries and wages, vehicle running expenses, electricity, water, insurance, office rent, advertising/ marketing equipment shed rent, maintenance of machinery equipment, maintenance of civil works, maintenance of furniture / fittings and administrative overheads.

The details of all projected operating expenses are shown in Appendixes however a brief mention of each is as hereafter presented.

9.2.1 **Salaries and Wages**

These averages at US$ 124,538 per annum for the existing manpower operating the factory

9.2.2 **Vehicle Running Expenses**

This is one of the cost items and it is averaging at US$ 40,000 per annum

9.2.3 Electricity

The total cost per year is averaging US$2,000 per annum

9.2.4 Water

The envisaged annual cost is estimated at US$600

9.2.5 Office Rent

This is estimated at US$ 2,000 PER annum

9.2.6 Equipment Storage Shed Rent

This has been computer at US$8,000 annum

9.2.7 Maintenance: Machinery / Equipment

Annually this will cost US$30,000

9.2.8 Maintenance; Furniture and Fittings

The annual amount will be US$800

9.2.9 Marketing /Advertising

This is estimated at US$30,000 per annum

9.2.10 Administration Overheads

The administrative expenses are estimated at US$50,000 per annum.These will include items such as stationary, telephone, fax, uniforms and other adhoc services

9.2.11 Depreciation

Depreciation rates have been calculated as follows

Land, Building and civil works	4% Straight Line
Vehicle	25% Straight Line
Pre- operational Expense	20% Straight Line
Equipment	12.5% Diminishing value

Total depreciation charges in year one after new construction will be at US$ 83,750 decreasing steadily to US$19,167 in year 10 as illustrated in Appendix .

9.2.12 Tax

Corporation tax is charges at 30% on profits before tax. Tax in year six is estimated at US$14,453 in year 1 rising to US$46,551 in year 10

Details of financial costs and corporation tax are shown in Appendix 8:C

9.4 FINANCIAL INDICATORS

Financial indicators showing the financial viability of the project are summarized below:

9.4.1 Internal Rate of Return (IRR) After Tax

The project's internal rate of return after tax is given in Appendix 9:D .This is estimated at 21% well above the lending rate of 7% for term loan

9.4.2 Payback Period

This has been computed and found to be 4 years months as indicated in appendix 9:E

9.4.3 Break – even Analysis 3rd Year

The break- even analysis in the 3rd year of operation shows break even sales at US$ 462,275 and breakeven capacity of 32%- Details are given in Appendix 9:F

9.5 SENSITIVITY ANALYSIS

A sensitivity analysis has been carried out on the project's IRR responsiveness to changes in sales price, operating costs or initial investment. And the result of the sensitivity analysis has shown that the IRR is more sensitive to changes in sales prices than changes in either operating costs or initial investment.

9.6 ECONOMIC BENEFITS

The successful operation of this undertaking in its rightful position contributes economic benefits to the Dar es Salaam Region people and the whole country .In summaries the benefit being realized are as follows:

i. The execution of this expansion will improve creation of additional direct employment opportunities for 50 employees that will man the various operation of the project

ii. The executive of this project will facilitate creation of direct employment opportunities for 50 employees that will man the various operations of the project.

Financial Statements

INVESTMENT BREAKDOWN	
COST STRUCTUR	**AMOUNTS USD**
PARTICULAR	
Land and Buildings	700,000
Plant & Machines	300,000
Motor Vehicles	225,000
Furniture & Fixtures	10,000
Pre Expenses	105,000
Others	
Working Capital	287,538
TOTAL	**1,627,538**

OTHER OPERATIONG COST

Other Operations Cost			YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Motor Vehicle running expens			40,000	40,400	40,800	41,200	41,600
Salaries and Wages			124,538	136,992	150,691	165,760	182,336
Adminitrative Overhead Costs			30,000	33,000	36,300	39,930	43,923
Utility Costs			30,000	33,000	36,300	39,930	43,923
Interest on Loan			50,000	55,000	60,500	66,550	73,205
Communication Exepnses			13,000	14,300	15,730	17,303	19,033
Total Costs			**287,538**	**312,692**	**340,321**	**370,673**	**404,020**

FIXED ASSETS SCHEDULE

NAME OF ASSETS			YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings			700,000	665,000	630,000	595,000	560,000
Plant & Machines			300,000	240,000	180,000	120,000	60,000
Motor Vehicle			225,000	185,000	145,000	105,000	65,000
Furniture & Fixtures			10,000	8,750	40,000	35,000	30,000
Total			**1,235,000**	**1,098,750**	**995,000**	**855,000**	**715,000**
Depreciation			**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
Land and Buildings			35,000	35,000	35,000	35,000	35,000
Plant & Machines			60,000	60,000	60,000	60,000	60,000
Motor Vehicles			40,000	40,000	40,000	40,000	40,000
Furniture &Fixtures			1,250	1,250	1,250	1,250	1,250
ANNUAL DEPRECIATION			**136,250**	**136,250**	**136,250**	**136,250**	**136,250**
CLOSING FIXED ASSETS			**1,098,750**	**962,500**	**858,750**	**718,750**	**578,750**

PROJECTED CASHFLOW

			YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Cashflow from Operations			1,400,000	1,378,125	1,447,031	1,519,383	1,595,352
Cash Sales							
VAT Receipt			**350,000**	**367,500**	**385,875**	**405,169**	425,427
Subtotal Cash Received			1,750,000	1,745,625	1,832,906	1,924,552	2,020.78
Expenditures from Operations							
Purchases			630,000	661,500	694,575	729,304	765,769
Interest and Loan			18,200	18,200	18,200	18,200	18,200
Additional Cash Spent			610,700	640,325	671,431	701,295	733,652
VAT Payments			105,000	147,000	154,350	162,068	170,171
Subtotal Cash Payment			**1,363,900**	**1,467,025**	**1,538,556**	**1,610,866**	**1,687,792**
Cash from Operations			**386,,100**	**278,600**	**294,350**	**313,685**	**332,987**
Cash flow from Investments							
Purchases of Assets			2,450,000				
Pre Expenses			30,000				
Working Capital Requirment			100,000				
Cash flow from financing							
Loan			1,820,000				
Owners Contributio			780,000				
Cash Flow from Financing			2,600,000				
Net Casflow for period			406,100	278,600	294,350	313,685	332,987
Cashflow at start of year				406,100	684,700	979,050	1,292,735
Cashflow at the end of year			**406,100**	**684,700**	**979,050**	**1,292,735**	**1,625,722**

PROJECT BALANCE SHEET

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets		1,235,000	1,098,750	995,000	855,000	715,000
Long term Assets						
Depreciation		136,250	136,250	136,250	136,250	136,250
Total long termassets		**1,098,750**	**962,500**	**858,750**	**718,750**	**578,750**
Current Assets						
Cash		406,100	684,700	979,050	1,292,735	1,625,723
Account Receivable		105,000	110,250	216,535	421,763	527,628
Inventory		214,710	376,383	438,469	402,292	467,493
Total Current Assets		**725,810**	**1,171,333**	**1,634,053**	**2,116,790**	**2,620,844**
Total Assets		**1,824,560**	**2,133,833**	**2,492,803**	**2,835,540**	**3,199,594**
Curent Liabilities						
Accounts Payable		84,000	88,200	92,610	97,241	102,103
Other Current Liablit		70,000	73,500	77,175	81,034	85,085
Subtotal Current Liabi		**154,000**	**1,616,700**	**169,785**	**178,274**	**187,188**
Long term Liabilties						
Long term Liabilitie		1,820,000	1,820,000	1,820,000	1,820,000	1,820.00
Total Liabiities		**1,974,000**	**1,981,700**	**1,989,785**	**1,998,274**	**2,007,188**
Net Assets		**820,810**	**877,633**	**951,268**	**1,044,516**	**1,157,656**
Captil and Reserves						
Owners Contribution		780,000	780,000	780,000	780,000	780,000
Retained Earning		**40,810**	**97,633**	**171,268**	**264,516**	**377,656**
Total Capital		**820,810**	**877,633**	**951,268**	**1,044,516**	**1,157,656**

PROJECTED INCOME STATEMENT

			YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR5
Sales Revenue			1,750,000	1,837,500	1,929,375	2,025,844	2,127,136.00
Cost of Sales			700,000	735,000	771,750	810,338	850,854
Gross Profit			**2,450,000**	**2,572,500**	**2,701,125**	**2,836,182**	**2,977,990**
Operating Expenses							
Administrative Overhead							
Costs			105,000	110,250	115,763	121,551	127,628
Motor Vehicle running							
Expenses			8,000	8,400	8,820	9,261	9,724
Salaries and Wages			378,000	396,900	416,745	437,582	459,461
Depreciation			381,000	381,000	381,000	381,000	381,000
Marketing Costs			26,500	27,563	28,941	30,388	31,907
Utility Costs			24,500	25,725	27,011	28,362	29,780
Insurance			49,000	51,450	54,023	54,023	54,023
Interest on Loan			18,200	18,200	18,200	18,200	18,200
Communication			1,750	1,838	1,029	1,929	2,929
Total Expenses			**991,700**	**1,021,325**	**1,052,431**	**1,082,295**	**1,114,652**
Profit before Tax			**58,300**	**81,175**	**105,194**	**133,211**	**161,629**
Tax (30%)			17,490	24,353	31,558	39,963	48,489
Profit After Tax			**40,810**	**56,823**	**73,636**	**93,248**	**113,140**