ALLIED MINING SERVICES LIMITED

Project for Expansion of Facilities for Provision

of

Back up Services to the Mining Sector in Fabrication, Importation

and

Distribution of Industrial Spares, Parts, Machinery and Accessories

A BUSINESS PLAN: 2020/2025

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1.0 INTRODUCTION

1.1 Background Information

Allied Mining Services Limited is a locally registered company formed for principle objective of establishing, operating and managing facilities for provision of back up services to the mining sector and hence is engaged in the fabrication, importation and distribution of industrial spares, parts, tools, machinery and accessories, mainly to the mining, exploration and drilling companies.

The Company is registered under Certificate of Incorporation No: 562008 issued on the 12th day of April, 2006 under the Companies Act, 2002. M/s Allied Mining Services Limited started operations in year 2007 with its target market being the major mining companies in the Lake Zone. At present the company has a supply contracts with most of the big mining and exploration companies in the Lake Zone, including M/s Twiga Mining Company Ltd (formerly Acacia Gold Limited/African Barrick Gold), the major gold mining company in the country with operating mines in Bulyanhulu, Buzwagi, and Nyamongo (North Mara), with its operating centre in Mwanza.

Having been in operation for about fifteen (15) years in the country, the company envisages diversifying further its business activities from its traditional distribution role of importation and distribution to expanding its newly established line of design and fabrication of some of the imported items locally, particularly spares, parts and tools, as well as rehabilitation of parts for heavy duty mining equipment.

While the company plans to use its existing warehouse at Plot No. 108 "F" Nyakato Industrial Area (which also accommodates the importation and

distribution activities) the company envisages establishing its own permanent workshop and procure modern production facilities including plant machinery, tools and equipment for the expansion project for production of quality steel products. As a specialist mechanical engineering project, they plan to carry on various kinds of engineering works including design, fabrication, and maintenance of steel structures; fabrication of steel plates, spares, parts and tools. Still, their main market outlet is focused on the mining industry, planning to take advantage of their current business ties. Instead of buying everything they supply, they will now fabricate most of the steel products required by their clients.

1.2 Business Plan Objectives

The objectives of this Business Plan are two-fold. First is to determine the viability of the proposed project and if viable, use it as a business guide in implementing the project. Second is to facilitate the 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) for the Project.

1.3 Project Location

The company's workshop will be located in own premises at Plot No. 108 Block "F" Nyakato Industrial Area along Mwanza/Musoma Road measuring 2,710 square metres.

1.4 Capital Investment and Financing Plan

To realize the objectives the expansion project, the company will undertake to inject new capital investment of **US$ 547,000-** to facilitate expansion and

modernization of workshop and purchase of workshop machinery and equipment, vehicles as well as expansion of its trading wing. In addition, the project will need **US$ 450,000-** to finance working capital requirements in the form **of** an overdraft facility.

The Company intends to equip its workshops with modern office equipment and machineries to enable it effectively communicate with suppliers and distributors of machine tools and spare parts in other parts of the country where there's large fleet of motor vehicles and mechanically propelled equipment and industries.

The project will be financed in the following arrangement:

Local Equity:	US$ 547,000-
Short Term Loan:	US$ 450,000-
Grand Total:	**US$ 997,000-**

1.5 The Project Promoter

The company was incorporated by virtue of the Companies Act of 2002 on the 12th day of April 2006 with initial authorized share capital is Tshs 500,000,000/= divided into 5,000 ordinary shares of Tshs 100,000/= each. In compliance to the financial laws and regulations, the company applied for and was awarded Taxpayer Identification Number (TIN) 104-596-169 with effect from 29th April 2006 issued under Section 133 of the Income Tax Act No: 11 of 2004; and VAT Registration No (VRN): 22-012266-0 with effect from 31st day of March 2006 issued under Section 20 of The Value Added Tax Act No: 24 of 1997. In just a span of the first 20 months of its operations, the Tanzania Revenue Authority

then categorized the company as one of their big taxpayers who diligently and religiously meet their tax obligations to the Government of the United Republic of Tanzania.

Allied Mining Services Limited is **currently** wholly owned by three high net-worth shareholders: two British Nationals and one Tanzanian who are also the only directors of the company. These are:

S/NO:	NAME AND ADDRESSES OF SHAREHOLDERS	NO. OF SHARES TAKEN	% SHAREHOLDING
1.	Ashish S. Pattni Plot No. 108 :F" Nyakato Industrial Area P.O. Box 2260 **Mwanza**	4504	43.04%
2.	Bindiya A. Pattni Plot No. 108 :F" Nyakato Industrial Area P.O. Box 2260 **Mwanza**	496	4.96%
3.	Suresh Laljibhai Pattni Plot No. 108 :F" Nyakato Industrial Area P.O. Box 2260 **Mwanza**	5200	52.00%

As the company name would suggest, M/s Allied Mining Services' main line of business is providing support services to the major mining, exploration and

drilling companies in the Lake Zone, specializing in the supply of spares and parts for heavy duty equipment. The company is also engaged in retail trade for automobile parts and general machinery and equipment parts.

2.0 MARKET POTENTIAL

2.1 Business Opportunities

It has been observed that the growing of and the development of construction and mining sectors in the country have contributed so much to the growth of mechanical engineering works and maintenance in the country. The sustainable maintenance of the mechanically propelled equipment and vehicles requires regular supplies of imported and locally manufactured parts and tools to serve the construction for roads, buildings, factories, airports etc. and in the repair and reconditioning of plants, machinery and vehicles.

All the above-sited activities provide broad business opportunities to the company's proposed modernization and expansion venture, although the promoters are targeting the mining industry in which they have strong ties in the supply of various steel products as stated in item 1.2 above. Modern and small garages for repairs and maintenance of motor vehicles and heavy earth-moving equipments and machineries also provide opportunities to this newly established company.

It is therefore anticipated that mechanical and tools manufacturing workshops will continue to grow over-time and provide market potential for the company.

2.3 The Company's Share of the Business Opportunities

It is assumed that the company will be competing with 10 or so other established companies some of which have ceased to operate or have reduced their market share such as Avlow Tanzania Limited, Tanuk Mining Services Limited, Mwanza Engineering Company Limited, Borrtech Tanzania Limited etc. It is further assumed that on full implementation of the proposed expansionary project, Allied Mining Services Limited will be able to secure more than 5% of steel products supplies to the major mining companies in the Lake Zone and over 3% of mechanical and machine tools manufacturing requirement of Mwanza and its neighbouring regions.

3.0 THE TECHNICAL ASPECT OF THE PROPOSED PROJECT

3.1 The Products

The project envisages design, fabrication and importation of steel products, mainly for supply to the mining industry in the Lake Zone. As a specialist mechanical engineering project, they plan to carry on various kinds of engineering works including design, fabrication, and maintenance of steel plates, spares, parts, tools and machinery. Still, their main market outlet is focused on the mining industry, planning to take advantage of their current business ties. Instead of buying everything they supply, they will now fabricate most of the steel products required by their clients. The main product, however, will be steel plates, but will also produce industrial spares, parts, tools, machineries and accessories as well as rehabilitation of the same for the mining sector and other sectors of the economy in Mwanza and elsewhere in the country and particularly in the Lake Zone.

3.2 Raw Materials

Steel structures will be fabricated from imported steel frames while plates will be processed from steel coils which are imported and usually come in coils of 10-tons. The coils are then cut to size by Cut-to-Length machines into required sizes before being delivered to the customers.

Cost: Each coil of 10-tons costs US$ 1,000 at cif value. Profit margin is about 12.5% of material costs. Finished products will be imported for distribution to fulfill the company's supply obligations.

Source: The main suppliers of this raw material are South Africa, Turkey, Russia, China and India

3.3 Production Capacity/Sales

Local Production

The proposed production capacity is 6,000 tons per year of various steel and products, over 80% being steel structures and steel plates.

Imported Goods

The company will continue with their traditional line of business which is importation and distribution of spares, parts, tools, machinery and accessories required in the mining industry. Audited Accounts of the company for the financial year 2018 shows that the company supplied goods worth over TShs 7.20 billion from TShs 5.10 billion supplied during 2017, an increase of about 41% in sales. With the proposed expansion, the company plans to increase sales by at least 25% in year 2021, 15% in year 2022 and predicts a stable increase of sales at 10% per annum from year 2023 to 2025, thus:

YEAR	SALES REVENUE (IN US$)
2021	3,910,635
2022	4,497,230
2023	4,946,953
2024	5,441,648
2025	5,985,812

3.4 Workshop Premises/Warehouses

The main workshop, as stated earlier is located at own premises at Plot No: 108 "F" Nyakato Industrial Area, Nyamagana District in Mwanza Region. The warehouse immediately available at the project site will be utilized to accommodate both the workshop and storage for materials, finished products as well as imported goods.

3.5 Machinery, Equipment

The major pieces of machinery and equipment to be purchased, installed and operated for the proposed project include the following.

3.5.1 Cut to Length Machine

3.5.2 Pressing Machines

Pressing machines are capable of exerting pressures of several thousand tons, by means of which either solid or hollow (Drum-shaped) forging can be forged. These machines are used for heavy classes of forgings and are also used for bending heavy plates.

3.5.3 Drilling Machines

Drilling machines are power operated, invariable driven by individual electric motors through suitable gearing, to cover a range of diameters.
Drilling machines consists of a cast-iron base plate, slotted to accommodate a "Clamp" or a "Vice" in which to secure the work-piece. Rising from the base plate is a vertical steel "pillar" or "Column" to which is attached a bracket for carrying the mechanism, gearing etc.

This bracket can conveniently be raised or lowered by manipulating the clamp-bolt to suit the height of the drill-spindle over the work; it can also be moved in a horizontal plane. There is also a "Radial" type Drilling machine whose arm can be positioned to drill a large work-piece when resting on the workshop floor, adjacent to the machine. Drilling machines undertake all drilling works at the workshop.

3.5.4 Boring Machines

"Boring" is the operation of "Machining" the inner surfaces of hollow objects too large in a diameter for normal drilling methods. Boring machines apply a boring bar which is solid steel through which a slot is cut and into which the "cutter" is firmly secured.

The cutter of boring tool is made of high - speed steel, and for some classes of work cutters have cemented carbide tips. There's also "Horizontal Boring" which can be performed in a lathe or Horizontal Boring Machines.

3.5.5 Honing Machines

Honing is a special process frequently used after the preliminary boring of engine cylinders in order to provide a supper smooth and accurate finish.

Honing is applicable to either vertical or horizontal processes, and very fine limits can be worked to.

Honing machine are made with either single or multi-spindles so a complete engine cylinder block can be honed in one operation.

For re-conditioning work engine cylinders, they can first be re-bored leaving a few fractions of a millimeter to be finally honed thereby producing an accurate and almost "mirror" like finish.

Machines are now made whereby log tubes can be honed for various industries.

3.5.6 Grinding Machines

Grinding is the operation in which abrasive wheels are used to remove metal from work, instead of employing steel cutting tools.

The machines which perform the operation are the grinding machines

The machines are used extensively for the smooth finishing of work, such as gear teeth worms, cylinder bores, etc, after having been roughly machined. Grinding machines are also employed for performing work on hard metals or alloys which would be difficult to machine by normal methods. Previously grinding machines have been used for many classes of work requiring a very smooth finish, coupled with a fine degree of accuracy.

3.5.7 Lathe Machines

A lathe machine consists of a strong framework, usually a cast iron whose top if machined "dead true" and is named the "bed". Mounted on the bed is a casting called a tool-slide rest, attached to a "saddle" which can be either

clamped in a suitable position or, in some cases, automatically moved to and from longitudinally along the bed by means of a driven "lead screw".

The slide-rest, which carried the "tool-post" is free to slide on its base across the bed, and the movement is controlled by operating a crank handle (or hand wheel) and is called "surfacing". The work piece is held in the lather between two supports, known as "head stock" and "tails stock" respectively. The head stock comprises a spindle, which is rotated by a power supply or an electric motor and gearing. The tail stock does not rotate but is merely a bracket for carrying end of the work piece mounted on a "dead center". The tail stock can be slid along the bed and bottled in position to suit the length of work piece concerned. Attached to the spindle of the head stock is either a "Catch plate" or a "face-plate" which supports the other end of the work piece and also rotates it.

There are many varieties of lathes, each depending on the type, shape, and size of work for which it is mainly to be used.

3.5.8 Re-facing / Surfacing Machines

This type of machine is especially designed for performing surfacing and sometimes boring operations i.e. machining the surfaces of large diameter work, such as locomotive wheels, etc. some machines are also capable of screw-cutting and taper turning operations being performed. Many of the details of surfacing / re-facing machines closely resemble the V3 "center" lathe, but the surface and boring type has no tailstock. Instead, a hexagon shaped current rest is incorporated; moreover, this lathe has a shorter bed and is provided with a "gap" immediately below the chuck position to accommodate work of large diameter.

3.5.9 Milling Machines

Milling is performed by a Milling Machine which uses rotary cutting tools known as "Milling Cutters" or "Mills ". A cutter is a small wheel, having a series of hardened cutting teeth spaced equally round its perimeter; the size and shape of teeth depend on the work to be performed by them.

Milling machines are capable of performing most of the operations carried out by a planning, shaping, or slotting machine; but in addition it is also capable of a large variety of work by using a combination of cutters. Milling machines supersede the machines just mentioned for many operations, owing to their versatile, character and speedier operations. Milling machines are chiefly used for cutting of gear - wheel teeth flutes of twist drills and screw-taps, key ways, also splines in shafts, etc.

3.5.10 Other Machines / Tools

Other machines and tools which will be put into use in the machine tools shop will be comprised of:

- Compressors
- Welding machines
- cranes/overhead cranes
- forklifts,
- standby electric power generators and
- Miscellaneous tools and equipment

Plant Machinery and Equipment requirement list

Description of Capital Item
Drilling Machines
Welding Machines
Fork Lifts
Motor Pumps
Standby Power Generators
General Workshop Tools and Equipment
Cut to Length Machine
Pressing Machines
Drilling Machines
Boring Machines
Honing Machines
Grinding Machines
Lathe Machines
Refacing/Surfacing Machine
Milling Machines
Miscellaneous Tools and Equipment
Total

Estimated Cost for Plant Machinery and Equipment

Plant, machinery and equipment required for implementation of this project in the next two [2] years (including auxiliary machines and equipment like standby power generators, overhead crane, forklifts, air compressors etc) indicated in the table above are estimated to cost US$ 427,000-.

3.6 Motor vehicles

The Machines tool shop will have to acquire utility vehicles for transportation of raw materials and distribution of finished steel products including installation of steel and aluminium structures (within the Lake Zone). These

will include two pickups for administration purposes and a truck mounted with crane. The following is the initial list of existing and proposed vehicles:

S/NO:	TYPE OF VEHICLE	NO. OF UNITS	COST (US$)
1.	Pickups	1	15,000
2.	Truck mounted with Crane	1	45,000
3.	Trucks & other Existing Vehicles	1	60,000
	TOTAL		**120,000**

3.7 Furniture, Fittings and Office Equipment.

Furniture and fittings for use in company offices, workshop premises and in the mill sheds are already in place. The furniture and fitting category comprises of items like desks, tables, chairs, safes, air conditioners, split units and computers. Also in place are other office equipment includes items like printers, photocopiers, fax machines and accessories etc. As such, no budget has been allocated for this item in the next two years budget.

3.8 Administrative Costs/Pre-operational Expenditures

This category will include all administrative expenditure prior to start of operations. This will involve cost of design and structural works for the workshop, processing of TIC Certificate of Incentives, business licence and registration with Contractors Registration Board and other permits and authorizations, recruitment and training of key staff and other similar activities. A budget of US$ 16,000- has been set aside for this purpose. An additional amount of will also be required to cover interest accrued during construction period.

4.0 ECONOMIC AND FINANCIAL ANALYSIS

4.1 General Assumptions and Projections

Predictability of available work for mechanical and machine tools workshops has always been a stumbling block to the would-be potential investors in mechanical and machine tools workshops and manufacturers. This has left the industrial sector with no local support in the supply of parts, spare and accessories. Most of our industries and machinery is largely dependent on importation of those supplies, and especially the mining industry.

Performance capacity of the machine tools of existing manufacturers is poor and lacks the ability to carry out an assignment successfully. Basic reasons for the inadequate capacity are contributed to:

- Qualification of personnel doing the job
- Working facilities
- Inadequate of equipment and machinery
- Lack of appropriate skills and precision etc.

It is in this regard we assumed that the Company will undertake a business turnover of about US$ 5,985,812- per annum from year three onwards after full implementation of the project expansion.

4.2 Financial Assumptions

The estimated capital cost and basic operating assumptions are summarized in the financial projections as shown in Annexure I to XIV. In the financial analysis the following major assumptions have been taken into considerations:

- By taking into consideration of economic life of assets to be employed and the gradual increase in plant production capacity, the financial projections are for 5 years.
- For convenience and stability, all financial figures have been quoted in United States Dollar at US$ 1 = 2,300/= TShs.
- Total capital investment cost is estimated at US$ 997,000- as summarized below:

CAPITAL INVESTMENT SUMMARY

S/NO:	CAPITAL ITEM	COST (US$)
2.	Plant Machinery, Tools & Equipment	427,000
3.	Motor Vehicles	120,000
6.	Working Capital	450,000
	TOTAL	**997,000**

Financing Structure

The project will be financed in the following arrangement:

Local Equity:	**US$ 547,000**
Local Short Term Loan (Overdraft Facility): at interest of 8% for three (3) years	US$ 450,000
GRAND TOTAL	**US$ 997,000**

- Depreciation of fixed assets and amortization of the pre-operational expenses rates used are as follows:

Capital Item	Capital Cost (US$)	Scrap Value (%)	Depreciation Rate
Plants, Machinery, Tools and equipment;	427,000	35%	12.5%
Motor Vehicles	120,000	20%	20%

4.3 Estimated Production Cost

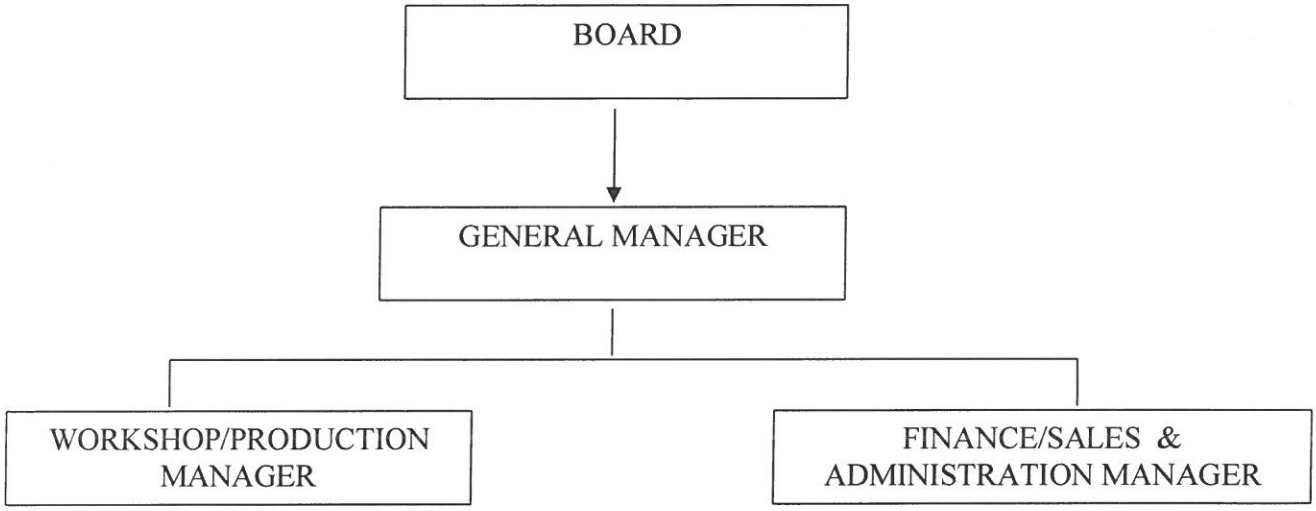
Projected cost of various production inputs have been based on norms pertaining at the existing operating workshops of similar capacity and characteristics. The constant costs and constant price principle have been employed when projecting operating costs assuming further that any in crease in costs during the projected period will be absorbed by corresponding increase in the pricing and selling the manufactured and made items as well as devaluation or increase valuation of T.Shilling against the US Dollar. It is therefore projected that the direct cost of production will be at around 85% of the projected revenues. Fixed costs, such as, capital charges and overheads are projected to be 5% of the projected revenues.

4.4 Organization/Management Structure and Labour Cost

4.4.1 Management

The Company is led by a Board of Directors consisting of two members. The Management of the Company is entrusted to the three owners who have appointed a General Manager. The General Manager is assisted by Workshop/Production Manager who is required to possess the requisite qualification in Metallurgy, mechanical engineering and or a mechanist foreman as is shown in the organization chart below:

COMPANY ORGANIZATION STRUCTURE



S/NO:	CATEGORY OF STAFF	NO.	MONTHLY SALARY/ PERSON (US$)	ANNUAL SALARY (US$)
	PRODUCTION			
1.	Workshop/Production Manager	1	2,500	30,000
2.	Welders/Mechanics	12	500	72,000
3.	Support Staff	6	200	14,400
	Sub total	**19**		**116,400**
	CORPORATE OFFICE			
4.	General Manager	1	3,000	36,000
5.	Admin & Finance Manager	1	2,500	30,000
6.	Sales and Marketing Manager	1	2,500	30,000

7.	Cashier	1	750	9,000
8.	Secretary	1	300	3,600
9.	Drivers	2	250	6,000
10.	Security Guards	2	200	4,800
	Sub total	**8**		**119,400**
	GRAND TOTAL	**36**		**235,800**

4.4.2 Manpower Needs and Labour Cost

The project will employ a total of 36 permanent staff as indicated in the table above. All the above employees will be recruited locally excepting for a few key personnel.

4.5 Analysis of Financial Results

Following are highlights of the financial projections and analysis:

Appendix II - Projected Income Statement

Operations of the project are profitable right from year 1. The company posts a net profit of US$ 792,899- in the first year of operations. The profitability position improves significantly during the subsequent years to US$ 1,178,669- in year three and reaches US$ 1,600,731- by end of the 5^{h} year.

Appendix III - Cash flow Projections

The projected Cash flow for Financial Planning indicates that the project will generate enough cash to meet all the financial obligations. Net cash/surplus balance increases from US$ 515,385- in the first year of operation after full project implementation to US$ 1,040,475- by the 5th year of operation. The cumulative cash balances during the same period increases from US$ 515,385-

to US$ 1,186,669-. This is a positive indication that the project is liquid enough to meet its cash requirements to support its trading operations.

Appendix IV – Pro forma Balance Sheets

The balance sheets indicate a favourable state of affairs of the project throughout the projected period. The net fixed assets as reflected in the balance sheet cover adequately the term loan. Current liabilities are well covered by the current assets, the ratio ranging from 4.05 to 6.05.

The company net-worth increases from US$ 547,000- at the end of construction period to US$ 2,422,295- by end of the 5th year, a significant growth in the value and profitability of the company.

Appendix VI – Internal Rate of Return

The Discounted Cash flow yields an Internal Rate of Return (IRR) of 12.32%, which is well above the assumed cost of capital at 8%. This confirms the financial viability of the proposed project.

Appendix VII: Payback Period

The entire investment of US$ 997,000- is estimated to be recovered in about 2 years at zero when discounted at the assumed cost of capital at 8%. This is a clear demonstration that the project has a reasonable return of return on investment.

5.0 RISK AND SECURITY ANALYSIS

Risk analysis can be looked from the strengths and weaknesses of the project as follows:

5.1 Strengths

- The project will generate substantial foreign exchange to the country, mainly by supplying steel products to the mining industry who will be paying in foreign currency. Likewise, it will save the outflow of foreign currency as it will substitute imports.
- M/s Allied Mining Services Limited is already engaged in the supply of steel products, spares, parts and machinery to the major mining, exploration and drilling companies in the Lake Zone. Therefore they have wide experience and knowledge in the marketing of the products.
- The project will make available in the market a product that is in very high demand, especially in the mining industry.
- The project is strategically located for easy delivery of raw materials and distribution of its products.
- The project will create employment opportunities for about 36 people in Mwanza. This is in line with the government policy for poverty reduction in the area.

5.2 Weaknesses

The project depends on the importation of products and major raw materials and transportation - some 1,200 kms away from the production site; and transportation of finished products from Mwanza to clients in the

Lake Zone. Therefore should there be unforeseen logistic problems like catastrophes from the raw materials exporting countries (like the current global spread of the killer Corona Virus), piracy over the seas, the road or railway being washed away by rains or drastic increase in the transportation costs like hiking in fuel, the project profitability will be adversely affected.

5.3 Collateral Security

The project has a captive market for all the steel products that will be produced as they are already guaranteed of the mining industry market where the demand is currently being met by expensive imports whose price includes 50% taxes on cif value. This factor guarantees the project a strong and predictable market and therefore cash flow to meet its operational and loan obligations in time and in full, holding all other factors constant.

The company will need about US$ 450,000- as a short term finance to finance working capital requirements. The company is already enjoying the facility arranged through local banks in form of Overdraft Facility. This is secured against the total fixed assets of the company whose net value outweighs the size of the proposed short term finance of US$ 450,000- at all times during the life of the project.

6.0 ECONOMIC ASPECTS OF THE PROJECT

6.1. Social - Economic Benefits

It is expected that the implementation of the proposed project will have the following social and economic development values -

a) Relieve some of the mining and exploration companies, medium sized industries and equipment owners to depend entirely on imported pre-fabricated steel structures, steel plates, spares, parts and tools. Since the project will be manufacturing spares, parts and tools locally, as is experienced in the Far East countries like Taiwan, Thailand. Hong Kong and India, it will as a consequence save the country from the use of foreign currency for the procuring of those parts and tools from overseas.

b) Contribute to the full utilization of locally produced steel and metals from local steel rolling mills. These local steel rolling mills will be encouraged to recycle locally available steel scraps of which are currently shipped and exported to overseas at the expense of shutting down local steel rolling mills for lack of raw materials and lack of marketing of their products.

c) The project is expected to offer employment for about thirty six (36) local personnel.

d) The government is also expected to receive revenue in the form of taxes during the project's productive life assumed to be 5 years - based on the economic life of the project assets.

e) The project is further expected to contribute towards production of essential and basic inputs for the maintenance repairs of mining and industrial machinery and equipment by utilizing locally available steel and metal resources and manufacturing them to parts, accessories and tools.

6.2. Environment Impact assessment (EIA)

a) The project will deploy high technology machines and equipment currently used in making and fabrication of steel and aluminium structures, steel plates, spares, parts and tools than most of those currently in use in the country.

b) The country is littered with a lot of scrap metals in many regions. The establishment of this project will facilitate and encourage the country's steel rolling mills to utilize the said scrap metals, since the machinist shop and workshop will utilize steel produced by those mills.

c) It is assumed that a detailed compilation of EIA will be undertaken in the early stages of its implementation.

7.0 CONCLUSION AND RECOMMENDATIONS

Analysis of the project confirms that the project is:

- Technically feasible,
- Financially and Economically viable,
- Socially desirable
- Environmentally sound, manageable and sustainable

Since the project is expected to make a significant contributions towards making the country self sufficient in the manufacturing of steel and aluminium structures, steel plates, spares, parts and tools and save the country's much needed foreign currencies it is recommended that the project be implemented and be give the necessary support by all concerned parties and institutions.

FINANCIAL PROJECTIONS

1. ADDITIONAL INVESTMENT PLANN	
Fixed Assets	
(1) Plants Machineries, Tools and Equipments	427,000.00
(2) Motor Vehicles	
Purchase of Pick up (1)	15,000.00
Purchase of Box body Truck(1)	60,000.00
Purchase of truck mounted 1	45,000.00
	120,000.00
Subtotal Fixed Assets	547,000.00
Current Asset	
Working Capital	450,000.00
Sub total current Assets	450,000.00
TOTAL INVESTMENT	997,000.00
FINANCING PLAN	
Equity	547,000.00
Short-term Loan	450,000.00
TOTAL FINANCING	997,000.00

Income Statement Projections

(all numbers in US$)

Revenue

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5		TOTAL
Sales of spares, parts, tools, machinery and accessories	-	**3,910,635**	**4,497,230**	**4,846,853**	**5,441,648**	**5,885,612**		**24,581,978**
Total Operating Revenue	-	**3,910,635**	**4,497,230**	**4,846,853**	**5,441,648**	**5,885,612**		**24,581,978**

Expenses

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	-	Total
Purchasing cost		1,600,000	1,696,000	1,797,760	1,905,626	2,019,963		9,019,349
Salaries		235,800	247,590	259,970	272,968	286,616		1,302,944
Social Charges & Pension Payments		23,580	24,759	25,997	27,297	28,662		130,294
Running Costs		450,000	490,500	534,645	582,763	635,212		2,693,120
Administrative Costs		215,000	230,050	246,154	263,384	281,821		1,236,409
Utilities		85,000	90,100	95,506	101,236	107,311		479,153
Total Operating Costs		**2,609,380**	**2,778,999**	**2,960,031**	**3,153,274**	**3,359,585**		**14,861,269**
Operational Net Earnings before Depreciation, Interest & Tax		**1,301,255**	**1,718,231**	**1,886,822**	**2,288,374**	**2,526,027**		**9,720,709**
%age Gross Contribution		*33*	*38*	*39*	*42*	*43*		*1*
Depreciation		**117,113**	**154,641**	**169,814**	**205,954**	**227,342**		**874,864**
Net Earnings before Tax & Interest		**1,184,142**	**As**	**1,717,008**	**2,082,420**	**2,298,685**		**8,845,846**
Interest Paid (Bank Loan)		**36,000**	**29,864**	**23,236**	**16,079**	**8,349**		**1,470,885**
Tax (30%)		**355,243**	**469,077**	**515,102**	**624,726**	**689,605**		**2,653,754**
Net Profit		**792,899**	**1,064,650**	**1,178,669**	**1,441,616**	**1,600,731**		**6,078,565**
Dividend 35%		**277,515**	**372,627**	**412,534**	**504,565**	**560,256**		**2,127,498**
Retained Earnings		**515,385**	**692,022**	**766,135**	**937,050**	**1,040,475**		**3,951,067**

3. Cash Flow statement from Investing Activities for five years

(all numbers in US$)	Year 1	Year 2	Year 3	Year 4	Year 5
CASH FLOW FROM OPERATING ACTIVITIES					
Cash receipts from Sales	3,910,635	4,497,230	4,846,853	5,441,648	5,885,612
Cash paid to suppliers and employees	(2,609,380)	(2,778,999)	(2,960,031)	(3,153,274)	(3,359,585)
Cash generated from operations	1,301,255	510,455	673,837	813,021	948,505
Dividends received*	0	0	0	0	0
Interest received	0	0	0	0	0
Interest paid	(36,000)	(29,864)	(23,236)	(16,079)	(8,349)
Tax paid	(355,243)	(469,077)	(515,102)	(624,726)	(689,605)
Net cash flow from operating activities	**910,012**	**11,514**	**135,498**	**172,216**	**250,551**
CASH FLOW FROM INVESTING ACTIVITIES					
Replacement of equipment	0	0	*0*	0	*0*
Proceeds** from sale of equipment	0	0	*0*	0	0
Net cash flow from investing activities	**0**	**0**	**0**	**0**	**0**
CASH FLOW FROM FINANCING ACTIVITIES					
Proceeds from capital contributed	547,000	0	0	0	0
Proceeds from loan	450,000	0	0	0	0
Payment of loan	(76,705)	(82,842)	(89,469)	(96,627)	(104,357)
Net cash flow from financing activities	**920,295**	**(82,842)**	**(89,469)**	**(96,627)**	**(104,357)**
NET INCREASE/ DECREASE IN CASH	**1,830,307**	**(71,327)**	**46,029**	**75,590**	**146,194**
Cash at the beginning of the period	515,385	692,022	766,135	937,050	1,040,475
Cash at the end of the period	**2,345,692**	**620,695**	**812,164**	**1,012,640**	**1,186,669**

4. Pro forma balance sheet

(all numbers in US$)	Year 1	Year 2	Year 3	Year 4	Year 5
ASSET					
Current asset	515,385	692,022	766,135	937,050	1,040,475
Fixed asset	547,000	557,940	569,099	580,481	592,090
Investment	450,000	459,000	468,180	477,544	487,094
Liquidity	1,119,163	1,141,546	1,164,377	1,187,665	1,211,418
TOTAL ASSET	**2,631,548**	**2,850,508**	**2,967,791**	**3,182,739**	**3,331,078**
EQUITY & LIABILITIES					
Equity	997,000	1,023,321	1,114,028	1,212,775	1,320,276
Reserves	557,957	440,760	*622,101*	871,277	1,102,019
Total Own Equtiy	**1,554,957**	**1,464,081**	**1,736,129**	**2,084,052**	**2,422,295**
Provisions	491,530	650,004	434,040	155,302	(120,870)
Long term loan	112,705	112,705	112,705	112,705	112,705
Short term Liabilities	472,356	623,718	684,916	830,680	916,948

5. Loan Information and Payment Schedule

Loan Data

Original Principal	$450,000
Loan Term (Years)	5
Annual Interest Rate	8.00%
Payments per Year	1
Payment	$112,705

Loan Summary

Scheduled Payments	$112,705
Scheduled number of payment	5
Actual number of payment	5
Total Early Payment	-
Total Interest	$225,411

Year	Payment	Interest	Cumulative Interest	Principal	Balance
0					$450,000
1	$112,705	$36,000	$36,000	$76,705	$373,295
2	$112,705	$29,864	$65,864	$82,842	$290,453
3	$112,705	$23,236	$89,100	$89,469	$200,984
4	$112,705	$16,079	$105,178	$96,627	$104,357
5	$112,705	$8,349	$113,527	$104,357	$0

6. IRR for the Project

(all numbers in US$)

	Initial Investment	-997,000
Year 1	Additional Annual Net Profit	515,385
Year 2	Additional Annual Net Profit	692,022
Year 3	Additional Annual Net Profit	766,135
Year 4	Additional Annual Net Profit	937,050
Year 5	Additional Annual Net Profit	1,040,475
	IRR (in 5 years)	**12.32%**

The IRR above indicates that the expected return on the $ 997,000 initial investment after 5 years is 12.32%.

7. Payback Period Analysis

	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	997,000.00	0.00	997,000.00
	1.00	997,000.00	515,384.63	481,615.37
	2.00	481,615.37	692,022.23	210,406.86
	3.00	210,406.86	766,135.13	976,541.99
	4.00	976,541.99	937,050.10	1,913,592.08
	5.00	1,913,592.08	1,040,475.11	2,954,067.19

Payback Period =	**2.00**	**Years**