

PATTERSON GROUP LIMITED

A FESIBILITY STUDY REPORT
ON THE PROPOSED PROJECT OF
CARGO TRANSPORTATION PROJECT

Prepared by:
PATTERSON GROUP LIMITED
P.O. Box 32292
DAR ES SALAAM

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EXECUTIVE SUMMARY

1.1 Introduction

PATTERSON GROUP LIMITED is a privately owned company incorporated for purpose of carrying out cargo/fuel transport operations to provide both domestic and transit cargo haulage services.

1.2 The Project

The feasibility study report sets out a proposal for the project by purchasing additional fleet of trucks/tankers. The total number is going to be 100 trucks and trailers/tankers at full project implementation.

Other motor vehicles to be included in this project are:-

- ✚ 3 Units 4WD double cabin pick ups for operations and general administration
- ✚ 3 Units 4WD Toyota Land Cruiser Hardtop for patrols
- ✚ 3 Unit 4WD Toyota Land Cruiser pick ups
- ✚ 3Unit 4WD Toyota Land Rover pick ups
- ✚ 3 Units Low Loaders

This project was established with following micro objectives:

- ✚ To carryout transportation of all manner of raw materials and goods including timber, sugar, water, fuel, all types of machinery for construction and other related cargo.
- ✚ Serving rural areas in general and important agricultural areas by efficient distribution of agricultural inputs such as farm implements, fertilizers, insecticides and consumer goods to rural areas.
- ✚ To move food and cash crops and particularly rice, leaf tobacco, cotton, and maize from farmers to consumers in urban areas and export outlets.
- ✚ To move and distribute building materials in both urban and rural areas.
- ✚ To transport transit cargo for neighbouring landlocked countries East and Central East namely: Rwanda, Burundi, Uganda, Malawi, Zambia, Democratic Republic of Congo, etc.
- ✚ To train local people on an equal opportunity level and provide competitive incentives.

The macro objectives of establishing the project were to support economic, social and administrative activities in the mentioned areas. Also, to increase the competitiveness of Tanzania goods in the export markets and improve the building and construction industry by offering competitive transport rates.

1.3 The Project Promoters

The project is being promoted by **PATTERSON GROUP LIMITED** based at an office in Kinondoni district, Dar es Salaam.

The shareholders of the company are:-

S/NO:	NAME AND ADDRESS OF SHAREHOLDER	NATIONALITY	SHAREHOLDING (%)
1.	ATU PATRICK MWAKITWANGE	TANZANIA	99
2.	AGNES FLAVIAN MGORI	TANZANIA	1

1.4 The Market

Recent reforms taking place in economy indicate that there is an increase in demand for transit cargo both dry and wet, including white petroleum product namely: petrol, diesel, jet fuel, lubricants, liquefied gas (LPG) etc. The following are some of the factors that have contributed to such an increase in demand for these products in the country.

- ✚ Increased level of rehabilitation and PROJECT of urban and trunk roads by the Government and international assistance agencies which has subsequently resulted in increased kilometers of passable roads by small and heavy-duty vehicles.
- ✚ Rise in people's standard of living and change in people's consumption patterns;
- ✚ General improvement in the national economy, especially the balance of payments which has made it possible for the Government to achieve greater capability to import critical products into the country;
- ✚ Increase general level of investments in industrial activities which are the major users of industrial inputs;
- ✚ Increased general level of investments in industrial activities which are the major users of industrial inputs;

- ✚ Increased transit trade between Tanzania and its neighbours especially Uganda, Rwanda, Malawi, Burundi and the Democratic Republic of Congo.

The factors have led to increased demand for transportation services for products in the country. Furthermore, these factors have created the impetus for increased inflow of investment capital by foreign and local private investors who now have decided to venture in the importation and industrial raw materials business.

The reforms, which are now being introduced in the sector, aim at influencing the inflow of and increased supply of both capital goods and other industrial products and their distribution in the country and beyond the national borders.

1.5 Project Cost and Financing Plan

The total cost of the project is estimated at US Dollars 12, 185,000. The following is the summary of the capital investment cost estimated.

Capital	Cost (US\$)
Workshop and Office Building Construction,/Renovations	700,000
Machinery, Tools and Equipment	440,000
Trucks & Trailers, Tankers and other Vehicles	9,795,000
Office Furniture and Fixtures	10,000
Pre-operational Expenses	20,000
Others	20,000
Initial Working Capital –Spare parts, Tyres, Fuels etc	200,000`
Total	11,185,000

Financing.

The project's cost will be financed by shareholder's equity contributions as well as loans as shown hereunder.

Equity	Loans
US\$ 3,355,500	US\$ 7,829,500

1.6 Financial Indicators

The following are some of the financial analysis highlights:

1.6.1 Profitability

Profitability after tax over the years in US \$ is as follows:

1 st year	837,463.00
2 nd year	988,872.00
3 rd year	1,152,367.00
4 th year	1,328,869.00
5 th year	1,518,667.00

1.6.2 Liquidity

The projected net cash flow over the year shows a health position and demonstrates the ability of the company to meet financial commitments as they fall due. The summary thereof in US \$ at end of each year is as follows:

1 st year	2,330,526.00
2 nd year	4,734,087.00
3 rd year	7,362,584.00
4 th year	10,227,587.00
5 th year	13,284,756.00

1.7 Social and Economic Aspects

The proposed project will result into the following social and economic impacts:

- 1.7.1 Increase the provision of high quality services in transportation of industrial products, fuel, building & construction materials and other cargo in the country.
- 1.7.2 Increased availability of quality distribution and marketing of products along side competitive prices of these products will result in increased and healthy competition among all trading and manufacturing companies

- 1.7.3 The proposed project will provide employment for about 121 permanent employees and several temporary ones
- 1.7.4 The Government and other agencies will benefit from various taxes, fees and commissions that will be paid to the Treasury.

1.8 Conclusion and Recommendations

The Executive Summary highlights indicate the proposed project will be financially and economically viable. The project will greatly contribute in transportation of cargo/fuel to support Tanzania's growing economy. It is expected to contribute significantly to the social and economic progress by way of increasing the provision of reliable sales and distribution of the various products and building & construction materials in the country. It is recommended that the project be accorded the required institutional and financial support to pave the way for its expeditious implementation.

2.0 THE PROMOTERS

The promoters in this project is Messrs **PATTERSON GROUP LIMITED** with head office in Kinondoni Area, Dar es Salaam Tanzania. As explained earlier, the shareholders of the company are all Tanzanian-

3.0 THE PROJECT

PATTERSON GROUP LIMITED plans to acquire 200 units & trailers /tankers to be employment in the proposed PROJECT of cargo transportation project . Other motor vehicles to be included in this project are:

- ✚ 5 Units 4WD double cabin pick ups for operations and general administration
- ✚ 5 Units 4WD Toyota Land Cruiser Hardtop for patrols
- ✚ 5 Units 4WD Toyota Land Cruiser pick ups
- ✚ 5 Units 4WD Toyota Land Rover pick ups
- ✚ 4 Units LOW Loaders

3.1 Description

In summary the project entails the following

- ✚ Purchase of 200 unit of trucks, trailers and tankers to be using in transportation of cargo from one point to another
- ✚ Purchase of tools and equipment including generators, welding machines, lathing machine, compressors, pump calibrator machine , various repair equipment and other machinery for the workshop

- ✚ Other cars include Four Wheel Drive Toyota Land Cruiser Hardtop (5 units), 4WD Toyota Land Cruiser pick ups(5 units),4WD administration and operations pick ups (5 units),4WDToyota Land Rover pick ups (5 units)and Low Loaders (4 units)
- ✚ Civil works will include minor renovation of workshop and office buildings the project sites.
- ✚ The sites have necessary infrastructure required for the business, including workshop.
- ✚ Importation of office equipment namely: telephones, facsimile machines, personal computers, and air conditioners at company's head office.

3.2 Location

As stated above, the company operations will be based at Plot at Kinondoni Area Dar es Salaam.

3.3 Objectives and Cargo Haulage Targets

This project was established with following micro objectives:-

- ✚ To carryout the business of transportation of cargo/fuel within and outside Tanzania
- ✚ To carryout transportation of all manner of raw materials and goods including timber, sugar, water, fuel, all types of machinery for construction and other related cargo
- ✚ Serving rural areas in general and important agricultural areas by efficient distribution of agricultural inputs such as farm implements, fertilizers, insecticides and consumer goods to rural areas.
- ✚ To move food and cash crops and particularly rice, leaf tobacco, cotton, and maize from farmers to consumers in urban areas and export outlets.
- ✚ To move and distribute building materials in both urban and rural areas
- ✚ To transport transit cargo for neighbouring landlocked countries East and Central East namely: Rwanda, Burundi, Uganda, Malawi, Zambia, Democratic Republic of Congo, etc.
- ✚ To train local people on an equal opportunity level and provide competitive incentives.

The macro objectives of establishing the project is to support economic, social and administrative activities in the mentioned areas. Also, it aims to increase the competitiveness of Tanzania goods in the export markets and improve the building and construction industry by offering competitive transport rates.

3.4 Sales Revenue Forecast and Direct & Indirect Cost Estimates

The following schedule provides a summary of the forecasted revenues during the first five years of project implementation.

REVENUE PROJECTION

PRODUCTION	YEARS				
	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Sales Revenue	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185
	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185

Direct and indirect costs for the cargo/fuel transportation project are summarized in the following schedule.

OPERATING COSTS

OTHER OPERATING COST	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Motor vehicle running expenses	528,000	554,400	582,120	611,226	641,787
Salaries and wages	696,000	730,800	767,340	805,707	845,992
Depreciation	1,286,400	1,286,400	1,286,400	1,286,400	1,286,400
Administrative Overhead Costs	345,600	362,880	381,024	400,075	420,079
Marketing Costs	144,000	151,200	158,760	166,698	175,033
Utility costs	120,000	126,000	132,300	138,915	145,861
Insurance	279,625	293,606	308,287	323,701	339,886
Communication	12,000	12,600	13,230	13,892	14,586
Total Costs	3,411,625	3,517,886	3,629,461	3,746,614	3,869,624

3.5 Environmental Aspects

Generally, Tanzania has environmental regulations governing the operation of garages and workshops. Nevertheless each operator takes basic precautions to ensure that during operations and in case of an accidental spillage or fire, damage to environment is limited to the minimum possible level.

3.6 Constraints and Government Policy

3.6.1 Constraints

The road transport in Tanzania is heavily dependent on imported vehicles and related inputs. The road transport sector is however faced with the following problems:

- Lack of adequate transportation equipment;
- Poor infrastructure facilities particularly trunk roads;

- Lack of adequate transport services to land-locked neighbouring countries which would like to use our port facilities for enhancement of their international trade;
- Poor maintenance of roads and transport equipments;
- Lack of proper co-ordination between the transport sector and other sector of the economy.

3.6.2 Government Policy on Transportation

The government has of late put a greater emphasis on the transport and communication sector so as to improve upon them and consequently lead to economic development. The following are therefore the national transport policies among others:

- ✚ To improve the standard of trunk road network by maintaining the existing roads so as to ensure satisfactory level of service and to expand the feeder roads in order to cover a wider area of agricultural production. Rehabilitation and maintenance of existing railway network is also given greater attention;
- ✚ To give assistance to the private sector so as to enable the sector provide proper transport services both in the country and neighbouring states. Hence, the private transport sector is expected to provide over 70% of total road services.

From the brief outline mentioned above, the transport policy in all its intent is geared towards improving and encouraging all modes of transport whether private or public and run on strictly business principles in order to promote efficiency and raise the quality of the service rendered.

4. ROAD TRANSPORT

4.1 History of road transport

The first forms of road transport were horses, oxen or even humans carrying goods over dirt tracks that often followed game trails. As commerce increased, the tracks were often flattened or widened to accommodate the activities, the travois, a frame used to drag loads, was develop. The wheel came still later, probably preceded by the use of logs as rollers.

With the advent of the Roman Empire, there was a need for armies to be able to travel quickly from area to another, and the roads that existed were often muddy, which greatly delayed the movement of large masses of troops. To resolve this issue, the Romans built great roads. The Roman roads used deep roadbeds of crushed stone as an underlying layer to ensure that they kept dry, as the water would flow out from the crushed stone, instead of becoming mud in clay soils.

During the Industrial Revolution, and because of the increased commerce that came with it, improved roadways became imperative. The problem was rain combined with dirt roads created commerce-miring mud. John Loudon McAdam (1756-1836) designed the first modern highway. He developed an inexpensive paving material of soil and stone aggregate (known as macadam), and he embanked roads a few feet higher than the surrounding terrain to cause water to drain away from the surface.

Various systems had been developed over centuries to reduce bogging and dust in cities, including cobblestones and wooden paving. Tar-bound macadam (tarmac) was applied to macadam roads towards the end of the 19th century in cities such as Paris. In the early 20th century tarmac and concrete paving were extended into the countryside.

4.2 Types of Road Transportation Services

Transport on roads can be roughly grouped into two categories: transportation of goods and transportation of people. In many countries licencing requirements and safety regulations ensure a separation of the two industries.

The nature of road transportation of goods depends, apart from the degree of development of the local infrastructure, on the distance the goods are transported by road, the weight and volume of the individual shipment and the type of goods transported. For short distances and light, small shipments a van or pickup truck may be used. For large shipments even if less than a full truckload (Less than truckload) a truck is more appropriate. In some countries cargo is transported by road in horse drawn carriages, donkey carts or other non-motorized mode. Delivery services are sometimes considered a separate category from cargo transport. In many places fast food is transported on roads by various types of vehicles. For inner city delivery of small packages and documents bike couriers are quite common.

People (Passengers) are transported on roads either in individual cars or automobiles or in mass transit/public transport by bus/coach (vehicle). Special modes of individual transport by road like rikshas or velotaxis may also be locally available.

4.3 Trucking and Hauling

Trucking companies or haulers/hauliers accept cargo for road transportation. In Australia road train replace rail transport for goods on many routes. Low-loader or flat-bed trailers are used to haul containers, see containerization, in intermodal transport. Truck drivers operate either independently working directly for the client or through freight carriers or shipping agents. Some big companies (e.g. grocery store chains) operate their own internal trucking operations.

In the U.S. many truckers own their truck (rig), and are known as owner-operators. Some road transportation is done on regular routes or for only one consignee per run, while others transport goods from many different loading stations/shippers to various consignee. On some long runs only

cargo for one leg of the route (to) is known when the cargo is loaded. Truckers may have to wait at the destination for the return cargo (from).

A Bill of Lading issued by the shipper provides the basic document for road freight. On cross-border transportation the trucker will present the cargo and documentation provided by the shipper to customs for. This also applies to shipments that are transported out of a Free port.

To avoid accidents caused by fatigue truckers have to keep to strict rules for drive time and required rest periods. This is known in the U.S as hours of service, and in the E.U as drivers working hours. Tachographs record the times the vehicle is in motion and stopped. Some companies use two drivers per truck to ensure uninterrupted transportation; with one driver resting or sleeping in a bunk in the back of the cab while the other is driving.

For transport of hazardous materials truckers need a licence, which usually requires them to pass an exam. They have to make sure they affix proper labels for the respective hazard (s) to their vehicle. Liquid goods are transported by road in tank trucks or tanker lorries or special tank containers for intermodal transport. For unpackaged goods and liquids weigh stations confirm weigh after loading and before delivery. For transportation of live animals special requirements have to be met in many countries to prevent cruelty to animals. For fresh and frozen goods refrigerator trucks or reefer are used.

Truck drivers often need special licenses to drive, known in the U.S as a commercial driver's license. In the U.K. a Large Goods Vehicle license is required.

4.4 Modern roads

Today roadways are principally asphalt or concrete. Both are based on McAdam's concept of stone aggregate in a binder, asphalt cement or Portland cement respectively. Asphalt is known as a flexible pavement, one which slowly will "flow" under the pounding of traffic. Concrete is a rigid pavement, which can take heavier loads but is more expensive and requires more carefully prepared sub base. So, generally, major roads are concrete and local roads are asphalt. Often concrete roads are covered with a thin layer of asphalt to create a wearing surface.

Modern pavements are designed for heavier vehicle loads and faster speeds, requiring thicker slabs and deeper sub base. Sub base is the layer or successive layers of stone, gravel and sand supporting the pavement. It is needed to spread out the slab load bearing on the underlying soil and to conduct away any water getting under slabs. Water will undermine a pavement over time, so much of pavement joint design are meant to minimize the amount of water getting and staying under the slabs.

Shoulders are also an integral part of highway design. They are multipurpose; they can provide a margin of side clearance, a refuge for incapacitated vehicles, an emergency lane, and parking

space. They also serve a design purpose, and that is to prevent water from percolating into the soil near the main pavement's edge. Shoulder pavement is designed to a lower standard than the pavement in the traveled way and won't hold up as well to traffic.

Pavement technology is still evolving, albeit in not easily noticed increments. For instance, chemical additives in the pavement mix make the pavement more weather resistant, grooving and other surface treatments improve resistance to skidding and hydroplaning, and joint seals which were once tar are now made of low maintenance neoprene.

5. TRENDS IN TRANSPORTATION SECTOR IN TANZANIA

5.1 Background

In Tanzania most of the country's total passenger and goods transport demand is met by the road transport sector. While rail and steamer services also play an important role in inter-regional transport, interregional transport is almost wholly catered for road transport. Road transport is a key link between sea and lake ports, railheads, regions, district and villages where the majority of the population lives and also the neighbouring countries.

5.3 Transport

Road Transport

During 2016, the government continued to improve trunk, regional and rural transport which contributed immensely to the growth of other socio-economic sectors. About 70 percent of all cargo in the country is transported via roads, out of which 64 percent is destined to neighbouring countries, while 90 percent of passengers use road transport.

6.0 CAPITAL INVESTMENT AND FINANCING PLAN

6.1 Investment Plan

The company plans to build a fleet of 200 units of trucks & trailers/tankers each costing around USD 45,000. Each Toyota Land Cruiser Hardtop/Pick up will cost approximately USD 42,000. Each Land Rover Pick up is estimated to cost USD 39,000. The 4WD Double Cabin Pick ups have been estimated to attract cost at USD 36,000 and each low loader will cost USD 70,000.

The company will need USD 20,000 being pre-operational expenses. Initial working capital of USD 200,000 will also be required. A summary of the Investment Plan is shown in the Table below:

**CAPITAL INVESTMENT COST SUMMARY (US\$)
COST STRUCTURE**

PARTICULAR	AMOUNT USD
Land and Building	700,000
Machinery & Equipment	440,000
Motor Vehicles	9,795,000
Furniture & Fixtures	10,000
Pre exp	20,000
Others	20,000
Working Capital	200,000
TOTAL	11,185,000

6.2 Financing Plan

It is estimated that a total of US \$ 11,185,000 will be required to acquire the various assets as shown in the table above.

The bulk of the capital cost will be raised by the company itself through equity contribution as well as loans. The other major source of funding will be internally generated revenue from operations which will be ploughed back.

Equity	Loans
US \$ 3,355,500	US \$ 7,829,500

7.0 MARKET AND MARKETING ASPECTS.

7.1 A General Overview

There is a wide market for transportation of domestic as well as transit cargo. Likewise, the market for transportation of fuel, as well as building and construction materials is huge, especially for the rural road contractors and builders in general. Hence, it can be expected that the sponsors would not face marketing and operational problems in managing the proposed project.

The ports of Dar es Salaam, Tanga, Mtwara and Mombasa have undergone major rehabilitation, modernization and PROJECT so as not only to be able to compete with South Africa ports in handling the East, Central and Southern African import and export trade but also, as a strategy for meeting the national demands for cargo handling that have grown steadily following PROJECT of agricultural, mining and industrial activities especially in East and Central Africa. These factors would provide the proposed freight haulage project the necessary condition for its soft establishment PROJECT of its future operations. **PATTERSON GROUP LIMITED** will endeavour

to achieve the projected sales for both domestic and transit business in the neighbouring countries of Kenya, Rwanda, Burundi and Eastern parts of the Democratic Republic of Congo, Uganda and Eastern parts of Zambia.

7.2 Facts About Cargo Haulage Services in Tanzania

7.2.1 Capacity in cargo Handling (Country Overview)

Tanzania surface transport system consists approximately 44,000 km of earth, gravel and tarmac roads. There is need for improving the road haulage industry and hence enhancement of economic well being of the country.

One major problem of road transport in the country is the poor condition of many roads. However, the government alongside World Bank funding, has begun to rehabilitate main trunk roads in the country at the moment and this move is expected to alleviate the existing problems.

Hence, there is a great potential for development of road haulage in the country due to limited and slow growth of potential railways. Development of road transport is essential for purposes of enhancing easy movement of inputs and consumer goods in the country. Road transport is also important in so far as transport of transit cargo is concerned particularly as regards south, north and central corridors for containerized goods.

The project aims at capturing the transit cargo passing through Dar es Salaam corridor DRC, Burundi, Uganda and Rwanda and later on to other land locked neighbouring countries. The major users of the Dar es Salaam transit corridors are Zambia, DRC, Malawi, Rwanda, Burundi and recently Uganda. The transit and inter-regional goods can be segmented as follows:-

- Transit goods destined for southern corridors of Malawi and Zambia, north and central corridors of DRC, Rwanda, Burundi and Uganda;
- Inter-regional goods involving areas such as Morogoro, Mara, Mbeya, Iringa, Ruvuma, Mwanza, Shinyanga, Tabora and Dodoma. Demand for transport to haul goods from the regions is highly seasonal. High demand normally occurs from July to December during harvesting, crop collection and supply of farm inputs transportation demand declines in January and remains low up to June.

7.2.2 Supply of Transport Equipment

According to the market survey, there has been a shift of ownership in recent times of transport projects from those owned by Parastatal Organization and CO-operative Unions to those operated and owned privately. The supply of goods transport in the region is represented by a fleet of commercial cargo carrying vehicles with average capacities of 35 tons and above operating within the regions, intra-regional and inter regional routes.

7.3 Transit Traffic

Tanzania acts as a transit country for the landlocked countries of DRC, Zambia, Rwanda, Burundi, Uganda, and Malawi. The bulk of transit cargo that traffics through Tanzania is that of Zambia with largest proportion being carried out by TAZARA.

Malawi has similarly shown a dramatic increase in passing its transit cargo through the Dar es Salaam port in recent years. The bulk of its cargo is carried by road. Recent efforts by heads of state of Malawi and Tanzania gear towards establishing and exploiting the so called Mtwara Corridor as a potential link between the two countries. Of course, it might take some time before actual implementation of the current plan are put into reality and trucks start rolling across borders of the two states.

As already stated, road transportation of cargo basically involves movement of trucks of agricultural produce, agricultural inputs, building materials, soft drinks, beer, timber consumer goods, industrial raw materials like gypsum, fuel coal etc. Domestic road transportation of cargo is basically classified into intra-regional transport. Intra-regional transport demand involves transportation of goods within the region which may be inward demand which refers to movement of goods from rural areas to urban centres, rail heads and factors or it may be outward demand which refers to movement of goods to rural areas.

Inter-regional demand of transport includes movement of goods across borders of a particular region to and fro.

The movement of goods to and fro across borders of the country is referred to as international transport demand.

M/S PATTERSON GROUP LIMITED will adhere to the company's basic objective for which it is established; that is, to strengthen transportation related to general cargo in order to serve more efficiently the target market and with a basic view of improving performance of this sector and stimulating and supporting other economic activities. Besides intra-regional and inter-regional operations, the company plans to go into international operations to serve the landlocked neighbouring countries.

M/S PATTERSON GROUP LIMITED has an open eye on the vast opportunities that exist in the intra-regional and inter-regional transport. The project therefore targets transportation of copper and other minerals, rice, cotton, timber, maize and tobacco. Other agricultural produce are also targeted. The directors have well established ties with the major companies such that acquiring transport tenders will not be a problem, and demand for the crop haulage services is huge. Other targeted markets are transportation of building materials like cement, steel and movement of industrial raw materials.

The other major targets in domestic transportation are in securing contracts to transport mining machinery and equipment for major mining companies. Also, there is scope for Securing

transportation contracts from UN bodies such as the Food Programme, United Nations High Commission for Refugees, etc

7.4 Freight Charges

The rates offered for standard transportation are on a per tonne basis, hence the more one carries per load, then more earnings are. The firm's expected revenue has been estimated from carrying thirty (30) ton loads, with an average of 5,000 kms/month per truck which is in effect SADC countries maximum carrying rates.

7.5 key Success Factors

Following are key Success Factors of the transportation industry;

The importance of having huge funds to finance large transportation operations means that the need to have strong relationships with banks is equally important. The ability of a bank to advance huge amounts of funds at short notice and at preferential bank rates depends largely on such long-term relationships established after long periods of time. New entrants may find it difficult to achieve this relationship. This requirement is crucial for the successful operation of a transport firm. This will involve: personnel emolument (especially for drivers); purchase of tyres, spares and parts, fuel and lubricants; and instant replacement of transportation equipments in case of break-down or serious vehicle accidents.

Hence, only those firms that are able to mobilize large sums of operating capital can achieve greater operating parameters and therefore, higher profit margins. No wonder that entry barriers are quite high in this regard.

Improved Technology/Product Innovation

Only corporate bodies that have strong financial muscles are capable to invest in better technology and be able to attain product differentiation as a cutting edge against rival firms. The use of Global Positioning System (GPS) has by and large enabled certain transport firms to instantly locate their trucks in transit. Hence, it has become possible to identify problems that drivers are facing far away from the base. This implies that should there be some break down or accident then it would be reported to the firm's base upon which a solution would be identified and dispatched. This is critical as many clients are becoming conscious of a transportation firm's ability to meet delivery times.

Ability to offer Credit Facilities Downstream

Corporate clients such as UN bodies and some of the multinational companies may require the transporters first to ferry the assigned cargo and get paid later, after some time say on delivery, after an agreed time, or after delivery of a series of group consignments. Only corporate

transporters with large fleets of trucks and other sources of revenue can afford to operate on a flexible basis as it is backed by strong shareholders.

Long Term Relationships

Established transport firms enjoy the advantage of long-term relationship with corporate clients. Such corporate firms include among others; armies, huge mining companies using thermal power, etc. clearing and forwarding companies, just to mention a few. Again, the proposed project would use synergy of its relation with parent companies in securing huge cargo.

However, it should be clearly understood that as time changes some industry forces have tended to re-modify these key success factors. Hence, generally it is the ability of a transport company to design and implement its business strategies that may suit building of a company's success in this sector.

8.0 MANAGEMENT AND ORGANIZATION STRUCTURE

8.1 Management

The company policy is to have adequate manpower to manage its operations efficiently. **PATTERSON GROUP LIMITED** believes in keeping on board only the very essential manpower strength, to develop them into highly motivated and sincere company team for the best and efficient operations of the company.

The company has a team qualified and experienced functional managers in the areas of Transport Operations, Workshop Operations and Finance & Administration. Other senior and middle level staffs are available for the operations of the company. The personnel for the PROJECT phase will also be qualified, well seasoned and possessing considerable industrial experience.

8.2 Management Policy

The day to day operations are managed by the Managing Director, assisted by Managers in areas of Finance and Administration and Transport operations. The manager for Transport Operations is the overall in charge of the fleet and Workshop Operations. An Accounts Assistant is available to assist in Accounting, Procurement and Finance functions. The Marketing Unit is responsible for both the countrywide and regional wide sales and marketing for the service. The job responsibilities include market planning and development, sales promotion and sales co-ordination. The Company's fleet pool is therefore professionally managed.

8.3 Organization Structure

Once the PROJECT programme has been well undertaken, the company organizational structure will have to change so as to give it a corporate structure of freight Haulage Company. Therefore, the shareholders will have to embark on a meticulous manpower planning and recruitment, which will be proceeded by a manpower consultant's report.

MANPOWER REQUIREMENT AND EMOLUMENTS

Manpower requirements are appearing in schedule attached hereunder. It comprises permanent employees to be employed. Some of the employees will be employed on temporary basis when needed.

SALARIES & WAGES

NO	EMPLOYEE DESIGNATION	NO	SALARY PER MONTH	SUBTOTAL MONTHLY SALARY	ANNUAL GROSS SALARY
1	Managing Director	1	3000	3000	36,000
2	Finance Management	1	2500	2500	30,000
3	Transport Manager	1	2500	2500	30,000
4	Accounts Assistants	2	1000	2000	24,000
5	Supervisor	2	700	1400	16,800
6	Drivers	64	500	32000	384,000
7	Assistant Drivers	40	300	12000	144,000
8	Mechanics	3	250	750	9,000
9	Secretary	3	250	750	9,000
10	Office Attendants	2	400	800	9,600
		2	150	300	3,600
TOTAL USD \$		121	11,550	58,000	696,000

9.0 FINANCIAL ANALYSIS

9.1 Financial Viability

The analysis of the proposed PROJECT of **PATTERSON GROUP LIMITED** transport project shows that the project can generate a fairly good profit and that it generates sufficient cash to meet its financial obligations.

9.2 Fundamental Assumptions.

The preparation of the financial projections took into account the following main assumptions:

9.2.1 The operating period under which the viability of the project is being evaluated is 5 years.

9.2.2 The capital cost of the proposed project is US \$ 11,185,000.

- 9.2.3 All the calculations throughout the economic lifetime of the project are constant with february 2024 being the base date
- 9.2.4 The projected operational costs are shown
- 9.2.5 The main revenue source is from the charging freight rates. In the estimation of the revenue income we have assumed that the revenue per trip is between USD 10,000 and USD 12,000
- 9.2.6 Capital Expenditure has been assumed to be incurred for a period of 5 years.
- 9.2.7 The financial plan is for the shareholders to finance the project from own sources by ploughing back profits and also through a loan.

9.3 Working Capital Requirements

Ideally, working capital requirements are directed by the volume and business tempo.

9.4 Projected Profitability

The projected profit and loss account is shown in the Financial Analysis Schedules. On the basis of the operating assumptions and cost the proposed investment is expected to be profitable throughout the project period of five years. The after tax profits (US\$) are as follows:-

1 st year	837,463.00
2 nd year	988,872.00
3 rd year	1,152,367.00
4 th year	1,328,869.00
5 th year	1,518,667.00

9.5 Cash Flow Projection

The liquidity performance of the project is shown in the Financial Analysis Schedules. The projections take into account the assumed sources and applications of funds over the planned period and show the ability of the project to meet financial obligations and capita expenditure requirements.

Over the projected period of five year the project has a positive end of year cash flow throughout the period. This is shown as follows:-

1 st year	2,330,526.00
2 nd year	4,734,087.00
3 rd year	7,362,584.00
4 th year	10,227,587.00
5 th year	13,284,756.00

9.6 Financial Review

The financial review of the proposed PROJECT of **PATTERSON GROUP LIMITED** shows that:-

- 9.6.1 The project is profitable
- 9.6.2 The liquidity position is sound and that is should be able to meet its financial commitments without any undue difficulty

9.6.3 It is therefore recommended that the project should go ahead so conceived in this report.

9.7 Development Aspects

The following are the major economic and social benefits, which will be generated by the proposed project PROJECT.

9.7.1 Revenue to the government Treasury and other organs in the form of taxes, fees and levies

9.7.2 Increase in employment opportunities as about 121 people will be employed by the project

9.7.3 Savings/earnings of foreign exchange because of the project's active engagement in the transit trade

9.7.4 Facilitate in increased improvement and availability of the freight haulage services especially in the transportation of minerals such as copper, raw materials, fuel, crops, building materials and finished products to and from markets.

With the liberalization of the economy in fully swing the resultant industrial growth is expected to push up the demand for the transportation of industrial and consumer goods services considerably.

10. CONCLUSION AND RECOMMENDATIONS

The foregoing discussion highlights on the social, economic and financial dimensions which the envisaged project is set to generate in this country. The brief financial analysis indicates that the project will be financially viable. Therefore, it is strongly recommended that the sponsors, **PATTERSON GROUP LIMITED** be available with the required institutional assistance so as to enable them expand the cargo transportation project.

PATTERSON GROUP LIMITED

PROJECTED INCOME & EXPENDITURE STATEMENT

	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Sales Revenue	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185
Cost of Sales	1,152,000	1,232,640	1,318,925	1,411,250	1,510,037
Gross Profit	4,608,000	4,930,560	5,275,699	5,644,998	6,040,148
Operating Expenses:					
Administrative Overhead					
Cost:	345,600	4,930,560	5,275,699	400,075	420,079
Motor Vehicle running expenses	528,000	362,880	381,024	611,226	641,787
Salaries and wages	696,000	554,400	582,120	805,707	845,992
Depreciation	1,286,400	730,800	767,340	1,286,400	1,286,400
Marketing Costs	144,000	1,286,400	1,286,400	166,698	175,033
Utility costs	120,000	151,200	158,760	138,915	145,861
Insurance	279,625	126,000	132,300	323,701	339,886
Communication	12,000	293,606	308,287	13,892	15,586
Total Expenses	3,411,625	12,600	13,230	3,746,614	3,870,624
Profit before Tax	1,196,375	3,517,886	3,629,461	1,898,385	2,169,524
Tax (30%)	358,913	1,412,674	1,646,239	569,515	650,857
Profit After Tax	837,463	423,802	493,872	1,328,869	1,518,667

PATTERSON GROUP LIMITED

PROJECTED BALANCE SHEET

	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
<u>Fixed Assets</u>					
Long-term Assets	10,945,000	9,658,600	8,372,200	7,085,800	5,799,400
Depreciation	1,286,400	1,286,400	1,286,400	1,286,400	1,286,400
Total long-term Assets	9,658,600	8,372,200	7,085,800	5,799,400	4,263,000
<u>Current Assets</u>					
Cash	2,330,526	4,734,087	7,362,584	10,227,587	13,284,757
Accounts Receivable	1,150,776	1,100,708	994,675	1,097,396	1,274,521
Total Current Assets	3,481,302	5,834,795	8,357,259	11,324,982	14,559,278
Total Assets	13,139,902	14,206,995	15,443,059	17,124,382	18,822,278
<u>Current Liabilities</u>					
Accounts Payable	656,640	702,605	751,787	917,312	1,057,026
Other Current Liabilities	460,800	493,056	527,570	714,500	754,015
Subtotal Current	1,117,440	1,195,661	1,279,357	1,631,812	1,811,041
Liabilities					
<u>Long-term Liabilities</u>					
Long-term Liabilities	7,829,500	7,829,500	7,829,500	7,829,500	7,829,500
Total Liabilities	8,946,940	9,025,161	9,108,857	9,461,312	9,640,541
Net Assets	4,192,962	5,181,834	6,334,202	7,663,070	9,181,737
<u>Capital and Reserves</u>					
Owners Contribution	3,355,500	3,355,500	3,355,500	3,355,500	3,355,500
Retained Earnings	837,463	1,826,334	2,978,701	4,307,570	5,826,237
Total Capital	4,192,963	5,181,834	6,334,201	7,663,070	9,181,737

PATTERSON GROUP LIMITED

PROJECTED CASHFLOW

	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
CASHFLOW FROM					

OPERATIONS					
Cash Sales	4,608,000	4,930,560	5,275,699	5,644,998	6,040,148
VAT Receipt	1,152,000	1,232,640	1,318,925	1,411,250	1,510,037
Subtotal Cash Received	5,760,000	6,163,200	6,594,624	7,056,248	7,550,037
Expenditures from					
Operations:					
Purchases	979,200	1,109,376	1,187,032	1,270,125	1,434,535
Additional Cash Spent	2,125,225	2,231,486	2,343,061	2,460,214	2,584,224
Interest on Bank Loan	172,249	172,249	172,249	172,249	172,249
VAT payments	172,800	246,528	263,785	288,658	302,007
Subtotal Cash payment	3,449,474	3,759,639	3,966,127	4,191,245	4,493,016
CASH FRO OPERATIONS	2,310,526	2,403,561	2,628,497	2,865,003	3,057,169
CASH FLOW FROM INVESTMENTS:					
Purchase of Assets	10,945,000				
Pre expenses	- 20,000				
Working capital Requirement	-200,000				
CASH FLOW FROM INVESTMENTS:	-11,165,000	-	-	-	-
CASH FLOW FROM FINANCING:					
Bank loan	7,829,500	-	-	-	-
Owners Equity Contribution	3,355,500				
CASH FLOW FROM FINANCING	11,185,000	-	-	-	-
NET CASH FLOW FOR PERIOD	2,330,526	2,403,561	2,628,497	2,865,003	3,057,169
CASHFLOW AT START OF YEAR	-	2,330,526	4,734,087	7,362,584	10,227,587
CASH FLOW AT THE END OF YEAR	2,330,526	4,734,087	7,362,584	10,227,587	13,284,756

PATTERSON GROUP LIMITED

SCHEDULES AND TABLES

SCHEDULE I

REVENUE PROJECTION

PRODUCTION	YEARS				
	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Sales Revenue	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185
	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185

SCHEDULE 2

THE OPERATING COSTS

OTHER OPERATING COST	YEARS				
	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Motor vehicle running expenses	528,000	554,400	582,120	611,226	641,787
Salaries and wages	696,000	730,800	767,340	805,707	845,992
Depreciation	1,286,400	1,286,400	1,286,400	1,286,400	1,286,400
Administrative Overhead Costs	345,600	362,880	381,024	400,075	420,079
Marketing Costs	144,000	151,200	158,760	166,698	175,033
Utility costs	120,000	126,000	132,300	138,915	145,861
Insurance	279,625	293,606	308,287	323,701	339,886
Communication	12,000	12,600	13,230	13,892	14,586
Total Costs	3,411,625	3,517,886	3,629,461	3,746,614	3,869,624

SCHEDULE 3

COST STRUCTURE

PARTICULAR	AMOUNT USD
Land and Building	700,000
Machinery & Equipment	440,000

Motor Vehicles	10,795,000
Furniture & Fixtures	10,000
Pre exp	20,000
Others	20,000
Working Capital	200,000
TOTAL	12,185,000

SCHEDULE 4

FIXED ASSETS SCHEDULE

NAME OF ASSETS	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Land and Buildings	700,000	679,000	658,000	637,000	616,000
Machinery tools & Equipment	440,000	352,000	264,000	176,000	88,000
Motor Vehicles	10,795,000	8,619,600	7,444,200	6,268,800	5,093,400
Furniture & Fixtures	10,000	8,000	6,000	4,000	2,000
TOTAL	11,945,000	9,658,600	8,372,200	7,085,800	5,799,400
DEPRECIATION	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Land and Buildings	2,000	2,000	2,000	2,000	2,000
Machinery tools & Equipment	88,000	88,000	88,000	88,000	88,000
Motor Vehicles	1,175,400	1,175,400	1,175,400	1,175,400	1,175,400
Furniture & Fixtures	2,000	2,000	2,000	2,000	2,000
ANNUAL	1,286,400	1,286,400	1,286,400	1,286,400	1,286,400
DEPRECIATION	9,658,600	8,372,200	7,085,800	5,799,400	4,513,000

CLOSING FIXED
ASSETS

SCHEDULE 5

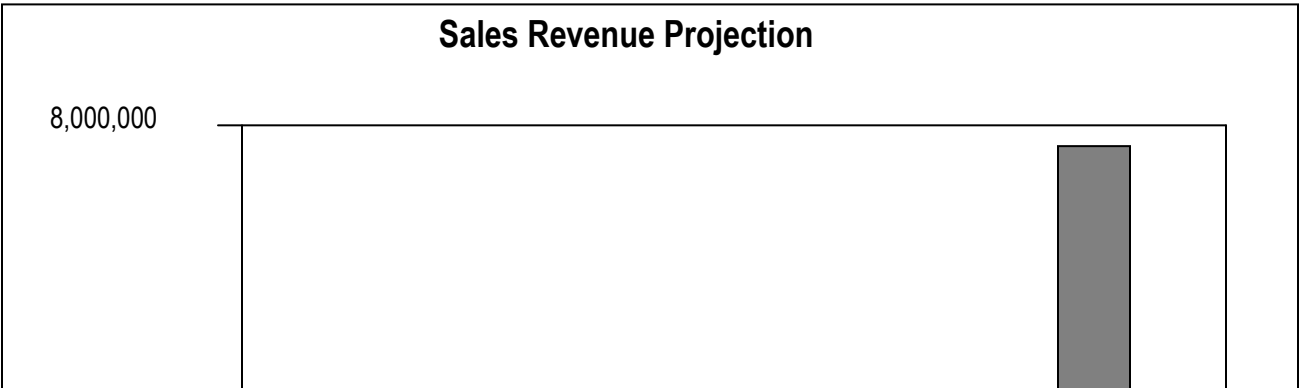
SALARIES & WAGES

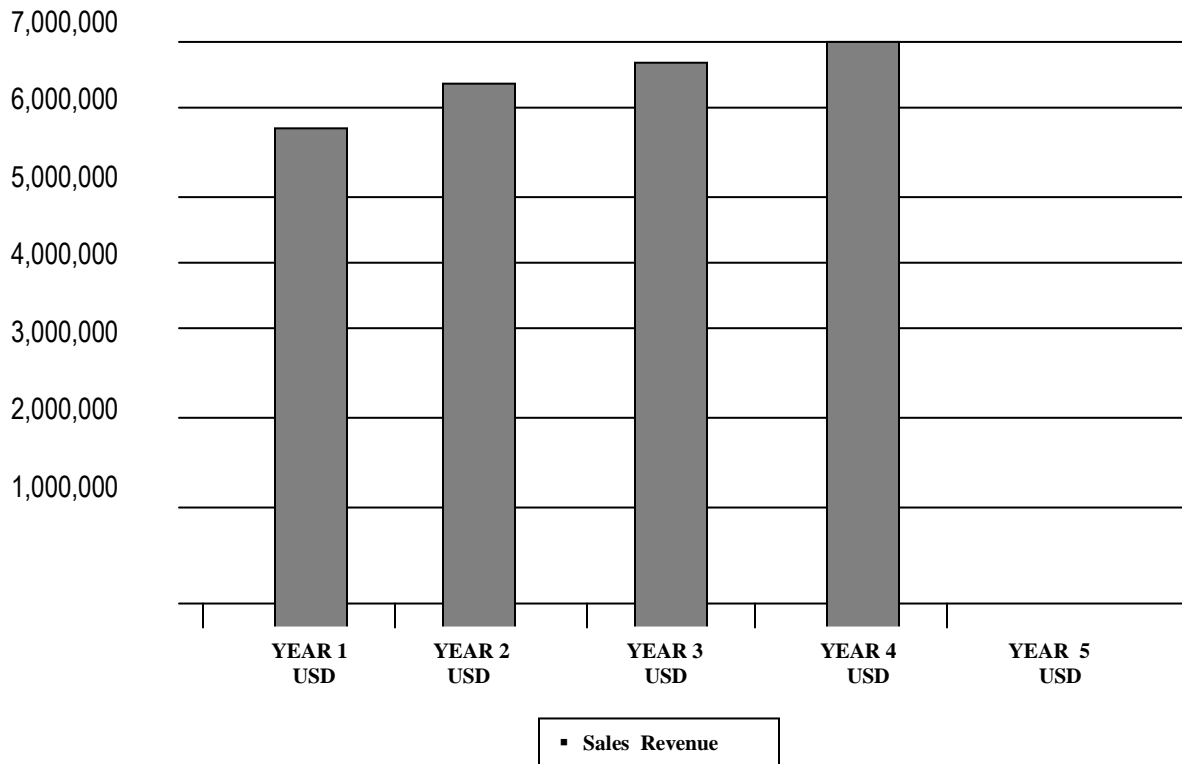
NO	EMPLOYEE DESIGNATION	NO	SALARY PER MONTH	SUBTOTAL MONTHLY SALARY	ANNUAL GROSS SALARY
1	Managing Director	1	3000	3000	36,000
2	Finance Management	1	2500	2500	30,000

3	Transport Manager	1	2500	2500	30,000
4	Accounts Assistants	2	1000	2000	24,000
5	Supervisor	2	700	1400	16,800
6	Drivers	64	500	32000	384,000
7	Assistant Drivers	40	300	12000	144,000
8	Mechanics	3	250	750	9,000
9	Secretary	3	250	750	9,000
10	Office Attendants	2	400	800	9,600
		2	150	300	3,600
	TOTAL USD \$	121	11,550	58,000	696,000

REVENUE PROJECTION

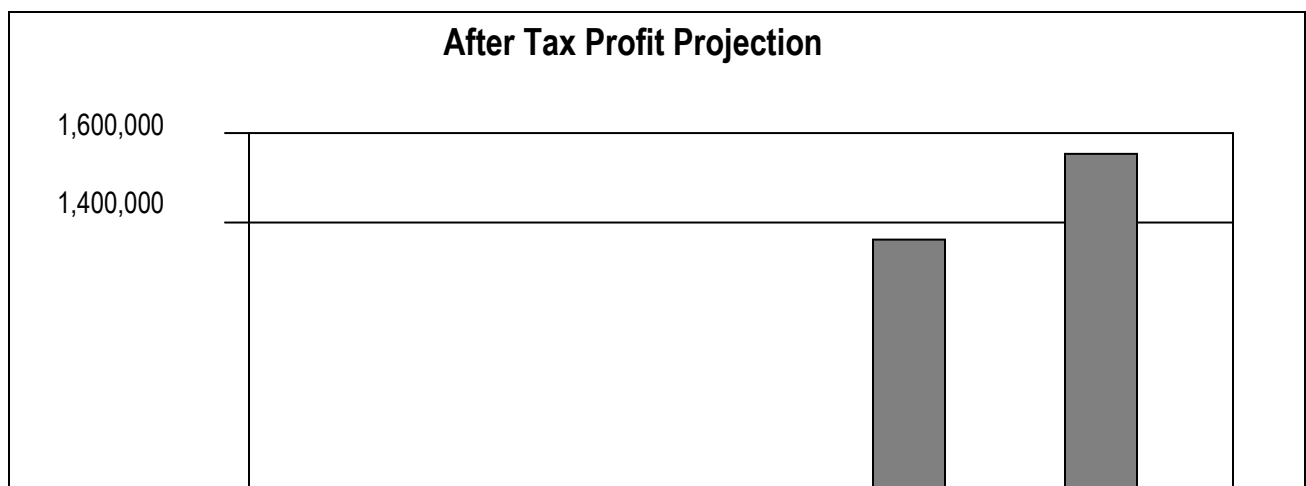
	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Sales Revenue	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185

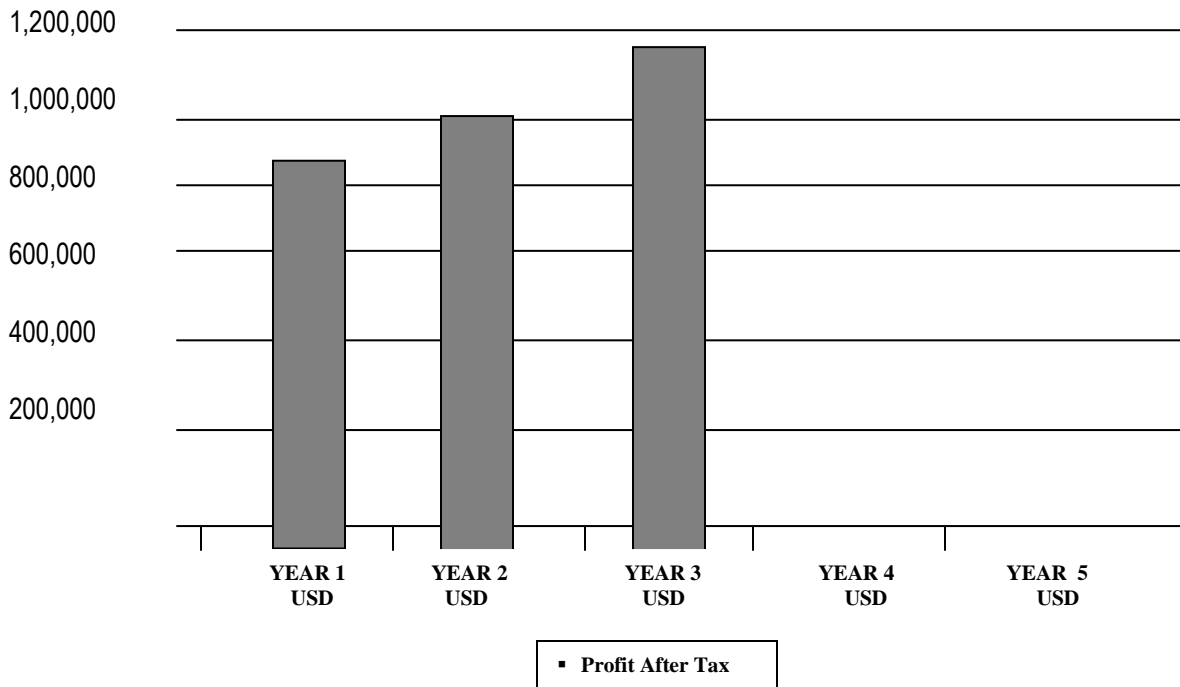




PROFIT PROJECTION

	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
Profit After Tax	837,463	988,872	1,152,367	1,328,869	1,518,667





CASH FLOW PROJECTION

	YEAR 1 USD	YEAR 2 USD	YEAR 3 USD	YEAR 4 USD	YEAR 5 USD
CASH FLOW AT THE END OF THE YEAR	5,760,000	6,163,200	6,594,624	7,056,248	7,550,185

