

UNITED POWER POINT LTD.

P.O. BOX 2441

ARUSHA.

Feasibility Study Report

On

**Establishment of
Manufacturing Unit for Road/Buildings Constructions
aggregates and Bricks blocks.**

In

Monduli area, Arusha, Tanzania

**Prepared for
M/s UNITED POWER POINT LTD,
P.O. BOX 2441
Arusha.**

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Index

S/No	Subject	Page NO. 1
1	Introduction	01
2	Company Details	02
3.	The Project	04
4.	Project Location & Inputs	06
5.	The Market & Demand	08
6.	Promoters & Management	10
7	Manufacturing Process & Technology	11
8	Manpower	14
9	Cost of the Project & Means of Finance	16
10.	Project Implementation Schedule	19
11.	Project Financials	21
12.	Social & Development Benefits	26
13.	Conclusion & Recommendations	29

List of Appendices:-

- ◆ Cost of the Project & Means of Finance
- ◆ Projected Five Years Profit & Loss Account
- ◆ Project Five Years Balance Sheet
- ◆ Projected Five Years Funds Flow Statement
- ◆ Projected Taxation Schedule
- ◆ Projected Depreciation Statement (Phase I)
- ◆ Projected Depreciation Statement (Phase II)
- ◆ Chart on Projected Profits for Five Years
- ◆ Chart on Cash-Profits for Five Years
- ◆ Implementation Schedule (Phase I)
- ◆ Implementation Schedule (Phase II)

0.1 Introduction

This feasibility study report is being prepared for **M/S UNITED POWER POINT LTD. of P.O. BOX 2441 Arusha, Tanzania** hereinafter referred to as UPPL. UPPL has undertaken a project to venture into the manufacturing of sub base materials for road/buildings construction, and other allied products including trading of commodities, transport contractors, air travels and sea travel agents, also clearing and forwarding agents. The promoters are well experienced in the envisaged line of business. The promoters have enough financial resources to see through the project and will bring in foreign exchange right from the inception stage of the project.

The purpose of this study is to assess the commercial viability and operational feasibility of the project being undertaken by UPPL. Most of the data has been compiled by the promoters' own research and study in Tanzania and is first hand information. The financials have also been worked out on the basis of market and cost information provided by the promoters of the project.

This report has additionally deliberated upon the social and related economic benefits (net) that will accrue to the nation and has given adequate weight age for the same in the conclusion & recommendation paragraph.

02. Company Details:

Registration:

M/S UPPL was registered with the Registrar of Companies on 9th of May 2006 as a limited liability company. The Authorized share capital of the company is same as the paid-up share capital. The registration number of the company is 56422.

Object Clause:

“To carry on the business of constructions of buildings/roads, vibrated blocks, interlocks blocks, carriers by land, by sea or air and as railway and tramway owners, wharfingers, light men, warehousemen, ship owners, transport, contractors, builders and owners of aircraft and vessels of all kinds, locomotives, traction engines motors, wagons and rolling stock and as shipping agents and forwarders or goods of allied products as well”

Other object clauses include the business of transporters, transport contractors, air travel and sea travel agents, chatterers and tourist agents, to establish camps, buildings, health farms and conveniences of all kinds for tourists, passengers and holiday makers including hotel and lodging accommodation, guides and reading rooms and also interest in construction line.

Promoters/Shareholders & Directors:

The Shareholders of UPPL are as under:

Name of the Share Holder	Nationality	% Holding
BARIKI SABAS LEKULE P.O. BOX 2441 ARUSHA.	Tanzanian	30%
EDNA STEPHEN MBOWE P.O BOX 2441 ARUSHA.	Tanzanian	20%

The first directors of the company are:

01. BARIKI SABAS LEKULE
02. EDNA STEPHEN MBOWE

Location of the Proposed Site:

The site for the business shall be in Kisongo, Monduli area, Arusha Region. Since the project is concerned with construction materials, maintain and improve or subscribe towards the construction maintenance and improvement of roads, water-works, cold storage, canals, and also of tramways, railways, and other roads and ways and quays and wharves for the purpose of the Company, or for access to the lands, works and properties of the Company.

Registered Office Address:

Plot/Block NO: 13 Olosiva, Kwaidi, Somali st, Arusha municipal.

03. The Project:

The basic purpose of the entire project is to add value to the abundantly available inputs, which have hitherto not been adequately exploited. The project will create more wealth for the nation and shall endeavor to bring in more prosperity and economic independence.

UPPL is interested in venturing into this area, as they are confident about their latest technology and manufacturing process. UPPL is sure to process high quality constructions products out of the so considered inferior quality products.

The project will create nearly 150 employment opportunities directly and more than that indirectly. Apart from adding to the wealth of the nation, it shall also increase the purchasing power of the community thereby leading to an overall increase in demand for other construction products, which shall in turn lead to better economy conditions.

The project shall bring in plant and machinery from outside the country and shall eventually train the local population in the running of the plant. The project will thus contribute towards the manufacturing sector of the economy. As per the latest findings of CTI (Confederation of Tanzanian Industries), manufacturing contributes less than 10% of contribution towards this sector which is very much welcome by the government. The manufacturing process being undertaken shall also ensure that

value addition is being done within the country, which is added advantage.

04. Project Location & Inputs:-

Since the project is related to manufacturing of sub base materials for road constructions etc., which is an outcome of specialized processes carried out on raw granite and concrete, the project location preferably has to be near to the raw materials region. A part from the very fact that the project requires lot of road transport related issues also dictate the location of such projects as being nearer to the source of raw materials.

The promoters reportedly carried out a survey of various regions in Tanzania where such project can be established with minimal obstacles. Their study led them to the Arusha region, it also has advantages in terms of availability of adequate local manpower, power and roads also, besides it is easily approachable from Dar es Salaam, which is the main commercial city of Tanzania. Arusha shall also prove to be one of the most important markets and as such Manyara, Kilimanjaro, Tanga and other central regions areas. enjoys the benefits of being near to the source of raw materials i.e. cement, quarries, sands e.t.c, relatively better infrastructure and also being quite near to the main market.

The local authorities have assured the promoters about adequate supply of power and water, which is required for the successful running of the business. Power requirement has been estimated at 1,100 h.p. With 24 hours running.

0.5 The Market Demand:-

Sub base materials for construction form the core product line of this project are all sourced from river sands, sometimes floods sands granite stones. These products are being used in construction industry as well as in preparation of industrial and domestic use.

Tanzania as a country has been enjoying a steady economic growth rate of nearly 4.5% to 5% for last more than 8 years and

that has resulted into spurt of demand for quality roads. The demand has been more pronounced in the basic necessity sector. Granite stones and road construction sector have also shown impressive growth. The products of UPPL form the basic for domestics and road construction industry. It is used in all stages of road construction. It is useful in the initial stage and once the road construction is completed it is required for interior decoration and for creation of useful attachments.

From marketing angle, apart from the points noted above, this project enjoyed a distinct advantage. There are certain international standards in which the dimensions are available for Road construction materials; however UPPL envisaged producing concrete and granite stones in various sizes, which can suit the requirements of local populace. This strategy shall provide the project with an additional marketing edge compared to imports, the first edge being lower prices. UPPL believes that creation of non-standard size shall not only make it more viable/profitable but will in long run also ensure maximum utilization of available resources.

UPPL promoters firmly believe that they will not encounter any major hurdle in marketing their products. Some time will definitely be required as the product boast of being import substitute and the products are not meant for direct consumption (which implies that they are being sold to an intermediary). However in long run UPPL promoters and management are very much sure about the successful operation of the project.

The per capital consumption of Sub base materials for road construction in Tanzania is one of the lowest in the world and the growing economy and changes in international situation it is very likely that the demand for concrete and granite stones products is growing in geometric proportions. UPPL seeks to initiate its activities on the premise of such calculations.

06. Promoters & Management:-

The importance of well-informed promoters and professional management can never be over estimated for successful implementation of the any project. It is said that well – informed

promoter and professional management can make even a not so viable project otherwise and vice-a-versa.

07. Manufacturing Process & Technology: -

The factory to be put-up for manufacture concrete and vibrated bricks blocks, sub base materials, granite stones, concrete etc. for road construction, shall be a very simple and target oriented. Concrete will support the roof and the sidewalls will leave open. This will not only ensure that the initial set – up cost of the project will be minimal but will also enable UPPL to increase the factory will maintain a very large open space to accommodate the storage of granite stones received in form of concrete waiting for further processing. In other words, the factory will be not consuming a very large area of land.

The project envisages manufacture of:

- ◆ M.R. Grade Granite Stone (GGS).
- ◆ B.W.P. Grade (bwpg).
- ◆ Film faced concretes;
- ◆ Checkered wall concrete white;
- ◆ Vibrated blocks.
- ◆ Interlocks blocks.
- ◆ Louver blocks.
- ◆ SS Concretes & Culverts
- ◆ Concrete bricks/blocks
- ◆ Cavity blocks
- ◆ Road divider blocks
- ◆ Paving stones, kerbing, corner column blocks.

The manufacturing process is briefly described as under:

Granite stones from the earmarked area from the source are brought to the factory and put into the concrete form. This is done in order to ensure that there are no end cracks. This process thus reduces loss of yield. This process assumes more importance in case of this project due to the fact that the granite stones envisaged to be utilized here is of very inferior/perishable quality. As per the study of the promoters the species expected to be utilized have never been utilized up till now in the country. There

are nearly 15 such varieties and barring for one or two none of these species have been commercially exploited. In a way this is also one of the edges of this project.

08. Manpower: -

Although the project of manufacturing sub base materials for road constructions will require lot of automatic machines, lot of manpower especially at lower end shall be required to carry out preparatory processes as well as for quick movement of concretes within the factory premises.

UPPL will hire one expatriate to oversee the operations supported by twenty local workers. Workers will be guided and trained by the expatriate technical experts to run machines. Organization hierarchy shall be as under:-

a. Top level

Chairman cum Managing Director
General Manager

b. Middle Level

Production Manager
Chief Engineer
Finance Manager
Marketing Manager

c. Lower Level

Production Supervisors
Personnel and Administrative Officer
Accounts Officer.
Sales Officer

UPPL shall endeavor to promote local staff as much as possible to ensure better employment opportunities to the local populace. However it shall always ensure that efficiency of the unit is kept intact.

UPPL shall run simultaneously a small in-house training house, where the experts will provide training to the new recruits before they are put on the jobs for on-job training. UPPL believes that a motivated and skilled manpower can for sure bring in immense

benefits to the industry and can ensure peaceful co-existence of all concerned.

09. Cost of the Project & Means of Finance:-

A. Cost of the Project:-

Sr. NO.	Details	US \$
1	Land & Building	300,000/=
2.	Plant & Machinery	5,993,020/=
3.	Furniture, Computers & Fixtures	55,000/=
4.	Vehicles	876,000/=
5.	Pre-operating Costs	52,580/=
6.	Others	73,400/=
7.	Initial working capital	150,000/=
	Total Cost of the Project	7,500,000/=

B. Means of Finance:-

Sr. NO.	Details	US \$
1	Equity Funds	2,000,000/=
2	Promoters' Loan	5,500,000/=
	Total Means of finance	7,500,000/=

The total cost of the project consisting of both the phases has been estimated at **US \$ 7,500,000/=** as can be seen from the above chart, majority of the expenses involved will be on Plant, Machinery and Vehicles. Nearly 73.33%. Besides considerable money will be required in the starting up of the unit which has been grouped under the head pre-operating and initial working capital costs.

Phase I will be implemented within a span of three months and the second and the final phase will be completed within a span of nearly 21 months from the date of the completion of the first phase.

Building will be a simple structure based on pillars with sidewalls open to facilitate future expansions. The height of the factory shed will be 15 feet. A small training house and a rest room for the workers will also be constructed.

Details of Plant & Machinery to be imported is as under:-

Sr. NO.	Description
01	Mobile crusher
02	Excavators
03	Wheel loader
04	Concrete Mixer
05	Concrete vibrator
06	18Tones Lorry
07	Tipping Trucks 7 -8Tones
08	Dumper
09	Theodolite
10	Leveling Equipment
11	Block Making Machine
12	Water Pump
13	Hand compacter
14	Standby Generator
15	Earth moving equipments (Excavators)

Three in-house utility vehicles will be needed to transport the finished goods from the factory to the buyers' place and also for moving the logs within the factory premises wherever required.

Office furniture will be bare minimum and so will be computers (may be three sets). Telephone lines; fax line and Internet line will be kept handy at the factory to ensure speedy and cheap communication.

Pre-operating costs will take care of the preliminary expenses, initial survey and travel costs including accommodation charges, professional charges for preparation of reports etc and shall also cover for the initial joining costs of various key personnel till the real operations commence. Initial working capital shall include the money required to bring in enough quantity of road construction materials, spend for the revenue

expenses for the process carried out on them and the financing of other revenue costs till the time money starts flowing back from the debtors for the goods sold to them on credit.

The promoters of UPPL are in possession of required finances and are committed to put in the same as and when required. The initial capital has been created at 2.0 million dollars and balance amount will be treated as loan from promoters, interest free.

10. Project Implementation Schedule:-

As has been stated in the earlier paragraphs the entire project will be implemented in two phases within a period of 24 months. The first phase is expected to be completed within a span of nearly two to three months and the next phase is expected to be completed in another 21 months. The initial capacity shall be 100 cubic meters a day and after completion of the second phase the manufacturing capacity shall be 450 cubic meters a day.

Considering Aug 2013 as the first month, the first phase is expected to be completed by July 2016 and commercial operations expected from September 2011. Where as the increased production form 100 cubic tones a day to 450 cubic tones as day will be achieved gradually, however optimum capacity will be reached within 24 months.

The project implementation schedule is shown in form of a table hereunder: (PHASE I).

Sr. No	Activity	Completion Period
01	Company Formation, Registering with statutory authorities, like Income tax, VAT NSSF, etc. securing TIC certificate of incentive Industrial license etc.	Aug 2022
02	Site identification, purchasing the same, designing of plant layout and commencing of construction of factory shed.	Sept 2023
03	Order placement for various	Oct 2023

	machineries, recruitment of key personnel.	
04	Installation of Machines	Dec 2023
05	Procurement of, Sands, granite stones for initial trial runs as also for future.	Dec 2023
06	Commencement of Trial Runs	Jan 2024
07	Commencement of commercial Operations.	July/August 2024

The project implementation schedule is shown in form of a table hereunder (PHASE II)

Sr. NO.	Activity	Completion Period
01	Site Mobilization & Factory Construction	January/February 2025
02	Factory Shed Complete & Plant Layout finalized for implementation.	February 2025
03	Order placement for various machineries, recruitment of key personnel	February/March 2025
04	Installation of Plant & Machines	March/April 2025
05	Procurement of granite stones for initial trial runs and plant commissioning.	May 2025
06	Commencement of Trial Runs	May/June 2025
07	Commencement of Commercial Operations.	May/June 2025

The second phase implementation will begin immediately after twelve months and it is expected that within a span of another nine months major expansion as envisaged will be completed. Improvements will be introduced in the next phase based on the experiences of the first phase.

11. Project Financials:-

11.01 Assumptions

- a) The rate of one US \$ is equal to T.shs 1,690/=
- b) Required labor force will be available
- c) Required permits will be granted within the limited time schedule to ensure implementation as per schedule.
- d) The first phase will be operational within a span of three months.
- e) The second phase will taken nearly 21 months to complete after the start of first year and will increase the capacity to 450 cubic tones per day.
- f) Total investment will be US \$ 7,500,000
- g) The project will have own finance
- h) Land will be available on lease in future as and when required.
- i) Import duty exemption and deferment of VAT will be available on import of plant and machinery.

11.02 Projected Five Years Profitability Statements

As can be seen from the enclosed projected profitability statement, the company will not earn profits in the first year where the operations are to run only for six months; however there will be cash- profits.

The company will attain a turnover of US \$ 0.62 million in first six months; will go up to US \$ 0.240 millions in the next years and from third year of operation will remain steady at US \$ 1.580 millions.

The profits will start coming from the 2nd year of operations. From the year 4 and onwards the annual profits will be in the range of US \$ 1.0 million and above. The project enjoys a payback period of 5 years.

The company will be earning gross profit @ 6% and net profit of nearly 2.5%. For a very large project, like this a net profit of 2% is quite reasonable. Government will earn lot of revenues due to such high turnover.

Selling costs have been assumed at 2% of the sales and other overheads have been assumed not to cross US \$ 50,000 a month including manpower costs.

Depreciation has been provided as per the prevailing income tax rates. Further full depreciation has been provided on assets purchased during the year. Separate schedules are attached with this report for calculation of depreciation.

11.03 Projected Five Years Balance Sheet

The enclosed balance sheet shows a very sound position of the company. The current assets ration is in excess of 1.2 from the beginning and by the year 5 it reaches 2.

Inventory will be maintained only for a period of one week. The reason being the plant is going to be located in the close proximity of Road Constructions materials.

Creditors will be outstanding for a period of 15 days and suppliers of services will be paid at the expiry of one month.

11.04 Projected Five Years Funds Flow Statements:-

As can be seen from the appended projected funds flow statement the company will be financed by the promoter's own funds.

Operating profits will be ploughed in to the business. Once the operations are steadied from the year 2015, the annual contribution of operational profits shall be turning the tune of US \$ 400,000/=

As the operations will grow, the net working capital requirement will also grow. As can be seen the increase in net current assets will be from US \$ 90,000/= (year 2013) to US \$ 680,000/= (year 2015).

The company assumes to maintain a positive cash balance of US \$ 45,000/= to US \$80,000/=.

11.05 Projected Five Years Taxation Schedule:-

The company will enjoy tax incentives as per the governing laws of the country. It will have taxable profits only from the year 2016 and will then onwards contribute to the exchequer in excess of US \$ 150,000/= in the first year and then onwards in excess of US \$ 340,000/= The company may reduce its tax burden by investing or expanding its operations and in either case the country benefits.

12. Social & Development Benefits:-

Generally it is presumed that a project for manufacture of granite stones or concretes will result into block making. Whilst this is true to a very larger extent, it should be noted that this project plans not to acquire more and more land even for manufacturing.

◆ Employment creation

As has been observed earlier this project will provide direct employment opportunities to more than 120 locals inclusive of skilled, semi- skilled and un-skilled class. One expatriate will also be employed as per the requirement of the project.

This direct employment of more than 121 individuals will generate indirect employment for more than 500 individuals. In nutshell it can be concluded that this project will have a very positive impact on the level of employment in the country and will be welcome change.

◆ Transfer of technology

This project being a manufacturing project will usher in the country technology. Although the technology is simple the advantages to the country are quite significant. The country will get the advantage of value addition due to such incoming technology. Further the country can reduce its dependence on

imports for the finished products manufactured by this project. Local employees will get on-the-job training from the experts (expatriate) employed and in long run will improve the technical competence of the local population.

- ◆ Contribution to the exchequer.

This project will contribute substantially to the society in general and to the exchequer in particular. As has been observed the total turnover at 100% utilization will be in the range of US \$ 24 million. This will result into VAT outflow of substantial amounts. Besides the company will be contributing tremendously in terms of PAYE and NSSF. In addition the company will also be contributing in terms of corporate taxation from the year 2017 onwards.

- ◆ Positive cascading impact on the nation's economy.

This project will have overall positive impact on the society. It will not only save the precious foreign currency reserves of the country by producing import substitute products, and by exporting the final product, but will also generate direct employment to more than 121 individuals and will provide means of livelihood to more than 500 individuals. The cascading positive impact on the society will be too great. This project will lead to creation of national wealth. Its contribution to the exchequer will also be quite significant in terms of NSSF, PAYE, VAT and direct taxation apart from skills and development levy.

One more advantage of this project is its location. Since it is located at Lugoba, Coast Region, which is not fully developed, will get more opportunities to commercially expand and develop. This project will thus result into regional development. This project will thus held the government to further its own objective of promoting regional development.

13. Conclusion & Recommendation:-

The foregoing write-up indicates following benefits to the country, which in turn pleads for immediate acceptance of this project as a feasible project.

- ◆ The country will get a manufacturing unit, which will add to its scarce manufacturing base. As on date the country's manufacturing base is very low with contribution of 9% to the GDP and thereby making the economy pre-dominantly agriculture oriented.
- ◆ The project will bring in latest technology in the relevant field and will ensure training or development of skilled labour force in the country. The labour force will get on –job training and will thus make them more and more competent.
- ◆ The project when implemented in full over a period of 24 months will ensure that there will be a direct flow of foreign currency in the country to the tune of US \$ 1,500,000/= which is considerable by any standard.
- ◆ The project will lead to regional development besides. As it will be located in Coast Region. This advantage has many other advantages running parallel. There will be tremendous boost to the economic development in the region. It will arrest migration of individuals and will also alleviate the problem of congestion and concentration of working force in neighboring regions.
- ◆ It will provide cascading positive impact on the economic situation in Arusha and other neighboring regions.

There are many other benefits direct and indirect of this project and therefore we conclude that this project is feasible technically as well as economically.