

DEFENG COMPANY LIMITED
PROPOSED BUSINESS PLAN
FOR
THE ESTABLISHMENT OF MEDICAL HOSPITAL IN
MWANZA CITY, MWANZA REGION,
TANZANIA.



Prepared by:

DEFENG COMPANY LIMITED,
MWANZA,
TANZANIA

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List of Abbreviations

ARH – DEFENG COMPANY LIMITED
CAPEX – Capital Expenditure
CCHP - Comprehensive Council Health Plans
CIF – Cost Insurance and Flight
CSI - Corporate Social Investment
DAWASA – Mwanza Water Supply and Sewerage Authority
EKG/ECG - Electrocardiogram
EIA – Environment Impact Assessment
FBO-Faith Based Organization,
HIV/AIDS – Human Immunodeficiency Viruses/ Acquired Immune Deficiency Syndrome.
HMS - Hospital Management System
GDP – Growth Domestic Products
GOT- Government of Tanzania
HSSP - Health Sector Strategic Plan
IMF – International Monetary Funds
IRR – Internal rate of return
NBS – National Bureau of standard
NEMC – national Environment Management Council
NGO – Non-Governmental Organization
TB - Tuberculosis
OPEX – Operating Expenditure
PPP- public-private partnership
MW – Mega Watts
SWOC – Strength Weakness Opportunity and Challenge
TANESCO – Tanzania Electric Supply Company
TZS – Tanzania Shilling
USA - United states of America
US\$ - United State Dollar
VAT – Value Added tax

EXECUTIVE SUMMARY

Tanzania exemplifies the developing world's struggle to achieve —middle income country status while confronting widespread poverty and substantial health challenges. A diverse range of both for-profit and not-for-profit organizations, the private health sector in Tanzania is making significant contributions across all health sector levels and health focal areas within the national health system.

The overall objective of the health policy is to improve the health of the people and their well-being focusing to those most at risk and to encourage the health system to be more responsive to the needs of the people. National Health Policy 1997, particularly stressed on the need for formulating environmental legislation and sectorial legislation as an essential component for effective and comprehensive health management and improvement of life.

Defeng Company Limited is translating policies practically by establishing health maintenance on behalf of stakeholders in Tanzania. It is realized that health care is a human right and a basic need. In such realization, establishment of Defeng Company Limited seek an opportunity by establish High Tech Hospital aimed at providing modern hospital services to all citizen in Mwanza city and nearby regions in Lake zone. The hospital will reduce time spent in seeking for health care facilities and strengthening health status among residents, create employment, reduce poverty.

The project implementation will be conducted in phases, phase I will start by developing a 3 storey's structure which will complies Department of Emergency, Department of Pathology & Laboratory Medicine, Department of Radiology, Clinical Departments, Department of Out Patients, and Wards. The proposed project is estimated to cost a total of US\$ 818,696 which including, own foreign equity of 654,957US\$ as proceeds from capital contribution of the project, total loan debt of 163,739US\$ with 8% interest rate will be borrowed from commercial Banks.

The hospital is looking at providing direct employment to at least 46 permanent jobs and visiting staffs. Projected financial viability of project is positive whereas net profit is positive, percentage gross contribution is above 57%, expected sales increases by 5%, the project is able to pay corporate tax, own loan contribution ratios is 20:80 ,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% and payback period of project is within 4 years, return on Investment is anticipated to 63% which is above bank interest rate, Depreciation of fixed assets and amortization of the pre-operational expenses rates is 12.5%, annually yearly loan payment is 41,010US\$ for 5 year for the whole project economic life.

The development of a large and complex project such as Defeng Company Limited is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach addressed to minimize multiple risks. Based on the Impact Investment Index analysis, the Institute can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements.

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, the development of this Hospital will be funded by private finances.

1.0. HEALTH SECTOR OVERVIEW IN TANZANIA.

1.1. Background of health sector

Tanzania exemplifies the developing world's struggle to achieve —middle income country status while confronting widespread poverty and substantial health challenges —such as persistently high child and maternal mortality, HIV/AIDS, tuberculosis (TB), and malaria. Over 74 percent of mainland Tanzania 's 55.4 million people live in rural areas where, despite strong national economic growth over the past decade, income levels remain among the lowest in Africa and an estimated one-third of Tanzanians live in abject poverty. The Government of Tanzania (GOT) —now implementing its Health Sector Strategic Plan (HSSP) IV (2020–2025) —has made strides in improving the delivery of essential health services. HIV prevention efforts have reduced prevalence from 7.3percent in 2000 to 5.6 percent in 2009; prevention of mother-to-child transmission coverage was estimated at close to 59percent in 2011; and a strong multi-pronged malaria prevention and treatment strategy has significantly improved access to first-line malaria therapy throughout the country.

However, despite a relatively well-developed policy environment for public-private collaboration in health, the process and methods for operationalization of private sector engagement and public-private partnership (PPP) has a significantly limited actual implementation of public-private collaboration within the health system with continuing missed opportunities to strengthen them.

Tanzania government in association with several stakeholders has continue to pursue improved availability long with the standards of health services. Reproductive and child health services are among key priority areas with an intention to reduce maternal and child mortality rates. As of 2020 there were 16215 health facilities in the country with a total number of 82,908 beds. The health care continues to be show some improvements. In particularly looking for health indicators. The achievement in health care were mostly due to some specific government interventions. Besides the achievements made, there are still some areas that need further improvements

Obviously, these government objectives infer opportunities in establishing more private health centers and dispensaries, additional medical facilities, modern diagnosis and health service equipment, extra ambulances and other life-saving items, plus other amenities that will enhance government capacity in its objective to improve the accessibility and quality of health services.

Some of specific investment areas involve;

- Creating mechanism and methods for care and rehabilitative treatment services at all level,
- Providing resource to facilitate the construction and rehabilitation of health facilities at all level;
- Offering housing and other incentives for public health workers;
- Offering health tools and equipment at all level;
- Establishing pharmaceuticals and offer drugs for curative and preventive measures;
- Providing health information system to facilitate efficiency health planning and programs.

1.2. Private sector landscape in Tanzania

Composed of a diverse range of both for-profit and not-for-profit organizations, the private health sector in Tanzania is making significant contributions across all health sector levels and health focal areas within the national health system. Despite this, the full scope of private health sector activity and contributions to health are typically excluded, or minimally represented, in assessments and evaluations of the health system. When one looks at the full scope of private sector activities beyond service delivery –including medical facilities, commodity supply, and health financing –a more realistic image emerges of a Tanzanian private health sector that is diverse, widespread, and complex. Over one-third of the general health services available in the country could be accessed through private sector health facilities, FBOs, and other not-for-profit facilities; these have become a critical extension of health services into rural and hard-to-reach areas. Moreover, a wide range of private facilities provide key supportive diagnostic and pharmaceutical dispensing services. Despite these contributions, a large portion of the private health sector has not been effectively engaged or included in national health planning processes. In particular, it is not effectively considered or involved in the creation of Comprehensive Council Health Plans (CCHP) at the district level Orin vertical program planning efforts. The ARH seeks to provide a more accurate landscape of private sector presence and activity in Tanzania’s health system, revealing the significant opportunities that exist to further leverage private health sector capacity in strengthening accessibility and delivery of essential health services.

1.3. Public and private health partnership in the health care

The government of Tanzania acknowledges the mutual co-operation between the government, private-for-profit groups, Faith-Based Organization (FBOs), NGOs, communities, civil societies, media, refugee relief groups and projects from outside in determining people health needs, sharing resources and delivery of well-regulated health services.

However, the economic recession, which started in 1978, has brought severe financial crisis and this has led Tanzania to accept cost- sharing policy, which was imposed in 1982 by the World Bank and IMF under the Structural Adjustment Program. The World Bank had estimated that all governments affected by economic recession could through cost- sharing collect between 10 - 20 % of their health sector recurrent budget.

Cost-sharing Fund - as it is commonly called - for purchasing essential drug, supplies, equipment, and rehabilitation of buildings. Under this policy all services at the district and regional level have to be paid for except patients who are grouped under exemption component of cost-sharing policy

1.4. Country Health Policy:

The overall objective of the health policy is to improve the health of the people and their well-being focusing to those most at risk and to encourage the health system to be more responsive to the needs of the people. The aim is to improve health status through reduction of morbidity, mortality and raising life expectancy. The government recognizes that health

is a major resource for social and economic development. Among its objectives in this policy are: -

- To sensitize the community on common preventable health problems and improve the capability at all levels of society to assess and analyze problems and to design appropriate action through genuine community involvement.
- To promote awareness in the government sectors and the community that health problems can only be adequately solved through multi-sectoral cooperation involving such sectors as Education, Agriculture, Finance, Regional Administration and Local Government, Water, Community Development, Bilateral Organizations, NGOs and Civil Societies.
- To create awareness through family health promotion that the responsibility of one's health rests squarely on the able-bodied individual as an integral part of the family.
- To promote and sustain public – private partnership in delivery of health services
- To promote prophetic medicine and alternative healing system

1.5. Regulatory Framework

National Health Policy 1997, particularly stressed on the need for formulating environmental legislation and sectoral legislation as an essential component for effective and comprehensive health management and improvement of life. Meaningful and effective Health law must be clearly understood and treasured by the communities and individuals whom it is aimed. The legislation will set out standards and procedures, duties and limits create obligations for all stakeholders, which will fit human activities and govern resources sustainably. While the government is on process of preparing such law mining environmental legislation have been formulated or reviewed. Health management has received attention from many donor agencies than any sector in Tanzania and although authority knows that the lives of Tanzanians are intimately connected to the environment, their survival and that of future generations depend on the harmonious relationship which natural elements unfortunately. Poverty and ignorance have resulted in aquatic resources and pollution thus upsetting the delicate balance between resources availability and recognition of the cross-cutting nature of health problems.

1.6. Role of Defeng Company Limited

The role of Defeng Company Limited is to translate policies practically by establishing health maintenance on behalf of stakeholders in Tanzania. It is unfortunately to stakeholders that, while some service producers (policy makers) had launched negotiations with producers' stakeholders are unable to get access to the negotiations as far as they do not own any organization to speak on their behalf.

1.7. Essence of Care and Establishment of the Project:

It is realized that health care is a human right and a basic need. In such realization we a special care should be taken and do something or people in such situation this project was proposed. The proposed hospital project will be one of the prominent health care institutions in Tanzania, which will provide health care awareness struggle against misuse of privilege and also provide medical relief to the entire stratum of humanity. We hope the

project to be a blessing to all. The proposed project will be established in 2021 and is being mainly run by mobilize funds from local and international commercial banks.

1.8. A need for Defeng Company Limited in Mwanza City for Social Economic development



Across differing regions, medical institutions (often referred to as “anchor institutions”) play a major role in the social and economic vitality of the country. In total, hospitals provide medical relief to the entire stratum of humanity and employment. Establishment of Hospital in Mwanza city is of particularly important, this will reduce time spent in seeking for health Service facilities outside Ilemela district, the project will be strengthening health status among residents, create

employment, reduce poverty at the same time will increase government revenue through PAYE, purchase of consumable goods, payment of utilities and other related factors that have multiplier effects toward increases Government revenue.

The investor, Defeng Company Limited identifies this potential since mostly health care’s in Ilemela lack of health care facilities especially in poor design/performance of existing schemes, therefore the institute decides to establish a modern hospital will all facilities of referral hospital in Ilemela so as to save life of citizen residing in Ilemela district. In addition, the hospital will save as internship center to student completed different course from health collage in Lake Zone especially medical students and health volunteer’s labor.

2.0. PROJECT OVERVIEW

2.1 The project location and ownership structure

Defeng Company Limited is a Tanzanian company registered in Tanzania with certificate of incorporation number 164537412 issued on 22nd March, 2023. The office of the company is located at Kiseke Area, Plot No. 138 Block B Ilemela District, in Mwanza Region. The project is located just 10 Km from Mwanza City and 3 Km to Ilemela district office. The permanent is P O Box 1629 Mwanza City, Mwanza Region. The project will be carried in Ilemela District.

The initial Authorized Share Capital of the company is TZS 100,000,000/= divided into 1000 ordinary shares of TZS 100,000 each and the company have the power to divide the original or any increased capital into several classes, and to attach thereto any preferential, deferred, qualified or other special rights privileges, restrictions or conditions. Unless the conditions of issues shall otherwise expressly declare, every issue of shares, whether preference or otherwise, or any such rights, privileges or conditions shall not be altered or modified except in accordance with the registered Articles or Association. The liability of the members is limited and the following names compromise the company ownership and principal shareholding as illustrated on Table 1 below.

Table 2.1: Company Ownership and Principal Shareholders

<i>S/No.</i>	<i>Shareholder's Name</i>	<i>Address</i>	<i>Occupation of Subscriber</i>	<i>Number of Shares</i>
1.	XU XINGGUO (Chinese) (Specialist)	Lijin Town, Shan Dong province in the Peoples Republic of China	Private Company By Share, Domicile In Tanzania- Incorporate Number 164537412	500
2.	WANG SHENHONG (Chinese) (Business Woman)	Shen Yang City, Liao Ning province in the Peoples Republic of China	Private Company By Share, Domicile In Tanzania- Incorporate Number 164537412	300
3.	GERSETEHNER GREEN MWENITUMBA (Tanzanian) (Business Woman)	Plot No 89 Block M Nyasaka C Ilemela Municipality Mwanza, Tanzania	Private Company By Share, Domicile In Tanzania- Incorporate Number 164537412	200

2.2. Project site analysis

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

2.2.1. Utilities and Other supporting Facilities

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

A. Electricity Supply

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Shinyanga to Ilemela District, and if possible, the institute will request installation electric Transformer in case the available power supply is not enough to feed the hospital.

As part of project budget, the hospital will be installed with a stand by generator with a capacity of 100KVA that will be installed for power supply. Solar energy will be alternative source for administration and other miscellaneous activities and not processing activities.

B. Water supply

The proposed site is close to MWAUWASA water network, the agency is major supplier of water to urban and peri urban area in the city. While depending on water supply from MWAUWASA the company plans to find alternative source of water while Hydrological surveys are ongoing on the project area to determine availability and sustainability of water supply.

C. Transportation network

The project is located just 10 Km from Mwanza city. The project is accessible in all mean of transport, such as heavy vehicles, Light Vehicle and public and private transport.

D. Communication system.

The mobile tower operators and service providers available to the project area are such as Vodacom, Tigo, Airtel and Halotel The particular business communication system with external world/entities is expected to improve once the company becomes operational. The National Fibre Optical line transmission is closer the project area, actually just like 3 meters closer to the project area.

2.3. Project Description

2.3.1. Background information of the project

Defeng Company Limited is the private company planning to establish a private specialized hospital that will be offering medical services in Mwanza city and nearby regions in Lake Zone. The company is intending to establish Medical Hospital with the focus of provide services to lower- and middle-income earners in Ilemela and nearby districts in Mwanza.

The proposed Hospital structures will consist of 5 storeys structure, but investor will start with 3 storeys. The project in phase I will start by developing a 3 storeys structure which will complies Department of Emergency, Department of Pathology & Laboratory Medicine, Department of Radiology, Clinical Departments, Department Of Out Patients, and Wards.

The Phase 1 has undergone a detailed technical and commercial planning to prove the feasibility and to calculate the required investments as well as the business model. The project during phase I will cost 1,518,261US\$ this will include construction, purchase of Machineries and medical equipment's, Purchase of Light vehicles and Ambulance.

Defeng Company Limited seek the opportunity finding the district has inadequate facilities for health services in Ilemela, the hospital will be equipped with medical facilities for diagnosis, treatment, for both medical and surgical, of the sick and the injured personnel.

2.3.3. Defeng Company Limited facilities

Defeng Company Limited will purchase Health facilities range from small clinics and doctor's offices to urgent care centers and large hospitals with elaborate emergency rooms and trauma centers, all health facilities will be classified according to their center of use, in this business plan Defeng Company Limited will purchase health facilities to 11 centers, these includes,

1. Ambulatory surgical centers (Ambulatory surgical centers, also called outpatient surgical facilities, allow patients to receive certain surgical procedures outside a hospital environment),
2. Birth centers, Blood banks, Clinics and medical offices, Diabetes education centers,
3. Dialysis Centers (Patients with kidney disease often need regular treatments of dialysis. Dialysis is a process that filters and cleans the blood artificially)—,
4. Hospice homes, Hospitals (Hospitals are the ultimate “catch-all” healthcare facility),
5. Imaging and radiology centers (These facilities, much like their hospital counterparts, offer diagnostic imaging services to patients).
6. Diagnostic imaging includes ultrasounds, X-rays, MRIs will not purchase at this stage),
7. Mental health and addiction treatment centers (This type of healthcare facility is a grouping for many different types of facilities),

8. Nursing homes (Nursing homes offer a living situation for patients whose medical needs aren't severe enough for hospitalization, but are too serious to manage at home),
9. Orthopedic and other rehabilitation centers (Orthopedic medicine deals with muscles and bones. Physical therapists are typically the practitioner patients see for problems in these areas of the body),
10. Urgent care (Urgent care (UR) facilities exist for on-demand healthcare needs) and
11. Tele health.

2.4. Project Cost & Financing Pattern

The proposed project is estimated to cost a total of US\$ 818,696 and will start by phases this including, own equity of US\$654,957 as proceeds from capital contribution of the project, total loan debt of 163,739US\$ with 8% interest rate. The Current asset of US\$ 226,433, fixed assets US\$ 801,304, liquidity 391,208 US\$ and total liabilities of 1,384,714US\$ which includes loan-able amount.

The project will be implemented within 5 years.

<i>EQUITY+LOAN</i>	
<i>FOREIGN EQUITY 80%</i>	<i>654,957</i>
<i>LOAN 20%</i>	<i>163,739</i>
<i>TOTAL EQUITY</i>	<i>818,696</i>

2.5. Business Plan Objectives

The objectives of this study are two-fold. First is to determine the viability of the proposed project and serve as a business plan for the company's development program. Secondly, it will be presented to Banks/Financial Institutions for application of Term Loan 163,739.13US\$ to support smooth implementation and running of the proposed projects. The project promoters have commissioned a reputable engineering and project planning consulting firm to advice on detailed technical and economic evaluation of the project and in determining its viability. As the report will be used to raise debt financing for the project, it is tailored to meet standard requirements of financial institutions in the region.

2.6. Product: Market and pricing Analysis

Defeng Company Limited target lower- and middle-income people in provision of health services at Ilemela district. In her strategies, the collage during the start of project will ensure sets of essential medical equipment installed to hospital; this will provide comprehensive treatment for patients, to a recommended hospital requirement to save life of people. Advocacy will be more support to enable the hospital to provide the services at subsidized costs. The collage will work closely with a well-established hospital in Mwanza especially to specialist Doctor to attend at least 3 to 4 time a week (visiting staff) so as to provide medical services, this includes; Endoscopy Services, Haemo-dialysis (Kidney), Neurology/Neurosurg, Ear, Nose & Throat – Ent, Pediatric Consults, Neuro-Surgery,

Neurology, Urology and Prophetic Medicine. These entire experts will work with full time staff whereas there is deficit in provision of medical services.

Defeng Company Limited will provide a competitive price charge and the institutes anticipate to save 200 people per day. The estimated charges for each service are as follows; the institutes estimated to receive patients who need medical consultant and / or with treatment per day are 50, Decease diagnostic 30, Clinic or birth services 20, bed rest 50 and Patients be treated and cured 100. Totaling too approximately. 200 patients per day. Pricing of each service includes, medical consultants 10,000 TZS, Decease diagnosis and treatment 20,000 TZS, Clinics and new born services 30,000TZS, price for Bed rest 30,000 TZS and Patients be treated and cured 15,000TZS. (See expected sales table)

2.7. Marketing Organization

Healthcare marketing is an integral component of sustainable growth. Without it, there would be no influx of new patients, and even your loyal patients may slowly drop off, one-by-one. The healthcare industry is changing fast. What used to be a volume-based industry centered on the physician, has become a quality-based industry centered on the patient. There are likely multiple healthcare practices in any given area that provide the same or relatively similar services. Marketing shows potential patients that not only is your practice different than the competition, but it is also a much better option overall. In this case Defeng Company Limited will deliver quality health care services; all staff will be equipped with customer care knowledge to ensure all attended patients will not opt to get service to other hospitals. In addition, during the start of hospital, the institutes will advertise all their service to Medias, established website and other easy to reach contacts.

2.8 Technical Characteristic of the project and related cost

2.8.1. Land acquisition and Buildings and related fixed cost

The project is located in Mwanza city, Tanzania. The project is 10 Km from Mwanza city Based on physical inspection of the proposed site, the availability of basic and essential industrial development is in place. The shareholder seeks to purchase land at Ilemela and the cost of it is included to this business plan. But Shareholder will use as collateral for established project in a given loan facilities.

The company initially will rent buildings and other related structures will be constructed by provision of loan-able facilities, the proposed Hospital structures will consist of 5 storeys but according to financial scarcity the investor will start renting 3 storeys. This includes establishment of 3 storeys building with medical equipment's, whereby; diagnostics, ENT, Orthopedics, Surgical, Maternal & Newborn services and for many other both non communicable & communicable diseases will be included. Based on Bill NR1 estimate sum is 46,087US\$ will be used for minor rehabilitation and additional facilities according to the hospital needs.

2.8.2. Machinery and Equipment.

Proper hospital machinery and equipment selection is one of the key problems in the development health care service in Tanzania. The machinery and equipment's must suit

the two-fold requirements of the developing countries, i.e. it should be up-to-date to allow quality delivery of health services. In view of the foregoing, an effort has been made to choose from modern technological alternatives, a level that strikes a balance between fixed costs based on depreciation and variable costs based essentially on wages.

The requirements of various items of equipment have been worked out taking into consideration the quality provision of health care services, average equipment utilization and normal productivity level of a professional worker etc. While working out details of equipment required, it has been assumed that the hospital will work day 365 days a year.

The projects machinery and equipment will be sourced from Europe and recommended machinery and equipment producer in the world according to their experience. Estimated total cost is 700,870US\$.

The project will purchase EKG/ECG Machines- 3 channels two sets, surgical tables 2 sets, 10 Defibrillators, 2 sets of 3D/4D Ultrasound Machine, Medical laboratory set, standby generator, and others facilities includes ICT equipment, Refrigerators, Electrosurgical Units 3sets etc.

These cost assumptions are C.I.F Mwanza and include installation, commissioning, consultancy, port charges and transport to the project site. Calculated depreciation of machines and other working facilities is estimated to cost 34,231US\$

2.8.3. Motor Vehicles

The project anticipated to purchase 3 motor vehicles costing to 32,609US\$. An ambulance will be purchased at 21,739US\$ and 2 light vehicles at 10,870US\$. Light vehicle will facilitate general work at the compound and administrative work.

2.8.4. Furniture & Fittings and office equipments

This cost item includes the purchase of various office furniture: tables, chairs cabinets, safes, telecommunication gadgets, firefighting equipment, air conditioners etc. A budget of 15,217US\$ will be allocated for office equipment furniture and 6,522US\$ for other office equipment such as computer, scanner, printers etc. Apart from furniture and office equipment, the project will allocate 6,522US\$ as contiguous for purchasing other office facilities in case the budget goes above limit.

2.8.5. Pre-Operational Expenses

Under pre-operational expenses are considered costs like company formation, preliminary project studies, business plan preparation costs, licenses, permits and authorization, including processing of Incentives, and legal fees, travelling expenses, initial recruitment and expenses, and interest accrued during project construction period. Budget allocated for this is 6,522US\$

2.8.6. Initial Working Capital

This item will mainly cover initial imports of raw materials estimated to last for the first three months of operations. Otherwise, raw materials will generally be maintained at one month's stock and debtors at one month's sales volume constitute the biggest portion of

current assets. Trade credits will be 15 days for the items listed. The initial working capital allocated budget is 10,870US\$.

2.8.7. Project Capital Investment Summary

INVESTMENT SUMMARY	
FIXED ASSETS	
LAND ACQUSTION (RENTING)	10,435
BUILDINGS (ADMINISTRATION BLOCK) RENOVATION	2,174
WARDS MATERNA MOTALITY RENOVATION	7,826
LABORATORIES RENOVATION	2,174
OPD RENOVATION	1,739
PHAMACETICAL STORES RENOVATIONS	6,522
THIETRE/OPERATION ROOM RENOVATION	6,522
ACCESS ROADS AND AMENITIES MAINTAINCE	8,696
SUB TOTAL	46,087
MACHINERIES AND EQUIPMENTS	
PHYSIOLOGICAL MONITORING SET	130,435
DIAGNOSTIC SETS	195,652
COMPLETE SET OF LAB EQUIPMENTS	65,217
STETHOSCOPES	43,478
ULTRASONIC CLEANERS.	65,217
PARTIENTS BEDS 50	13,913
BEDS FOR SPECIAL PURPOSE 10	86,957
TEACHING FACILITIES	13,043
THIETRE EQUIPMENTS	78,261
OTHER EQUIPMENTS	8,696
SUB TOTAL	700,870
MOTOR VEHICLES	
1 AMBULANCES	21,739
LIGHT VEHICHLES FOR ADMINISTRATION 2	10,870
SUB TOTAL	32,609
OTHER FACILITIES	
FENITURE AND FITTINGS INCLUDES BEDS, WHEEL CHAIRS, ETC	8,696
OFFICE EQUIPMENTS	6,522
COMPUTERS/PRINTERS/SCANNERS ETC	6,522
CONTINGES	6,522
SUB TOTAL	21,739
SUB TOTAL FIXED ASSETS	801,304

<i>CURRENT ASSET</i>	
<i>PRE OPERATIONAL EXPENSES</i>	6,522
<i>INITIAL WORKING CAPITAL</i>	10,870
<i>SUB TOTAL CURRENT ASSETS</i>	17,391
<i>TOTAL ASSET</i>	818,696
<i>TOTAL INVESTMENT</i>	818,696
<i>EQUITY</i>	
<i>FOREIGN EQUITY 80%</i>	654,957
<i>LOAN 20%</i>	163,739
<i>TOTAL EQUITY</i>	818,696

2.8.8. Project Financing

The project costs, including fixed costs (machinery, equipment, building renovations, motor vehicles, office furniture and equipment and pre-operation expenses will be financed by a combination of bank term loan and shareholders own resources. Working capital requirements will be financed by short term bank financing in form of overdraft facility. The project promoters are planning to finance project cost in the following pattern:

2.8.9. Project Implementation

Full implementation of the project is planned to take place by end of December, 2023. Machineries and motor vehicles will be imported immediately while construction/renovation works are in process.

2.8.10. Explanatory Notes

The hospital will provide medical services for 24/7/365 including Holidays and Sunday. The project capacity to attend patients will be 310 per day. Capacity utilization of the project is 100%. The proposed project is a complete set of modern technology machines and equipment's. All machines are from well-known European country, after being over hauled, run 5-20years.

2.8.11. Hospital management system

Defeng Company Limited will install Hospital management system so as to save their customers /patients; Hospital Management System brings together all the information and processes of a hospital, in a single platform. It presents you with a unified 360-degree view for managing patients, doctors, and inventory, appointments, billing information, finances and much more. The system automatically generates a highly-efficient process and makes it quick. Thereby, allowing hospitals to provide quality service in addition to professional medical care. In a nutshell, Hospital Management System (HMS) creates a frictionless approach towards managing the entire hospital and solves all complexities in the process. This includes the followings:

Appointment Management

When patients book an appointment, Hospital Management System assigns them to the specialist available, or the one that they prefer. For assignment, it matches the patient's illness to the doctor's area of expertise. If medical care needs to be provided at the patient's house, the system will check the doctors' availability for the remote visit. Again, the allocation happens based on availability.

Patient Management

The hospital management system helps register complete patient information. It captures and stores the medical history, treatment required, details of their previous visits, upcoming appointments if any, reports, insurance details and more. It helps eliminate the need to get these details on every visit. This enables the doctor to focus more on the treatment and improves the patient experience.

Facility Management

Every hospital or medical institution needs to maintain records of bed availability, occupancy status of rooms with specialized care and more. HMS collects all such information and makes it readily available whenever required. Your receptionist can easily check the information from the system and convey it to those who seek it.

Staff Management

The staff management module lays a concrete solution to the HR organization in your hospital. It contains records of your staff, their job description, their service domain, and other vital details. It helps you to know your staff without going through a heavy bundle of files. Additionally, it enables you to plan the hiring process based on the requirement in the hospital.

Supply Management

The supply management component of the HMS tracks the availability of medical stocks. It helps you calibrate the minimum quantity of supplies required without any hassle. Now, you reorder the supplies whenever stocks fall short. Furthermore, it also provides details of the medicine available so that doctors can prescribe the ones in stock.

Financial Management

This component manages all the financial affairs of your hospital. It calculates, stores, and presents the billing information to the patients. Additionally, it also records the expenses incurred by the hospital, revenue data, and other financial details of the hospital. This consolidation saves you the trouble of analyzing a colossal pile of record books.

Insurance Management

The insurance Management component of HMS records and stores the insurance details of the patients. On requirement, it furnishes the policy number, insurance company, and other information associated with it. The software makes it easy to fetch these details making insurance validation easier.

Laboratory Management

The laboratory management component shows the details of various lab-tests taken by patients. It furnishes reports when needed and maintains all records collectively.

Radiology Management

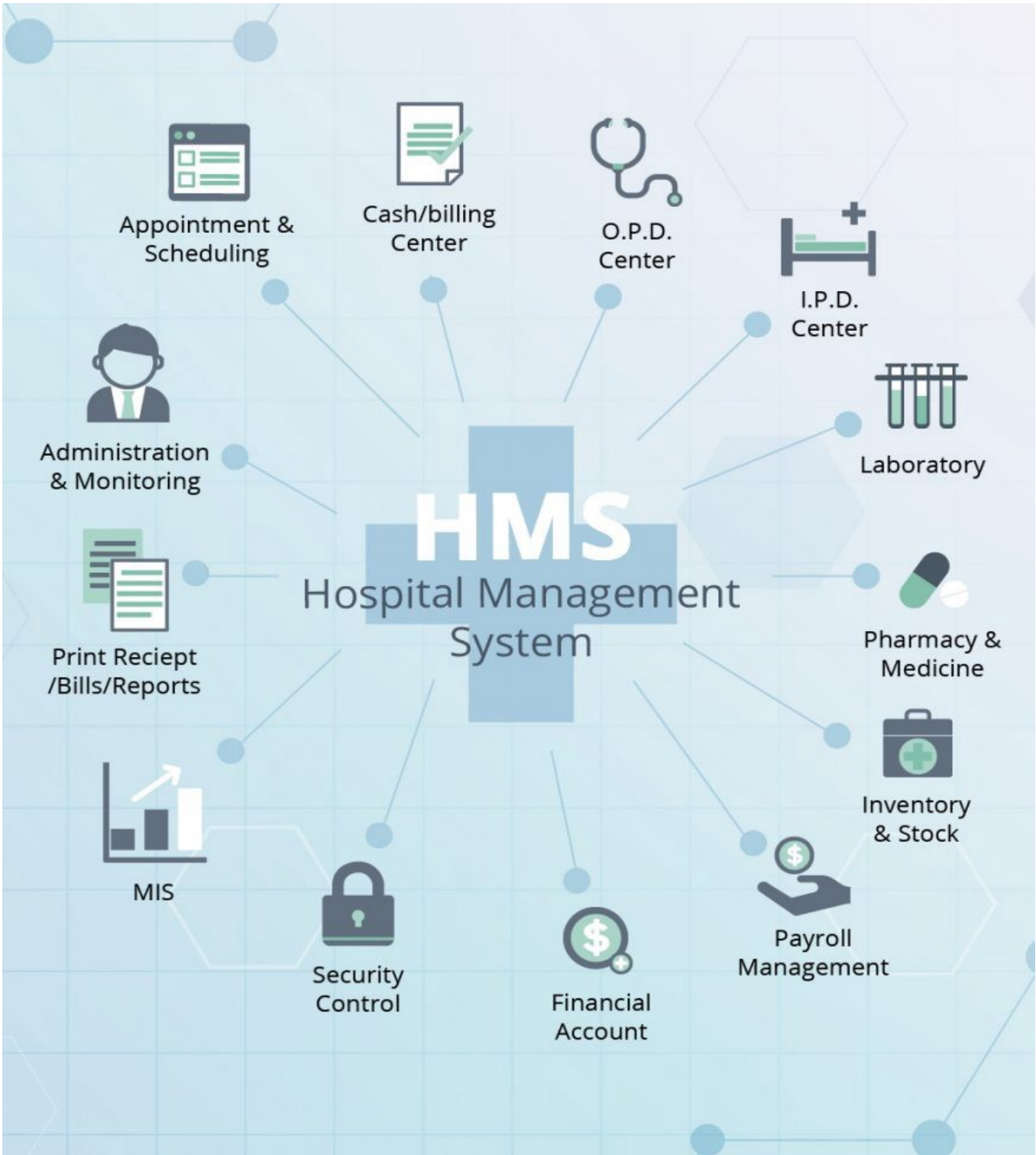
This component of Hospital Management System records and stores all reports from the radiology department of the hospital. It can be easily accessed by the doctors.

Report Management

Report Management module records and stores all the reports generated by the hospital. In the case of financial reports, It analyzes performance metrics to check the business profitability. Furthermore, it also provides a comparison between performance reports of different years.

Support Management

This segment records data of different complaints and requests of the patients. It also ensures that these requests and problems are handled properly. To summarize, the Hospital Management System takes care of all activities and processes involved in managing the hospital. But you should understand this technology is only for “Managing”, the aspect of patient care is lacking in it. Patients having episodic treatment have to be nurtured properly. The one in the Outpatient Department has to be supplied with care giving inputs so that they can be converted into in-patient for more advanced treatment. There are various other instances as well. The following is the Hospital management flow diagram



2.8.12. Auxiliary Materials/ services

Falling under this category of health care services, utilities and service facilities must be considered,

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

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

(i) Workshop

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

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

(ii) Electric Power and Generator

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Shinyanga to Mwanza Region. As part of an alternative power supply, the hospital will heavy duty 100KVA power generator automated generator that will be connected to the all-necessary hospital compound for standby power supply. The hospital will install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems.

(iii) Water Supply

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed site has close to MWAUWASA water network, the agency is major supplier of water to urban and peri urban area in the city. While depending on water supply from MWAUWASA, the main line is close to the proposed industry from Mwanza city to Ilemela peri-urban area. The main line from this source will be tapped and let to the land site and water collected in an overhead reservoir provided at the top of the building of the plant. Adequate provision has been made in the project cost for the overhead tank and supply and laying of pipelines etc.

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

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

2.8.12. Warehousing and distribution

The hospital warehousing service is ready to meet 24/7/365 with provision of medicine by pharmacist. The efficiency of on-site combined with light handling equipment t is already accommodated all needs and reduce supply chain costs.

The Hospital through Hospital Management system will use quick dispatch for medicine and take extra care, therefore taken to make it hygienic so that the medicine and other related goods do not get spoiled during storage.

2.8.13. Waste management for industry

In order to create a sustainable society, it is necessary to develop effective utilization of all sorts of wastes. One of the major wastes from our living is fiber wastes. Fiber wastes are generally divided to nonindustrial (organic chemicals) and industrial wastes (inorganic Chemicals). In her strategic management for a hospital; the industry has to move from an understanding of improvement at all costs to an understanding of continuous and balanced improvement once established. In modern times, environmental protection is being implemented not because it is enforced law, but as an administrative philosophy.

Rapid degradation in environmental conditions has changed at attitude of industrial managers toward ecological environment and had them consider ecology a significant factor while taking decisions related to industrial management. Parameters responsible for environmental pollution include chemicals discharged into air, water and soil as well as energy pollution all these will be taken into consideration of the proposed project.

3.0. MANPOWER AND PROPOSED SALARY BUDGET

3.1. Employment

The hospital is looking at providing direct employment to at least 46 permanent jobs on full implementation and operation of the project. The project is divided into 3 Departments; Administration (3), Finance (5), Operational department which includes medical staff (38). Medical staff 33 will be fully employed and 14 as visiting staff.

3.2. Recruitment

Recruitment of the 33 persons will be carried out by giving first preference to graduates from universities in the country such as Bugando or Muhimbili Hospital and other collage of Health in Tanzania based on demonstration of skills and aptitude basis and their willingness to work for the hospital. Careful methodology is being worked out by a competent management consultant who will set the job descriptions. To ensure that the right caliber is recruited. Recruitment of expatriate personnel will be carried out in consultation with the relevant authorities in Government and the collaborating agencies.

3.3. Training and the use of consultants

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

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

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

Table 3.1. Proposed organization and manpower requirement:

<i>A.ADMINISTRATION DEPARTMENT</i>		<i>FULL TIME STAFF</i>	<i>VISITING STAFF</i>	<i>MONTHLY SALARY FULL TIME STAFF</i>	<i>MONTHLY ALLOWANCE VISITING STAFF</i>	<i>Total ANNUAL SALARY</i>
<i>A. DEPARTMENT ADMINISTRATION</i>	<i>POSTS</i>	<i>POSTS</i>	<i>POSTS</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>
<i>DIIRECTOR/ADMINISTRATOR</i>	1	1	0	500	-	6,000
<i>HUMAN RESOURCE</i>	1	1	0	350	-	4,200
<i>LOGISTIC OFFICER</i>	1	1	0	250	-	3,000
<i>SUB TOTAL</i>	3	3	0	1100	0	13200
<i>B.FINANCE DEPARTMENT</i>		<i>POSTS</i>	<i>POSTS</i>	<i>POSTS</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>
<i>DEPARTMENT</i>	<i>POSTS</i>	<i>POSTS</i>	<i>POSTS</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>
<i>ACCOUNTANT/CASHIER</i>	2	2	0	250	-	6,000
<i>PROCUREMENT OFFICER</i>	2	2	0	200	-	4,800
<i>DRIVER</i>	1	1	0	120	-	1,440
<i>TOTAL</i>	5	5	0	570	0	12,240
<i>C. MEDICAL STAFF - OPERATIONAL DEPARTMENT</i>		<i>FULL TIME STAFF</i>	<i>VISITING STAFF</i>	<i>MONTHLY SALARY FULL TIME STAFF</i>	<i>MONTHLY ALLOWANCE VISITING STAFF</i>	<i>Total ANNUAL SALARY</i>
<i>DEPARTMENT</i>	<i>POSTS</i>	<i>POSTS</i>	<i>POSTS</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>	<i>AMOUNT US\$</i>
<i>MEDICINE</i>	4	4	0	300	100	19,200
<i>GENERAL SURGERY</i>	2	1	1	300	120	10,080
<i>OUT PATIENTS</i>	2	2	0	300	0	7,200
<i>ENDOSCOPY SERVICES</i>	2	1	1	350	120	11,280
<i>HAEMODIALYSIS (KIDNEY)</i>	1	0	1	0	120	1,440
<i>NEUROLOGY/NEUROSURG</i>	1	0	1	0	200	2,400
<i>GYNECOLOGY</i>	1	1	1	350	120	5,640
<i>EYE</i>	1	0	1	0	100	1,200
<i>EAR, NOSE & THROAT - ENT</i>	1	0	1	0	100	1,200
<i>DENTAL</i>	1	0	1	0	100	1,200
<i>ANAESTHESIA</i>	1	1	1	250	0	3,000

<i>NURSING</i>	5	5	0	150	0	9,000
<i>PHARMACIST</i>	2	2	0	400		9,600
<i>PROPHETIC MEDICINE</i>	1	0	1	0	150	1,800
<i>MEDICAL ASSISTANCE</i>	3	2	1	160	0	5,760
<i>DRIVER</i>	4	4	0	210	0	10,080
<i>ICT</i>	1	1	0	300	0	3,600
<i>TOTAL</i>	38	25	14	3,070	1,230	103,680
 <i>GRAND TOTAL</i>	46	33	14	4,740	1,230	129,120

4.0. FINANCIAL ANALYSIS

4.1. Production, Revenue and project viability

- ❑ The estimated revenue gain in providing health service 625,245US\$ annually excluding Value Added Tax during the first year in operation of the hospital,
- ❑ Net profit before tax is 391,208US\$ for the first year, and increases to second year to 415,449US\$, third years increases tremendously,
- ❑ Percentage of gross contribution for the first year 63%, 63% second years and increases to 65% to the 5th year as shown in income statement,
- ❑ Net profit after tax and depreciation for the first years in operational is 226,433US\$ and increases positively, the project is able to pay corporate tax 117,446US\$ which has positive contribution to GDP of the country,
- ❑ The expected sales increase annually is 5% while expenses increase by 3% which depends on inflation rate of the country
- ❑ Total investment cost of the project is 818,696US\$ whereas the own equity is 80% and loan-able amount 163,739US\$, project current assets for the first year is 226,433US\$, fixed asset 801,304US\$, Project liquidity is 391,208US\$,
- ❑ The end balance of project in cash flow statement is positive and increases tremendous.
- ❑ Cash generated from operation and net cash from operational activities increases positively of project (see cash flow sheet)
- ❑ The Discounted Cash flow yields an Internal Rate of Return (IRR) of 12.32%, which is well above the assumed cost of capital at 8% and payback period of project is within 4 years. This confirms the financial viability of the proposed project.
- ❑ Return on Investment is anticipated to 34.6% which is above bank interest rate, which show strength in recover bank loan within project economic life - see balance sheet,
- ❑ Depreciation of fixed assets and amortization of the pre-operational expenses rates used are as follows: land 5%, Civil Works/ Structures/Buildings 5.00% on straight line basis, Plant Machinery & Technical Equipment 12.50% on straight line basis, Motor Vehicles. 20.00% on straight line basis. The business plan uses 12.5% as depreciation factors,
- ❑ Salaries and Wages have been based on the prevailing scales in the industry. There is provision of 20% to cover company contribution to NSSF (10%) and other social welfare (10%). Included to the total amount (see Income statement)
- ❑ Corporate Tax is fixed at 30% of taxable profits.
- ❑ The business plan has an assumption all loan-able amount will be recovered annually with yearly repayment of 41,010US\$ at an interest rate of 8% for 5-year loan recovery schedule,
- ❑ The project will pay bank interest of 41,308US\$ for the whole project economic life,

4.2. Capacity Utilization

For projection purposes, it is assumed that the hospital will operate for a triple shift with approximately of 8 hours per single shift, (makes 24 hours/day) in a day, 30 days a month or 365 days per year, to save patients 54,750 annually at an average of 150 patients per day.

5.0. RISK ANALYSIS

5.1. Risk Analysis

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

5.2. Macroeconomic risk analysis

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

5.3. Finance risk analysis

- a) **Supply Risk:** The risk in consumable good relates to supply of raw material, transportation and price fluctuations. There is no assurance of enough supply of raw materials/medics in the local market instead mostly of raw materials are imported.
- b) **Processing Risks:** The technology, machines and equipment used in health care are in rudimentary stages all of which contribute to reducing output efficiency. Also quality safety and standards consideration in the hospital environment is limited.
- c) **Sales/market risk:** Placing on the consumer markets bears risk of demand fluctuations and rejections through the implementation. Furthermore, consumers are not aware of the hospital and safety criteria and are usually very pricing sensitive.

5.4. Other potential external risk

- a) **Lack of Governance:** the governance mechanism in the value chain is underdeveloped, actors operate in an uncoordinated and unorganized fashion, and if rules exist, they are often ignored;
- b) **Lack of market coordination:** No lead organization has a coordinating role in relation to markets, technology and information such that producers and processors have no incentives for improving neither their product nor the chain process to promote sustainable income earning opportunities;
- c) **Unclear and conflicting roles regulatory authorities:** Regulatory Agencies are responsible for quality control as well as enforcing TBS, Ministry of Health, NEMC etc, are regulatory role in issuing licensing etc

- d) **Industry associations:** Associations are weak at all levels of the chain;
- e) **Operating procedures:** Standard procedures are inadequately enforced, or not enforced at all, because of relaxed production and trade regulations; and
- f) **Integration:** there is little vertical integration of importers, mid chain actors and processors.

5.5. Mitigating potential risk

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

6.0. ECONOMIC AND SOCIAL ASPECTS

6.1. Broad Socio-Economic impact of the project

In the Business field, what still really matters most is “*What is the return on investment of your project?*” The challenge thus created is to determine the relationship between community and social impact and business value (or return on investment). Many public, private and community stakeholders have over the past few decades become disappointed about the potential social impact and value of Corporate Social Investment (CSI) projects. Defeng Company Limited will apply the CSI perspective, social impact assessment as a tool that will be used to qualify and quantify the social, economic and environmental changes and outcomes that will occur over a period of time, within the development context, as the result of the factory investment. In order to address the impact assessment framework, the company will apply the Impact Investment Index, which will show through evaluation and assessment, the social impact of the project through a blend of indicators that are able to prove positive short-, medium- and long-term impacts.

Impact Investment Index Framework

IMPACT INVESTMENT INDEX		
FRAME WORK FOR DEFENG COMPANY LIMITED		
PERFORMANCE AREA	QUANTITATIVE INDICATOR	REMARKS
INVESTMENT CAPITAL	TOTAL INVESTMENT CAPITAL, CAPEX AND OPEX 1,518,261 US\$	SUBSTANTIAL AMOUNT OF CAPITAL INVESTED INTO THE DOMESTIC ECONOMY
INCOME TAX ANNUALLY	INDICATIVE ANNUAL AUDIT REPORT 1,051,565 US\$	INCREASED GDP OF THE NATIONAL
JOB REQUIREMENTS	JOB CREATION AFTER ESTABLISHMENT OF THE PROJECT IS 33 DIRECT 14 INDIRECT TANZANIAN JOBS	REASONABLE NUMBER OF DIRECT JOBS CREATED TO LOCAL TANZANIANS WITH DIRECT IMPACT ON POVERTY REDUCTION THROUGH ENHANCED INCOME GENERATION
TECHNOLOGY APPLIED	HIGH TECH ENVIRONMENTALLY FRIENDLY MACHINERY	APPLIED TECHNOLOGY WHICH IS FREE FROM ENVIRONMENTAL POLLUTION
OTHER IMPLIED PROJECT BENEFITS		
<ul style="list-style-type: none"> ▪ INCREASED SALES TO THE UTILITY COMPANIES PROVIDING SERVICES OF ELECTRICITY, WATER AND SEWERAGE, TELECOMMUNICATIONS; ▪ INCREASED BUSINESS TRANSACTED BY LOCAL BANKS AND INSTITUTIONS PROVIDING FINANCIAL SERVICES; ▪ BUSINESS OPPORTUNITIES FOR LOCAL CONTRACTORS AND SUB-CONTRACTORS DURING THE CONSTRUCTION PHASE; ▪ INCREASED REGIONAL INTRA-TRADE AND INTERNATIONAL TRADE DUE TO BETTER INFRASTRUCTURE FACILITY AND LINKS TO MARKETS; AND ▪ CONTRIBUTION TO GDP GROWTH THROUGH INCREASED ECONOMIC ACTIVITIES 		

Based on the Impact Investment Index analysis, the Institute can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements. In this regard therefore, Defeng Company Limited will promote the good health and increases Tanzania life span, create employment, attract new technologies, expand earnings and ultimately contribute substantially to the country's economic growth.

7.0. FINANCIAL MODELLING AND ANALYSIS

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

7.1. Project investment inputs

Table 7.1. Project investment inputs

<i>EXPECTED SALES IN PUT</i>	<i>US\$</i>
<i>ANNUAL WORKING DAYS</i>	<i>365</i>
<i>NUMBER OF PATIENT TREATED PER DAY</i>	<i>150</i>
<i>MEDICAL CONSULTANTS (NO OF PATIENTS PER DAY)</i>	<i>50</i>
<i>DECEASE DIAGNOSIS (NO OF PATIENTS PER DAY)</i>	<i>30</i>
<i>CLINICS (NO OF PATIENTS PER DAY)</i>	<i>20</i>
<i>NUMBER OF BED (NO OF PATIENTS PER DAY)</i>	<i>50</i>
<i>PATIENTS BE TREATED AND CURED (NO OF PATIENTS PER DAY)</i>	<i>50</i>

7.2. Project projected sale/revenues

Table 7.2 Project projected sale/revenues

<i>EXPECTED SALES 'USD'</i>	
<i>MEDICAL CONSULTANTS 10,000 TZS EQV 4.4US\$</i>	<i>80300</i>
<i>DECEASE DIAGNOSIS AND TREATMENT 20,000 TZS EQV 8.6US\$</i>	<i>94170</i>
<i>CLINICS AND NEW BORN SERVICES 30,000TZS EQV 13US\$</i>	<i>94900</i>
<i>BED REST 30,000 TZS EQV 13US\$</i>	<i>237250</i>
<i>PATIENTS BE TREATED AND CURED 15,000TZS EQV 6.5US\$</i>	<i>118625</i>
<i>TOTAL SALE REVENUE</i>	<i>625,245</i>

7.3. Objective and Scope of Financial Model

7.3.1. Objective

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

7.3.2. Scope

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

ANNEX I – INCOME STATEMENT

	<u>YEAR 0</u>	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	-	<u>TOTAL</u>
<i>MEDICAL CONSULTANTS 10,000 TZS EQV 4.4US\$</i>	-	80,300	84,315	88,531	92,957	97,605		443,708
<i>DECEASE DIAGNOSIS AND TREATMENT 20,000 TZS EQV 8.6US\$</i>		94,170	98,879	103,822	109,014	114,464		520,349
<i>CLINICS AND NEW BORN SERVICES 30,000TZS EQV 13US\$</i>	-	94,900	99,645	104,627	109,859	115,352		524,382
<i>BED REST 30,000 TZS EQV 13US\$</i>		237,250	249,113	261,568	274,647	288,379		1,310,956
<i>PATIENTS BE TREATED AND CURED 15,000TZS EQV 6.5US\$</i>		118,625	124,556	130,784	137,323	144,189		655,478
TOTAL OPERATING REVENUE	-	625,245	656,507	689,333	723,799	759,989		3,454,873
EXPENDITURE	<u>YEAR 0</u>	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	-	<u>TOTAL</u>
SALARIES		129,120	132,994	136,983	141,093	145,326		685,516
SOCIAL CHARGES & PENSION PAYMENTS		25,824	26,599	27,397	28,219	29,065		137,103
PURCHASE OF RAW MATERIALS (MEDICINE)		43,478	44,783	46,126	47,510	48,935		230,832
FUEL AND LUBRICANTS		13,535	13,941	14,359	14,790	15,234		71,860
UTILITIES		5,217	5,374	5,643	5,925	6,221		28,380
HOSPITAL OVERHEAD COST		8,696	8,957	9,225	9,502	9,787		46,166
INSUARANCE/LICENSING/OTHER CHARGES		1,645	1,694	1,745	1,797	1,851		8,732
OTHER COSTS		6,522	6,717	6,919	7,126	7,340		34,625
TOTAL OPERATING COSTS		234,037	241,058	248,397	255,962	263,759		1,243,213
OPERATIONAL NET EARNINGS BEFORE DEPRECIATION, INTEREST & TAX		391,208	415,449	440,935	467,837	496,230		2,211,660
%AGE GROSS CONTRIBUTION		63	63	64	65	65		1
DEPRECIATION AT 12.5%		34,231	36,352	38,582	40,936	43,420		199,049
NET EARNINGS BEFORE TAX & INTEREST		356,977	379,097	402,354	426,902	452,810		2,012,611
INTEREST PAID (BANK LOAN)		13,099	10,866	8,455	5,850	3,038		41,308
TAX (30%)		117,446	124,723	132,374	140,451	148,974		663,968
NET EARNINGS		226,433	243,508	261,524	280,600	300,798		1,312,863

ANNEX II -CASH FLOW FROM OPERATING ACTIVITIES

<i>(ALL NUMBERS IN US\$)</i>	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
<u>CASH FLOW FROM OPERATING ACTIVITIES</u>					
CASH RECEIPTS FROM SALES	625,245	656,507	689,333	723,799	759,989
CASH PAID TO SUPPLIERS AND EMPLOYEES	(234,037)	(241,058)	(248,397)	(255,962)	(263,759)
CASH GENERATED FROM OPERATIONS	391,208	510,455	673,837	813,021	948,505
DIVIDENDS RECEIVED*	0	0	0	0	0
INTEREST RECEIVED	0	0	0	0	0
INTEREST PAID	(13,099)	(10,866)	(8,455)	(5,850)	(3,038)
TAX PAID	(117,446)	(124,723)	(132,374)	(140,451)	(148,974)
NET CASH FLOW FROM OPERATING ACTIVITIES	260,663	374,866	533,008	666,720	796,493
<u>CASH FLOW FROM INVESTING ACTIVITIES</u>					
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
<u>CASH FLOW FROM FINANCING ACTIVITIES</u>					
PROCEEDS FROM CAPITAL CONTRIBUTED	654,957	0	0	0	0
PROCEEDS FROM LOAN	163,739	0	0	0	0
PAYMENT OF LOAN	(27,910)	(30,143)	(32,555)	(35,159)	(37,972)
NET CASH FLOW FROM FINANCING ACTIVITIES	790,785	(30,143)	(32,555)	(35,159)	(37,972)
<u>NET INCREASE/ DECREASE IN CASH</u>	1,051,449	344,722	500,453	631,561	758,521
CASH AT THE BEGINNING OF THE PERIOD	226,433	243,508	261,524	280,600	300,798
CASH AT THE END OF THE PERIOD	1,277,881	588,231	761,978	912,161	1,059,319

ANNEX III – PROFOMA BALANCE SHEET

PRO FORMA BALANCE SHEET					
<i>(ALL NUMBERS IN US\$)</i>	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
<u>ASSET</u>					
<i>CURRENT ASSET</i>	226,433	243,508	261,524	280,600	300,798
<i>FIXED ASSET</i>	801,304	699,138	611,746	535,278	468,368
<i>LIQUIDITY</i>	391,208	510,455	673,837	813,021	948,505
TOTAL ASSET	1,418,945	1,453,101	1,547,107	1,628,899	1,717,670
NET ASSET MINUS DEPRECIATION	1,384,714	1,416,749	1,508,525	1,587,963	1,674,250
<u>EQUITY & LIABILITIES</u>					
<i>EQUITY</i>	654,957	672,247	731,835	796,705	867,325
<i>RESERVES</i>					
TOTAL OWN EQUITY	654,957	672,247	731,835	796,705	867,325
<i>PROVISIONS</i>	537,072	542,418	564,724	568,862	573,521
<i>LONG TERM LOAN</i>	41,010	41,010	41,010	41,010	41,010
<i>SHORT TERM LIABILITIES</i>	151,676	161,075	170,956	181,386	192,395
TOTAL EQUITY & LIABILITIES	1,384,714	1,416,749	1,508,525	1,587,963	1,674,250
<i>NET FA/CL</i>	19.54	17.05	14.92	13.05	11.42
<i>CL/CA</i>	0.67	0.66	0.65	0.65	0.64
<i>DEBIT/CAPITAL RATIOS</i>	0.53	0.53	0.51	0.50	0.48
<i>ROI</i>	34.6	36.2	35.7	35.2	34.7
<i>BREAK EVEN POINT</i>	2.05	1.68	1.39	1.14	0.94
<i>BREAK EVEN RATIO</i>	1.09	1.07	1.04	1.02	1.00
<i>EQUITY/TOTAL LIABILITIES</i>	47	47	49	50	52

ANNEX IV – LOAN PAYMENT SCHEDULE

Loan Information and Payment Schedule

Loan Data		Loan Summary	
Original Principal	163,739.13	Scheduled Payments	\$41,010
Loan Term (Years)	5	Scheduled number of payment	5
Annual Interest Rate	8.00%	Actual number of payment	5
Payments per Year	1	Total Early Payment	-
Payment	\$447,088	Total Interest	\$41,308

Year	Payment	Interest	Cumulative Interest	Principal	Balance
0					\$163,739
1	\$41,010	\$13,099	\$13,099	\$27,910	\$135,829
2	\$41,010	\$10,866	\$23,965	\$30,143	\$105,686
3	\$41,010	\$8,455	\$32,420	\$32,555	\$73,131
4	\$41,010	\$5,850	\$38,271	\$35,159	\$37,972
5	\$41,010	\$3,038	\$41,308	\$37,972	\$0

ANNEX V- INTERNAL RATE OF RETURN

	<i>(ALL NUMBERS IN US\$)</i>	
	INITIAL INVESTMENT	-818,696
YEAR 1	ADDITIONAL ANNUAL NET PROFIT	226,433
YEAR 2	ADDITIONAL ANNUAL NET PROFIT	243,508
YEAR 3	ADDITIONAL ANNUAL NET PROFIT	261,524
YEAR 4	ADDITIONAL ANNUAL NET PROFIT	280,600
YEAR 5	ADDITIONAL ANNUAL NET PROFIT	300,798
	IRR (IN 5 YEARS)	22.29%

THE IRR ABOVE INDICATES THAT THE EXPECTED RETURN ON THE US\$818696 INITIAL INVESTMENT AFTER 5 YEARS IS 22.29%.

ANNEX VI – PAYBACK PERIOD

PAYBACK PERIOD ANALYSIS				
	<i>YEAR</i>	<i>BEGINNING BALANCE</i>	<i>NET CASH FLOWS</i>	<i>ENDING BALANCE</i>
<i>COST OF INVESTMENT</i>	<i>0.00</i>	<i>818,695.65</i>	<i>0.00</i>	<i>818,695.65</i>
	<i>1.00</i>	<i>818,695.65</i>	<i>226,432.72</i>	<i>592,262.93</i>
	<i>2.00</i>	<i>592,262.93</i>	<i>243,508.10</i>	<i>348,754.83</i>
	<i>3.00</i>	<i>348,754.83</i>	<i>261,524.41</i>	<i>87,230.43</i>
	<i>4.00</i>	<i>87,230.43</i>	<i>280,600.45</i>	<i>193,370.03</i>
	<i>5.00</i>	<i>193,370.03</i>	<i>300,797.62</i>	<i>494,167.64</i>
<i>PAYBACK PERIOD =</i>		<i>4.00</i>	<i>YEARS</i>	

8.0. CONCLUDING REMARKS AND WAY FORWARD

8.1. Evidence of project viability based on financial model and policy framework support

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the Hospital as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, Defeng Company Limited through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of hospital is financed using a combination of equity debt ratio (80:20), it gives an IRR of about 22.29%. The computed IRR is well above annual loan interest rate of 8%) which is technically interpreted that the project is financially viable. The payback period for the project is estimated between 3-4 years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

8.2. Policy Framework Support

The development of the project is designed to tape advantages of the current Tanzanian market-oriented reforms. The Project will be developed and established to accelerate the industrialization process. The vision 2025 emphasizes the importance of the allocation of public funds for strategic investments and private sector financing for development investments.

The 15 years Perspective Plan (2020-2025); Periodize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2020-2025) recognizes the fundamental role of the private sector in enabling the government to allocate its fund to strategic projects to facilitate a higher level of development. It should be noted that existing public resources are clearly insufficient to meet Tanzanian's huge development needs. The increased use of private enterprises participation in development projects can help alleviate the financing gap. This approach is now applied by Defeng Company Limited to ensure development of one among the ultra-modern Hospital to be developed in Ilemela, Mwanza Region. Private sector and investment have been recognized as the most significant potential source of additional funding required to facilitate development projects.

8.3. Conclusive Remarks and Way Forward

The development of this Hospital will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 818,696US\$ and the amount of 163,739US\$ will be raised through borrowing from investment banks either within or outside the country. The Hospital will fund the development of the project by renting hospital buildings, wards, Dr rooms, OPD, changing room, Laboratories, general offices, and purchasing machines as stated on this business plan. Before the Hospital engages into the development of this project as a private enterprise, it needs to accomplish the pre development activities to make way for the development of the designated project.

a) Conduct Environmental Impact Assessment.

The hospital has to engage a consultant to conduct EIA in order to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and project development. The EIA Directive aims at introducing systematic assessment of the environmental effects of strategic land use related plans and programs. It typically applies to regional and local, development, waste and transport plans, within the country. EIA ensures that plans and programs take into consideration the environmental effects they cause.

b) Mobilization of project requirements

The hospital should engage a firm to make construction that will suit Hospital requirement. The structure should include all vital service facilities described in this business plan. When possible, the process of design of the facility should be consultative insomuch that it should allow and incorporate ideas from experienced professionals from the industry.

c) Mobilizing Funds

As previously discussed on the Financial Analysis of this business plan, financing mechanism for the Hospital should be scrutinized well before commencing the project implementation. There may be several options of financing the project development but the firm will find the best option. The investment team should do consultation with relevant financial institutions (Banks and non-bank Financial Institutions), both within and outside the country. This exercise should be more effective if the team works closely with central government agencies, particularly health regulatory agency, PO - RALG, TRA, etc