

EXECUTIVE SUMMARY

This strategic plan spells out Uganda Blood Transfusion Service's (UBTS) efforts to focus its planning and development within a long-term framework. It was developed through wide stakeholder participation and underpins UBTS's pledge to continue providing sustainable blood transfusion services across the country. The implementation of the strategy is aligned to take advantage of the already existing National Health System.

The Uganda Blood Transfusion Service is the National Blood Service responsible for all blood transfusion and safety activities for the entire country. The Uganda Blood Transfusion Service was established as an autonomous institution and commissioned in January 2003 by a Board of Directors. It operates within the framework of the National Health Policy (NHP) and the Health Sector Strategic Plan HSSP).

The Uganda Blood Transfusion Service is a centrally coordinated department in the Ministry of Health with efficient central coordination sufficiently decentralized to render service to all regions of the country. The headquarters at Nakasero Blood Bank acts as a reference centre for the regional blood banks and other public and private hospitals. The blood collection depends on healthy volunteer donors with least risk for Transfusion Transmissible Infections (TTIs).

UBTS has grown from a service supplying blood in Central Uganda within a radius of 100 km from Kampala in 1989 to a network of 7 Regional Blood banks which include Arua, Fort-Portal, Gulu, Kitovu, Mbale, Mbarara and Nakasero; Six- (6) blood collection centers in Hoima, Jinja, Kabale, Rukungiri Lira and Soroti. At that time blood collection was mainly replacement donation and hardly any Voluntary Non-Remunerated Blood Donors (VNRBD). The percentage of VNRBD gradually increased to 85% in 1999 and currently stands at 100%.

Over the next five years, UBTS will continue providing safe blood and blood components in the areas of Prevention and Treatment of Malaria Anemia, Morbidity and Mortality Reduction, Prevention of HIV/AIDS and other TTIs, Maternal and Child Health and Accidents and emergencies. In order to scale up service delivery in blood transfusion services in the entire

country, UBTS will continue to collaborate with key partners like the Uganda Red Cross Society (URCS), Blood donors, users and recipients of blood and other partnerships to delivery blood transfusion services in the entire country.

The implementation of this strategic plan will be guided by five strategic objectives which have been aligned with the National Health Sector Strategic Plan II and will contribute to the fulfillment of Uganda's Health sector goals and the United Nations Millennium Development Goals (MDGs).

Specific objectives are:

1. To expand blood transfusion infrastructure to operate adequately within a decentralised health care delivery system
2. To increase the annual blood collection necessary to meet the transfusion needs for all patients in the country
3. To operate an active nationwide quality assurance program that ensures blood safety
4. To promote appropriate clinical use blood
5. Strength the organisation capacity of UBTS to enable efficient and effective service delivery

A detailed logical framework has been designed to ensure that the activities are implemented as planned, monitored and evaluated to measure outcomes and impact. Based on the framework, management will develop an annual operation plan with detailed activities which will be implemented by a highly skilled and experienced team of personnel.

The cost of implementing the UBTS strategic plan is estimated at **UGX 106,706,627,353 (\$59,270,468)** expected to be financed by the government, development partners, Foundations, and individual community members.

1.0 INTROUCTION

The Uganda Blood Transfusion Service (UBTS) is the National Blood Service responsible for all blood transfusion and safety activities for the entire country. The Uganda Blood Transfusion Service was established as an autonomous institution and commissioned in January 2003 by a Board of Directors. It operates within the framework of the National health Policy and the Health Sector Strategic Plan.

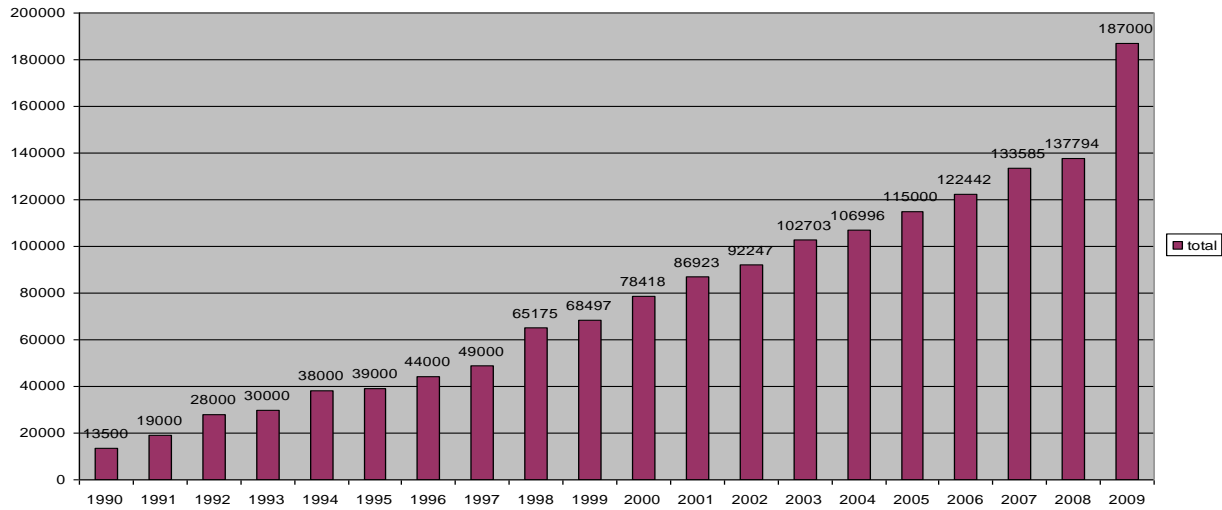
A National policy on Blood Transfusion was developed to guide the implementation of blood safety activities for the attainment of the best possible technical and ethical standards.

1.1 The National Blood Transfusion Network

The Uganda Blood Transfusion Service is a centrally coordinated department in the Ministry of Health with efficient central coordination sufficiently decentralized to render service to all regions of the country. The headquarters at Nakasero Blood Bank acts as a reference centre for the regional blood banks and other public and private hospitals. The blood collection depends on healthy volunteer donors with least risk for Transfusion Transmissible Infections (TTIs).

UBTS has grown from a service supplying blood in Central Uganda within a radius of 100 km from Kampala in 1989 to a network of 7 Regional Blood banks which include Arua, Fort-Portal, Gulu, Kitovu, Mbale, Mbarara and Nakasero; Six- (6) blood collection centers in Hoima, Jinja, Kabale, Rukungiri Lira and Soroti. At that time blood collection was mainly replacement donation and hardly any voluntary non-remunerated blood donors (VNRBD). The percentage of VNRBD gradually increased to 85% in 1999 and currently stands at 100%.

TREND OF COLLECTION FROM 1990 TO 2008 AND PROJECTION FOR 2009



1.2 Recruitment of Blood Donors

The increase in blood collection is due to a vigorous Donor Recruitment and retention program jointly run by UBTS and URCS. Fifty eight percent (58%) of these are regular blood donors, who are recruited through mass media, public announcements or placement of notices in public places and 20 mobile collection and recruitment teams with each performing an average of 20 sessions per month and collecting 37 units per session.

The main assignment of UBTS is to make available adequate quantities of safe blood products for treatment of patients as is required. The UBTS has an important task of meeting the increased demand for safe blood transfusion especially at health Centers IVs, which are located in rural areas where most of the population lives. As the accessibility of health services by the rural population increases the need for more blood for transfusion will increase; this requires more resources to meet the increased demand and efficiency in utilizing such resources. Most of the blood is used for transfusion of children and mothers to address the improved Maternity Health and reduce Child mortality. 50% of all blood collected is for treating children with severe anemia, largely due to malaria, intestinal worm infection and malnutrition, 25% of the blood is required to treat pregnant women with anemia and complications of child birth and 25% the remaining blood is used in other emergence medical treatment of anemia, accident and surgical cases.

1.3 The Strategic Planning Process

A three day strategic planning workshop was organized to help UBTS think through the process of developing the strategic plan for the next five years. The strategic planning process provided UBTS an opportunity to reflect on the future in the context of which strategic actions can be taken towards the attainment of the desired future.

In attendance were participants from UBTS, Ministry of Health, Centre for Disease Control (CDC), Uganda Red Cross Society (URCS), heads of regional referral hospitals, Ministry of Finance-Health Desk, Makerere University Medical School and Sanquin consultants among others.

2.0 ACHIEVEMENTS AND CHALLENGES OF UBTS

2.1 Achievements

- UBTS has grown from a service, supplying blood in Central Uganda within a radius of 100 km from Kampala in 1989 to a current network of 7 Regional Blood banks in Arua, Fort-Portal, Gulu, Kitovu, Mbale, Mbarara and Nakasero and six blood collection and distribution centres in Hoima, Jinja, Kabale, Rukungiri, Lira and Soroti.
- Regional Blood banks have the capacity to recruit volunteer blood donors, collect blood and test it for transfusion – transmitted infections (TTIs) – HIV, Hepatitis B, C, Syphilis blood grouping process blood into pediatric packs and prepare platelets and fresh frozen plasma (FFP).
- The percentage of Voluntary Non-Remunerated Blood Donors has gradually increased to eight five percent in 1999 and currently stands at a hundred percent. The increase in blood collection is due to a vigorous Donor Recruitment and retention program jointly run by UBTS and URCS. Fifty eight percent of these are regular blood donors
- There is development being experienced in terms of improvement of facilities at Mbale and Mbarara, while construction plans are underway for Nakasero, Gulu and Fort Portal region blood banks.

- The approval of the National Policy by the Ministry of Health; the staff structure; the self-accounting status granted to UBTS are but a few of the achievements experienced.
- Quality system and management have been developed; the Quality manual is in place, quality awareness has also grown. All collections made are tested for HIV, HBV, HCV and Syphilis; and for ABO/Rhesus D.
- Networks and collaborations have improved; there is collaboration with URCS at societal interface. Key partners in the blood safety program in Uganda include the Uganda Red Cross Society (URCS) who are responsible for about 40% of the activities in blood donor recruitment. Donor management task force has been established.
- UBTS has adequately trained staff, stocked equipment and reagents, assay kits and testing to meet the minimum requirements and reagents of a screening program.
- Donors are recruited through mass media, public announcements or placement of notices in public places. Twenty mobile collection and recruitment teams with each performing an average of 20 sessions per month and collecting 37 units per session.

2.2 Challenges

- **Meeting National Demand.** A key challenge and constraint for UBTS is to expand blood collection capacity to meet the increased national blood demand especially at health Centre IVs when they become fully operational.
- UBTS has an important task of meeting the increased demand for safe blood transfusion especially at Health Centre IVs, which are located in rural areas where most of the population lives. Most of the blood is used for transfusion of children and mothers; 50% of all blood collected is for treating children with severe anaemia, largely due to malaria, intestinal worm infestation and malnutrition; a further 25% of the blood is required to treat pregnant women with anaemia and complications of child birth and 25% to treat accident or surgical cases.
- **Funding.** More Government funding is required to replace the reducing donor funding.
- **Infrastructure.** Blood transfusion Infrastructure is still inadequate with some of the centres operating from a few room borrowed from referral hospitals. There are only two purpose regional Blood banks Mbale and Mbarara that were built using Pefpar

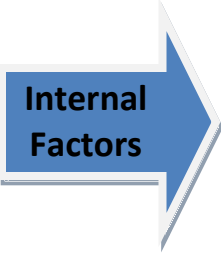
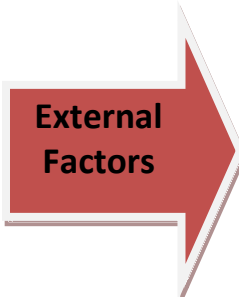
funds. Inadequately furnished centres include: Fort- Portal, Gulu, Arua and five smaller centres at Hoima, Kabale, Jinja, Soroti and Masaka – currently collect and distribute blood but require more appropriate structures. It was planned to have a Regional Blood Bank for each Regional Referral hospital.

- **Establishment of UBTS as an autonomous body.** The approval of the National Policy by the MOH; the existing structure; the self-accounting status granted to UBTS were important steps in preparation of UBTS for autonomy. However, the drafting of the necessary statutes to make UBTS as a fully autonomous institute has delayed.
- **Sustainability of UBTS.** UBTS is partly run on donor funds (PEPFAR) that has made significant improvement in the programs. Government in collaboration with MOH and UBTS should devise ways of resource mobilization in order to avoid interruption of Blood transfusion Services
- In Uganda, blood transfusion is a very expensive therapy. It costs about US dollars 45 to make a unit of safe blood delivered to the hospital.
- There are inconsistent practices with no guidelines to bring about harmonization and essential uniformity at the hospital level. Clinical interface is virtually absent leading to poor clinical practices.
- Poor waste management is experienced with the little blood that is essential to life. This is indicated by lack of hospital transfusion committees. There is need to develop appropriate clinical transfusion medicine practices.
- There is inadequate publicity and advocacy for BDR activities, there is need to invest in the development of sustainable partnerships with the consumers (hospitals) and suppliers (community). Societal interface is still weak. This is exhibited by the high percentage of one time only donors.

3.0 REVIEW OF THE CURRENT SITUATION

UBTS undertook an analysis of internal and the operating environment and came with the following analysis. It looks at long term issues based on the past 5-year state of both the internal and external environment. The analysis was a combination of what the Sanquin consultants had observed over a period of three years (2002-2005) and what the workshop assessed based on the current dynamics in the internal and external operating environment.

UBTS SWOT Analysis

	STRENGTHS	WEAKNESSES
 <p>Internal Factors</p>	<ul style="list-style-type: none"> • Improved facilities (Mbale and Mbarara that have been upgraded) • Construction plans for Nakasero, Gulu and Fort Portal are in place • Decentralised services-RBB and collection centres • Self accounting status • Existence of Donor management taskforce • UBTS serves as National and regional reference laboratory for the TTIs quality assurance with uniform TTI marker testing system • Improved MIS available & extended (CDC) management support • Quality system and management being developed • Availability of confirmatory testing • Qualified, competent and committed staff • Ongoing in-country training of staff at all levels • Existence of national donor registry (traceability) • Improvement of post-donation counseling 	<ul style="list-style-type: none"> • Organisational structure still incomplete and incoherent • Inadequate facilities in some places for example Gulu, FortPortal and Nakasero (Kampala) • Inappropriate and inadequate transportation system of blood in some areas (rural areas) • Lack of documented Standard Operation Procedures and systems • Poor waste management procedures • Inadequate Donor registration procedure (traceability) • High discard of collected blood – e.g. TTI markers reactivity, repeat testing, out dating • Limited capacity to process blood into different components • Clinical interface virtually absent • Inconsistent practices – no harmonization, no essential uniformity • No haemovigilance system • Societal interface still weak • Inadequate publicity and advocacy • Inadequate planning for research collaboration • High donor dependency for funding
	OPPORTUNITIES	THREATS
 <p>External Factors</p>	<ul style="list-style-type: none"> • Supportive policies in place (HSSP, HSP, National blood transfusion policy) • Political will and government commitment to support UBTS • Good public image/credible organisation • Moving towards full autonomy • Potential strengthening of hospital supply system – distribution centres at sub-district level and regional level (e.g. Arua, Kitovu, Soroti) • Support from hospitals- in terms of space, storage facilities, vehicles etc • Existing collaboration with Uganda Red Cross Society at societal interface • Increase of regular donor pool • Availability of Hepatitis B vaccination • Rapid reduction of TTI marker prevalence among donors • Development of appropriate clinical transfusion medicine practices (in-hospital clinical guidelines and Transfusion • Availability of professional workers in the labour market • Available strategy for the development of human capacity at all levels by the MOH • PEPFAR continued funding for development of operational organisation/structure (PEPFAR 2 – leadership and sustainability) • Updated (WHO) donor selection procedure • Growing awareness of need for undergraduate and postgraduate education in Transfusion Medicine (Universities) • Development of clinical interface (mutual understanding and respect) • Existing decentralized structures and systems in MOH 	<ul style="list-style-type: none"> • Absence of national standards and proper documentation system both for the procurement as well as for the clinical use • No control by UBTS on usage of blood • Inability by UBTS/UCR to guarantee incentives provided by the coupon given to donors • No hospital transfusion policies and strategies • No reliable information on real consumption needs • Inadequate infrastructure - National infrastructure – road • system, power and water supply and communication • Corruption- sale of blood in some hospitals • Absence of cost-recovery system for medium and long-term sustainability • Lack of active hospital transfusion committees • Outbreaks of epidemics • No continuous education of donors • Insufficient Government funding • Limited funding resource base

In the next five years, UBTS will marshal its efforts by taking advantage of the existing strengths and minimize the identified weaknesses by developing key strategic interventions aligned with the available opportunities in order to achieve its goals and objectives.

4.0 SITUATION ANALYSIS

4.1 The global environment

UBTS's operations over the last 5 years mainly focused on local and regional issues, but there is now a realization that both internal and external changing environments impact on the organization. Therefore, UBTS will deliberately take a strategic direction in order to respond to both global and local changing environments. The major global issues that emerged in the 20th and 21st Centuries include the Millennium Development Goals (MDGs) and the Poverty Eradication Action Plan (PEAP), Uganda's national development framework.

UBTS therefore strives to contribute to the achievement of the Millennium Development Goals 4, 5 and 6, which relate to reduction of child mortality, improvement of maternal health, combating HIV/AIDS, Malaria and other diseases and environmental sustainability respectively.

4.2 National environment

The Ministry of health has got the specific objective to have a blood bank at every HCIV as part of its facility package, in order to consolidate the functionality of the existing lower level health facilities which will compliment all the operations of UBTS. UBTS has got a target of offering Blood Transfusion Services at all HCIVs by 2010. The National Health Policy objective for the National Health System is to restructure the organization and management of the Ministry of Health and the District Health System to ensure effective harmony and linkages between the centre and the districts on the one hand and the public and private components on the other. It further calls for the establishment of a network of functional, efficient and sustainable health infrastructure for effective health care delivery closer to the people.

4.3 HSSP II Program and Development Goals

The overall development goal remains “the attainment of a good standard of health by all people in Uganda, in order to promote a healthy and productive life” (NHP). The improved human development contributes to increased socioeconomic growth and poverty eradication.

4.4 PEAP and HSSP II Health Targets

The overriding priority of HSSP II is to fulfill the health sector’s contribution to the PEAP and MDG goals of reducing maternal and child mortality; and to reducing fertility; malnutrition; and the burden of HIV/AIDS, Tuberculosis and Malaria, and reduce disparities in health outcomes among the lowest and highest income quintiles by at least 10% over the HSSP II period.

4.5 Ministry of Health and Other National Level Institutions

4.5.1 Ministry of Health

The Ministry of Health was restructured in line with its mandate and core functions. The national Health Policy defines the core functions of the Ministry of Health as:

- i) Policy formulation, setting standards, and quality assurance
- ii) Resource mobilization
- iii) Capacity development, training and technical support
- iv) Provision of nationally coordinated services, e.g. Epidemic control
- v) Coordination of health research
- vi) Monitoring and evaluation of the overall sector performance.

The MoH retains responsibility for such central services as health emergency preparedness and response, epidemic prevention and control. Other nationally delivered services are by specialized institutions under the stewardship of the Ministry of Health.

4.5.2 National Level Institutions

The autonomous National level institutions include the National Referral Hospitals, National Medical Stores, National Drug Authority, Uganda Virus Research Centre, Uganda Cancer Institute, National Blood Transfusion Service, National Public Health Laboratories and the

Uganda Natural Chemotherapeutic Research Laboratory. The Regional Referral Hospitals and the National Blood Transfusion Services have been accorded self accounting status and shall become fully autonomous in the course of HSSP II.

4.5.3 Hospitals

Hospitals represent the top end of a continuum of care providing referral services for both clinical and public health conditions to the District Health Services. They play an important complementary role to primary care and constitute an important and integral part of the National Health System.

A National Hospital Policy has been formulated to streamline the role and functions of hospitals within the National Health System. Given the present challenges and health sector reforms of recent years, well-defined role and functions of hospitals in Uganda is essential.

The objective of the policy is to improve the performance and accountability of the hospitals in order to contribute to the overall economic growth of the country by ensuring a healthy and productive population. The guiding principles of the policy are:

- i. Ensuring equity of access to hospital services.
- ii. Creating an enabling environment for the delivery of hospital services through effective management, an improved referral system and resource mobilization.
- iii. Guaranteeing that hospitals provide quality and affordable services consistent with the National Minimum Health Care Package.
- iv. Creating a conducive environment for the development of private hospitals in the country.

4.6 The strategic analysis:

To effectively contribute to the above-mentioned global and national concerns, UBTS has isolated some pertinent areas for intervention. The thematic areas include Malaria Anemia Death Reduction, Prevention and control of STI/HIV/AIDS and Maternal and child health.

4.7 The disease Burden

Most of Ugandan's disease burden is preventable. Communicable diseases (Malaria, HIV/AIDS and TB) continue to be the leading cause of morbidity and mortality in Uganda. They account for 54% of the disease burden (HSSP II).

Malaria, HIV/AIDS and TB remain the leading causes of ill health and mortality. The focus of the Government in the delivery of the Uganda National Minimum Health Care Package includes enhancement of sexual and reproductive health and rights with a focus of improving maternal and child health, malaria control, sanitation, community mobilization and HIV/AIDS. Participatory Poverty Assessment reports have identified ill health as the leading cause and consequence of poverty in Uganda. Health continues to be an important element of the Human Development Pillar of the PEAP with priority on preventive health care and commodities for basic curative care. The success of UBTS getting blood through voluntary donors depends on a health population and this heavily relies on the extent to which the nation is able to reduce the disease burden.

4.7.1 Malaria Anemia Death Reduction

Malaria is highly endemic in most parts of Uganda. It is one of the leading causes of morbidity and mortality in Uganda. It is a common disease in all parts of the country. Malaria kills more people than any other disease and is the most frequent cause of attendance at health facilities. It does not only lead to illness and death, but also has long-term consequences on pregnant mothers and their babies for example leading to low birth weight, chronic anemia, reduced growth and in some cases still births or death of the mother. Records from health centres indicate that malaria accounts for 25% to 40% of outpatient attendances, 20% of all in-patient admissions and 9-14% of in-patient deaths¹. Children aged below 5 years and pregnant women are the most affected.² It is estimated that 70,000 to 100,000 children die of malaria every year.

¹ National Communication Strategy for Malaria Control in Uganda, 2005-10

² Management of uncomplicated malaria: A practical guide to health workers. 3rd edition December 2005, malaria control program Ministry of Health

Malaria is also responsible for 30% of all deaths of children under five years of age because of poor access to treatment. Nearly 10% of household income is spent on treatment of malaria. For the prevention and reduction of death from malaria UBTS will offer support by making available blood for treating children with severe anemia, largely due to malaria, intestinal worm infection and malnutrition.

4.7.2 Prevention and control of STI/HIV/AIDS

Since the onset of the HIV epidemic a cumulative total of over two million Ugandans have been infected with HIV and there are currently about 120,000-150,000 adults with AIDS disease. It is also estimated that there have been about 900,000 HIV/AIDS related deaths since the beginning of the epidemic. The weighted national average prevalence based on antenatal figures has stabilized at around 6%. Over the years disparities in HIV prevalence between sexes have been noted and these could be attributed to biological, economic and socio-cultural factors.

During HSSP I, government focused on mainstreaming HIV/AIDS into all sectors and decentralization of the implementation plan. A comprehensive patient care package was developed which included the management of opportunistic infections including TB, palliative care, home based care and the provision of antiretroviral drugs for post-exposure prophylaxis. Regional blood banks were established to ensure safe blood for transfusion.

The UBTS's contribution in the prevention of the spread of STI/HIV /AIDS will focus on providing enough and safe blood that has been tested for Human Immunodeficiency Virus, HIV, TB, hepatitis B, surface antigen, Hbsag, hepatitis C antibodies and syphilis in all hospitals up to the most remote areas of the country at all Health Centres VI (HC IV).

4.7.3 Prevention and Treatment of Tuberculosis

Notifications of tuberculosis continue to rise and in 2003 a total of 42,901 cases of TB of whom 20,320 were new smear positive were notified. During HSSP I community participation and ownership of the TB program increased. Community based Direct Observed Therapy (CB-DOTS) was expanded to 49 districts improving the treatment outcome. Uniform diagnosis through sputum smear microscopy was adopted as the national strategy for case finding and integrated

in the national laboratory network and adopted countrywide. Short course chemotherapy using 4 Fixed Dose Combination Drugs was implemented countrywide. A logistics management system with computerized tracking system was piloted in a few districts and monitoring system was implemented at health sub-district and community level. Several strategies including expansion of DOTS through Public Private Mix (PPM-DOTS), Intensified Support and Action in Countries (ISAC) and the Practical Approach to Lung Health (PAL Initiative) were initiated. The Uganda STOP TB Partnership was also established to strengthen interagency coordination and harness partner efforts towards the speedy attainment of the 2005 targets and the MDG. The major challenges are achieving global targets for case detection, contending with the increasing case load of TB cases, implementing the IEC strategy that was developed in the latter half of HSSP I and establishing a system for surveillance and policy for treatment of multi-drug resistant TB.

4.7.4 Maternal and child health

During the decade of the 1990s, health outcomes related to maternal and child health did not show improvement. While acknowledging that improving maternal and child survival transcends the health sector, the health sector carries a major responsibility in the provision of life saving interventions that contribute to the improvement of health outcomes. Several reports including the Infant and Maternal Mortality reduction report, the Child Survival Lancet papers, multi-country evaluation of IMCI and Cochrane reviews on maternal and prenatal mortality indicate that cost effective interventions are already known. The need for systematic scale up of sets of proven, cost effective interventions and ensuring adequate national coverage while reducing inequality between the least and most poor has been identified. The utilization of maternal and child health services is inadequate. The low level of education of women and cultural practices, which include power dynamics at household and community levels contribute to the low utilization of health services and the disparities in health services utilization.

Maternal and neonatal conditions contribute the highest (20.4%) to Uganda's total burden of ill health and avoidable death. During HSSP I, maternal and child health was accorded priority,

particularly the Reproductive Health program and the Expanded Program on Immunization. HSSP II being outcome oriented will focus on reducing the Infant mortality rate and Maternal Mortality ratio. During HSSP II, the maternal and child health will be delivered under a single cluster consisting of five elements: Sexual and Reproductive Health (SRH), Newborn care, Common childhood illnesses, Immunization and Nutrition. This process emphasizes the link between maternal and child health mortality and the cumulative nature of health problems through the entire lifecycle. The objective of the maternal and child cluster is to contribute towards the achievement of a level of reduction in maternal, neonatal and young child mortality that is commensurate with the timely achievement of the PEAP targets and related Millennium Development Goals.

UBTS is going to provide safe blood to reduce the cases of mothers who die due to cases of over bleeding and emergency need of blood during Caesarian sections.

5.0 STRATEGIC DIRECTION

Over the next five years, UBTS will continue providing safe blood and blood components in the areas of Prevention and Treatment of Malaria Anemia, Morbidity and mortality Reduction, Prevention of HIV/AIDS and other TTIs, Maternal and child health and accidents and emergencies.

In order to scale up service delivery in blood transfusion services in the entire country, UBTS will continue to work with key partners like Uganda Red Cross Society, Blood donors, Users and recipients of blood and other partnership

In these areas, UBTS will continue to work with key partners like Uganda Red Cross Society and blood donor recruiters in order to scale up service delivery in blood transfusion services in the entire country.

5.1 Diagnostic and Blood Transfusion Services

Diagnostic, Medical Imaging and Blood Transfusion services are an Integral part of the integrated service delivery and impact on quality of health services and health outcomes whose objective is to *contribute to the improvement of the health status of the people of Uganda by*

providing safe, efficient and sustainable diagnostic and blood transfusion services able to meet the needs of Uganda's health care system. They substantially increase the human resources capacity to solve health problems and thereby improve the performance of the health systems. With the scaling up of core interventions such as EmOC, TB, malaria, ARVs, these services are of increasing importance.

In the next five years UBTS is going to concentrate on infrastructure development by expanding the existing infrastructure as well as construct new structures in the country in order to operate adequately within the decentralized health care delivery system. Infrastructure expansion and construction will include regional blood banks and blood collection centres.

5.2 The Blood Transfusion Services

The main assignment of UBTS is to make available adequate quantities of safe blood and components for treatment of patients who are in need of it. The UBTS has an important task of meeting the increased demand for safe blood transfusion especially at health Centers IVs, which are located in rural areas where most of the population lives. As the accessibility of health services by the rural population increases the need for more blood for transfusion will increase; this will require more resources to meet the increased demand and efficiency in utilizing such resources. Most of the blood is used for transfusion of children and mothers to address the improved Maternity Health and reduce Child mortality.

UBTS is going to focus on increasing annual blood collection necessary to meet the transfusion needs for all patients in the country who need it. This will be achieved through increased advocacy and mobilization for blood donation, strengthen strategic collaboration with Uganda Red Cross Society, a key partner and improved care and retention of safe blood donors. Investment in adequate collection and storage equipment will also be a key area of intervention.

5.3 Alignment of the Uganda Blood Transfusion Services with the International and National Frameworks for Health

Millennium Development Goals	MDG4: Reducing Child Mortality MDG5: Improve Maternal mortality MDG6: Combat HIV/AIDS, malaria and other diseases
PEAP	Pillar 5: Human Development
National HSSP II Focus	Cluster 1: Maternal and Child Health Cluster 2: Control of Communicable diseases Cluster 3: Control of non-communicable disease Cluster 4: Health promotion, disease prevention and community Health
HSSP II Programme and Development Goals	Goal 1: The attainment of a good standard of health by all people in Uganda, in order to promote a health and productive life. Goal 2: Reduced morbidity and mortality from the major causes of ill-health and premature death and reduced disparities therein.
The Uganda National Minimum Health Care Package (UNMHP)	A Health Care Delivery System that is effective, equitable and responsive To strengthen the Integrated support systems To reform and enforce the Legal and regulatory Framework An Evidence based policy Programme, Planning and Development in place
Integrated health Support systems	A strengthened supportive system, services and inputs to achieve coordinated support for the delivery of the minimum package <ul style="list-style-type: none"> • Health system Inputs • Diagnostic and Blood transfusion • Information for decision making • Legal and Regulatory Framework
Diagnostic and Blood Transfusion services	To contribute to the improvement of the Health status of the people of Uganda by providing safe, efficient and sustainable diagnostic and blood Transfusion Services able to meet the needs of Uganda's health care system. <ul style="list-style-type: none"> • Laboratory Services • Imaging Services • Blood Transfusion Services
Blood Transfusion Services	GOAL: To make available adequate quantities of safe blood and blood products for treatment of patients
	SO1: To expand the blood transfusion infrastructure to operate adequately within a decentralized health care delivery system Outcome Improved delivery of Blood Transfusion service within a decentralized health care system
	SO2: To increase the annual blood collection necessary to meet the

	<p>transfusion needs for all patients in the Country. .</p> <p><u>Outcome</u> Annual blood collections satisfying clinical needs of patients in the country</p>
	<p>SO3: : To operate an active nationwide Quality assurance program that ensures blood safety</p> <p><u>Outcome</u> Safe and efficacious blood and blood components</p>
	<p>SO4: To promote appropriate clinical use of blood</p> <p><u>Outcome</u> Blood and blood products appropriately used</p>
	<p>SO:5. Strengthen the organizational capacity of UBTS to enable efficient and effective service delivery</p> <p><u>Outcome</u> Efficient and effective Blood transfusion organisation</p>

Alignment of the UBTS Strategy with the National Health System UBTS in implementing this strategy will take advantage of the already existing National Health system. The HSSPII in its Health Infrastructure Development and Management strategy has got the overall objective **“To consolidate the existing health facilities to enhance their functionality and to increase accessibility to health services and quality of health care delivery within the available resource envelope”**

6.0 UBTS' VISION, MISSION AND CORE VALUES

6.1 Vision

Up until now the vision of UBTS has been focusing on UBTS as an organization **“A national, efficient, effective, well resourced, accountable organization”** but the revised conceptual framework of the Health Sector Strategic Plan II (HSSP II) has been constructed to reflect on the primary purpose and the key output of improved health of the people as a contribution to the Uganda National Minimum Health Care Package (UNMHCP). **“Focusing on the people”** is the main approach to achieving the sector program goal, UBTS will therefore need to change and realign her Vision and Mission to focus on the improved health of the beneficiaries. The new vision for UBTS is therefore:

“An effective, efficient and sustainable Blood Transfusion Service in Uganda”

6.2 Mission

“To provide sufficient and efficacious blood and blood components through voluntary donations for appropriate use in health care service delivery.”

6.3 Core values

6.3.1 Professionalism

UBTS will deliver blood transfusion services with the highest level of ethical standards and professional code of conduct required for such an entity. The organization will be guided by both the professional ethics and medical code of conduct in all its work. UBTS shall also ensure promotion of appropriate and rational clinical use of blood.

6.3.2 Altruism

UBTS will be motivated by a sense of service, selflessness, commitment and a spirit of voluntarism. All staff, partners and community will be moved by this attribute and approach their work with the deepest sense of selflessness and service.

6.3.3 Accountability

UBTS will be accountable to all stakeholders by ensuring that resources (funds, equipment and time) are effectively and efficiently utilized in the best interest of the organization, partners, patients and the entire nation.

6.3.4 Excellence

The need to deliver with the highest level of excellence at all levels is highly recognized. UBTS will deliver with the highest ability, blood transfusion services that meet the national needs of patients who require blood and blood components.

6.3.5 Excellence

The need to deliver blood transfusion services based on equal treatment for all shall guide our practice.

7.0 STRATEGIC FOCUS AND OBJECTIVES

The implementation of this strategic plan will be guided by five strategic objectives which have been aligned with the National Health Sector Strategic Plan II (HSSPII). UBTS as aligned to the HSSPII will contribute to the fulfillment of Uganda's Health sector goals and the United Nations Millennium Development Goals (MDGs).

The implementation of this strategic plan will be guided by three Strategic Focus Areas (SFAs) as follows:

1. Strategic Focus Area 1: Infrastructure Development
2. Strategic Focus Area 2: Blood Transfusion Services
3. Strategic Focus Area 3: Organisational Development of UBTS

These are illustrated in the matrix below.

Strategic Objective	Outputs	Key Activities
Expand Blood transfusion infrastructure		
SO1: To expand the blood transfusion infrastructure to operate adequately within a decentralized health care delivery system.	Seven regional Blood banks constructed and fully operational by 2015	<ul style="list-style-type: none"> Expand Nakasero and complete Mbale and Mbarara blood banks Acquire land for construction and expansion of blood banks Construct Arua, Fort portal, Gulu and Moroto Regional Blood banks
	Ten collection & distribution banks established	Equip Masaka, Jinja, Hoima, Soroti, Kabale and Rukungiri to store and distribute blood
	Adequately equipped laboratories at every regional blood bank	Establish and equip Bundibugyo, Lira, Kagando, to collect, store and distribute blood
Strategic Objective	Outputs	Key Activities
Blood Transfusion Services		
SO2: To increase the annual blood collection necessary to meet the blood requirements for all patients in the hospital through out the whole country	Increased advocacy and mobilization for blood donation	<ul style="list-style-type: none"> Develop an advocacy and communication strategy for BDR Implement Advocacy and communication strategy Review the SOPs for blood donor mobilization Organize periodic meetings and partnership events with media
	Improved Blood donor Education	<ul style="list-style-type: none"> Develop a BDR curriculum and materials Conduct TOT and train staff with skills in BDR Review and develop IEC materials
	Strengthened strategic framework for collaboration with URCS	Conduct Joint planning with stakeholders for BDR activities
	Improved care and retention of safe donors	Establish customer care strategy
	Adequate blood collection and supply as per WHO ratio to population	<ul style="list-style-type: none"> Form and support donor clubs Increase blood donation units per session Increase drives in communities Conduct timely post donation counseling sessions to donors Review blood donor recognition Guideline Organize periodic regional donor recognition events Conduct field monitoring and support visits
	Adequate supplies and equipment for collection and field storage	Provide adequate supplies and equipment for collection and field storage
Strategic Objective	Outputs	Key Activities
Blood Transfusion Services		
SO3: To operate an active nationwide quality assurance program that ensures blood safety	Improved UBTS Quality assurance program	<ul style="list-style-type: none"> Review quality policies, processes and procedures Train personnel in quality management Institute an organisation wide quality management system in all UBTS processes
	Improved Quality Assurance system for mobilization and recruitment	<ul style="list-style-type: none"> Review system for mobilization and recruitment Conduct customer satisfaction surveys

	Improved Quality assurance system for Blood donor selection, blood collection and transportation	<ul style="list-style-type: none"> Reviewed system for blood collection, selection and collection and transportation
	Improved Quality assurance system for blood testing	<ul style="list-style-type: none"> Review the existing testing algorithm Provide adequate test kits, reagents and consumables
	Improved Quality assurance system for processing, storage and distribution	<ul style="list-style-type: none"> Review policies and procedures for processing, storage and distribution
	Strengthened occupational safety	<ul style="list-style-type: none"> Review and develop and implement guidelines for occupational health and safety Provide and enforce use of protective gear
	Improved Quality assurance system for waste management	<ul style="list-style-type: none"> Develop policies for waste management Train staff on waste management Provide waste disposal infrastructure and materials
Strategic Objective	Outputs	Key Activities
Blood Transfusion Services		
SO4: To promote appropriate clinical use of blood	Training curricula in transfusion medicine developed	<ul style="list-style-type: none"> Establish the necessary collaborative partnership with medical training institutions and Health facilities Review guidelines for appropriate clinical use of blood
	Training curricula implemented in training institutions	<ul style="list-style-type: none"> Develop training curricula in transfusion medicine in collaboration with stakeholders
	Continuous Professional Development in Transfusion medicine	<ul style="list-style-type: none"> Conduct Continuous Professional Development activities in blood transfusion
	Strengthened Hemovigilance in transfusing facilities	<ul style="list-style-type: none"> Develop guidelines for formation and operation of hospital transfusion committees Conduct medical audits on blood use Conduct regular supervisory visits to transfusion facilities Develop an index of blood and blood components
Strategic Objective	Outputs	Key Activities
Organizational Development of UBTS		
SO5: Strengthen the organizational capacity of UBTS to enable efficient and effective service delivery	Streamlined organizational structure	<ul style="list-style-type: none"> Review current organizational structure Operationalise the organizational structure Review the current arrangement of staff URCS working in UBTS
	Adequate/effective Policies and procedures	<ul style="list-style-type: none"> Review and develop policies and procedures Implement the new policies and procedures
	Staff development plan	<ul style="list-style-type: none"> Conduct training needs assessment Develop a training and development plan Implement the training plan Develop a recruitment plan including volunteers
	Improved ICT in Blood transfusion	<ul style="list-style-type: none"> Develop ICT SOPs Automate of UBTS processes Design and up date a website for UBTS Computerise key field activities Connect regional blood banks on internet Integrate regional banks into a national database Train users on database Procure appropriate ICT equipment Develop a resource centre

	Effective planning, monitoring, evaluation and reporting	<ul style="list-style-type: none"> • Develop a monitoring and evaluation System • Implement M& E System • Conduct a mid evaluation of the strategic plan • Conduct end of term evaluation of the strategic plan
	Improved efficiency and effectiveness in UBTS	<ul style="list-style-type: none"> • Carry out collaborative research to improve on UBTS processes • Conduct a costing study of UBTS activities
	Strengthened organizational financial resource base	<ul style="list-style-type: none"> • Conduct a review of UBTS financial resource • Develop and implement a financial sustainability plan
	Full autonomous body	<ul style="list-style-type: none"> • Lobby for fully autonomy of UBTS

8.0 GOVERNANCE, MANAGEMENT AND ADMINISTRATION

UBTS will make use of factors that will propel the organization forward by continually achieving best results in the most efficient way as possible. The achievements so far were as a result of the key factors that UBTS adopted. UBTS's values and principles shall continue to guide in implementing this strategic plan. In summary:

8.1 Governance

UBTS has a committed and competent Board that advises the organization from time to time. The current structure has been revised and consolidated to reinforce proper coordination of the organization's activities. Where there are gaps, it is proposed in this strategic plan that UBTS structure be reviewed to ensure that the organization has the right capacity and competencies to deliver the services and programs planned for in the five years.

8.2 Management

This strategic plan will be implemented by a team of staff at UBTS led by the Director supported by a team of well qualified staff. In addition, the implementation of this plan will also require strengthening of the organizational structure both in terms competencies and numbers. At the time of writing this, the MOH had already approved some of the positions.

8.3 Human resource

While UBTS operates in an environment where no other players exist, it requires strong social capital to survive. To win the confidence of the stakeholders and beneficiaries, UBTS shall continue to deliver high quality blood transfusion services by recruiting and retaining a well motivated team of highly qualified staff and volunteers.

Currently, UBTS has adequately skilled and committed staff, the head quarters that drives the organization. In addition UBTS is focusing on developing the capacity of the regional blood banks and collection centres in order to enhance the quality and delivery of blood and blood components across the country. In addition, UBTS will also aim at harnessing and strengthening relationship with partners such as the Ministry of Health, Centre for Disease Control, Uganda Red Cross Society, blood donors and other partners across the country that will supplement its efforts to have accelerated blood transfusion service delivery. The organization will further develop the capacity of the existing staff both in terms of competence and numbers to enable it deliver on its expectations.

In order to improve on the current staff capacity to deliver, a staff development plan will be put in place to enable staff acquire the necessary capacity. This will include among others; supporting them to undertake both short-term and long-term training and sponsoring them or encouraging them to take advantage of the available opportunities for evening classes at local institutions and correspondence courses at international institutions.

A comprehensive organizational development initiative will be undertaken in order to reinforce the already existing structures, policies and processes. In order to increase its resource base, UBTS will embark on a financial sustainability strategy which will include among others strengthening collaborations with partners, both local and international. In order to increase outreach, UBTS will focus on identifying and building the capacity of the partners to enable them effectively deliver safe and efficacious blood transfusion service.

8.4 Administration

Systems such as the financial, administration, procurement, ICT and human resource management systems for its effective operations have been developed upon which UBTS thrives, and these will further be reviewed. Furthermore, all existing Standard Operating Procedures will be reviewed and updated and non-existent ones developed to allow the organization to be more effective, efficient, so as to provide quality blood transfusion services to the country. All the quality assurance systems will be accredited by internationally recognized accreditation agencies, in order to provide the level of recognition and respect that blood transfusion requires.

UBTS will also embark on improving its information, communication and technology. A nationwide database will be developed to link all the regional blood banks and blood collection and distribution centres. In addition all regional banks and centers will be supported with computers and networked to improve on information sharing and dissemination.

8.5 Corporate Social Responsibility and Client Relations

UBTS recognizes the significant contribution made by the voluntary blood donors from the wider public. As such, it will deliberately focus on developing care and retention strategy. The strategy will aim at empowering the blood Donors, recipients and the general public to easily access information and services of UBTS. UBTS will invest in high level and state of art waste management practices which are environmentally sound.

9.0 MONITORING AND EVALUATION

9.1 Monitoring

Overall, UBTS will strengthen its performance management system among to chart out progress and draw lessons. Monitoring and review will be built into the way UBTS works to see whether the organization's activities are pulling in the right direction and in a cost effective manner. This will help UBTS ensure that the funds and other resources are being used correctly and activities are progressing as planned.

A monitoring framework will form part of UBTS' performance measurement system. It will assist in developing tools to use to monitor progress in terms of delivering activities and in looking more broadly at monitoring progress at the level of outcomes and impact. At program level, UBTS will embark on monitoring of progress against the set objectives in the implementation plan. This will focus on monitoring results. Annual plans and work schedules will be laid out from the strategic plan. The following monitoring mechanisms will guide the implementation of the strategic plan: -

- Monthly and quarterly reports from the field officers
- Quarterly review meetings of senior staff to review progress and check if everything is working out as planned or not.
- Annual review progress with staff and partners to assess whether UBTS is having impact that it hoped for through its activities
- Field support visits on monthly basis by Project officers and quarterly visits by the Executive Director, as well as on spot assessment if and when required

9.2 Evaluation

This will focus on assessing the underlying assumptions made at the start of implementation process. Evaluation process will examine the changes made and appraise the wider impact, intended, unintended, positive and negative. The results of evaluation will be used for wider learning and to ensure accountability to intended beneficiaries and funders. UBTS will carry out evaluation at mid term and at the end of the strategic plan.

In addition UBTS plans to develop a comprehensive M&E system to enable it track outcomes and impact. A participatory monitoring framework will be developed to enable stakeholders and communities participate in the monitoring of interventions.

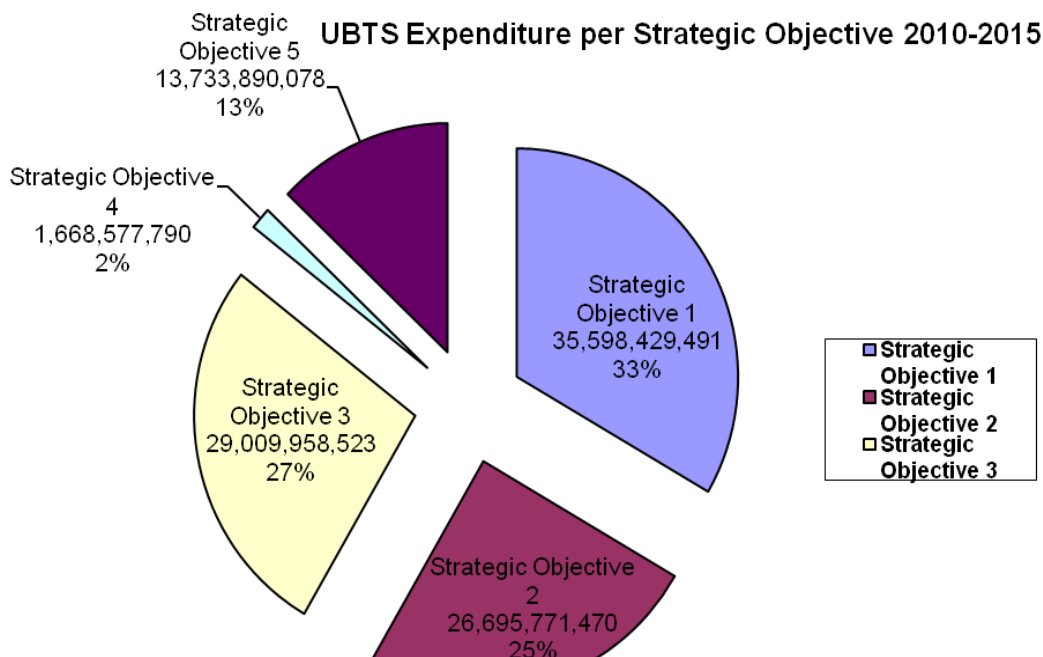
As part of the ICT development, the M&E system will strengthen the data collection processes, analysis and dissemination of information and lessons learnt.

10. FINANCING OF THE STRATEGIC PLAN

10.1 Costing and Financing of the UBTS Strategic Plan

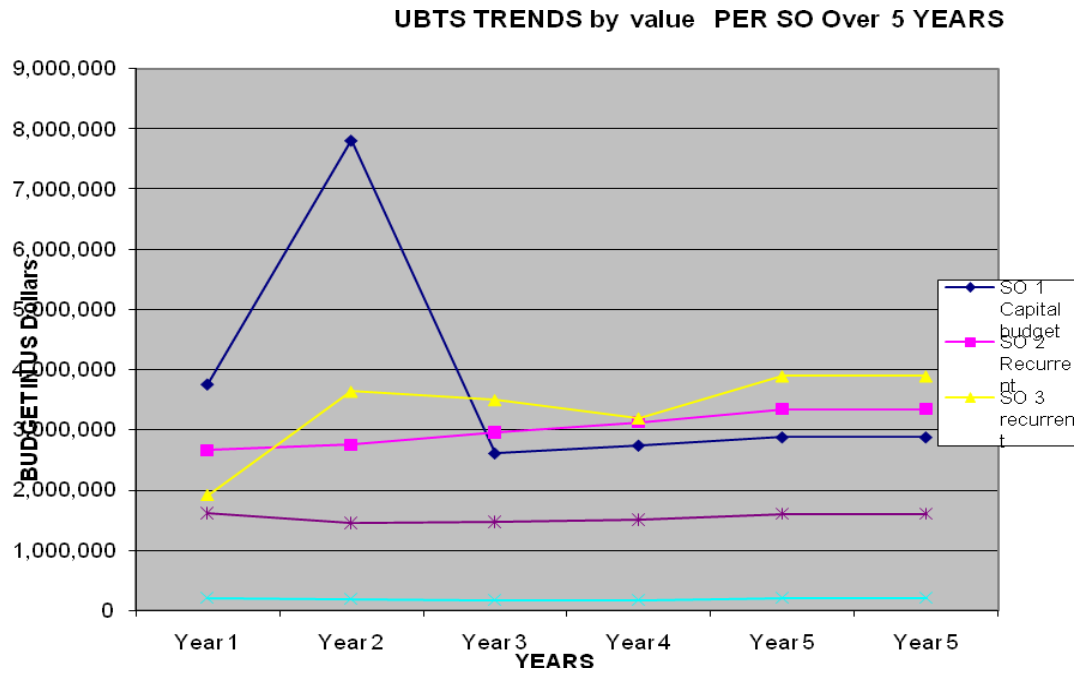
A budget of Ushs.106.7 Billion (US\$59.2) has been used as an estimate for the implementation of this strategy. UBTS will endeavor to secure the required amount of funds from Donors, Government, Foundations, and individual community members. The Budget has been prepared across the major expenditure categories (strategic objectives) Construction of the Regional blood banks and equipping them as the capital Budget plus, management and personnel. The budget summary is presented below.

Fig. 1



Expenditure on strategic objective one is highest going down to three, five, two and four respectively. The detailed budget (attached) also highlights the overheads and institutional capacity building that will have to be met in the implementation of the Strategic plan, calculated at 13%.

Fig. II: Five Year Financial Expenditure Trends across the Strategic Objectives



Strategic objective one that is contributing 33% of the budget is to improve the infrastructure for the Regional blood banks, will start low in year one, UBTS will need ample time to complete the unfinished business at Nakasero, Mbarara and Mbale already funded outside this strategy. Year one will cater for bridging funds to complete the work that is already going on. The construction of the new Regional Blood banks will start in year two. This is a high investment and will help create growth in the long term.

Strategic objective three contributing 27% of the budget will cater for improved quality and this will start off high in year one and will increase with a spike in year two. As can be observed, strategic objectives two, five and four will increase in the first two to three years of operation; this is due to the startup level of operation needed to deliver quick wins and build momentum for strategy implementation.

All the other strategic objectives have got a high level of recurrent expenditure. Overall the strategy is supported by a high capital: recurrent expenditure ratio of 60:40. This is a good balance for a lasting impact on UBTS and the entire country for a long time.

Fig. III: Capital Vs Recurrent Expenditure by Strategic Objectives:

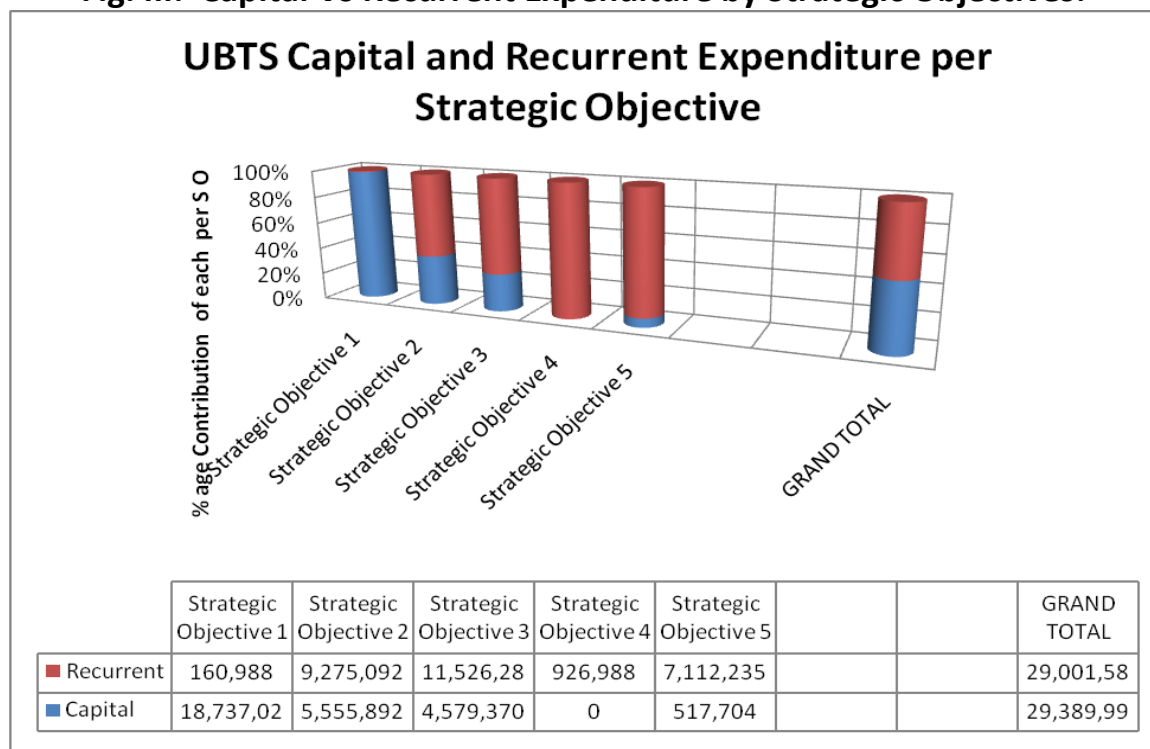


Fig.IV: Summary of Funding the Strategic Plan over the next 5 Years by Strategic Objective

Strategic Objectives	Annual Projected Expenditures in US\$					
	Year 1	Year 2	Year 3	Year 4	Year 5	TOTALS
Strategic Objective 1	3,753,579	7,812,258	2,604,621	2,734,852	2,871,595	19,776,905
Strategic Objective 2	2,659,777	2,749,523	2,955,018	3,124,012	3,342,654	14,830,984
Strategic Objective 3	1,908,854	3,633,893	3,492,760	3,190,331	3,890,805	16,116,643
Strategic Objective 4	199,018	179,385	167,354	175,722	205,508	926,987
Strategic Objective 5	1,612,257	1,445,253	1,464,658	1,506,279	1,601,493	7,629,940
GRAND TOTAL	10,133,484	15,820,312	10,684,411	10,731,196	11,912,055	59,281,459

Annex I: Implementation Plan for UBTS Strategic Plan 2010 - 2015

Objectives	Outputs	Activities	Performance Indicators	Responsibility	Period	Estimated Cost (\$)
SO1: To expand the blood transfusion infrastructure to operate adequately within a decentralized health care delivery system						
	Seven regional blood banks constructed and fully operational by 2015	Expand Nakasero and complete Mbale and Mbarara blood banks	Numbers of blood banks expanded.	Regional Directors Administrator	YR 1	9,209,385
		Acquire land for construction and expansion of blood banks Gulu, Arua, Fortportal, Moroto, Mbale, Nakasero	Title deeds MOUs Authorization instruments	Regional Directors Administrator	YR 1	200,222
		Construct Arua, Fort portal, Gulu and Moroto Regional Blood banks	Numbers of regional blood banks constructed.	Regional Directors Administrator	YR 2, 3, 4	4,666,667
	Ten sub-regional blood banks established	Acquire premises for blood collection and distribution blood banks	Title Deeds MOUs	Director Regional Directors	YR 1	-
		Equip Masaka, Jinja, Hoima, Soroti, Kabale and Rukungiri to store and distribute blood	Number of designated collection/distribution blood banks fully equipped and functional	Director Regional Directors	YR 1, 2 3, 4	1,175,000
	Adequately equipped laboratories at every regional blood bank	Establish and equip Bundibugyo, Lira, Kagando and Kitgum to collect, store and distribute blood	Number of designated collection/distribution blood banks fully established and equipped	Regional Directors PDC	YR 3, 4, 5	3,683,754
	Adequate and appropriate transport at every blood bank (22)	Procure 22 vehicles for the sub-regional blood banks	Number of vehicles	Director	YR 1,2,3,4	878,889

Objectives	Outputs	Activities	Performance Indicators	Responsibility	Period	Estimated Cost (\$)
SO2: To increase the annual blood collection necessary to meet the transfusion needs for all patients in the Country.						
	Increased advocacy and mobilization for voluntary blood donation	Develop an advocacy and communication strategy for BDR	Advocacy and communication strategy for BDR	PDC URCS	YR 1	8,333
		Implement Advocacy and communication strategy	Advocacy and communication strategy implemented	PDC URCS	YR 1 QR 4, YR 2	613,959
		Review the SOPs for blood donor mobilization	Reviewed SOPs for blood donor mobilization	Quality manager PDC	YR 1	47,833
		Organize periodic meetings and partnership events with media	Number of periodic meetings & events conducted	PDC URCS	YR 1 - 5	306,980
	Improved Blood donor Education	Develop a BDR curriculum and materials	BDR Curriculum and training materials developed	Regional Directors Training Coordinator PDC URCS	YR 1	15,556
		Conduct TOT and train staff with skills in BDR	Numbers of TOTs and staff trained in various BDR courses.	Training Coordinator	YR 2	24,398
		Review and develop IEC materials	Number of IEC materials reviewed and developed	PDC, URCS	YR 1	403,678
	Strengthened strategic framework for collaboration with URCS and other partners	Conduct Joint planning with stakeholders for BDR activities	Number of joint planning meetings on BDR activities	Director Secretary General	YR 1	13,814
	Improved care and retention of safe donors	Develop strategy for Blood donor retention	Blood donor retention strategy	PDC URCS		8,333
		Establish customer care center	A functional customer care centre established	PDC, ICT,HR	YR 2	88,675
		Form and support Blood Donor Clubs	Number of donor clubs formed Number of clubs supported	PDC URCS	YR 1- 5	245,584
		Increase blood donation units per session	Number of units of blood	PDC, URCS	YR 1 - 5	3,243,048
	Adequate blood collection and supply to population	Sensitize the community on voluntary blood donation	Number of units per sessions	PDC Program Manager	YR 1-5	

Objectives	Outputs	Activities	Performance Indicators	Responsibility	Period	Estimated Cost (\$)
		Increase drives in communities	Number of Blood drives	Regional Directors PDC, URCS	YR 1- 5	466,609
		Conduct timely post donation counseling sessions to blood donors	Number of counseling sessions Number of donors counseled	Counselors, PNO	YR 1- 5	464,155
		Review blood donor recognition Guideline	Reviewed BD recognition Guideline	PDC Program Manager	YR 1	24,558
		Organize periodic regional donor recognition events	Number of donor recognition events	Regional Directors PDC, URCS	YR 1-5	15,349
		Conduct field monitoring and support visits	Number of filed monitoring and support visits	Regional Directors PDC, URCS	YR 1- 5	147,350
	Adequate supplies and equipment for collection and field storage	Provide adequate supplies and equipment for collection and field storage	Quantity/number of supplies and equipment received and used	Administrator Procurement Officer	YR 1 - 5	5,467,217
SO 3: To operate an active nationwide Quality assurance program that ensures blood safety						
	Improved UBTS Quality assurance program	Review quality policies, processes and procedures	Documented quality policies, processes and procedures	Director Quality manager	YR 1	9,567
		Train personnel in quality management	Number of staff trained in quality management	Director Quality manager	YR 1- 5	84,808
		Institute an organizational wide quality management system in all UBTS processes	Functional Quality management system	Director Quality manager	YR 1- 5	105,107
	Improved Quality Assurance system for mobilization and recruitment	Review system for mobilization and recruitment	Documented processes and procedures for mobilization and recruitment	Director Quality manager	YR 1	-
		Conduct customer satisfaction surveys	Customer satisfaction surveys conducted	Quality Assurance Manager, PDC	YR 1- 5	17,600
	Improved Quality assurance system for Blood donor selection, blood collection and transportation	Reviewed system for blood selection and collection and transportation	Documented processes and procedures (SOPs)	Quality manager PNO, PDC	YR 1- 5	73,675

Objectives	Outputs	Activities	Performance Indicators	Responsibility	Period	Estimated Cost (\$)
		Review the existing testing algorithm	Revised testing algorithm	Quality manager PLT	YR 1	12,279
		Provide adequate test kits, reagents and consumables	Number of test kits, reagents and consumables	Director Procurement	Yr 1	10,878,985
	Improved Quality assurance system for processing, storage and distribution	Review policies and procedures for processing, storage and distribution	Documented processes and procedures (SOPs)	Quality manager, Regional Directors, PLT/SLT	YR 1	73,675
	Strengthened occupational safety	Develop and implement guidelines for occupational health and safety	Guidelines for health and safety developed	Quality Manager, Heads of departments, HR	YR 1	10,667
		Provide and enforce use of protective gear	Number of protective gears Variety of protective gears Number of staff using protective gear	Heads of departments, HR	YR 1-5	2,247,581
	Improved Quality assurance system for waste management	Review quality assurance system for waste management	Documented processes and procedures (SOPs)	Quality Manager, Heads of departments,	YR 1	-
		Train staff on waste management	Number of staff trained in waste management	Quality Manager Heads of Departments, HR	YR 1-2	-
		Provide waste disposal infrastructure and materials	Functional waste disposal infrastructure	Administrator, Quality Manager, HR	YR 1-5	2,322,222
	Accreditation of UBTS	Accredit UBTS with a reputable internationally recognized agency	Certificate of accreditation	Director Quality Manager	YR 3	50,000
SO4: To promote appropriate clinical use of blood						
	Training curricula in transfusion medicine developed	Establish the necessary collaborative partnership with medical training institutions and Health facilities	Number of functional collaborative partnerships	Director Regional Directors	YR 1- 5	368,375
		Review guidelines for appropriate clinical use of blood	Operational guideline	Director, Regional Directors	YR 1	41,000
	Training curricula implemented in training institutions	Develop training curricula in transfusion medicine in collaboration with stakeholders	Transfusion curricula in use	Director, Regional Directors	YR 1-2	251,139

Objectives	Outputs	Activities	Performance Indicators	Responsibility	Period	Estimated Cost (\$)
	Continuous Professional Development in Transfusion medicine	Conduct Continuous Professional Development activities in blood transfusion	Number of professional staff trained Number of trainings carried out in institutions	Director, Regional Directors HR	YR 1- 5	73,675
	Strengthened Hemovigilance in transfusing facilities	Develop guidelines for formation and operation of hospital transfusion committees	Functional hospital committees	Director, Regional Directors	YR 1-2	41,667
		Conduct medical audits against standards on blood use	Number of audits conducted	Director Quality Manager,	YR 1- 5	-
		Conduct regular supervisory visits to transfusion facilities	Number of supervisory visits	Director Quality Manager,	YR 1- 5	-
		Develop an index of blood and blood components	Operational index	Director Regional Directors, PLT	YR 1	-
SO5 Strengthen the organizational capacity of UBTS to enable efficient and effective service delivery						
	Streamlined organizational structure	Review current organizational structure	Organisational structure reviewed	Director/HR	YR 1	55,854
		Operationalise the organizational structure	Functional structure	Regional Directors, HR, Heads of Departments	YR 2-5	63,852
	Adequate/effective Policies and procedures	Review the current arrangement of staff URCS working in UBTS	Reviewed arrangement	Director/HR	YR 1	-
		Review and develop job descriptions	Reviewed job descriptions	Regional Directors, HR, Heads of Departments	YR 1	12,556
		Implement the new policies and procedures	Policies implemented	Director, Regional Directors	YR 2-5	5,833
	Staff development plan	Conduct training needs assessment	Training Needs assessment conducted	HR. Heads of departments	YR 1	10,222
		Develop a training and development plan	Training Plan developed	Heads of Depts, HR	YR 1	-
		Implement the training plan	Number of staff trained	HR, Heads of Departments, PBDR	YR 2-5	647,972

Objectives	Outputs	Activities	Performance Indicators	Responsibility	Period	Estimated Cost (\$)
	Improved ICT in Blood transfusion	Develop a recruitment plan including volunteers	Number of staff and volunteers recruited	HR, Heads of departments	YR 1	-
		Develop ICT SOPs	Documented ICT processes	ICT	YR 1-5	-
		Automate of UBTS processes	Number of processes automated	ICT	YR 1-5	-
		Design and up date a website for UBTS	Functional website	ICT	YR 1	4,167
		Computerize key field activities	Number of field activities computerised	ICT	YR 1-5	-
		Connect regional blood banks on internet	Number of regions connected	ICT	YR 1-5	88,530
		Integrate regional banks into a national database	Number of regions integrated	ICT	YR 2-5	-
		Train users on database	Number of users trained	ICT	YR 1-5	17,500
		Procure appropriate ICT equipment	Number of ICT items procured	Procurement officer	YR 1-5	583
		Develop a resource centre	Resource centre developed	ICT	YR 2-5	14,583
	Effective planning, monitoring, evaluation and reporting	Develop a monitoring and evaluation system	M& E system developed	PE	YR 1	58,944
		Implement M& E system	M&E system	PE	YR 1-5	176,820
		Conduct a mid evaluation of the strategic plan	Mid term evaluation	PE	YR 3	15,086
		Conduct end of term evaluation of the strategic plan	End of term evaluation of the strategic plan	PE	YR 5	20,513
	Improved efficiency and effectiveness in UBTS	Carry out operational research to improve on UBTS processes	Operational Research conducted	Director, Regional Director	YR 1-5	215,506
		Conduct a costing study of UBTS activities	Costing study of UBTS conducted	Director, Senior Accountant	YR 2	14,000
	Strengthened organizational financial resource base	Conduct a review of UBTS financial resource base	Resource base review conducted	Director Senior Accountant, PBDR	YR 2-5	4,375
		Develop and implement a financial sustainability plan	Financial sustainability plan developed	Senior Accountant, Regional Directors	YR 12-5	13,333
	Full autonomous organisation	Lobby for fully autonomy of UBTS	Lobby and advocacy plan	Director	YR 1-5	10,000

Annex II. Proposed Organisational Structure

