

# Hearts of Care Community Hospital

Cheptais, Kenya

Project Proposal



CDS Kenya

## Project Information Sheet

With the hope of providing better healthcare facilities for women and children in Cheptais, we developed the described project. This information sheet is intended to provide some guidance to prospective fundraisers, suppliers, contractors, and all people regarding the project.

Date	February, 2021
Project Title	Hearts of Care Hospital (HCH)
Location	Cheptais, Mt. Elgon, Bungoma County, Kenya
Executing Organization	Community Development and Sustainability Organization (CDS)
About the Organization	CDS Kenya aims to empower communities and promote sustainable livelihoods. Our mission is to facilitate community developments with structure and unity. We address challenges by strengthening existing capacities, promoting advanced education, and fostering human flourishing.
Type of Organization/ Legal Status	NGO Coordination Board Reg Certificate :OP.218/051/12-0839/8736
Address	Cheptais District Head Quarters. P.O.BOX 27, 5021, Cheptais, Mt.Elgon Kenya.
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Website	<a href="https://cdskenya.8b.io/">https://cdskenya.8b.io/</a>
Legal Representative	Peter Chem
Estimated Starting Date	2021

CDS Kenya reserves the right of final interpretation.

## Executive Summary

Our organization, Community Development and Sustainability Organization (CDS) Kenya, requests a grant of \$373,016 US Dollars (USD) or Pound Sterling (GBP) £267,884 to support our project to construct a hospital called “Hearts of Care Community Hospital”, which will primarily focus on providing care for mothers and children in Mt. Elgon, Kenya. The purpose of the project is to increase access to quality health care services for women and children, while reducing disparities in health outcomes in this region.

Health care is fundamental to improving and maintaining the well-being of a community’s population. In Kenya, only 62% of births are conducted with skilled personnel. This is alarmingly low when compared to developed countries such as the United States and the United Kingdom, where the rate is 98-99%. Due to limited public health funding in Kenya, the public health system does not adequately service rural communities such as Mt. Elgon. Many women and adolescents have poor education on health seeking behavior and the risks associated with their health. Currently, there is no specialized hospital for women and children in this area. The nearest specialized hospital is in the capital city of Nairobi, which is more than an 8 hour drive away; most women in Mt. Elgon must walk long distances to even access public transportation.

The project aims to increase access to health care services, improve health education and improve the quality of services delivered to the community in Mt. Elgon. The hospital will have five wards, 50 hospital beds and will be staffed with at least two full-time doctors, three nurses, and will host a visiting doctor monthly. The quality of the hospital will be maintained by ensuring that there are clean sheets and blankets for beds, adequate essential medication, a standby generator to support ongoing power, and a Resting Room for overnight clinical staff. In its first year, the hospital hopes to provide services to at least 100 patients a month, as well as delivering at least 50 babies a month. Expecting and nursing mothers will be equipped with maternity kits to stay-up to date on fetal development, follow-up appointments and delivery dates. Community Health Volunteers will be able to use two motorbikes to assist patients with visiting the hospital and obtaining information. The hospital will hold weekly antenatal training, have a consultation/health education talk room, and host quarterly campaigns onsite and in the community to spread pertinent information on various health topics.

Our methods to support this project includes, coordinating with local community leaders, conducting surveys, hosting focus groups, collecting data, securing funding partnerships and

employing qualified locals to support operations and planning. In addition, we shall maintain records of delivered services, compile monthly statistics, provide training and follow-up focus groups to monitor our progress and efficiency. We will use a “Theory of Change” tool to create an evaluation plan. To ensure the ongoing operations of the hospital past year one, we have conducted extensive research to locate donors who we can target to secure future funds to support sustainability. Lastly, various social media platforms will also be used to campaign and generate sustainable income.

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# 1. Introduction

The health of a community is fundamental to advancing the well-being and longevity of its population. Despite many advances in modern medicine, many countries struggle with providing adequate health care services because of economic and/or social barriers. For developing countries such as Kenya, the lack of public health funding has resulted in widespread health inequities. The World Health Organization (WHO) noted that the estimated number of people in need of treatment in Kenya is around 220,000. Many of these people reside in Kenya's rural communities where access to health care services and health education is extremely limited.

Financing healthcare in Kenya continues to present unparalleled challenges to the government, health practitioners and policymakers. The poorly funded health system has resulted in poor health outcomes. For example, Kenya faces a high maternal and child mortality rate that is alarmingly high compared to developed countries. In 2017, the maternal mortality rate in the US was 17.7/100000 while in Kenya it is 342/100000, which is approximately 20 times higher. The Infant mortality rate in Kenya is 31.9/100000 which is 5.6 times higher than the 5.7/100000 rate in the US. The COVID-19 pandemic has exacerbated the situation. The function of hospitals as a channel to combat the COVID-19 crisis through education and vaccination of patients is a priority to reduce the spread of infections throughout the community on top of the daily needs in treating patients and eradicating other illnesses and diseases.

Currently, the Sustainable Development Goals (SDGs) aim to promote good health, good well-being, and gender equality. The Millennium Development Goals (MDGs) aim to promote a reduction in child mortality, promotion of maternal health, and combat HIV/AIDS. In order to reach these development goals in Kenya, more interventions are necessary. The construction of a modern hospital in Mt. Elgon, Kenya is a primary intervention that can reduce high rates of mortality and infectious diseases in western Kenya. We intend to construct Hearts of Care Community Hospital; a modern hospital specializing in maternal and children's health. We plan to collect funds to build an outpatient department for both women and children, as well as common wards with two units for doctors and three units for nurses. The hospital will have chairs, tables, shelves, fridges, a standby generator, beds, sheets and blankets. We aim to target a capacity of 50 hospital beds with an administration block, and gate A&B. Hearts of Care Community Hospital will be a critical component of the local community and significantly contribute to its overall well-being.

## 2. Institutional Background

Community Development and Sustainability Organization (CDS) Kenya is an NGO located in Cheptais Sub County, Mt. Elgon Kenya. CDS Kenya is concerned with good governance and advocacy, and it represents the voice and proactive action of communities in five counties as potential engines of socio-economic growth and national democracy in respective jurisdictions. CDS Kenya was formed in June 2009 for the purpose of implementing programs for peace, health, food security, human rights protection, and promoting access to education. In the past twelve years, CDS Kenya has significantly contributed and positively influenced those areas, becoming one of the most well-known NGOs in Kenya.

The mission of CDS Kenya is to facilitate development based on self-reliance and self-sufficiency through effective implementation, promotion, and support of integrated community development with the full participation, ownership, and promotion of communities.

CDS Kenya empowers communities to advance knowledge and enable access to basic needs, which promote a sustainable livelihood through self-reliance and full community participation.

CDS Kenya focuses on tackling the community challenges people face on a day-to-day basis, by providing structure and unity. Because of its goal, CDS Kenya is building a non-profit community hospital, Hearts of Care Community Hospital, in the Kimaswa region in western Kenya. This hospital will focus on the well-being of children, women, and especially mothers. CDS Kenya hopes that this will be a non-profit hospital that addresses the need for a medical facility that offers high standard treatment. The non-profit hospital will aim to treat all common diseases and serve a population of 100,000 to 200,000 people, including people crossing the border from Eastern Uganda.

In addition to offering the full range of standard medical treatment, the hospital will also operate a pharmacy and a laboratory. This makes the institution unique in the sense of its quality and diversity of services. In order to run the facilities, the hospital will rely on both local and international medical personnel. Services at the non-profit hospital will be offered for free. However, a pricing model that works on a voluntary basis will be applied and will take into account the economic situation of the patient.

It is an initiative of CDS Kenya to build Hearts of Care Community Hospital as a non-profit institution to save the lives of children and mothers, and better serve the Mount Elgon community with quality health care.

### 3. Problem Statement and Needs Assessment

The Cheptais region is west of Kenya in Mt. Elgon, with 204,000 residents. There are two major ethnic groups: the Sirisia and the Kabuchai. The region is not spared from poor health statistics below. Health seeking behavior and knowledge of danger signs of infancy were poor (Wambui et al. 2018). In 2014, Kenya only had 62% of skilled birth attendance. In contrast, developed countries such as the United States, the United Kingdom, and Canada have 98-99% of skilled birth attendance.

The Demographic and Health Survey of Kenya<sup>1</sup> suggests that women have their first birth at a median age of 20.3, which is later than the first marriage's median age. Among the available healthcare services, women in five cities in Kenya prefer public hospitals over other healthcare services. Quality of the healthcare services is overall preferable to the distance of healthcare services (Escamilla et al. 2017). High transportation costs may lead many households to prefer informal care over the quality of care (Kukla et al. 2017). Yet, there is currently no specialized hospital for women in the Cheptais area. The nearest women's hospital is the Nairobi Women's Hospital located over eight hours away.

The impacts are poor maternal and child health, poor health-seeking behavior, lack of health education and promotion programs, inefficient healthcare deliveries, and weak performance toward the SDGs. In addition to these impacts, the majority of the population in Kenya suffers from social vulnerability for cultural, economic, educational, political, and religious reasons. This social vulnerability additionally leads the population to overpay for distant services without proper quality of care (Mwangi 2013). Nevertheless, various services can be provided to prevent the described underlying problems and address the impacts and consequences of the underlying problem.

First, we anticipate more specialized care for women and children to address the problems. There is potential to substantially reduce pregnancy-related mortality in rural Kenya by ensuring all pregnant women have access to good quality skilled care during delivery which will be provided to maternal women in close proximity wards. We need to provide wards specializing in maternity and infant care in the Mt. Elgon community, to prevent the majority

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<sup>1</sup> National Bureau of Statistics-Kenya and ICF International. 2015. *2014 KDHS Key Findings*. Rockville, Maryland, USA: KNBS and ICF International.

of women from walking great distances to reach public transportation to the nearest hospital in Nairobi.

Second, we anticipate more education and investment in health promotion and education to address the problems. Women in labor with unknown HIV status will be offered HIV testing in the maternity ward, and those identified as HIV positive will receive additional services. Some new mothers, sick with HIV, may be unable to take care of their newborns, which means that sometimes the job of changing, feeding, and washing the babies falls onto the nurses.

Finally, we anticipate better quality medical supplies for preventive measures and other purposes. Educational programs and better clinical care for HIV/AIDS, malaria and tuberculosis among all women of childbearing age may help to reduce pregnancy-related mortality. Results for post-neonatal mortality shows that the level of maternal education is the single most important socioeconomic determinant of post-neonatal mortality in urban Kenya. These facts fueled the need for CDS Kenya to raise funds to create public health educational opportunities and treatment options through operating the hospital.

## 4. Program Goals and Objectives

The proposed “Hearts of Care Community Hospital” will primarily specialize in maternal and child health, and offers general health care services as well. The proposed plan aims to address health care inequity in Western Kenya by increasing accessibility to high quality health care services in the region. In addition, the plan intends to combat high maternal and infant mortality, and poor nutrition by increasing the level of education on general and maternal health within the region. The specific goals and proposed objectives are as follows:

### **First Goal**

Ensure that the community of Western Kenya, especially the women and children, have healthcare services that are easily accessible and readily available.

### *Objectives*

- Build a specialized community hospital containing a maternity ward, pediatric ward, delivery ward, premature babies ward and general ward that is accessible to at least 200,000 people in the surrounding community.
- Purchase two motorbikes to assist patients with transportation to and from the hospital.
- By the end of year one, provide services to least 100 patients every month.
- By the end of year one, deliver 50 babies in the hospital every month. By the end of year two, increase delivery rate to 100 babies in the hospital every month.
- By end of year one, send community health volunteers out into the community to assist patients with obtaining health care services and/or information by using each motorbike at least twice a week.
- Distribute maternity kits to expecting mothers in the community that contain information on the baby delivery dates, important check-up dates and free medication to encourage them to continue to visit the hospital for care throughout their pregnancy.
- By the end of year one, at least once a month, have a visiting doctor from a different medical facility provide services at the hospital to support treating more patients.
- By the end of year one, secure subsidized or donated essential medications that are affordable for the local community.

## **Second Goal**

Maintain and improve maternal, infant, and female adolescent well-being by offering health education. The topics include maternal health, neonatal health, nutrition, and infectious diseases.

### *Objectives*

- By the end of year one, there is at least one consultation/health education talk room to disseminate information to patients regarding topics such as maternity health, HIV/AIDS transmission and nutrition.
- By the end of year one, regularly supervise expecting mothers' health progress by giving them information on fetal growth and development during all prenatal and antenatal visits.
- Organize weekly antenatal training for expectant and nursing mothers.
- Host quarterly campaigns, either onsite and/or in the community, that seek to create awareness on the community's health care and nutritional needs, and to promote health-seeking behaviours in the community. At least one campaign should be targeted towards adolescents in the community.

## **Third Goal**

Improve the quality of health services delivered to the community in Western Kenya by ensuring that the hospital is adequately equipped and staffed, and offers a comfortable setting for staff and patients.

- Within the first three months, employ two doctors and two nurses as full-time clinical staff. By the end of six months, increase full-time clinical staff to two doctors and up to eight nurses.
- Ensure adequate levels of staffing (including full-time staff, part-time staff and/or volunteers) to support hospital administration, operations and sanitization.
- Purchase a standby generator to maintain enough electricity to support 24-hour operation of the hospital.
- By end of year one, there are at least 50 hospital beds, including at least eight maternity beds and at least eight hospital cribs.

- By the end of six months, there are at least three sets of clean blankets and bed sheets ready for use per every hospital bed and hospital crib.
- By the end of six months, there is at least one Resting Room for stand-by clinical staff that allows at least one doctor and two nurses to remain in the hospital overnight.
- By the end of year one, maintain a pharmaceutical room that is stocked with adequate essential medication to support the delivery of care to at least 100 patients per month.

## 5. Methods and Implementation Plan

We propose that the major solution would be to improve the healthcare of the people of Mt. Elgon especially for pregnant women, nursing mothers, and children. This requires building a hospital that provides quality healthcare services to the community. The process leading up to the success of this project is explained below.

A) Contacting the community leaders to discuss the project; this will enable us to get the support of the community.

B) Data collection: In order to ensure the program meets the Mt. Elgon community needs, a survey will be used as a feedback mechanism to drive the design of the program. Below is a sample: <https://forms.gle/fpETBrnzZm3iXEjY9>

C) Funding/Partnerships: Funding will come from various sources, including foundations, donor groups and individuals. Partnerships with pharmaceutical companies, manufacturing companies (i.e. food, textile, furniture, medical equipment, chemical reagents), organisations and NGOs with volunteer healthcare staff, such as "Doctors without borders".

D) Employment: Employing various local personnel to assist with the operations of the hospital. This includes: Contractors, Human Resource/Administrative Personnel, Financial Analyst/Accountant, Doctors, Nurses, Woodworkers, Security Operatives, Community Health Volunteers; Peer Educators, Ambulance Motorbike Driver, and Emergency Hotline Operative personnel.

E) Community collaboration with local skilled trade workers to obtain supplies and support for constructing the hospital.

F) Recordkeeping to measure performance: Maintaining logs of all patient visits, their requested services and outcomes. As well as compiling monthly statistics on: (1) number of patients treated; (2) baby deliveries; (3) hospital bed occupation; (4) maternity kit distribution; (5) medication distribution; (6) number of patients counselled on maternity health, nutrition, and HIV/AIDS; and (7) distribution of sanitary pads.

G) Project Monitoring and Evaluation System: Monitoring the efficiency of the project and that of its stakeholders (i.e. project manager, community residents, partners, medical and non-medical staff, volunteers) through training, funding, technical support, compliance and quality assurance, and follow-up sessions at the community level.

## **Plans for the Community**

### Pre-Execution

- Host campaigns that bring awareness of the need of improved healthcare to promote health-seeking behaviours.
- Set up healthcare stands where volunteers offer healthcare education and services like blood pressure checks, HIV testing, diabetes check, and cervical cancer screening to build a trust relationship with the communities prior to the opening of the hospital.

### Post-execution

- Gather members of the community, especially adolescents, twice a week to provide education on the importance of nutrition. Distribute care packages to participants.
- Weekly antenatal training for pregnant women and nursing mothers, and distribute maternity kits.
- Distribute sanitary pads to teenage girls and women; speak to youth about sexual education.

## 6. Evaluation of Plan

We apply the “Theory of Change” tool to evaluate the progress of the implemented plans.

The tool will help us to:

- develop the key evaluation questions.
- identify the key indicators for the monitoring of the project.
- identify the gaps in the available data we have obtained.
- prioritise any additional data collection we would have obtained during the course of the project.
- provide a structure for data analysis and reporting.

The tool will be reviewed/revised as the project develops when:

- there are gaps and errors that have been identified with the tool.
- previously agreed upon checkpoint occurs with the understanding that the team would review the tool at that point.
- the context of the project changes significantly.
- if the tool becomes inadequate for further evaluation of the project.

### Beneficiaries

The people we are targeting and hoping will benefit from the project will be:

1. Women and children in Cheptais Sub County, Mt. Elgon.
2. The communities around the Cheptais region in the Sirisia Districts.
3. Communities in the western region of Kenya.
4. Ugandan communities along the nearby eastern border between Kenya and Uganda.

### The actions towards our goals are:

- To develop the funding proposal.
- To acquire funding from local, international donors and organizations.
- To have campaigns that will improve the health seeking behaviour of the communities.
- To develop and build the Hearts of Care Community Hospital in the region specializing in women and children healthcare.

## **Planning**

We developed a clinical services plan allowing us to offer different services including: admission for maternity cases only, OPD for any other diseases such as: HIV/AIDS, child health and prevention of mother to child transmission, antenatal services, nutrition rehabilitation services, and treated nets to prevent and reduce prevalence and incidence of malaria

In addition to establishing donation channels on GoFundme, Google suite and Global giving, we developed this funding proposal to be submitted to our contact list that includes: local, international donors and organizations.

The financial plan (as noted in the Budget section of this proposal), clinical services plan (mentioned above), and the concept design (available below) will be used to raise \$ 200,000 USD in funds to construct OPD for both women and kids, as well common wards for both, with two units for doctors and three units for nurses. We need to prepare the hospital with chairs, tables, shelves, fridges, standby generators, beds, sheets, and blankets. This will allow us to target a capacity of 30 women and 50 children beds, build an administration block, and construct gate A&B. In general, we need to maximize the quantity of resources available to the healthcare professionals.

## **Concept Design**

### Delivery

We plan to work on a detailed design plan and a construction plan to build and equip the hospital within the set time frame and budget. Once the project is completed we will begin the staff recruitment and training phase. Meaningful partnerships with NGOs, public and private sectors, will be created to notify the community in Mt. Elgon of our available services to encourage women and children to visit the hospital, improve their health seeking behaviours, address family planning problems related to in-home births, encourage child vaccination, improve women's health awareness, and maximize capacity development.

## Stakeholders

- Beneficiaries
- Partners
- Staff
- Managers
- Donors

## Measurable effects of the work

Implementation of this project has the potential to provide substantial benefits that are extremely broad and observable in the short term and long term. These impacts can be measured by assessing the improvement of dimensions such as health, economy, efficiency, effectiveness, and satisfaction. Measurement of these dimensions will be qualitative and quantitative, and can be monitored during a period of time to examine the progress and efficiency of the project. In addition, by referencing similar existing projects, we can see how different parameters can evaluate the benefits of constructing a new medical center in an underserved area.

First, to evaluate the project benefits, we will use the following parameters:

- Mortality rate
- Rate of prenatal diseases diagnosis
- Rate of diagnosis error
- Rate of infectious disease
- Rate of early diagnosis
- Health awareness
- General hygiene
- Quality of therapeutical care
- Waste management
- Health care effectiveness and efficiency on chronic disease
- Diagnostic perspective
- Surgical variability
- Pharmaceutical expenditure
- Pharmaceutical perspective efficiency
- Pharmaceutical assistance compliance
- Rate of change to healthy lifestyle

- Healthcare effectiveness
- Healthcare efficiency
- Treatment cost
- System resilience during emergencies
- Patient Safety
- Health care staff safety
- Complexity control
- Social engagement
- Healthcare professional engagement
- Patient satisfaction
- Medical staff Satisfaction
- Govern Society demand
- Mental health improvement
- Risk reduction
- Job security
- Data security
- Rate of health employment

However, it is still possible that a hospital is not functioning at its best capacity. For instance, the project could face funding shortage in the future. Other possible setbacks include data security and waste control.

Sr No	Predicted problem	Prospective Solution
1	Less number of patients due to poor infrastructure in and around the region. The roads might not be suitable for patients to reach to the hospital.	The local communities could work together and create roads required in their locality in order to reach the hospital.
2	Less number of patients due to high costing of medicines and surgical equipment	The hospital could partner with pharmaceutical companies to ensure affordable and easy access to medicines.

3	Less number of patients due some misconceptions	Awareness programs on how taking health issues for granted or using home remedies might be dangerous
4	Shortage of funds for development of hospitals or less number of donors	Communities could donate some money for the work or help in any manner they can. Continue fundraising and have sustainable programs to keep the project running.
5	Accidental leak of Data of several patients	Experienced people should be hired when looking for people who enter, manage and handle data and adequate measures should be kept to keep data safe from virus and bot attacks.
6	Excessive waste of resources or funding	Experienced accountants should be hired and project costs should be pre evaluated in order to project the high cost areas and areas with high wastage of resources and preventive measures should be taken.

### **Impact**

What are the long-term changes we want? The Hearts of Care Hospital Project wants to improve the general health and nutrition of the residents of Mt. Elgon, Kenya, with primary focus on maternal and children's health. In addition, the project hopes to play a major role in the revitalization of the social, economic and health sector of the community. In order to realize such impact, the project aims to foster strong communication and partnerships with stakeholders.

### **Impacts on Stakeholders**

S/No	Stakeholders	Long-term change (expectations)
	Beneficiaries (simply describes the Residents of the community).	a. That they are able to afford health insurance.

		<ul style="list-style-type: none"> <li>b. That they can support their workforce through creation of employment.</li> <li>c. That there would be a serious decrease in child/infant mortality as well as maternal mortality.</li> <li>d. That there would be nutritional improvement for the mothers and children.</li> <li>e. That there would be visible growth in their physical and mental health.</li> <li>f. That there will be a decrease in other disease like malaria, Mother to child transmission of HIV, hence a decrease in these rates.</li> </ul>
	<p>Partners (entities that showed interest in the project by providing resources peculiar to them to aid the success of the project).</p>	<ul style="list-style-type: none"> <li>a. That a level of trust is built between them and the organization as they see that the project is indeed providing all that it was proposed to.</li> <li>b. That their efforts in improving health equity enhances the reputation of their businesses.</li> </ul>
	<p>Staff (members of the team that made the project a reality which includes paid workers and volunteers).</p>	<ul style="list-style-type: none"> <li>a. That the project will improve their work ethics and need to learn.</li> <li>b. That there will be improvement in the living conditions of the paid workforce through the project.</li> <li>c. That the workers get better pay and the volunteers could either get promoted to work or get good recommendations as they forge ahead to do other things.</li> <li>d. That there would be recruitment of new volunteers regularly to promote</li> </ul>

		Institutional and Organizational sustainability.
	Donors (individuals or groups that have provided monetary support to the project).	a. That they get closure on how their funding was used for the betterment of the project.
	Project Manager (the individual who manages the affairs of the project, has the job of providing information to the stakeholders, available to take full responsibility of the project before, during and after completion).	a. That he/she be promoted; this ensures that the competence acquired in the project is used accordingly to the organisation's long-term competence goal.

## **7. Future Funding and Sustainability**

In order to ensure the future sustainability of the project we have engaged in extensive research into potential large-sized donors who can support the continuous flow of funds in both the short- and long-term trajectory of Hearts of Care Community Hospital. These donors mainly center around supporting health care initiatives in Africa, with particular focus on women's health care. With regards to healthcare training, there are a range of US and UK based organisations such as AKDN and THET that provide health worker training programs in Kenya and East Africa. There are also both Kenyan and US based prospective partners who can offer a wide range of materials such as hospital equipment and health and safety equipment for construction purposes. Moreover, several Canadian and US funds offer grants to assist in construction funding for projects in Kenya, with a notable emphasis on initiatives that focus on women's and children's health in the region. It is through these sources of funding that we will be able to ensure the financial, institutional and organisational sustainability of the project.

In addition to researching and submitting proposals to large donors, we are also working on smaller sized, yet extremely effective, social platforms that can generate sustainable income from small to medium scale donors. Other social media fundraising platforms will be investigated by volunteers. The identified platforms include the GoFundMe Charity, iDonate, and many other platforms. We are also hoping to collaborate with other brands that share the same vision which can potentially aid our funding. Social Media platforms will include but are not limited to Facebook, Instagram, and Youtube. Volunteers from the United Nations Online Volunteering will create introduction and organize information on these platforms. We are confident that these social media fundraising methods will help us reach our goal of constructing Heart for Care Hospital and fulfill its vision of serving its community with a sustainable health care model for years to come.

## 8. Budget

The budget estimation in this section is based on the report “Assessing Facility Capacity, Costs of Care, and Patient Perspectives” by Institute for Health Metrics and Evaluation (2014). Given that the estimation is based on monetary costs, labour costs, and other values in 2014, it is important to note that there might be discrepancy between the estimated values and the current or future values.

### **Project Expenditures**

The total expenditure for the development of this project is US Dollars (USD) \$373,016 or Pound Sterling (GBP) £267,884. The usage of this funding is spread between three phases:

- 1) Phase 1: Construction: Amounting to USD \$174,766 (GBP £125,509) or 46.8% of total expenditure, this phase covers the building of the hospital. The projected completion of this phase is anticipated to be the end of Phase 1, with weekly cash flows evenly split to accommodate construction.
  - a) Outcome: Hospital built with 50 hospital beds, including at least eight maternity beds and at least eight hospital cribs by the end of the Phase 1.
- 2) Phase 2: Hospital Equipping: Amounting to USD \$24,483 (GBP £17,582) or 6.6% of total expenditure, this phase covers equipping the Hospital with requisite patient rooms, equipment, and material . The projected completion of this phase is anticipated to be the end of the first XX Time.
  - a) Outcome: five sets of clean blankets and bed sheets ready for use per every hospital bed and hospital crib by the end of the Phase 2.
- 3) Phase 3: Hospital Operation: Amounting to USD \$173,768(GBP £124,793) or 46.6% of total expenditure, this phase covers the final remaining costs for medical supplies, and the integration of hospital staff. The projected completion of this phase is anticipated to be the end of the XX time.
  - a) Outcome: Adequate essential medication to support the delivery of care to at least 100 patients, full staffed by the end of the Phase 3.

Overall, subject to changing macro-conditions within the community, construction labour may fluctuate depending on local employment conditions. In addition, the cost of materials will be subject to the final supplier agreement.

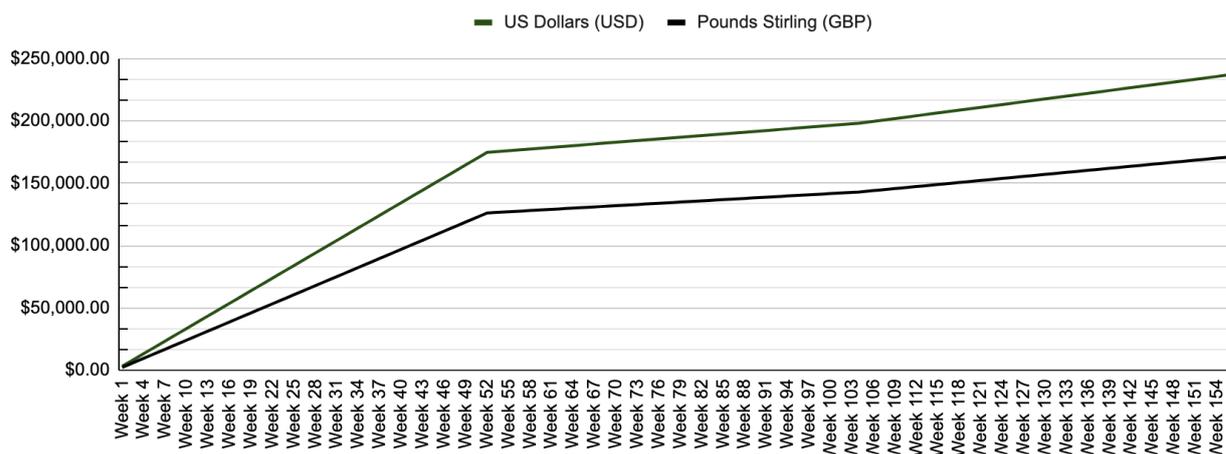
The project budget for revenues and expenditures are as follows:

Projected Budget of Expenditures					
Expenditures	Unit	Amount (USD)			
		Year 1	Year 2	Year 3	
1. Construction Phase	Cut Sones (6"x 9")	6000 - (6"x 9")	\$6,000	-	-
	Bars, Bindings, Wires		\$2,475	-	-
	Iron Sheets (Various Sizing)	650 - (Various Sizing)	\$13,000	-	-
	Roofing Timbers (4"x 2" & 3"x2")	2800 - (4" x 2" & 3" x 2")	\$33,000	-	-
	Nails	910	\$3,100	-	-
	Doors (3'x7')	17 - (3'x7')	\$2,000	-	-
	Doors (5'x11')	1 - (5'x11')	\$300	-	-
	Locks for Doors	18	\$500	-	-
	Windows (4'x4)	56	\$5,200	-	-
	Cement (Bamburi Type)	2500	\$4,200	-	-
	Sand	1600 Tonnes	\$1,920	-	-
	Rough Stones	120 Tonnes	\$1,500	-	-
	Wire Mesh	50 pcs	\$1,340	-	-
	Drainage Construction/Plumbing		\$4,300	-	-
	Pit Laterinces		\$6,300	-	-
	Electrical Wiring & Installation		\$10,000	-	-
	Paint		\$7,500	-	-
	Perimeter Wall Construction & Gates		\$8,500	-	-
	Drilling of Borehole and Tank Installation (30 Liter Capacity)		\$12,300	-	-

	Septic Tank Construction & Installation		\$10,000	-	-
	Excavation		\$1,000	-	-
	Construction Labour (Labour Rate of Total Construction Costs)		\$40,331	-	-
<b>Phase Total Cost</b>			<b>\$174,766</b>	<b>-</b>	<b>-</b>
2. Clinic Equipping Phase	Beds	50	-	\$8,000	-
	Bed Sheets	150	-	\$1,500	-
	Bed Mattress	100	-	\$8,000	-
	Blankets	150	-	\$1,333	-
	Tables	24	-	\$5,000	-
	Chairs	30	-	\$650	-
	Motorbikes	2		\$2,400	
<b>Phase Total Cost</b>			<b>-</b>	<b>\$24,483</b>	<b>-</b>
3. Clinic Operation Phase	Fuel	Annual	-	-	\$1,200
	Nurses	Annual	-	-	\$56,417
	Security	Annual	-	-	\$15,912
	Doctors	Annual	-	-	\$39,332
	Accountant	Annual	-	-	\$9,449
	Administrator	Annual	-	-	\$8,636
	VCT Counsellor	Annual	-	-	\$17,822
	Drugs for Hospital Startup	Annual	-	-	\$25,000
<b>Phase Total Cost</b>			<b>-</b>	<b>-</b>	<b>\$173,768</b>

Based on the projected timeline for this project, the weekly cash flows are shown as follow:

### Cumulative Weekly Cash Flows (USD & GBP)



### Project Revenues

Following the completion of Phase 3 of the project development, the hospital will be in full operation. Based on the goals of the hospital, it is anticipated to service 100 patients per month, and delivery of 50 babies in the hospital every month. By the end of year two, this should increase to a delivery rate to 100 babies in the hospital every month. Based on the Institute for Health Metrics and Evaluation, Kenya’s average cost per outpatient visit is estimated at USD \$10 / visit, while the cost of birth average cost per birth is USD \$106 / Delivery.

Projected Budget of Revenues			
Revenue	Unit	Amount (USD)	
		Phase 4	
4. Operation Revenues	Cost Per Delivery	\$106 / Delivery @ 600 per Year	\$63,600 (Year +2: \$127,200)
	Cost Per Inpatient Visit	\$10 / Visit @ 1,200 per Year	\$12,000

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# Appendix: Hospital Construction Plan

Figure 1: Hospital Design Plan. The hospital is designed to be eco-friendly and sustainable.

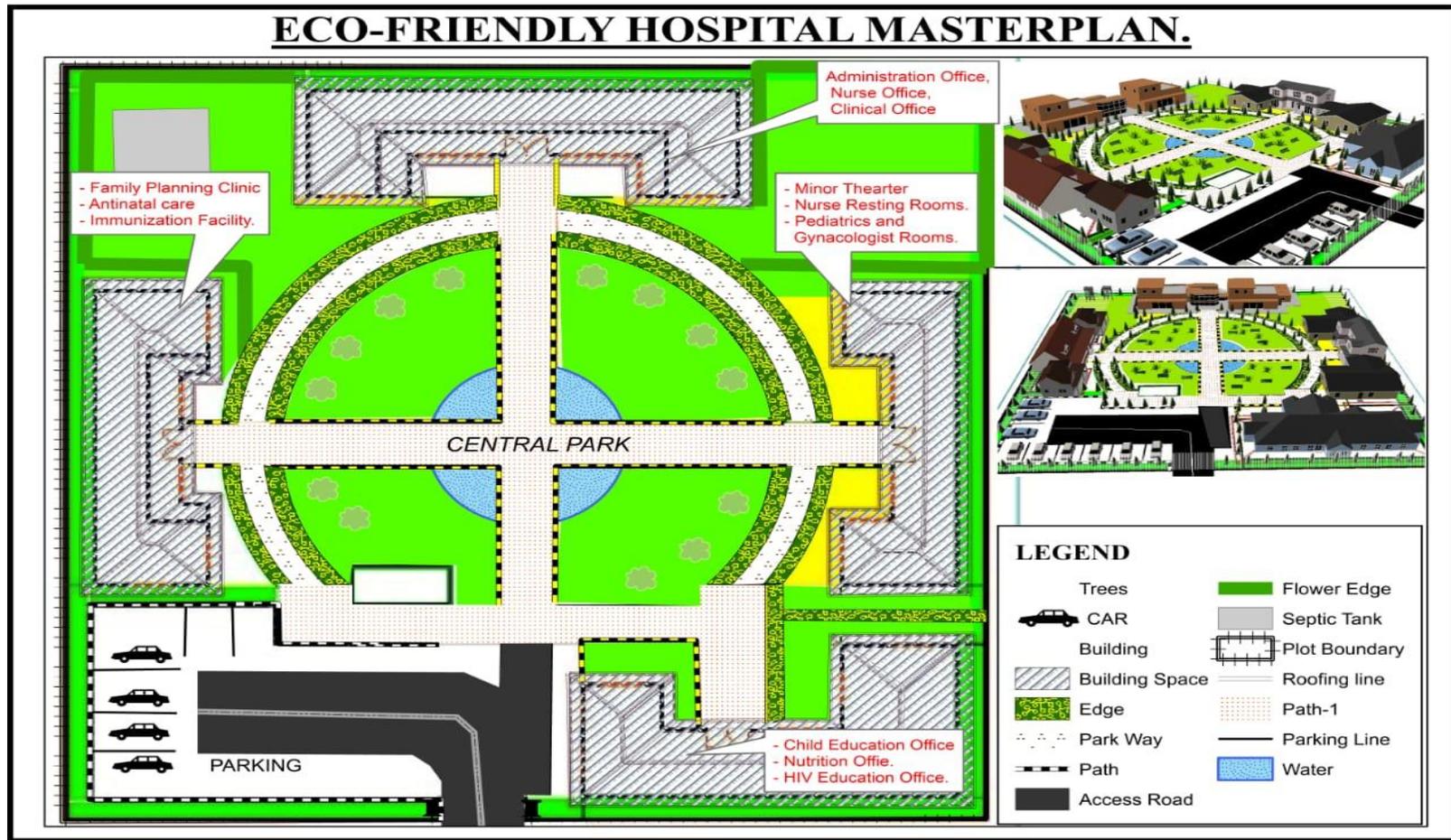


Figure 2 and 3: Hospital Exterior Designs under two different angles.



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All works are completed under the approval from Peter Chem, the legal representative of CDS Kenya. For detailed information about CDS Kenya, consult the project information sheet on page 2.

CDS Kenya reserves the right of final interpretation.



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