



I Aid Africa®



# Healthy Hospital

## Phase 1 Kolandoto Hospital Survey

Version 2



## TABLE OF CONTENT

INTRODUCTION

DIRECTORATE

PARTNERS

BACKGROUND

DESCRIPTIONS OF PROBLEMS AND NEEDS

TARGET GROUP

PROJECT GOALS

SUBGOALS

INDICATORS

ACTIVITY PLAN

TIMEFRAME

BUDGET

RISK ANALYSIS/MITIGATION

PROJECT FOLLOW UP



## INTRODUCTION

The project is developed by the non profit Non-Governmental Organization (NGO) I Aid Africa the spring of 2014 in cooperation with AICT Kolandoto Hospital, Engineers without borders and Architects without borders. Discussion with Kolandoto about their electricity and water problems have been held for a long time and IAA sent a representative to the hospital 2012 to gather more information but IAA did not have capacity at the time to respond to the needs. A new assessment is needed to move forward.

## DIRECTORATE

Jon Gunnarsson Ruthman (Vice president I Aid Africa)	Project coordinator I Aid Africa
Jan Burenius Henrik Danielsson	Project coordinator Ingenjörer utan gränser (Engineers without borders)
Saga Karlsson	Project coordinator Arkitekter utan gränser (Architects without borders)
Mikael Mangold (PHD student Chalmers)	Technical advisor and coordinator
Dr Elimeleki Katani	Hospital Director Kolandoto Hospital
Methuselah Nkaka	Electricity responsible Kolandoto Hospital
Julius Omango	Water and waste responsible Kolandoto Hospital
Annika Danielsson (Master student in architecture)	Group leader survey team
Andreas Berg (Master student in engineering)	Survey team member
Daniel Kallus (Master student in engineering)	Survey team member

## PARTNERS

**Engineers without borders** is a Swedish NGO and they are a part of a international network which supports development projects based on engineering, often is cooperation with local organizations and their goal is to find technical solutions adapted to and with respect to local capacity, culture and values.

**Architects without borders (ASF-Sweden)** is a NGO which is a part of the network ASF-International which works for sustainable and socially equitable architecture. They aim to



create better opportunities for people in difficult living situations and disasters as well as solve financial and knowledge based obstacles in the way of a safe, fair and sustainable environment. Their projects are in cooperation with local organizations and seek to involve the community.

### **African Inland Church Tanzania (AICT)**

The AICT is a religious community whose goal is to support individuals, families and communities, both physically and spiritually. The organization is working to try to achieve quality health care for all individuals, regardless of economic status. AICT has several medical facilities and also conducts field activities. The organizations headquarter are based in Mwanza, Tanzania.

AICT Kolandoto hospital is located in the northwestern region of Shinyanga. The hospital has cooperated with IAA since 2008.

## **BACKGROUND**

During 2012 Kolandoto asked IAA for support with their electricity and water problems. IAA's representative Julius Alewaryo Massawe made an initial assessment (Appendix 1).

At the time IAA did not have the necessary capacity and funding to be able to execute the initial recommendations given in the assessment. Since then the situation has changed in the capacity of IAA but also regarding the situation in the hospital.

During the spring of 2014 contacts were made with engineers without borders and Mikael Mangold as a technical advisor. Mikael invited architects without borders into the group to expand our scope.

## **DESCRIPTION OF NEEDS AND PROBLEMS**

**Water:** Problems with the water pump, limited water sources in comparison to the number of users and expected growth, high fluoride levels in the water, leaking water pipe system. See appendix one for further information.

**Electricity:** Power cuts are common, emergency generator does not have enough capacity. See appendix one for further information.

**Hospital Design:** There is no long-term plan for the hospital. Problems identified is the logistical flows of patients, staff, material and air throughout the hospital are assumed to



create room for errors and cause infections. See appendix 2 for further information.

There is a need for a more in depth assessment and further planning before IAA and the involved partners can move further.

## TARGET/RECEIVER

- AICT Kolandoto Hospital
- Patients of the Hospital
- Kolandoto Village

## PROJECT GOALS

- Provide a report/blueprint for a sustainable infrastructure at Kolandoto Hospital

## SUBGOALS

- Assess water supply and treatment, sanitation and solid waste handling, electricity and energy supply before 15<sup>th</sup> of April 2015.
- Assess patient flow, logistics of materials, staff flow, indoor climate, medical zoning, and architectural support systems for infection control before 15<sup>th</sup> of April 2015.
- Provide an estimated budget based on the proposed solutions for phase 2 before 15<sup>th</sup> of April 2015.
- Submit application for support for Phase 2 from Swedish International Development Agency (SIDA) before the 1<sup>st</sup> of May 2015

## INDICATORS

- Assessment/report including budget handed to IAA before 15<sup>th</sup> of April 2015
- Application submitted to SIDA before 1<sup>st</sup> of May

## SURVEY

The surveys will be conducted in the project area under the umbrella of two master thesis's. One architect student and two engineer students have been chosen to conduct the



survey.

Annika Danielsson's project proposal for her master thesis appendix 3.

Andreas Berg and Daniel Kallus project proposal for their master thesis appendix 4.

Report template appendix 5.

## TIMEFRAME

- Spring 2014 cooperation started
- Phase one designed June 2014
- July 2014 Project visit by IAA's representative Benjamin Grossmann
- Autumn 2014, identifying candidates for the studies
- Project visit by Mikael Mangold December 2014
- Survey team arrives February 2015
- Report handed in to IAA before 15<sup>th</sup> of April
- Application submitted to SIDA before 1<sup>st</sup> of May
- Project visit by Jon Gunnarsson Ruthman end march 2015
- Spring 2015 planning Phase 2

## BUDGET

Surveys will be financed by grants from SIDA through their Minor Field Study program (MFS).

If "quick fixes" can be performed during phase one, money can be applied for through the framework *Healthy hospitals*, see appendix 6 for application for funds. All three organisations have an initial budget for phase 1 of 10 000 SEK which together makes 30 000 SEK.

## RISK ANALYSIS/MITIGATION

See framework for overall risk assessment

- Risk: That suitable candidates are not found for the field study  
Mitigation: IAA and the partners will do our best to find suitable candidates, if not possible it might be necessary to push the study until good candidates have been found
- Risk: That the report comes up with solutions that Kolandoto do not want to



implement

Mitigation: Constant communication between Kolandoto and contact persons are vital. Kolandoto hospital is the owner of the project and IAA and its partners are only supporting. It is vital that Kolandoto takes ownership of the project and is part of every step of the way.

- Risk: That MFS scholarships are not given

Mitigation: If all partners together cannot find the financial means to support the project it might be necessary to postpone phase one until the support can be found.

## PROJECT FOLLOW UP

- Continuous communication between the different partners
- After phase one is finished it will be evaluated by students and all partners involved
- If interventions is performed in phase one they will be evaluated in individual project reports.