LUI HOSPITAL – NEW WATER SOURCE NEEDS

This report aims to provide a brief overview of the critical issues related to the water supply of Lui Hospital and proposes a solution.

Context Description

Lui Hospital is situated on a compound of less than 6 hectares with a perimeter of 1000 meters Googlemap link here .

The compound has 9 main medical pavilions and 12 buildings for non-hospital functions (medical staff houses, offices, school complex).

The hospital has 120 beds with an average occupancy rate of 75%. It also hosts:

-pregnant women (at least 20 per day);

-hospital-based medical staff (at least 6 persons);

- relatives of hospital patients (at least 1 per patient).

On average, at least 250 people are present in the hospital every day, in addition to about 60 patients who are received at the OPD from 8 to 17.

Criticality

In February 2023, the failure of the pump that feeds the hydraulic system of the hospital was caused by a probable lowering of the aquifer.

For over 7 days, water had to be drawn from a collection basin located 5km from the hospital, which caused many inconveniences.

Proposed Solution

Although the current pump has been positioned at a greater depth, the risk of further lowering of the water table in periods of prolonged drought persists.

For this reason in order to avoid in future new inconveniences, CUAMM intends to excavate a new well, possibly on the opposite side of the compound, to draw water from a different aquifer.

The excavation of a new well - with a solar pump, storage tank, tank-castle, and distribution system - is estimated to cost about 42,000 USD, based on market research carried out in October 2022 for the PHCC of Adior (Yirol) (see Annex 1) which has similar requirements to Lui Hospital.

Annex1_Quotation_Borehole_Adior_Gre

Annex2_LH4_Draw_BackupWell.pdf

The quotation has been confirmed as valid on 31/03/2023.

In conclusion, the water supply issue at Lui Hospital in South Sudan is a critical problem that requires urgent attention. The recent failure of the pump caused many inconveniences and highlighted the need for a more sustainable solution. With a new well, the hospital can ensure a reliable and sustainable water supply, which is crucial for the proper functioning of the hospital and the well-being of patients, staff, and visitors.

Antonio Maini, 03/04/2023