DOCTORS WITH AFRICA CUAMM

INTEGRATING CLEAN COOKING AND HEALTH AND NUTRITION STRATEGIES

EXPERIENCE FROM NORTHERN ANGOLA

photo © Nicola Berti

BACKGROUND AND RATIONALE

Household air pollution (HAP) resulting mainly from biomass fuels used in cooking is linked to negative health impacts and premature death, affecting nearly half of the global population-especially in low-income, resource-limited communities. The World Health Organization (WHO) identified HAP as a **major environmental health risk**, responsible for 7.7% of global deaths in 2016[1]. This includes 25% of chronic obstructive pulmonary disease cases, 12% of strokes, 17% of lung cancers, 45% of pneumonia-related deaths in children under five, and an increased risk of burn injuries[2]. Women and children in these communities are the most affected, accounting for 60% of all HAP-related deaths[3].

Currently, **970 million people in Africa lack access to sustainable cooking solutions**, and Angola mirrors this challenge, with only 50% of the population having access to clean cooking. In Uíge Province, this rate drops to 25%, and the continued reliance on wood and charcoal for cooking exacerbates deforestation, pollution, and health risks. Ensuring access to clean cooking in sub-Saharan Africa by transitioning from traditional to improved cookstoves (ICS) is also recognized as a key step towards SDGs, including those related to environmental sustainability (13), sustainable cities and communities (11), clean energy (7), gender equality (5), poverty reduction (1) and health (3).

To address the issue the Clean Cooking project promotes **sustainable cooking** in rural and peri-urban areas by replacing traditional stoves with improved cookstoves (ICS). The project also integrates **health and behavioral change interventions**, enhancing its overall impact and sustainability.

Launched in April 2024, the project implemented in collaboration with the Salesians of Don Bosco, Eni and the Government of Angola aims to distribute 200,000 ICS units in the target areas by 2028 reaching approximately **1 million people**. This distribution will also provide an opportunity to simultaneously reach a larger number of families with hygiene and nutrition awareness interventions.

The primary objectives of the project are:

- **Generate** high-quality carbon credits in compliance with the Gold Standard for voluntary carbon offset projects through the adoption of more efficient cooking devices by local populations, therefore contribute to Eni's decarbonization goal of achieving net-zero carbon emissions by 2050.
- **Integrate** ICS distribution with hygiene and nutrition promotion activities, and strengthening of the local health system.

KEY FIGURES

970 MILLION
estimated number of people lacking access to sustainable cooking solutions in Africa

50%
of the population having access to clean cooking in Angola

25%
of the population having access to clean cooking in Uíge

[1] WHO, 2021.
[2] WHO, 2022.
[3] WHO, 2021.

UÍGE PROVINCE:
MUNICIPALITIES

AN INTEGRATED APPROACH

The consistent use of ICS will help lower household smoke exposure, improving health conditions while saving time and money on fuel collection. The project will enhance the thermal efficiency of stoves, reducing reliance on firewood and charcoal, combating deforestation, and lowering carbon emissions. The project not only promotes cleaner cooking but also includes a **health education component** to raise awareness about **basic hygiene and nutrition.** It will be implemented across **16 municipalities in Uíge Province**, targeting vulnerable communities.

In addition, a **Social and Behavior Change (SBC) strategy** using the *Família Modelo* methodology, will be adopted in **3 selected municipalities** with the aim to improve domestic hygiene behaviors to reduce the prevalence of malnutrition, malaria and infectious diseases at the household level. Developed and tested in similar contexts, this approach has been adopted by Mozambique's Ministry of Health with UNICEF support. The methodology focuses on observable behaviors such as handwashing and using simple, low-cost technologies made from locally available materials. Trained Community Health Workers (CHWs) will engage families in behavior promotion and assist in building practical hygiene devices. A dedicated monitoring system will track the impact of these behaviors on malnutrition rates and health outcomes. The intervention will be rolled out through training, community engagement, baseline data collection, monthly behavior promotion, and quarterly monitoring. The approach is designed to be **scalable, sustainable, and adaptable** to local contexts.

Furthermore, a **"Health Plus" component** will be integrated into the project's strategy in the three target municipalities. Its main goal is to promote **safer, healthier cooking methods** through the distribution of improved cookstoves, while addressing community awareness, health worker skill development, and access to health services. The component focuses on **managing malnutrition** through prevention, community screening, and care for Moderate and Severe Acute Malnutrition (MAM and SAM), aiming to reduce Global Acute Malnutrition (GAM) in the region. It also supports the prevention of trypanosomiasis, a major health issue in the area.

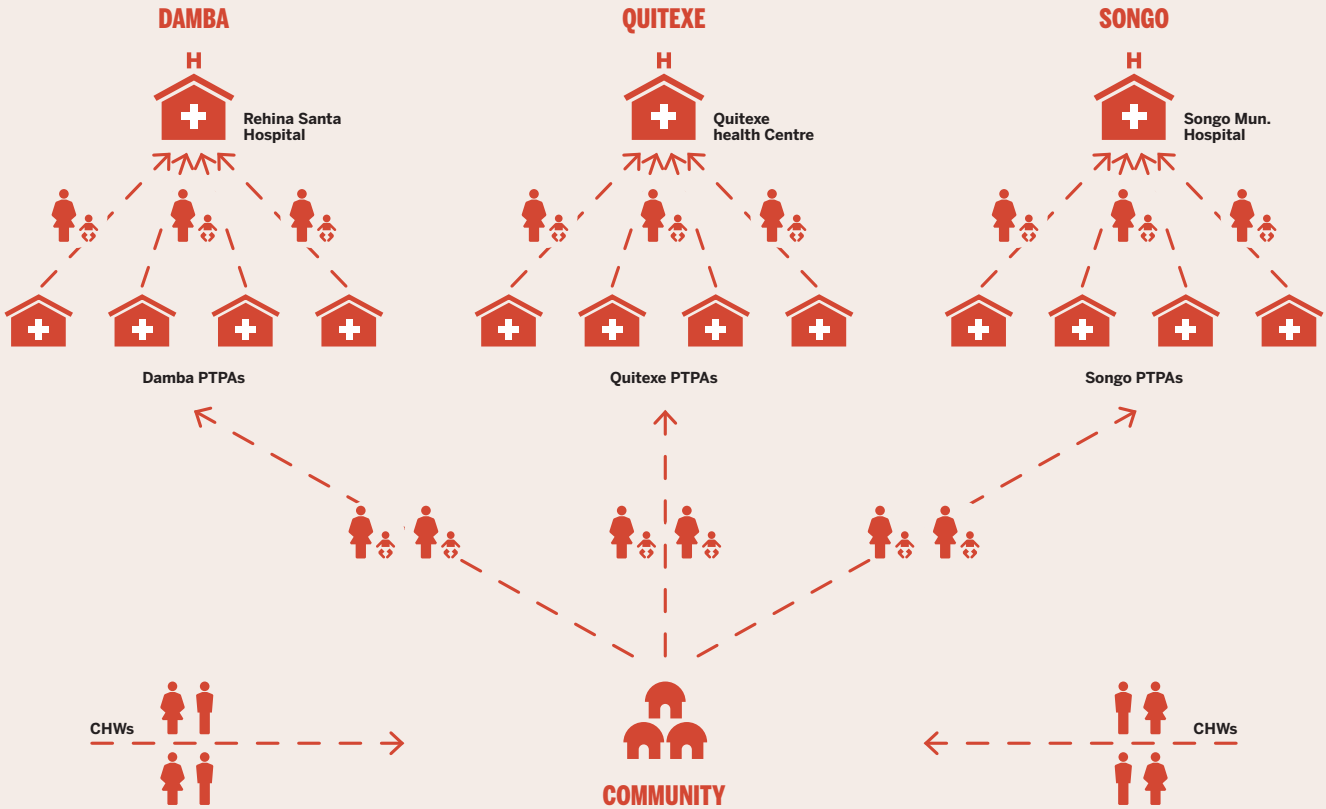
The three target municipalities namely Damba, Quitexe, and Songo were selected based on factors such as local health authority support, malnutrition rates, healthcare infrastructure, and the presence of trained community health workers. The project's assessment revealed gaps in malnutrition care, including insufficient infrastructure and staff for treating acute malnutrition, and the lack of necessary therapeutic resources in most of the health facilities. To improve healthcare, the project will establish **Special Nutrition Units (UEN)** in hospitals and **Therapeutic Program for Patients with Malnutrition in the Outpatient Clinic (PTPA)** in health centers to treat both moderate and severe malnutrition cases effectively.

The component will also focus on improving child malnutrition care in Damba, Quitexe and Songo municipalities by strengthening community health workers (CHWs) and local health facilities. Key activities include:

- conducting community assessments to engage local leaders and CHWs;
- providing training for CHWs on malnutrition screening;
- organizing cooking demonstrations.

Health centers will establish Therapeutic Program for Patients with Malnutrition in the Outpatient Clinic (PTPAs) to treat Moderate Acute Malnutrition (MAM) and Severe Acute Malnutrition (SAM) without complications, while health staff will be trained on proper screening and referral protocols. Special Nutrition Units (UENs) will be set up in three hospitals to manage complicated SAM, supported by child-friendly spaces and open kitchens for nutrition education. The project will also support local authorities through training and joint health facility supervision. The goal is to **build local capacity for sustainable malnutrition treatment and prevention**.

U-5 MALNUTRITION REFERRAL SCHEME



MAIN BENEFITS

The added value of the initiative implemented by Doctors with Africa CUAMM will focus on the following **key areas**:

1. **Distributing improved cookstoves** and raising household awareness on their proper use and the benefits of consistent utilization.
2. **Social and Behavior Change (SBC) interventions**:
   - The project is conducting basic hygiene and nutrition sensitization activities in all households reached by the distribution.
   - In 3 out of 16 municipalities the SBC strategy will be centered on the *Família Modelo* approach with the objective to improve domestic hygiene behaviors, aiming to reduce malnutrition and infectious diseases at the household level.
3. **Strengthening the health system** through health and nutrition interventions at the community, health post, and hospital level.


photo © Nicola Berti

DOCTORS WITH AFRICA CUAMM

Doctors with Africa CUAMM
via San Francesco, 126
35121 Padova

international@cuamm.org
www.doctorswithafrica.org