ENGINEERS WITHOUT BORDERS KNUST CHAPTER

## NEWSLETTER 8TH EDITION

# THE KITCHEN STOVE PROJECT

By the kitchen stove project team

#### **Project background**

 Inception and about the project

**Current Stage of the Project** 

**Project Gallery** 

Induction always available once you join the team via www.ewbknust.com

GROUP MEETINGS AT Petroleum Building 012 EVERY FRIDAY 5:00PM.

EWB KNUST Newsletter - JUNE 2022



#### PROJECT BACKGROUND



As we all know, food is vital when it comes to sustaining human life. It is a basic need for every human. The people who prepare this food are also equally important, and the kitchen stove team was formed to help make working easier for these people.

The kitchen of the Ullo SHS is the main focus of the kitchen stove project. The kitchen staff, who ensure that food is always available to students, are not working under the best conditions. They cook in an open space on traditional make-shift stoves that produce much smoke and need constant maintenance.

However, on a trip to the school, it was noticed that there was a well-built kitchen with modernized cookstoves, but it wasn't in use. The team asked the women why it wasn't in use, and they were informed that although the stoves would have helped them a lot, the ventilation was relatively poor. For people cooking in that small space for many students, the situation was very understandable.

The kitchen stove teams of the EWB-KNUST and EWB-ISU came together to help solve the issue and improve their working conditions. The goal is to build a spacious, well-ventilated kitchen with improved

and modernized cookstoves. There have been several trips to the school to assess the situation, gather data, and take all the needed measurements.

In December 2021, a trip team revisited the school and built the first prototype. It was one stove unit with two cooking sections. A smoke test was done to make sure the cooking area wouldn't be engulfed in smoke and also to make sure the smoke went through the smoke channels through to the chimney as it was designed to be. The turnout was satisfactory.

During the most recent trip to the school last February, more tests were run, and new assessments were done to check for the outcome of the prototype stove, its effectiveness, efficiency, and to listen to the feedback of the kitchen staff since they were using the stove.

The fuel consumption test proved the kitchen stove to be very efficient, and cooking was done more swiftly. There were some smoke leakages and cracks too. The kitchen staff also requested a covering of the metal pipe chimney to prevent accidental burns when one accidentally touches it.

### CURRENT PROGRESS



The team is currently working on ways to correct the faults, add more beneficial updates to the kitchen stove, and do their best to improve the designs and attain the goal of building effective and efficient modernized cookstoves that will make life more comfortable for the kitchen staff of the Ullo SHS.

### GALLERY









### GALLERY









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