



Report on the EWB-KNUST Uilo Trip

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This report summaries the activities that took place during a visit by a team from Engineers Without Borders (EWB) KNUST to Uilo in the Upper West Region of Ghana.

## **Abstract**

The Engineers Without Borders (EWB) KNUST chapter, embarked on a journey to Ullo, a small farming community in the Upper West Region of Ghana. A team of 5 people embarked on the trip. The trip team consisted of 2 students, a faculty advisor, a project coordinator and a driver. The trip was embarked on to provide training for the natives of Ullo on post-harvest loss mitigation using a PICS bag for storage of grains and nuts.

# Table of Contents

<b>Abstract</b>	2
<b>Table of Contents</b>	3
<b>List of Figures</b>	4
<b>Chapter One: Introduction</b>	5
<b>1.1 Purpose of the trip</b>	5
<b>Chapter Two: Post-Harvest Loss Mitigation Training</b>	6
<b>Chapter Six: Conclusion</b>	10

## List of Figures

Figure 1: Demonstration of how to use the PICS bag	7
Figure 2: Elizabeth, the volunteer from one of the communities	8
Figure 3: George Obeng-Akrofi presenting a chart to one of the representatives.	8
Figure 4: Mr. Constantine, a Self-Help International Official, during the training	9
Figure 5: All who were present at the training	10

## **Chapter One: Introduction**

The Ullo community is a town in the Upper West region of Ghana. The main occupation of the inhabitants in this community is farming. Some engage in subsistence farming and others, large scale farming. According to the research conducted, many of the farmers were complaining about post-harvest losses they incur because of the lack of good storage bags and mediums for the storage of their grains and nuts. After some research was conducted on three different storage bags in the Agricultural and Biosystems Engineering Department at KNUST, it was concluded that PICS bag will help curb most of the post-harvest losses the farmers complained about.

### **1.1 Purpose of the trip**

The trip was embarked on to provide training for the natives of Ullo on post-harvest loss mitigation using a PICS bag for storage of grains and nuts. After the training, the team from KNUST together with George Obeng-Akrofi went to check the status of the existing projects that were initiated by the EWB-KNUST and EWB-ISU partnership.

## **Chapter Two: Post-Harvest Loss Mitigation Training**

The training started around 10:00am with the team from KNUST, officials from Self-Help International, George Owusu, George Obeng-Akrofi and natives from Ullo. There were about 37 representatives from the communities in and around Ullo. Chief Hassan graced the training with his presence.

George Owusu, who is a friend of George Obeng-Akrofi and an employee of Ghana CocoBod engaged the trainees initially with songs and stories. Dr. Joseph Oppong Akowuah took over when George Owusu was done. As part of this engagement, training was conducted on the factors that cause reduction of the quality of stored grains and nuts, and how best to reduce post-harvest losses. It was made known to them that some of these factors include moisture content, the temperature and relative humidity. Also, some agents like pests and rodents have adverse effects on the produce. Farmers were advised to always make sure their produce are within the safe moisture content range before storage by using a Grainmate moisture meter to determine its moisture content. The device was shown to them and they appreciated it.



*Figure 1: Demonstration of how to use the PICS bag*

Due to the language barrier, a translator was needed. A volunteer from one of the communities, Elizabeth, translated the words of the speakers to the local language for easy comprehension by the natives.



*Figure 2: Elizabeth, the volunteer from one of the communities*

Charts showing how to use the PICS bags and other post-harvest reduction techniques were presented to the farmers according to groups. Chief Hassan and Officials from Self-Help International presented these charts to the groups.



*Figure 3: George Obeng-Akrofi presenting a chart to one of the representatives.*

Self-Help came in and encouraged the farmers to do their best and entreated the natives to come to them when they need help, as far as agriculture is concerned. They emphasized that they wanted only serious people who were ready to help themselves.



*Figure 4: Mr. Constantine, a Self-Help International Official, during the training*

The training came to an end at 3:00pm with closing remarks being given by the chief of the community and the Assistant Head Master (Academics) of the Ullo Senior High School.



*Figure 5: All who were present at the training*

**Chapter Compiled by: Samuel Owusu Nsiah, Student Member, EWB KNUST.**

Finally, after the training, the outstanding project sites were visited. It was observed that one of the three poly tanks of the water team, the last one, was not filled with water. The assumption was that the water in the second tank was not able to flow through the pipes. It was also observed that there was an urgent need for the construction of a bridge to enable motorists and other members of the Ullo Traditional Area to move freely during the rainy season.

## **Chapter Six: Conclusion**

The team eventually departed the satisfied and expectant community at about 4:41 pm on Wednesday, 11<sup>th</sup> June 2021 after completing all scheduled activities. The team returned to the guest house at Jirapa to rest for the night. The next morning at about 8:30am the team left Jirapa and continued to Kumasi through Wa, Bole, Techiman and finally arrived in Kumasi at about 6:00 pm. Overall, the trip was very successful and all targets were met at the end of the trip.