

# Breaking postharvest bottlenecks: Long-term sweetpotato storage in adverse climates

“TRIAL SET UP IN MALAWI”



**Sweetpotato**  
Profit and Health  
**Initiative**

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**A USAID-OFDA Disaster Reduction Research: On-  
farm Sweetpotato Storage in Ghana and Malawi**

## Implementing organization:

- International Potato Center (CIP)
  - Catholic Relief Services (CRS)
  - Catholic Development Commission based in Mzuzu, North Malawi (Mzuzu-CADECOM)
  - Min of Agriculture and Food Security (MoAFS)
  - Three farmers' communities in Central and Northern Region of Malawi:
    - Zombealaki, Kasungu District,
    - Chizerema, Kasungu District,
    - Champira, Mzimba District
- These communities are under the supervision of CRS-CADECOM

# Strategic plans



- Identifying the key individual farmers.
- Getting an appropriate numbers of farmers.
- Refreshing the knowledge and skills of the NGOs and government extension and the farmers on sweetpotato production management, postharvest handling and processing and utilization.
- Training on the data collection and management (extension & farmers).
- Setting up the trial at harvest and data collection.

# TRIAL SET UP



- 3 villages in 2 districts
- 30 participants per village
- 3 storages:
  - Afghanistan ventilated pit storage
  - Ladder pit storage
  - Granary
- 2 types of sweetpotato:
  - Local varieties (white and yellow flesh)
  - OFSP (Zondeni)
- 3 replicates per village



# Assessments



## Test of consumer acceptance at

0 month: mid May 2014

1.5 months later: end of June

2 months later: end Aug 2014

2.5 months later: mid Nov 2014

## Test on market orientation:

**End June 2014** during the harvest period in June 2014

**Mid Nov 2014** where the sweetpotato is scarce

**Test on Beta-carotene for OFSP varieties:** End of June and Mid November 2014

# Training on Pests and Diseases including a negative selection for SPVD





Good cultural practices  
can boost a good yield  
and clean





## Training on Processing and Utilization:

Increase of knowledge on OFSP to reposition sweetpotato, and Behavior change







Mandazi,  
Juices (leaves and roots),  
One-pot meal  
(at least 3 food groups in a dish), etc





**Afghanistan  
Ventilated Pit Storage**  
(a slight modification from the pit storage  
introduced by CRS)





**Ladder Pit Storage with “dry” sand**  
(slightly modified Malawian storage)



**Granary covered by clay-cement with “dry” sand**  
(improved Malawian storage)

→ *useful for flood prone areas*





# Thank you very much for you attention

