

Innovation Lab for the Reduction of Post-Harvest Loss News & Updates

Happy Earth Day from PHLIL!

Greetings PHLIL team members and stakeholders! Since Earth Day of last year, PHLIL has been hard at work with our collaborators, scaling technologies and securing funding to continue research that supports the reduction of food loss and waste on our precious planet.

We celebrate this Earth Day by sharing a story featured on the Feed the Future website about one of our very own collaborators in Ghana, and how her adoption of post-harvest technologies have aided in the reduction of food loss and waste. <u>Click here to read Josephine's story</u>.



Global food loss and waste results in \$1 trillion in losses annually. Curbing food loss and waste represents a critical, immediately available strategic intervention to bolster resilience through the looming food security crisis *while* addressing and helping food systems adapt to climate change. Food loss and waste contributes nearly 10% of anthropogenic greenhouse gasses, and taken as a country falls only behind China and the USA. You can read more about the the linkages between food loss and waste and climate change through these resources:

Food Waste and its Links to Greenhouse Gases and Climate Change, 01.24.2022

How We Can Counter Climate Change by Reducing Food Loss and Waste, 04.12.2022

Feed the Future's Food Loss and Waste Fact Sheet, 09.21.2021

PHLIL Secures Nearly \$2M in New Funds:

PHLIL Awarded a \$1M Costed Extension to Operate through 2022

<u>Click here to read</u> the official announcement about PHLIL's year 9 extension with program activities continuing in Bangladesh and Ghana.

PHLIL Kicks off \$1M Food for Education Project in Malawi

<u>Click here for the press release</u> announcing a new \$1M USDA-Foreign Agricultural Service program award that PHLIL team members have been collaborating on. PHLIL is a subaward grantee of leader, Nascent Solutions.

Hermetic Cocoons in Bangladesh

In late 2021, the PHLIL-Bangladesh team hosted trainings on the BAU-STR dryer, gender sensitizations, hermetic bag storage, and the newly introduced hermetic storage cocoons. The combination of GrainPro hermetic bags and cocoons help maintain a modified environment for stored paddy seed to retain quality, protecting the seed from moisture, mycotoxin development, and insect or pest damage.

Additionally, the Bangladesh Agricultural University team has held a number of trainings and meetings with public sector ag organization, BADC (Bangladesh Agricultural Development Corporation), government officials. BADC representatives have commented that the cocoons would be an effective technology for safe storage of seed and suggested piloting the use of cocoons in additional BADC locations to build user and stakeholder confidence. Crucial policy dialogues are planned for 2022 as this technology scales with Bangladesh farmers and beyond.

BADC supplies almost 25% of the country's rice paddy seeds, and they are considering adoption of cocoons for all of their operations. Cocoons eliminate the need for pesticide application and associated mid-storage handling efforts.

Pictured below: PHLIL-Bangladesh team members pose with BADC officers and employees of the seed division after hosting a training on the BAU-STR dryer and hermetic cocoons in early December 2021.



Congratulations on your Promotion!

Congratulations to PHLIL Director Jagger Harvey on his promotion to Full Professor in the Department of Plant Pathology at Kansas State University. Well deserved, Professor Harvey!



New Trials for the Arc'teryx Tent Dryer

The Arc'teryx tent dryer, previously tested in Ethiopia (spring 2021), has now been further adapted and shared for additional trials with two PHLIL partner institutions: Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, Ghana and Bangladesh Agricultural University.

In Ghana, KNUST will conduct efficiency and adaptation tests with the dryer and provide recommendations on integrating and scaling of this technology into the everyday life of the smallholder farmers and rural entrepreneurs. An assembled team of economists, engineers, and food science & nutrition experts are working to determine nutrient-dense perishables that could be optimally dried using the innovative tent dryer.

Results from the study will also be useful in Bangladesh as a 3rd set of tent dryers was donated by <u>Arc'teryx</u> and sent to the BAU team in early 2022 for validation experiments.

Pictured below: [*left*] PHLIL Consultant, Mike Friend, shakes hands with KNUST Engineer, Joseph Akowuah, during a December 2021 inaugural setup of the tent dryer. [*right*] Team members at Bangladesh Agricultural University follow a manual provided by Arc'teryx Lead Engineer, Tom Fayle, as they conduct an inaugural setup of the tent dryer in April 2022.





Meeting with the Mayor

Members of the PHLIL Leadership Team and External Advisory Council visited Ghana in November - December 2021. While in Accra, the team was invited to meet with the Office of the Mayor to present and discuss potential future collaborations with the city. Mayor Elizabeth Sackey is the first female mayor of Accra.

Representatives from the office emphasized that Accra is seeking better ways to develop urban food systems to feed its growing population and remediate its paradoxical problem of food loss and waste while hunger and malnutrition devastates much of the population of Accra. PHLIL is inspired by the passion and dedication to help transform Accra under Mayor Sackey's Economic Recovery and Resilience Plan.

Pictured below: Mike Friend, Jagger Harvey, and Bob Zeigler of PHLIL sitting across from members of the Accra Mayor's Office. It should be noted that PHLIL gender specialist,

Anna Snider, recently had a follow-up meeting with the mayor's representatives while traveling to Ghana this spring.



ADMI Decennial and Webinar Series

The year 2021 marked a major milestone for PHLIL partner, ADMI: the 10 year anniversary! To celebrate the occasion ADMI hosted a series of informational webinars throughout Q1 of 2022. ADMI's webinar series addressed post-harvest loss reduction through food systems research, innovations, and capacity building. Clink on the image below to view past webinars.













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