



# WHERE WE WORK



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FEED THE FUTURE
INNOVATION LAB
FOR THE
REDUCTION OF
POST-HARVEST LOSS







### **ABOUT PHLIL**

The Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss (PHLIL) is a strategic, applied research and education program aimed at improving food security by reducing post-harvest loss of seeds and long-term storage crops, e.g., grains, oilseeds and legumes.

Under the joint leadership of Kansas State University and the ADM Institute for the Prevention of Postharvest Loss at the University of Illinois, PHLIL serves as part of the U.S. Government's Feed the Future initiative to reduce global hunger and improve food security. The initiative uses research, education and outreach to advance solutions to mitigate hunger, poverty, and under-nutrition in low-income countries.

Through collaborations between U.S. universities and local universities, research institutions and other partner organizations, PHLIL is conducting research, testing and outreach to contextualize and address current post-harvest loss factors and task division in rural communities and households.



Post-Harvest Loss (PHL) estimates are distressingly high considering the current/estimated future need for food. These losses represent food that could have been used to reduce food insecurity and hunger and to increase food quality/safety, nutrition and market opportunities for the small landholder. PHL reduces real income for all consumers, which especially affects the poor, because such a high percentage of their disposable income is devoted to staple foods. PHL reduction also has significant gender implications since staple food production in most developing countries is the responsibility of women.

### WHAT WE DO

- Enhance the capacity of smallholder farmers for drying, handling, storage, pest management, transportation, reducing/eliminating mycotoxin/ aflatoxin development and marketing of their crops, and thus improving the quantity and quality of crops.
- Improve the capability of smallholder farmers to store and preserve the quality/quantity and enabling them to choose at what point in the price cycle to sell their crops to increase profit for themselves.
- Pilot test promising "on the shelf" and "in the field elsewhere" best practices and technologies that need further refinements and input from end-users in order to ensure countryspecific scale-up and commercial uptake, while minimizing negative environmental impacts.



- Investigate cultural, social and economic factors, with specific attention to gender issues, that affect local stakeholders and their interactions with post-harvest practices/technologies and utilizing this information to structure recommended changes/technologies to help ensure their adoption.
- Use local artisans, business people and workers to create and develop, where possible, locallyproduced tools and technology to aid in the sustainability of resources and practices.
- Employ advanced information technologybased systems to more rapidly evaluate and disseminate promising PHL innovations for application where needed in our focus countries.
- Increase the quantity and quality of stored food staples and dietary diversity, along with countryspecific nutrition education, thus increasing access to nutritious food and reducing undernutrition and food insecurity.