ADMI Institute for the Prevention of Postharvest Loss University of Illinois

Despite the lingering effects of a worldwide pandemic, ADMI and our research partners have continued to conduct research, advance innovation, build capacity, and disseminate knowledge to reduce postharvest loss. This report summarizes some notable outcomes and progress reported in 2022 and early 2023.

Supporting Research

100% of insects were eliminated in 30-ton hermetic storage cocoons tested for seed storage at the Bangladesh Agricultural Development Corporation (BADC). Bangladesh Agricultural University (BAU) researchers have been testing cocoons at BADC processing and storage sites for the past 3 years. The research indicates that insects cannot survive in the hermetic environment, and seed germination is improved.

1.5% higher harvest losses are reported by Brazilian farmers when they ask a third party to harvest versus doing the work themselves, according to <u>ADMI-funded</u> research by Illinois professor Mary Arends-Kuenning.



University of Illinois researchers interviewed Bangladeshi women farmers in February to establish baseline data for the new project.

56.5% Although women make up more than half the agricultural labor force in Bangladesh, they don't receive the same supports as men. A new ADM Cares-funded project will identify gaps women smallholders face in accessing mechanized service providers for drying and threshing services.

Scaling Innovation



50-70% government subsidy has been approved for the BAU-STR dryer in Bangladesh, making it more affordable for farmer groups and small entrepreneurs.

20 small businesses launched using BAU-STR dryers purchased by the Bangladesh Ministry of Food. The public-private partnership to incubate new agriculture-focused service providers includes training on drying practices and moisture management by Bangladesh Agricultural University engineers.



Testing of the 12-ton mesoscale drying unit (above) is complete at the Moti Auto Rice Mill. Efficiency calculations for this site are helping engineers at BAU create nationwide recommendations for efficient mill operations.

Building Capacity

16 officials from the Bangladesh Ministry of Food attended a 2-week short course in Illinois, the third since 2016. The training was the final in the Integrated Food Policy Research Program series.

> **500+** women farmers in Tanzania and Uganda received marketplace social sustainability literacy training to help them explore changes to help them succeed in the face of a changing climate.

5 animated <u>SAWBO videos translated to Krio</u> to train farmers in Sierra Leone about solar grain dryers and hermetic storage for grains and legumes. The PHL Experimental Training Hub at Njala University has benefitted from several ADM Cares grants to build this valuable program.

Sharing Knowledge

200+ attendees from all over the world attended ADMI's 3-part webinar series in spring 2022, which drove new traffic to our website and social media accounts, in addition to fostering new connections.

2x ADMI's reach on Facebook and LinkedIn more than doubled over the past year, boosted by the 10-year anniversary webinar series, new blog posts, and regular posts and shares by postharvest sector colleagues.



Bangladesh Ministry of Food officials learn about specialty cooperative operations at Clarkson Grain in Cerro Gordo, Illinois, during the Integrated Food Policy Research program.

15 Marketplace Literacy Program videos in Hindi and English specifically focused on postharvest loss field-tested with farmers in India and refined for broader use as extension resources in future projects.



Associate Director Maria Jones (second from right) spoke about ADMI's work in a postharvest loss side event at the Borlaug International Dialogue in Des Moines, Iowa. Sponsored by Michigan State University, fellow panelists were from the Gates Foundation, Bayer, and Penn State and Texas A&M universities.

FUNDING SOURCES AND MORE INFORMATION

Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss Funding: USAID Partners: Kansas State University, Bangladesh Agricultural University (BAU) go.illinois.edu/phlil

Postharvest Loss Prevention Training and Outreach through the PHL Training Hub Funding: ADM Cares, ADMI Partners: Njala University, AgReach postharvestinstitute.illinois.edu/njala-phcoutreach/ Integrated Food Policy Research Program Funding: World Bank

Partners: International Food Policy Research Institute (IFPRI), Bangladesh Institute of Development Studies (BIDS), Bangladesh Ministry of Food

www.ifpri.org/project/integrated-food-policy-andresearch-program-ifprp

Educating Women Farmers on Marketplace Social Sustainability during Climate Change Funding: ADM Cares Partners: Marketplace Literacy Project

go.illinois.edu/MarketplaceLiteracy

Women and Youth Adoption of and Access to Postharvest Mechanization and Entrepreneurial Models in Bangladesh Funding: ADM Cares Partners: Bangladesh Agricultural University, Smart Agro-Technology Innovation Youth Network (SAIYN) postharvestinstitute.illinois.edu/womenentrepreneurship-mechanization/

More about ADMI projects and partnerships postharvestinstitute.illinois.edu/projects/



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