

Postharvest Situation

The Philippines are a major rice importer. In the postharvest (PH) sector losses are caused by manual harvesting, sun-drying and poor storage. Physical losses are between 15-25% and quality losses are evenly high. Farmers don't value add. Through the Philippine Rice Self Sufficiency Program (PRSSP), the Philippines seek to be rice self-sufficient by 2013.

Objective

- To reduce postharvest losses and thus contribute to the objectives of the PRSSP.
- Improve farmers' incomes through better postharvest management and better marketing of their rice.

Major Partnerships

- Philippine Rice Research Institute (PhilRice).
- Seed growers in Bohol, Camarines Sur and Agusan del Norte.
- Grainpro, Inc. Manufacturer of hermetic storage systems.
- NGO: CRS, Mariphil,
- Philippine Rice Postproduction Consortium (PRPC).
- Local government units and other local institutions.

PPWG Sites

The PPWG currently has major pilots in three provinces, Bohol, Camarines Sur and Agusan del Norte. Interested partners from other provinces are invited to join through the Learning Alliances.

Major Activities

- Participatory Impact Pathway Analysis, PIPA (2009).
- Initiation of postharvest Learning alliance (LA) and conduction of annual LA meetings (2009-2011).
- Needs assessment and baseline studies in 6 provinces (2009-2010).
- Capacity building and participatory verification of hermetic storage with seed growers (2010-2011).
- Roadmap for development of business models (2010).
- Support transfer of reversible air flow flat bed dryer from Vietnam to PhilRice, adaptive research (209-2010).
- Piloting of semi-automatic rice husk furnace (2010).
- Assessment of mycotoxin contamination in postharvest in 3 villages (2010-2011).

Technologies

- Hermetic storage systems.
- Reversible air flow flat bed dryer with 4t capacity.
- Rice husk furnace for dryers.
- Village moisture meters and grain quality kits.

Examples for Technologies and Outcomes

Hermetic storage of farmers' seeds

In tropical climates farmers' seeds loose germination within a few months. In the Philippines local seed producers multiply seeds for farmers and also provide other inputs. Hermetic storage enables them to maintain high germination rate for a year and longer.



Hermetic storage verification at Mariphil Farmers Cooperative, Panabo, Mindanao

Through their networks the local seed producers can also make hermetic storage technology available to farmers.

Semi automatic rice husk furnace

Dryers are often not being used because operating costs are high. Rice husk is a cheap alternative to fossil fuels but traditional rice husk furnaces are labor intensive and pollute significantly. The project is piloting a new, semi-automatic rice husk furnace, which has clean combustion and low labor



Learning alliance

One of the challenges in out-scaling improved postharvest technologies is the complexity of the postharvest value chain which includes many stakeholders from rice harvesting, following operations like drying, milling and final marketing. To embrace these stakeholders from public and private



Learning alliance members assess low cost moisture meter

Sectors the project facilitates a national postharvest Learning alliance. Learning alliance members meet regularly to discuss ongoing activities, capture the learning, and plan follow-up activities.

Plans for 2011

- Continue hermetic storage verification with seed growers.
- Piloting of the reversible air flow dryer.
- Establishing a supply chain for hermetic storage.
- Development of business models for hermetic storage.

Issues to be addressed beyond 2011

- Development of business models for the dryer.
- Out-scaling of business models.
- Out-scaling of the dryer.
- Policy dialog to create a more favorable policy environment for development of the Postharvest sector.
- Institutionalizing the Learning alliances.

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ADB RETA 14
 RETA14: Addressing the pre- and postharvest challenges of the rice supply chain.
 RETA15: Strategic Research for Sustainable Food and Nutrition Security in Asia.



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