

Postharvest situation

The Philippines is a major rice importer. Its postharvest (PH) sector losses are caused by practices such as manual harvesting, sun-drying, and poor storage. Physical losses range from 15 to 25% and quality losses are evenly high. Farmers do not add value. Through the Philippine Rice Self-Sufficiency Program (PRSSP), the Philippines seeks to be self-sufficient in rice by 2013.

Objectives

- Reduce PH losses and thus contribute to the objectives of the PRSSP
- Improve farmers' incomes through better PH 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 Foundation
- 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 (2009)
- Initiation of PH Learning Alliance (LA) and conduct annual LA meetings (2009-11)
- Need assessment and baseline studies in six provinces (2009-10)
- Capacity building and participatory verification of hermetic storage with seed growers (2010-11)
- Road map for development of business models (2010)
- Support transfer of reversible air flow flat bed dryer from Vietnam to PhilRice, adaptive research (2009-10)
- Piloting of semi-automatic rice husk furnace (2010)
- Assessment of mycotoxin contamination in three villages (2010-11)

Technologies

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

Technologies and outcomes

Hermetic storage systems for farmers' seeds

In tropical climates, seed germination rate can decline rapidly. In the Philippines, seed producers multiply seeds for farmers. Using hermetic storage enables the seed growers to maintain high germination rate for a year and longer. Through their networks, local seed producers can also make hermetic storage technology available to farmers.



Hermetic storage verification at Mariphil Farmers Cooperative, Panabo, Mindanao

Semi-automatic downdraft rice husk furnace

Dryers are often not being used because of high operating costs. Rice husk is a cheaper 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 requirement.



Learning Alliance

One of the challenges in scaling out improved PH technologies is the complexity of the PH value chain, which includes many stakeholders from rice harvesting, following operations like drying, milling, and final marketing. Involving these stakeholders from public and private sectors of the project facilitates a national PH Learning Alliance. Learning Alliance members meet regularly to discuss ongoing activities, capture the learning, and plan follow-up activities.



Learning alliance members assess low cost moisture meter

Plans

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

Issues to be addressed

- Development of business models for the dryer
- Out-scaling of business models
- Out-scaling of the dryer
- Policy dialogue to create a more favorable policy environment for developing the PH sector
- Institutionalizing the Learning Alliance

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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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