

Postharvest Situation

Lao PDR reached self sufficiency and envisions surplus and exports of rice in the near future. The local markets have many traditional aromatic varieties. On-farm postharvest losses are high and the paddy received by rice mills has low quality which results in low milling yields. Lao does not have standards for rice yet. All postharvest (PH) equipment is imported and postharvest capacity of institutions is extremely low. Farmers don't value add but store significant amounts of grain and seeds on farm, with high losses.

Objectives

- Improve farmer's income through better postharvest management to reduce losses and improve quality.
- Assist the industry to improve paddy quality and milling efficiencies.
- Assist Government with national standards, building capacity in postharvest, and assist in technology transfer from neighboring countries.

Major Partnerships

- NAFRI, national rice program.
- Agricultural research stations: NARC, Savannakhet, Louangphrabang.
- Private sector: Dryer manufacturer.

PPWG Sites

- NARC and 3 villages close by.
- Savannakhet.
- Louangphrabang.
- Dryer workshop in Vientiane.

Major Activities

- Three week PH training at IRRI (September 2005).
- Assessment of the Postharvest Situation (2005).
- Surveys of three rice markets (2005-2006).
- Hermetic seed storage trials in 3 research centers (2005) and 3 villages (2006 and 2007).
- PH training (e-learning and hands-on) for 22 participant from public and private (July 2006)
- Transfer of drying technology from Vietnam including participation in dryer training in Vietnam (2005 - 2007)
- Assessment of seed processing lines in Savannakhet and Champasak research stations (2006).
- Participation in combine training in Cambodia (2007)
- Assessment of rice mills for export oriented production in a consultancy to ProRice project (2007)
- Provide laser leveling equipment (2007)
- Provision of rice quality kits and moisture meters.
- Three two day PH training courses (2008).
- Laser leveling, combine harvester training courses in Savannakhet (2008)

Major Technologies

- Hermetic storage systems.
- Drying technology transfer using Vietnamese dryers.
- Mini Combine harvester (through training in Cambodia)
- Laser assisted leveling

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Examples for Outcomes and Impact

Drying technology transfer

In October 2005 IRRC had sent the manufacturer Outhay Thaimany and an extension official to Vietnam to participate in an IRRC dryer manufacturing training at Nong Lam University in Ho Chi Minh City. After returning to Lao Mr. Thaimany has started local production of Vietnamese type dryers and started adapting them to local needs.



4t dryer in Vientiane



Fans for low cost dryer



Dryer training at NARC

Anticipated impact

- Reduced losses and higher incomes from better quality
- One 4t dryer can serve up to 80 farmers per season

Outcome as of September 2007:

- One demo dryer with 4t capacity at Vientiane
- One dryer with 1t capacity installed in Savannakhet
- 30 low cost dryers for demonstration in the provinces.

Capacity building

In 2004 three participants from Lao participated in a three week postproduction training at IRRI, Philippines. This was followed-up by a two day hands-on postharvest training at NARC combined with 1 day of e-learning.



Training participant Singly Voradeth advising a farmer on how to use the hermetic Super bag for seed storage trials

Plans until 12/2008

- Assist in setting up national grain quality lab and in the development of national rice standards.
- Follow-up on ProRice activity (improve paddy quality through village level extension).
- Evaluate potential for and initiate the formation of a national postharvest workgroup.

Major PH issues to be addressed beyond 2008

- Develop and implement a capacity building strategy addressing the key PH stakeholders.
- Expand partnership with more PH stakeholders for better impact and facilitate more public private partnerships for better delivery to all postharvest stakeholders.
- Piloting extension of PH technologies in cluster villages in Savannakhet.
- Value chain integration of postharvest interventions (all stakeholders, incl. extension, financing and marketing).



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