Adding Value to Africa’s Rice

by Savitri Mohapatra

Africa researchers are looking at every step rice goes through to lessen waste and improve its value to help raise income, improve rice quality, and expand the market for locally produced rice products.

About one-third of the food produced in the world never reaches our plates. Not only is this a colossal loss but all the resources used to produce, harvest, process, and market it are also squandered. The project involves Cameroons, Gambia, Ethiopia, Malawi, Nigeria, Senegal, Sierra Leone, and Uganda. It seeks to introduce improved harvesting and postharvest practices and equipment throughout the value chain to achieve high-quality grain.

More smallholder farmers and processors in Africa’s rice sector are women who often have fewer rights than male farmers to access the vital resources they need to farm, process, and sell. The project will therefore make sure that women farmers will obtain their fair share of attention in rice R&D.

The project aims to develop new rice-based products, explore innovative uses of husks and straw, improve the policy environment, and build the capacity of rice stakeholders. By 2020, postharvest losses are expected to decline by 10% and will help increase farmers’ nominal annual income in the eight project countries by about $32 million.

Each project will have national facilitators, we train one lead facilitator who will then continue training others,” said project coordinator Dr. Jean Moreira. In 2013, 17 facilitators from 11 countries were trained to construct the ADRAA-SAFEDIS (AS) thrasher-cleaner. A light thrasher has also been developed especially for women farmers in Uganda.

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Rice policy

The project will focus on AfricaRice’s ongoing efforts to harmonize rice policy across the region through the Global Rice Commodities Program. “In the long run, rice will be cheaper when the continent is producing rice as the basis of a breadbasket and not depending on imports,” remarked Dr. Aline Dugne, former program leader of Policy, Innovation Systems, and Impact Assessment at AfricaRice.

Scientists are working with producers to improve quality and processing, while also working with consumers to catalyze rural enterprises and raise rice nutrition, especially for women farmers and processors in our region,” said Ms. Lynda Hogan, scientist at the Food Research Institute (FRI) in Ghana.

Reusing waste products

Rice straw in Africa mostly dispose of rice straw from fields by burning it, which helps control rice disease and pest problems. However, burning rice straw emits carbon dioxide (CO2), which is the major cause of global warming.

As part of the project, AfricaRice, in partnership with FRI, is supporting a study in Ghana to assess rice straw and husk as potential substrate in cultivating mushroom. The study also ascertained the potential of the spent compost (the organic matter left over after mushrooms grown on rice straw have been harvested) as a biorefinery.

Rice husks. Traditionally, rice husks (or hulls) are wasted in Africa. Stockfeed, rice husks are either dumped near the mills, where they not produce methane (a potent greenhouse gas), or burned in the fields, thus polluting the atmosphere.

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Building capacity in rice postharvest technology

Building capacity of rice stakeholders throughout the value chain, from farmers, through millers and parboilers, to marketers is a vital part of the project.

"We have had lots of cross-fertilization of ideas and scientific outputs thanks to the project,” observed Dr. Paul Nji Johnson from the Council for Scientific and Industrial Research in Ghana.

"Some of the success stories can be replicated and scaled up through the Rice Hub network initiated by AfricaRice.

By helping actors along the value chain add value to rice, the project is helping raise income, improve rice quality, and expand the market for locally produced rice products.

Ms. Mohapatra is the head of Marketing and Communications at AfricaRice.

1. SHANAHAN, CHRISTOPH, et al. Improved rice husk bio-oil of higher quality than locally produced rice. A project named PARDO (Cleaning and Processing of Rice) at the University of KwaZulu-Natal.
2. USAID, et al. “Rice for Africa.” A project named PARDO (Cleaning and Processing of Rice) at the University of KwaZulu-Natal.
3. WISE, JAY, et al. “Rice for Africa.” A project named PARDO (Cleaning and Processing of Rice) at the University of KwaZulu-Natal.
4. USAID, et al. “Rice for Africa.” A project named PARDO (Cleaning and Processing of Rice) at the University of KwaZulu-Natal.

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