The Lao PDR-IRRI collaboration started in the late 1960s and, by the 1970s, saw the testing of improved rice breeding material from IRRI’s breeding and selection work in the country. Systematic multilocation yield trials took place in 1973, followed by multiplication and dissemination of several IRRI lines and varieties to farmers.

The first memorandum of understanding between Lao PDR and IRRI was signed in 1987. Collaboration intensified, however, when the Swiss Agency for Development and Cooperation (SDC) supported the Lao PDR-IRRI Research and Training Project from 1990 to 2007. The project sought to improve and strengthen the country’s rice research capacity and included research support, development, and training. An offshoot of the project was the development of a national rice research network that by 1995 included all provinces.

On 12 January 2007, Sitaheng Rasphone, minister for agriculture and forestry of Lao PDR, and Robert Zeigler, IRRI director general, signed a memorandum of understanding to establish a regional hub in Lao PDR. As a result, the IRRI-Greater Mekong Subregion office was formally opened. The office has since become the IRRI office in Lao PDR.

In October 2011, IRRI consulted Lao PDR partners in Vientiane, gathering government scientists and researchers, extension workers, policymakers, and donors in the rice sector in a workshop that defined areas of collaboration—improvement of good seed production practices, and the testing and establishment of public-private partnership models for disseminating agricultural technologies. Results from the workshop, combined with policy changes, feed into the development of strategies for rice research and development for the country.

On 11 May 2012, IRRI welcomed H.E. Thongsing Thammavong, prime minister of Lao PDR, in a visit he made to the institute’s headquarters while on trip to the Philippines.

Since 1968, IRRI has hosted more than 260 scholars and training participants—40 of whom are women—from Lao PDR.

IRRI has had at least 13 staff members posted to Lao PDR.

IRRI’s work in Lao PDR is currently supported by the International Fund for Agricultural Development, the Bill & Melinda Gates Foundation, the Australian Centre for International Agricultural Research, and the Government of Japan.

Key achievements

- **Conservation of rice genetic diversity.** Lao PDR has entrusted more than 15,000 types of rice—the second highest contribution of seeds from a country—for safekeeping at IRRI’s International Rice Genebank. In turn, IRRI has dispatched 750 rice samples to Lao PDR for breeding and other research purposes, and restored more than 11,000.

- **Improved rice production.** Total rice production in Lao PDR increased from 1.5 million tons in 1990 to more than 2 million tons in 1999, at which time the country achieved rice self-sufficiency. The SDC-supported Lao PDR-IRRI project was underway at the time. In 2012 and 2013, rice production exceeded 3 million tons (Source: FAO).

- **Adoption of modern rice varieties.** By 2004, modern rice varieties had been adopted in Lao PDR on 69% of rice land. Varieties developed with IRRI accounted for 51% of these and included TDK 1, TDK 5, PNG 1, and PNG 2. In 2008, 87% of farmers in major rice-growing plains and 67% of those outside these areas grew improved glutinous rice varieties.

- **Improved crop management practices.** A 7-step best management practices manual and poster for rainfed lowland rice were developed and adapted. It covered variety selection, good seed production, land preparation, crop and field management, harvesting, and storage.

- **Research support.** IRRI helped build up Lao PDR’s national rice research system, having hosted more than 60 scholars and more than 180 trainees from the country.
Current collaboration

Better rice varieties. Improved varieties, such as those with tolerance for submergence and drought, are being developed and field tested in Lao PDR.

Coping with climate change. Working with Lao PDR researchers, IRRI also tested seasonal weather forecasting in combination with crop and nutrient management systems toward developing a decision-support tool to help farmers better cope with climate change.

Better grain quality. Under IRRI’s Plant Breeding Division and Grain Quality and Nutrition Center, the aroma of Lao PDR-grown rice is being enhanced to improve quality, value, and export appeal.

Help for upland rice farmers. Through the Consortium for Unfavorable Rice Environments, IRRI is helping farmers in Lao PDR’s northern mountain region (A) find varieties that suit the specific environment and (B) upgrade agricultural practices to help minimize environmental impact.

Sharing knowledge. IRRI is helping further develop the Lao PDR Rice Knowledge Bank, an online repository for best management practices in rice production.

International Rice Research Institute (IRRI)

The International Rice Research Institute (IRRI) is the world’s premier research organization dedicated to reducing poverty and hunger through rice science; improving the health and welfare of rice farmers and consumers; and protecting the rice-growing environment for future generations. IRRI is an independent, nonprofit research and educational institute founded in 1960 by the Ford and Rockefeller foundations, with support from the Philippine government. The institute, headquartered in Los Baños, Philippines, has offices in 15 rice-growing countries in Asia and Africa, and about 1,180 staff members of some 40 nationalities.

Working with in-country partners, IRRI develops advanced rice varieties that yield more grain and better withstand pests and disease as well as flooding, drought, and other destructive effects of climate change. More than half of the rice area in Asia is planted to IRRI-bred varieties or their progenies. The institute develops new and improved methods and technologies that enable farmers to manage their farms profitably and sustainably, and recommends rice varieties and agricultural practices suitable to particular farm conditions as well as consumer preferences. IRRI assists national agricultural research and extension systems in formulating and implementing country rice sector strategies.

Contact
Grant Singleton
Principal Scientist
g.singleton@irri.org
c/o IRRI Lao PDR (Vientiane)

August 2016

Rice science for a better world