



## UC DAVIS AND THAILAND – PARTNERS IN DEVELOPMENT

**UC DAVIS**  
UNIVERSITY OF CALIFORNIA

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UC Davis has a proud history of partnering with universities and government organizations in Thailand. Together, our researchers are finding ways to improve harvests, protect wildlife, and improve quality of life for the poor. Since 2010, UC Davis researchers have co-authored over 700 scholarly publications with colleagues in Thailand.

Together we have made new scientific breakthroughs, benefited from rich cultural and intellectual exchanges, and helped to prepare the next generation of leaders with world-class teaching and training.

UC Davis is committed to strengthening out dynamic and fruitful partnerships in Thailand and across Asia. As our university expands its presence in the region, we look forward to continuing our work with partners in order to increase knowledge, exchange ideas, and positively impact society worldwide.

## HELPING SMALL FARMS GROW

For many smallholder farmers in Southeast Asia, buying and trading vegetable seeds is risky business. Due to the humid climate, seeds often deteriorate, leading to poor harvests.

Seeking to help farmers increase their yield, UC Davis' Horticulture Innovation Lab developed the Drying Bead, in partnership with Thai company Rhino Research.

Drying Beads are placed in seed storage containers, protecting these precious seeds from excess moisture. The revolutionary beads can be reused over and over, greatly increasing farmers' profits.

Over 3,600 people have been trained in the use of Drying Beads in Thailand, India, Nepal and Bangladesh, leading to better incomes and improved harvests.





## PROTECTING HUMAN AND ANIMAL HEALTH

Led by UC Davis' One Health Institute, the PREDICT project brings together global partners to protect the health of people, animals, and the environment worldwide.

PREDICT has helped enhance the Thai government's ability to detect and monitor potentially dangerous pathogens, strengthened diagnostic testing capabilities, and built capacity among Department of National Parks staff to ensure biosafety.

Our research focuses on areas where people are increasingly in contact with wild animals, monitoring bats, monkeys, and rodents for diseases that could potentially threaten humans and domestic animals.

Our researchers have identified and are monitoring potentially dangerous diseases in bats, which – similar to SARS – may have the ability to infect humans.

Our Thai partners include:

- Faculty of Forestry, Kasetsart University
- Department of National Parks, Wildlife and Plant Conservation (DNP)
- Ministry of Public Health
- AFRIMS: Armed Forces Research Institute of Medical Sciences
- Department of Livestock and Development

# SUSTAINABLE AGRICULTURE INNOVATION

In 2012, UC Davis' Horticulture Innovation Lab established its Asia Regional Center at Kasetsart University in Thailand.

The center provides training programs, facilitates the evaluation and adaption of horticultural technologies, and develops mechanisms for sharing ideas internationally.

The center serves Thailand, Bangladesh, Nepal and Cambodia by providing training for farmers and horticultural professionals, technical assistance and innovative technologies.

Working with UC Davis' sustainable energy and engineering researchers, the Horticulture Innovation Lab has developed many sustainable technologies:

- Specialized nets that protect crops from pests, control temperature, and balance humidity and soil moisture
- CoolBot controller substantially reduces the cost of cool storage environments, reducing post-harvest lost of fruits and vegetables due to rot
- Chimney Solar Dryer lets farmers harness the power of the sun to dry fruits and vegetables for sale at market
- Solar Pumps make irrigation affordable and efficient for small farms





## KEEPING FOOD FRESH

Dried fruits, vegetables, beans, and nuts provide wonderful sources of nutrition and income long after harvest. But, farmers in Thailand have often struggled against the humid climate to properly dry their produce, leading to spoiled food and lost sales.

Working with our partners at Kasetsart University, the UC Davis Horticulture Innovation Lab is helping farmers in Thailand process and preserve their crops long after harvest.

Our team developed the Dry Card, an inexpensive humidity indicator now being used to show humidity in dried foods. It has helped reduce food waste, allowing farmers to increase their profits while protecting the food safety and nutrition of their dried goods.

The team continues to refine the product based on feedback from farmers, and is using the project to help teach the next generation of students how to develop practical tools that meet real-world needs.

## PRIVATE SUPPORT

Your support will help the partnership between UC Davis and Thailand blossom. We invite you to join us in expanding our projects in Thailand and beyond.

For more information on private support, please contact Marina Tan Harper at [mtharper@ucdavis.edu](mailto:mtharper@ucdavis.edu) or +1 (530) 754-2021.

