

#### FEED THE FUTURE INNOVATION LAB FOR LIVESTOCK SYSTEMS

# IMPROVED PIG HEALTH AND NUTRITION: THE MAJOR DRIVERS OF PROFITABILITY AND SUSTAINABILITY FOR SMALLHOLDER FARMERS IN CAMBODIA

Kansas State University and Cambodia's Royal University of Agriculture developed the following goal: to improve pig productivity on Cambodian smallholder farms by targeting two major factors that contribute to pig health: nutrition and disease management. This goal will be achieved through two research objectives that have been combined with human and institutional capacity development approaches that target education and training.

Expected results include the development of new pig diet options using locally available feed resources, an assessment of smallholder disease



management strategies for reducing pig morbidity and mortality (this includes both preventative and therapeutic strategies), and education and training platforms that seek to expand stakeholder knowledge and understanding of pig disease management and nutrition (e.g. seasonal impacts on dietary needs, nutrition for growing pigs, biosecurity, vaccines and treatment strategies). This proposed work will be established through the engagement of collaborations from four areas of influence; (I) Feed the Future Innovation Labs, (2) the Cambodian University System (3) private industry partners, and (4) regional and local government programs. Our multi-institutional team will fully engage in these Cambodian-led collaborations in order to develop project success and sustainability. Finally, all proposed work will seek to integrate three cross-cutting themes: (I) human nutrition, (2) gender sensitivity and (3) human and institutional capacity development.

### **Objectives**

The project aims to accomplish its main goal through the implementation of the following objectives:

- Objective I: Assess the nutrition composition of locally available feed resources in rural and peri-urban Cambodia and provide economical diet options and recommendations to smallholder farmers.
- Objective 2: Assess the current disease management strategies on smallholder farms and in rural and peri-urban communities in Cambodia and provide practical recommendations for improved pig health outcomes.













## Quick facts about the project

- **Duration**: July 2017-May 2019
- Target Stakeholders: Rural and peri-urban smallholder farmers
- Target Provinces: Feed the Future zones of influence, including the provinces of Battambang, Siem Reap and Kampong Thom



# Principal investigator (PI) and lead institution

• Dr. Michael Tokach, Kansas State University

#### **Co-PI** and collaborator institutions

- Kansas State University: Dr. Lisa Tokach, Dr. Jessie
   L. Vipham
- Royal University of Agriculture, Cambodia: Dr. Kang Kroesdan, Chea Bunna

