

CAPACITY DEVELOPMENT GAP ANALYSIS: CAMBODIA

Introduction

The **Human and Institutional Capacity Development (HICD)** team's gap analysis for Cambodia is based upon a stakeholder consultation and strategic planning process that took place internally at the Royal University of Agriculture (RUA), as well as discussions with RUA staff, faculty, students, and stakeholders over the past two years of 2017 to 2018. This plan outlines RUA's 10-year strategy (2016-2026) for strengthening the capacity of the Animal Sciences (AS) and Veterinary Medicine (VM) departments. The findings of the HICD gap analysis for RUA in Cambodia are similar to findings in other partner countries. As such, we are using this similarity as the basis of our recommendations for Livestock Lab capacity development activities in Cambodia. This analysis outlines the findings from the RUA report along with our recommendations.



Woman purchasing meat on the street in Cambodia.

Human Resources Management and Development

The objective of human resource (HR) development is: “*to have motivated and innovative teams of people within the Faculty of AS and VM, with clear and rewarding career pathways, who are actively focused on achieving high quality teaching, research and extension outcomes.*” The RUA strategy outlines a need to bring international experts into the university to assist in the development of systems such as linking performance outcomes to promotion. RUA sees a direct linkage between morale at the university and the HR structure. The report stresses the lack of HR manpower and the need to bring on additional well-trained support staff and to bring the faculties up to a minimum standard of education. This latter goal is to increase the number of faculty from 13 to 20 and bring the share of faculty holding graduate degrees (M.Sc. and PhDs) up to 80% by 2019.

Areas Commonly Identified as Training Needs by HICD Gap Analyses

- ASF and human nutrition
- Community development skills including communication and engagement
- Grant and scholarly writing
- Laboratory skills and management
- Modern technologies and innovations
- Teaching pedagogy and practices
- The “research package” including design, analysis, statistics, modeling, and interpretation
- Technical skills training in livestock research such as animal husbandry, feed and forage, nutrition, health and other areas.

Funds Access and Management

The objective for funding is: “*to have a clear Development and Funding Plan in place within the Faculty of AS and VM, supported by a well planned and transparent expenditure process that delivers appropriate resources for successful training, research and extension outcomes.*” As with many of the Feed the Future Innovation Lab for Livestock Systems’s partners, funding access and management is a concern at RUA. The university has the goal of increasing external funding sources by 40% by 2023. This includes a desire to seek funding from FAO, NGOs, international research collaborators, the Cambodian government, and private companies. The RUA plan includes collaboration with international partners to train the faculty on grant writing and development, cost/benefit analyses, as well as industry engagement and collaboration.

Collaboration, Research and Extension

The objective for collaboration is: “*for the faculties of AS, VM and their staff to have effective and rewarding engagement with industry, and implement Research & Extension (R&E) programs that results in delivering appropriate solutions to local and regional community issues.*” RUA planned to implement a R&E program by 2017. As of the writing of this analysis, these plans have not yet been realized. The plan emphasizes a need for R&E mentorship from international collaborators, inclusive of training on grant writing and development and R&E processes and methodologies. Part of the RUA plan includes the development of monitoring and evaluation mechanisms.

The HICD team’s primary recommendation:

To improve research capacity, organizations must address the linkages and gaps between (a) laboratory infrastructure, resourcing and management; (b) the skills of the researcher in research design, biostatistics, methods and analyses (inclusive of modeling); (c) policy and funding mechanisms at the state level; and (d) the research and extension connection.

Facilities and Equipment

The objective for facilities is: “*to have sufficient high quality, shared and well maintained facilities and equipment within AS and VM, to facilitate world class training, research and extension services into the future.*” All Livestock Lab partner countries have infrastructure and materials challenges, particularly in terms of laboratories and teaching farms. The RUA strategic plan focuses on the need for teaching laboratories (Microbiology and Anatomy labs are specifically mentioned), and the lack of basic teaching and research equipment such as microscopes. The report also discussed the need to repair older equipment. The report additionally focuses on technology needs such as access to digital resources, online learning platforms and digital history collections for teaching. They emphasize the need for public-private partnerships and seeking equipment donations.

Curriculum and Teaching Methodology

The objective for curriculum is: “*to have sufficient, well trained and capable staff employed and world standard curricula in place within the AS and VM, to facilitate world class theoretical and practical training and services into the future.*” The curriculum plan mirrors aspects of the other focus areas, particularly concerning staff leveling, reward and incentive programs and the need to collaborate with international partners for training and mentorship. They also emphasize the need for the development of a teaching and curriculum development plan including teaching resources and outcomes. RUA would like to partner with other institutions for training in teaching methodology, visits to partner institutions, and on-line training, as well as faculty participation in training with a requirement to then conduct the training at RUA. Notably, RUA is under-staffed and it is challenging for the university to release faculty time to participate in training while still covering their courses. Thus, the plan emphasizes the role of online training as one mechanism to address this issue. Among the older faculty, however, English language skills are not strong so their ability to utilize trainings and materials in English is very limited.

Networking and Communications

The objective for communication is: “*to have efficient, reliable, supported and maintained internet, eLearning and computer system access available to facilitate modern learning, teaching, research, communication, collaboration, management, and administration within the AS and VM.*” The RUA communication plan emphasizes the need for international experts to conduct training on teaching management systems (such as Moodle), virtual teaching and data storage. Coupled with this are needed resources outlined above. The plan also discusses annual surveys and data collection, analysis, and management with industry, students and alumni.



Plant species are being tested as living fences in rural Cambodia.

Recommendations

The RUA strategic plan is aggressive in scope and timeline. Many of the prioritized activities were slated to be completed by 2017. However, the university has not yet been able to meet their goals. The recommendations from the HICD team are based on support for the RUA strategic plan and the outcome of the gap analyses that have been conducted in other focal countries.

Human

Organizational

Environmental

- Improve the capacity of researchers and laboratory technicians to manage a laboratory, appropriately use laboratory equipment, and analyze results from laboratory tests.
- Conduct short-term training to improve the research capacity of faculty, with a particular focus on the “research package” including design, analysis, statistics, modeling and interpretation; grant and scholarly writing; and modern technologies and innovations.
- Conduct training to improve the capacity of faculty to participate in and conduct online teaching/training and to integrate digital resources into teaching.
- Conduct training to improve the capacity of faculty to design and develop high-quality curriculum and teaching resources (including materials).
- Conduct an audit of curriculum and provide input into areas that need improvement or updating.
Assist in the development of:
- A clearly defined promotion system expanding upon the new system and inclusive of faculty, support staff, and other human resource personnel.
- Develop and implement processes and opportunities for professional career development for faculty.
- Increase the availability of low-cost resources including assistance with accessing journals and strengthening e-library resources.
- Policy and budget discussions at the organizational and national level need to occur to address the significant infrastructure and resource gaps in laboratories, research and teaching farms and resources to conduct practical training for students.