

Mid-year progress report

Awarded Institution: Royal University of Agriculture, Cambodia

Award Recipient: Khong Thong; Dean, Faculty of Agro-Industry

Volunteer of the Award: Glenn Young

Submitted by Professor Glenn Young, January 23, 2017

The purpose of this addendum is to further describe the progress of the project and to describe changes that have occurred.

Project summary (as stated in the original grant)

The goal will be to develop a platform for all students to organize their senior research project. To accomplish this goal, we wish to gain guidance on how to best organize the students to provide education for ways to develop projects, define reachable objectives, to learn how to assess progress and to then gain insight on how to adjust their goals if needed, based on their assessments. All of our students will be involved, and we will need to engage all of the faculty. We will expect the USA mentor to provide guidance on organizing the program, to help define common areas for student training and interaction, and to mentor faculty and students in designing projects. One key element of the senior project will be that all students will have to summarize their results in the form of a written journal and will participate in an annual student led symposium.

Anticipated Results (as stated in the original grant)

1. For the senior project class; 5 teaching staff will upgrade their capacity to design studies and to mentor students in conducting applied research.
2. Faculty will gain skills with employing course assessments and skill for better organizing the program
3. Curricula will be upgraded

Trip summary: October 4 – 14, 2016

I traveled to Phnom Penh Cambodia as planned to initiate the project. During the visit, I spent the time working daily with Dean Kong Thong. I also visited with other faculty aligned with the undergraduate and Masters programs.

There was direct contact with students on numerous occasions. First, I mentored a group of undergraduate students that were in the process of developing their senior research projects. Second, I held roundtable discussions with the students to discuss their view of education, goals for their careers and expectations about senior research projects --- which include having to complete a written thesis and oral defense. Third, I

mentored students that were in the process of preparing their oral defense scheduled for November 2016. Importantly, the group of students preparing their oral defense was not part of the original project plan. However, the coincidence of my visit provided an unexpected opportunity. I spent time mentoring students to help them develop clear and concise summaries of their research and approaches to preparing for oral defense. Dean Kong Thong describes some of these activities, which he listed as Results #3 and #4.

During the daily working meetings with Dean Kong Thong, the educational goals and resources of the Faculty of Agro-Industry were defined. This exercise led to more fundamental discussions to define the administrative structure of Royal University of Agriculture and factors that affect the success of teaching and research goals. Based on these discussions Dean Kong Thong and the faculty developed a set of general and programmatic goals that would, overall, improve the delivery of effective educational programs that incorporate experiences that give students practical training. Some of the goals related to the undergraduate program are listed by Dean Kong Thong below as Result #1. Goals that Dean Kong Thong associated with strengthening the Masters program are listed in Result #2.

A significant unexpected outcome of the daily working meetings with Dean Kong Thong occurred, that related to how current faculty incentives impact education and research quality of the programs. In early discussions, the Dean and faculty described and expressed how they felt limited by resources (funds and equipment). We toured the premises and found that adequate equipment was available to support most of their proposed goals. Through much discussion, we also came to understand that funds were also not necessarily limiting either. Interestingly, by comparing the RUA and UC Davis administration and faculty assessments there were significant new observations. The RUA faculty are paid a salary that is specifically calculated by hours in the classroom. They are not assessed for other activities that impact the overall quality of the educational program. For example, there is no instructor and course assessment; and there is no faculty merit review to determine one's contribution to research, service or outreach. As a result, many teachers over schedule classroom hours (sometimes lecture several hours) and demand overbearing sets of course requirements. Administration and service of programs falls to a few people, rather than being spread over many faculty members. Research is not seen as an important element of student education and training.

Over the entire visit these discussions continued. Dean Kong Thong even took the discussions to the Rector to explore how they might determine ways to make changes that could be impactful to the *big picture* goals to improve education and research. One idea that Dean Kong Thong had discussed with the Rector during my visit was to implement a faculty merit review process that would provide faculty with

clear expectations and feedback on their contributions to teaching, research and service. Furthermore, there was tentative approval that Dean Kong Thong could explore a pilot initiative to develop policies consistent with faculty merit reviews and that faculty advancement would be link to salary. It is my opinion that these ideas must be pursued only if they are seen as valuable by the faculty and I advised Dean Kong Thong create an inclusive process. Quite frankly, this is a very provocative idea and has political risk for the Rector and Dean. However, I am proud of them for discussing these issues and willingness to explore how to progress toward a system that overall improves the university. My next visit is scheduled for February 2017. During the interim period, I have been in contact with Dean Kong Thong. The ideas discussed above continue to be action items.

REPORT OF DEAH KONG THONG BELOW (submitted: January 11, 2017)

Progress Report on

Improving the Master Program in Food Science and Technology in Faculty of Agro-Industry, Royal University of Agriculture, Phnom Penh, Cambodia

Background

In October 4 to 14 October the mentor from USA, Professor Glenn Young at Department of Food Science and Technology, University of California, Davis had work in the Faculty of Agro-Industry, Royal University of Agriculture, Phnom Penh. Prof. Dr. Glenn Young was support from AWB-US in order to help the faculty of agro-industry in the improving the master program of food science and technology that will be plan to start in year 2017.

Result

1/ After the group meeting that have dean and vice dean of faculty and professor Glenn Young about the current situation of Bachelor degree and what the faculty want to achieve, Prof. Dr. had provide many points for the activities of the faculty.

- Organize the outreach and training service in food and postharvest technology (course plan, Technical Professional service(special area in postharvest loss, fruits processing, Vegetables processing, Food fermentation, Fish processing, Meat processing, Beverages, Sauces, Bakery, Snack)
- Increase company partnership (go to meet the company and introduce the goal of faculty and faculty activities and services)

- To strengthening the capacity of student (practice) in microbiology using the microbiology laboratory
- To develop the master program (compare with the UC Davis program)
- To have regular on food innovation conference
- Provide the consultant service to the company
- International undergraduate program
- To Improve the evaluation system for staff
- Strengthen the research capacity of the staff in AI
- Separate the specialization into the department
- International master program

2/ Relate to the master program that Faculty had prepared if compare with the master program in UC Davis the program in the faculty had to modify to reach the mission of the Royal University of Agriculture such as Teaching, Research and Extension. In this case the professor had advises that:

- Increase the research activity in the program
- Identify the major courses for food science and technology
- Provide more time for research activity
- Should be focus on the problem base research

3/ Teach the 4 year students how to prepare the power point presentation for the thesis defend in November. in this case, because of our students poor in English first have only four students joint the class but finally remain only one students can finish the assignment.

4/ Beside the meeting and teaching the 4 year to prepare the power point presentation, Prof. Dr. Glenn Young had provide the idea to the students in the field of research as well. He explained the student to make research base on study the problem and then find the solution to solve the problem. In this point he not only focus in the students but during meeting with dean and vice dean he also were mention to as well.

Conclusion

During the first mission of the Prof. Dr. Glenn Young from 3-14 October, 2016, the faculty got many ideas for future development in the master program, the field of research and the way to increase the relationship between the faculty and private sectors. Students had learned from very high experiences professor from USA in the way how to prepare the good power point presentation and research base on the problem.

Prepare by

Kong Thong

Dean of Faculty