Agribusiness Curriculum and Teaching Methodology Workshop
University of Agricultural Science, Bangalore, India

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Overview:
Purdue/USWDP initiates series of short term workshops as part of curriculum development for agribusiness management degree and staff capacity of Afghan faculties. Purdue University and University of Agricultural Science Bangalore expats conducted its first curriculum development workshop in Kabul back in July 2016 to identify core courses for agribusiness degree based on Ag sector needs assessment from Balkh province. As part of USWDP/ Purdue efforts to establish degree program at five regional universities, second round of curriculum development and teaching methodology workshop was initiated / conducted from February 1 through February 10, 2017 at University of Agricultural Science, Bangalore India. The purpose of the workshop was to refresh the knowledge and skills of participants in areas of agribusiness management, application of math in agriculture, MS office computer application and microeconomics along with introducing new teaching methodology to faculties for incorporating in their teaching in agribusiness BS program. Five MS students reside in UAS Bangalore, Mohammad Ismail Hashime from Kandahar and Ms. Sara Sahibzada from Kunduz university have participated in the workshop. In addition, USWDP staff, Purdue University and University of Agricultural Science (UAS) staff also attended the workshop. Participants presented a demonstration lecture of aforementioned courses to faculties for critics while identifying program needs, finding common goals and discussing the content of each of the courses. Dr. P.K. Mandanna from University of Agricultural Science has exposed participants to dynamic of food industry in Bangalore and common skills that Ag firm has to perform on everyday businesses. Industry tour have expanded participants view on what skills are important to agribusiness graduate upon graduation.

Workshop Objectives:
Purdue/USWDP team have been working on program development and curriculum development for the agribusiness BS program since one year and many progress toward establishment of BS program at the five provincial universities are achieved; ministry of higher education have formally approved agribusiness for five universities and soon new recruitment will be done through Kankor exam. This curriculum and teaching methodology workshop is an effort to introduce first year curriculum to ten MS students at the University of Agricultural Science (UAS) in Bangalore, India. MS students will return to Afghanistan late 2018 to assist in establishing new agribusiness degree at their respective universities. A year before, first workshop of curriculum development was conducted in Kabul with the participation of deans and faculties from five partner universities in agribusiness program. The current curriculum draws its core courses from the employer skills survey conducted in Balkh and Nangarhar province. Main discussion and topics of the workshop was teaching methods, course materials, teaching quality, materials rigorous and teaching style.
The workshop in UAS covered two major areas: a day long industry visits, curriculum development and demonstration of teaching methodology. The attendees were first exposed to the food processing and marketing of agricultural products and the dynamics of Indian food industry. Participants saw Safal co-ops and India Foodpark as example of how Indian government support market and connect producers with buyers in the markets. In addition, participants interacted with agribusiness asking various questions related to skills that fresh agribusiness graduate must possess and many more exciting issues on food handling, marketing, auction, wholesale and retailing industry were discussed. Second, Dr. Kevin T McNamara from Purdue University have set the tune for curriculum development and teaching methodology workshop and he pointed key strategies for teaching agribusiness course. Participants have presented a demo class to the classroom for critics and feedback that how a particular course might be thought when the agribusiness program begins this year in Kandahar and Nangarhar universities. MS students and participants gave their inputs on teaching style and course materials, so that materials have enough content and enough rigorous for teaching.

Workshop Activities:

Week one:
The workshop was opened by Vice chancellor of University of Agricultural Science, Dr. H Shivanna, and he gave overview of UAS mission and their contribution to Afghanistan agriculture development. Vice chancellor said that UAS is committed to provide support and leadership on developing agribusiness program in Afghanistan. Purdue University, Dr. Kevin McNamara delivered his remark and emphasized on importance of curriculum development workshop and teaching workshop in UAS campus followed by some brief comments by Dr. P.K Mandanna, professor of MBA program in UAS and other UAS officials.

The first day of the workshop, participants toured local agricultural wholesale Safal market to learn how Indian agricultural market procure commodity, how sale and purchase take place and how valued is added to surplus of agricultural products. Participants saw banana processing unit and participants both from food technology and agribusiness noticed major issues related to food hygiene, grading, packing, sales and inefficiency of physical capital in the market. Auction hall center where producer and buyer meets to exchange commodity showcased a modern type of sales and marketing. The whole concepts of observing these activities is broadening participants’ knowledge and views on how students should know this information when they enter job market. Participants learnt price determination and how the price is set for agriculture product in Safal retail market. Participants learned that even in relatively organized market farmers or producers face several problems that reduces their income due to not receiving fair share of their product price.

Purdue University consultant, Dr. Donald Breazeale, gave a presentation on teaching methodology and type of teaching style that can be very effective for better learning and overall learning experience. He showcased five important teaching style as such: authority or lecture style, demonstrator or coach style, facilitator, group and hybrid or blended which different subject requires its own approach to better communicate the teaching materials. For more clarity and understanding of particular teaching style, participants were grouped in three and everyone was asked to pick one subject and work in group to pick strategy or teaching style that would work best for a course.

Week two:
Purdue/USWDP have put together draft teaching materials for the first year of agribusiness and those materials were presented to participants for the reviews. Shershah Ameri, USWDP Senior Program Officer for Agribusiness, presented a demo of one of the courses on microeconomics on supply and demand and the idea was to get feedback and comments for presenting this course in better way so that students can master content and its application well. Ms. Sara Sahibzada, Kunduz University Faculty, followed a demo class on elasticity and participants provided inputs and feedback on her teaching style. Concept, example and its application, homework, assignment, group project, teaching styles, and course evaluation were prime suggestions to the participants to incorporate in his/her teaching style.

Similarly, teaching materials, syllabus, modules for math for agriculture, intro to agribusiness management and MS computer program was presented by the participants. Dr. Donald Breazeale suggested to add a unit of statistics for business in math for agriculture courses. As math for agricultural application is new course and MS students in India have no prior background on math, so it was suggested to conduct extracurricular/special tutor class to 5 MS students so they can build foundation for math for agriculture. Participants gave comments on some of the course contents and teaching style: clear definition and explanation of key terms, incorporating classroom discussion, group-in-class activity and pop up quiz were key feedback for better communicating teaching materials. Feedback and comments were collected from participants to improve teaching materials and contextualize content to the Afghanistan situation. The workshop tried to inject new teaching methods and introduced modern teaching style. Current Afghan teaching methods is outdated and lacks modern teaching requirement as such assignment, homework, group project, extra reading, encouraging students to ask question. USWDP team will incorporate participants’ inputs into the teaching materials and copy of the revised version will be shared with MS students in India and Afghan university faculties.

**Workshop Outcomes:**
Participants went through in details on four courses of intro to agribusiness, microeconomics, math for agriculture and MS office program and have suggested revisions on the content, adding extra reading, assignment, homework, in class activity, pop up quiz and group project, so students have the opportunity to practice concept into real world problems. Course materials and modern teaching methodologies are incorporated in the curriculum for the first semester. Participants outlined that introductory courses should follow concept, example and its application for communicating teaching materials more clearly. The workshop was well received by five MS students in Bangalore, India and they have better picture of what is expected from them when they complete their MS studies and comeback to Afghanistan teaching agribusiness courses. The workshop has finalized four course as such intro to microeconomics, intro to agribusiness management, math application to agriculture and MS office program. Feedback and inputs from participants will be incorporated in the teaching materials.

USWDP team will with Afghan faculties in Afghanistan to contextualize first year first semester courses to Afghanistan situation. Participants have better idea of how to teach first year course when the BS agribusiness program begin this year in Kandahar and Nangarhar provinces. Participants have discussed teaching methods, course materials, course quality, materials rigorous and teaching style.

**Next Steps:**
USWDP team will incorporate participants’ feedback and comments to course materials and the revised version will be shared with 10 MS students in India and faculties in Afghanistan. USWDP will explore options on continuation of curriculum workshop for the second semester in July or August 2017.