

## **Leveraging the Power of Partnerships to effectively engage Universities for enhanced food security**

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### **Executive Summary**

In 2011, the U.S. Agency for International Development, through the USDA/Foreign Agricultural Service launched a new strategy to support relationships between USA, Indian and African Universities to improve agricultural capacity in Africa. Our partnership is titled the *Egerton University/Punjab Agricultural University/Ohio State University, Trilateral Partnership for Food Security*. Ohio State University (OSU) and Punjab Agricultural University (PAU) are working with Egerton University's Faculty of Agriculture to enhance its capacity to provide tertiary agricultural education, research and outreach programs that contribute to improving food security and poverty alleviation in Kenya. Partnerships have been identified as critical to capacity development initiatives. Some characteristics of successful capacity development partnerships are that they are built on mutual trust, long-term partnerships, integrate the complementary assets of participating institutions and result in mutually beneficial outcomes. Tactically, the conduct of strategic planning efforts, prior to initiating collaborative activities is important so that partners can participate in designing their own projects and work plans. This article presents lessons learned and experiences with the process of incorporation of these elements with a view to ensure a successful partnership in terms of achieving the intended objectives.

Key words: Capacity development, Kenya, Trilateral partnership

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## Background

In 2011 the U.S. Agency for International Development, through the USDA/Foreign Agricultural Service, launched a new strategy to support relationships between USA, Indian and African Universities to improve agricultural capacity in Africa. The RFA (Request for Applications) for this grant designated that a USA university take the lead in forming a trilateral partnership between an Indian University and a university in Kenya, Malawi or Liberia. The OSU brought together Egerton University Faculty of Agriculture with the Punjab Agricultural University (PAU) and wrote one of two successful proposals for this highly competed-for RFA.

**Major Program rationales.** This program was based on two major rationales. The first had to do with appropriate technology. Emerging nations, such as India, are likely to have on-the-shelf technologies that will be of use to African nations. It was also assumed that U.S. universities were less likely to possess these appropriate technologies, given the advanced status of the food systems of their stakeholders. The second rationale was geopolitical, namely that there is a need to counterbalance major efforts by China to open markets in Sub-Saharan Africa, as well as to secure the ample natural resources possessed by this

region. Strengthening the presence of India in the region would help to provide this counterbalance.

**General Program objective.** Through this program, which is called the *Egerton University/Punjab Agricultural University/Ohio State University Trilateral Partnership for Food Security*, OSU and PAU will work together with Egerton University's Faculty of Agriculture to build its capacity to improve food security and alleviate poverty. The OSU is expected to transition its existing bi-lateral partnerships with PAU and Egerton into a trilateral partnership - hence the name of the project. The objective of the project is to combine the strengths of PAU with OSU's expertise in capacity building to improve the quality of Egerton's tertiary agricultural education and research with the intent of helping Egerton provide practical knowledge to graduates and stakeholders so that they may better contribute to the growth of Kenyan agriculture and national development priorities. Given that 60% of Kenya's labor force is still engaged in agriculture, this is a critical goal for achieving national development.

What was formerly called institution building is now called capacity building at the organizational or institutional level. Capacity building is broadly defined by many to refer to building the ability of organizations to achieve their goals, and

partnerships have been identified as critical to these capacity development initiatives. The most promising capacity-development efforts are built on mutual trust relationships that facilitate long-term partnerships and take advantage of complementary assets of participating institutions with an openness to new types of partnering arrangements for training organizational development and network formation (Cohen, 2010:8). They typically result in mutually beneficial outcomes. The most promising capacity-development partnerships also appear to be those that take a strategic, criteria-based approach to selecting partners and conducting strategic planning efforts prior to initiating collaborative activities, so that partners can participate in designing their own projects and jointly develop work plans. We have attempted to incorporate each of these elements into this trilateral partnership.

The Ohio State University (OSU) has had long-term partnerships with both institutions selected to participate in the partnership. It's partnership with PAU commenced over 50 years ago. Beginning in 1955, OSU was invited to work with the Punjab-state government to create a land-grant type agricultural college complete with the missions of teaching, research and extension. The partnership between OSU and PAU has been maintained since then through a succession of projects both large and small, supported by various donors. The OSU has maintained a partnership with Egerton over the past decade, with joint activities supported by a succession of development projects including the Higher Education Partnerships for African Development (HEPAD) project that was led by OSU and administered regionally by the Regional Universities Forum for Capacity Building in Agriculture

(RUFORUM) (Erbaugh, 2009; Gilboy, 2010).

### **Building Mutual Trust and Partnership Linkages.**

The first step in transitioning OSU's existing bi-lateral partnerships with PAU and Egerton into a trilateral partnership was to build communication linkages between the two institutions and also with the donors. This was initiated when Dr. Alexander Kahi, Dean of the Egerton University Faculty of Agriculture, was invited to attend a workshop for the Agricultural Innovation Partnership Program funded by USAID in New Delhi in December 2011. Staff from OSU were also invited to this workshop. Dean Kahi met Dr. B.S. Dhillon, Vice Chancellor, Dr. S.S. Gossal, Director of Research, Dr. Gusharan Singh, Dean, Post-Graduate Studies, and Dr. K.N. Minhas, Chair, Department of Food Sciences at this workshop. Subsequent to this event, Dean Kahi joined USDA and OSU representatives including Erbaugh and Hansen from OSU in Delhi in May 2012 and accompanied them on a trip to Ludhiana to meet with PAU administrators and faculty members and to view PAU facilities, including a half day trip to view the operations of a KVK (Krishi Vigyan Kendra) extension center. Contacts were also made with ICAR, FAS/USDA and USAID at the U.S. Embassy in New Delhi. Subsequent to this meeting, Erbaugh and Hansen met with USAID and FAS/USDA officials in Washington, D.C. to discuss the program. Dean Kahi and Erbaugh then met with USAID/Kenya in July 2012 to inform them of project objectives and future implementation plans. These meetings represented important bridging communications with donors and partners

and were fundamental to partnership building.

The first major programmatic thrust was to hold a strategic planning workshop at Egerton University involving program participants from all three institutions. The PAU was represented by Dr. Gursharan Singh, Dean of Post-Graduate Studies, Dr. Piara Chahal, Deputy Director for Research, and Dr. Sandeep Kapur, Head of the School of Business. USDA/FAS was represented by the project managers, Susan Waage and Jonathan Hamrell. Ohio State University was represented by its project PI's, Erbaugh and Hansen, and Egerton was represented by Dr. Alexander Kahi, Dean of Agriculture, and numerous Egerton faculty.

This strategic planning exercise ensured that program activities would be demand driven and consistent with programs on the campuses of all three institutions. Program activities were designed to take advantage of complementary assets and lead to outcomes that would achieve project goals. Fortunately, Egerton had just completed a strategic planning effort that identified a range of opportunities for our engagement, and this was used as the basis for our own strategic planning exercise held in Nakuru, Kenya in late August 2012.

The strategic planning process was led by Professor Hansen beginning with the identification of project objectives that were aligned with priorities identified by Egerton. The outcome of the workshop was an implementation plan that included program objectives, outcomes, outputs

and indicators. Major priority areas for the program included topics on which faculty from PAU and OSU had collaborated in the past. They included:

- (i) Value chain management and analysis.
- (ii) University Outreach Center.
- (iii) Promoting teaching excellence.
- (iv) Promoting private sector linkages.
- (v) Creating a Learning/Outreach Center. Developing technology packages for small farmers<sup>1</sup>.

#### **PAU Golden Jubilee Celebration.**

OSU was invited to participate in the 50<sup>th</sup> year Golden Jubilee Celebration of PAU in fall 2012. An overview of OSU's long term partnership ending with a description of the new Trilateral Partnership Project was presented. Unfortunately, Kenya's Minister of Higher Education, who was a PAU graduate, was unable to accept his invitation to attend. This celebration was timely because as PAU was celebrating 50 years of advancing agricultural higher education and research in India, the USA was celebrating 150 years of the Morrill Act which led to the creation of the land-grant universities in the USA and to their tripartite mission of teaching, research and extension.

**Egerton Agricultural Knowledge Center.** Egerton is committed to increasing its contributions to the Kenyan agricultural private sector, including

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<sup>1</sup> Langston University, USA, was also invited to participate in the strategic planning exercise. USDA/FAS was provided with funding to work on small ruminants and decided to combine this program with the trilateral activity in support of Egerton's development efforts.

agribusinesses and farm producers. To accomplish this goal, its Faculty of Agriculture wishes to establish outreach centers located throughout the country at which it will work with farmers and related agribusinesses to increase agricultural production and to promote development of this sector. As a first step, Egerton asked that a strategic plan to accomplish this be developed.

In spring 2013 delegations from Egerton and OSU convened with PAU partners on the PAU campus to initiate this process. Dean Kahi had visited a District Outreach Center of PAU during his previous visit to India and expressed a desire to utilize elements of this model in developing Egerton's outreach program. The Egerton delegation was led by Prof. Bockline Bebe and consisted of six staff from Egerton, representing the disciplines of agricultural extension education, crop and animal production and agricultural economics. The OSU delegation consisted of Dr. Gary Straquadine, an expert in strategic planning and Chair of the OSU Department of Agricultural Communication, Extension and Leadership, and Dr. David Hansen, project Co-PI. This delegation visited the PAU district center in Jalandhar to acquaint itself with the organization of the center, its interaction with the central extension office on the PAU campus, and its interaction with farmers and rural community members in the district. In addition, the delegation was invited to participate in a major "*kisan mela*" (university outreach function) on the PAU campus that involved participation of private sector exhibitors, extension offices, and other university units. These background activities proved useful for subsequent deliberations involving strategic planning

for Egerton. An outcome of this visit was a draft strategic plan for Egerton.

**Value Chain Management Curriculum and Private Sector Outreach.** From April 14-20, agribusiness faculty from PAU and OSU joined Egerton faculty in Njoro with three objectives: to design an undergraduate course in value chain assessment and management, to design a master's level program in value chain management for individuals already employed in the public and private sectors, and to undertake an assessment of local agribusiness sector training needs. This delegation included Dr. Sandeep Kapur, PAU, Dr. David Hahn, OSU Professor of Agribusiness; and Dr. Mark Erbaugh, OSU Co-PI. The undergraduate course which is designed to reach over 3,000 undergraduate students was approved by the University Senate and is now being taught and the Masters program in value chain management has also been approved. Modules associated with it will soon be taught to interested program participants. An agribusiness sector assessment has also been completed and analyses of the data collected are underway.

**Honey Bee and Mushroom Technology Packages.** The strategic planning process identified two technology packages to be developed that are of great economic potential to improve the livelihoods of small farmers and landless poor. Honey production and mushrooms do not require large tracts of land. In fact, they do not require possession of farm fields *per se*. Yet they have a high potential to increase incomes and improve diets. The PAU has developed successful programs in honey and mushroom

production over the past several decades. These programs have had an important impact on farm and other rural families in Punjab state. Leaders of these programs visited Egerton during summer of 2013 and worked with Egerton counterparts on development of demonstration units for these products. Building on the limited capacity at Egerton for these products, they have collaborated on the design of the demonstration units and development of short-term term training courses for trainers from NGO's and government organizations, as well as for producers themselves. Egerton has since worked on the acquisition of equipment and establishment of these demonstration units. Faculty from Egerton and PAU will continue to research and further develop these technologies and accompanying outreach programs.<sup>2</sup>

**Monitoring and Evaluation of Program.** A monitoring and evaluation plan was developed for the program. It was an integral part of the strategic planning exercise and was further embellished with assistance from USDA/FAS experts in this field. Data are being collected by program participants and fed into the evaluation process.<sup>3</sup>

Egerton clearly sees the benefits to result from this program. It will:

- (i) Increase its outreach capacity to meet the needs of the private sector, through expanded programs surrounding specific technology packages. Those included in the trilateral programs revolve about honey production, mushroom production and goal production. Other commodity value chain enterprises are expected to evolve over time.
- (ii) Improve the education it is providing to its undergraduate and graduate students, making them more "society ready" upon graduation, thus providing useful professionals to Kenyan society and providing the students with greater opportunities to contribute to Kenya's national development goals.
- (iii) Increase the professional growth opportunities of its teaching and research staff by giving them opportunities to acquire new knowledge in their areas of expertise through interactions with counterparts in India and the U.S.

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<sup>2</sup> Another interesting technology of great potential value to small farmers; namely, goat production, has also been introduced through this program, but not directly through PAU. Utilizing other funding, USDA/FAS has enlisted the support of Langston University in the U.S. to introduce improve goat stock for dairy production. The improved herd, imported from South Africa, will be used to introduce cross-breeding with local goats through artificial insemination, a practice which does not currently exist in Kenya.

<sup>3</sup> Additional activities designed to strengthen the undergraduate program at Egerton will be undertaken during 2013. They include attention to the internship program offered by Egerton. An internship manual will be one of the outputs of this exercise. They also include a workshop on teaching excellence, focusing on student centered learning. This exercise will contribute to the development of a Teaching/Learning Center.

Benefits will also accrue to PAU and to India. The program will enable PAU to:

- (i) Test its various models for improving food systems in an external context and further refine them as a consequence.
- (ii) Increase the international scientific standing of PAU through its engagement with development issues in Kenya.

Benefits to India from the program participation will be substantial as well and will justify its support of the trilateral activity in Africa. India has substantially increased its engagement with the global economy in recent years. Foreign trade now represents 43% of India's GDP, against just 16% two decades ago. Accompanying its growing participation in the global economy is its increasing influence on global decision making. India has moved from being solely a donor recipient to one of becoming a donor to other nations. It currently provides development assistance and soft loans to other nations. Given its burgeoning population, India is naturally concerned about access to energy, natural resources and commercial markets for exports, all of which require an active foreign policy agenda. In many ways, India's foreign interests converge with those of the U.S. Its demonstrated ability to raise food coupled with its own need to develop external linkages suggests the potential importance of building soft diplomatic ties with Africa through agriculture development and institutional capacity building.

**Lessons Learned.** This trilateral program is an ongoing activity. Nevertheless, some lessons have been learned from it. Among them are:

- (i) A need to bring partners together to build trust and familiarity with program.
- (ii) A need to engage all partners in planning process.
- (iii) The key role of the "senior" partner, in this case The Ohio State University, is to act as intermediary to help bridge cultural differences and to help build trust among partners using social capital built with Indian and African partners.
- (iv) A need to innovate in order to overcome bureaucratic obstacles faced in forging new relationships of this type; again, the intermediary role of the bridging partner.
- (v) A need for the bridging partner to stimulate programmatic activities given that other partners are busy doing their own thing and may not be disposed to push new partnership activities without this intervention.
- (vi) The opportunity for the bridging partner can learn from observing interactions among the new partners and studying the organizational, production, and processing technologies involved in the program;
- (vii) A need for top leadership of two new partner institutions needs to be

involved in the partnership in order to ensure that human resources are available and committed to activity.

- (viii) A need for adequate funding to stimulate productive interaction among the new partners.

This discussion of lessons learned focuses on the trilateral relationship among the partner institutions. Observations are based on specific programmatic activities undertaken, but also on factors that determine whether or not partner institutions can effectively collaborate and can form long term partnership relations.

**(1) Trust and familiarity among partners are necessary conditions for successful partnerships.** Getting to know one another is an important first step in effecting partnership programs, particularly if the prospective partners have had limited interaction in the past. It is especially critical if the institutions are from significantly different cultural contexts. The process of getting to know one another can be purposely strengthened by providing opportunities for informal interaction among actors once program activities are initiated. In the case of the EGU/PAU/OSU partnership, it was vital that the PI from EGU travel to India to meet with the leadership of PAU, USDA/FAS and USAID officials in India and with representatives of the Indian Council on Agricultural Research and the Ministry of Agriculture as a first step in building the partnership.

**(2) Successful programs depend on early buy-in by all partners.** All participating institutions in the trilateral program need to feel that they have a stake in the success of the program and,

therefore, that they have helped define program content. Thus it is essential that all partners be involved in the formulation of the initial program proposal as well as in the definition of program goals, objectives and activities to be undertaken. In regard to the latter, each partner needs to understand the roles that it will play in the program, the staff and other resource commitments that it will need to make, as well as the resources that will be provided by the funding institution in furtherance of its participation. The performance gap workshop held at EGU was essential to achieve this objective. All institutions had representatives that actively participated in the development of a program strategic plan and all institutions made significant inputs to the plan.

**(3) The senior partner has a critical role in building a partnership among the other two participants.** A critical role for the senior partner is to in bridge cultural gaps among the other two partners. Typically, they would use their existing social capital with the other partners in doing so. Ideally, the senior partner has a long standing relationship with the other two partner institutions. This relationship would ideally include past programs that involved interaction among its staff and the staff of the partner institution. This past staff interaction can be used to build new relationships among staff members from the other two partner institutions. For the EGU/PAU/OSU trilateral program, these past relationships between the senior partner and each of the other partners were used to build new relationships based on interactions occurring as part of the trilateral program. This lesson learned would suggest that the senior partner should have a history of collaboration with institutional partners and experience in



creating and managing partnership programs.

**(4) Partners need to have the capacity to identify alternative ways of supporting programmatic activities should bureaucratic obstacles arise.**

Partners are subject to different bureaucratic and policy frameworks that are unique to the national institutions to which they respond. In some cases, these frameworks may raise substantial obstacles in regard to the ability of the partners to carry out their objectives. In the case of the EGU/PAU/OSU partnership, the Government of India, through the Indian Council on Agricultural Research, was unwilling to allow PAU to enter into a formal agreement with USDA/FAS or into a sub-agreement with OSU to formally administer program funds. This was evidenced by their allowing the partner institutions to sign a tripartite program-related MOU. Objections raised were the result of government- to-government interactions that had nothing to do with the institutions involved. In order to make the program operational, it was necessary to find an alternative solution which was for OSU to manage all funds related to PAU participation in the program, thereby significantly increasing the administrative burden for OSU and denying PAU access to funds related to hosting partners while on the PAU campus. The ability to adjust to administrative obstacles depends in great part on the experience of the senior partner and the ability of the partners to seek program alternatives when they arise.

**Leadership of partner institutions needs to be supportive if partnerships are to be successful.** Support from

institutional leaders is a necessary condition for program success. This support includes appreciation of the cultural and social diversity represented by the institutions involved. Ideally, this support would translate into formal documents of agreement, such as the MOU which we were unable to sign due to Indian government policy. One of the initial project activities was having the OSU Director of International Programs in Agriculture and the Dean from EGU visit the PAU campus to meet with the PAU Vice Chancellor and his team to discuss the program. By the end of this visit, all participants pledged their full support for it. The Dean, Graduate Studies, represented PAU at the initial workshop at which the strategic plan was developed. Subsequent authorization of PAU staff travel to EGU and approval of visits by EGU staff to PAU was forthcoming from the Vice Chancellor's office.

**Successful programs need sufficient time to build strong partnerships and to ensure maximum impact of capacity building activities.** Allowing sufficient time for program activities to have their impact on institutions and their existing programs is essential. The amount of time needed may be greater given the fact that most of these programs require time for the participants from the participating institutions to get to know one another. Technical programmatic activity may not require the same amount of time to be effective as illustrated by the apiculture and mushroom activities of our partnership. It is hoped that the interactions among staff from PAU and EGU will persist into the future now that the program has terminated. Development of an Agricultural Outreach Center and a

Teaching/Learning Center require more time, given the obvious changes implied in “customary ways of doing things.” It is significant that the program achieved the strategic plans for these activities, but had insufficient time to help with the implementation of these plans.

### References

- Cohen, Clara, K. 2010. Developing Institutional and Human Capacity for Agricultural Research. July, 2010.
- Erbaugh, J.M., Crawford, E. and Adipala, E. 2009. Strengthening Faculties of Agriculture in Africa through Collaborative Post-Graduate Degree Training by U.S. and African Universities: The HEPAD Experience. (Abstract). *Journal of International Agricultural and Extension Education* 16(2):70.
- Gilboy, A., Flora, C., Raphael, R. and Pathak, B. 2010. Agricultural long-term training-assessment and design recommendations: Final Report. (Aguirre Division of JBS International, Inc.) [http://pdf.usaid.gov/pdf\\_docs/PNADT511.pdf](http://pdf.usaid.gov/pdf_docs/PNADT511.pdf).