





AET Institutional Transformation: Project Design Review Workshop Proceedings



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Introduction

In order to promote food security, USAID and other donors have been making investments to strengthen agricultural education and training (AET) institutions and investigating alternative strategies to improve programming. In support of this endeavor, the Innovation for Agricultural Training and Education (InnovATE) project hosted a design review workshop uniting project implementers involved in current or recently completed AET institutional development projects. This workshop promoted interaction among AET project partners who compared their experiences and examined the challenges, successes and lessons learned.

The objective of the workshop was to document tacit knowledge and lessons learned to inform policies and recommendations for the transformation of AET institutions for sustained and entrepreneurial youth workforce development. Activities were designed to elicit critical insights on processes for food security project-driven transformation in AET institutions. Workshop participants engaged in enthusiastic discussions to advance our understanding and capacity to make a difference. Learning is a mutual endeavor; donors, implementers, and host country institutions benefitted from the process. This summary consolidates key learning moments in workshop participants' 1000 years of collective experience and highlights those insights and lessons which can be applied to improve management and implementation of AET projects.

Workshop Organization

Workshop activities were organized in two phases. A pre-workshop dialog engaged seventeen key individuals (AET advisors, project implementers and host institution representatives) selected from among those with considerable hands-on experience with USAID AET-based projects. The workshop organizer, Keith Moore, arranged for each of these individuals to address the following questions during hour-long telephone interviews:

- What are the critical challenges you have faced in the process of implementing AET institutional transformation projects?
- What was done (successfully and unsuccessfully) to address them?
- What can be done to enhance AET institutional transformation projects in the future?

The free-flowing conversations began by targeting specific AET experiences. Each interviewee had priority messages to convey. They then were asked to expand on a particular theme or two with examples highlighting personal insights. The workshop organizer, as a listener and recorder, made notes on these experiences and insights and had the notes confirmed a few days later. Many of these experts engaged in a second and sometimes a third such opportunity to elaborate their views. Content analysis of these notes led to the list of key workshop themes.

In twos and threes, the experts continued these informal discussions via Skype. A core of Conversation Co-Leaders took shape to lead the workshop. During the course of these conversations, the Design Review Blogs were drafted. These blogs were drafted and revised by the Conservation Co-Leaders as a mechanism to raise issues and stimulate discussion among workshop attendees. They were posted on the InnovATE website in the month leading up to the workshop. Reflecting the priorities and concerns expressed, these themes were consolidated into five categories for the Workshop Thematic Sessions: Trust and Partnerships; National AET System Transformation; Curriculum Development and Pedagogical Reform; Budget and Contracting Relationships; and Governance and Leadership.

The second phase of the workshop involved more participants and face-to-face conversations. To maintain the intimate and informal level of discussion, workshop attendance was limited to about fifty invitees including the Conversation Co-Leaders. The Design Review Workshop itself was held in June 2016 at Mountain Lake Lodge in Pembroke, Virginia. The plenary sessions were recorded and transcribed. To facilitate comparisons and shared learning, each AET institutional development project presented a poster highlighting project objectives, institutional context, mission, key stakeholders, scale, duration, impact, and other pertinent facts.

Van Crowder (OIRED/VT Executive Director) and Çlara Cohen (Acting Chief, Human and Institutional Capacity Development Division BFS/USAID) introduced the first day. Peter Trenchard (USAID/Malawi Deputy Mission Director) and Keith Moore (OIRED/VT), the workshop organizer, gave the keynote addresses. Workshop sessions were moderated by Angela Neilan (OIRED/VT) and Peter Koehn (University of Montana). Moderators managed session conversations, maintained the focus of the discussion, and assured balanced participation.

The conversation sessions began with the Conversation Co-Leaders. First the US project leaders introduced themselves and their projects. Host institution counterparts then presented their institutional transformation experiences. One host institution counterpart participated by video because he was not able to attend in person. Presentations highlighted personal experiences and insights. The floor was then opened to include the audience.

After Conversation Co-Leaders made their preliminary remarks, themes focused the majority of conversations. Two or three Conversation Co-Leaders opened each session with introductory remarks designed to stimulate debate and advance the evolving conservations. The first thematic session addressed *Trust and Partnerships* and was followed by a stimulating discussion among workshop participants. The day ended with participants listing take-aways for the first day.

The second day focused on three more thematic sessions: *National AET System Transformation; Curriculum Development and Pedagogical Reform*; and *Budget and Contracting Relationships*. In adaptive management fashion, responding to feedback from the first day, participant discussion was organized in focus groups. The moderator provided a few leading questions. Discussions were quite animated in the smaller group format and results of these discussions were captured in the end of session plenary summary provided by each group.

The day ended with a World Café exercise to consolidate the tacit knowledge and lessons learned from these collective experiences. Small groups were asked to respond to a set of four questions developed on the basis of the evolving conversations:

- What are some re-current project design mistakes?
- How can contextual complexity and dynamics be accounted for in project design?
- What emergent lessons can we draw from our experiences that contribute to a theory of institutional change?
- What organizational experiments would you propose for improving the design of institutional transformation projects?

The final day held the last thematic session on *Governance and Leadership* and a concluding session on Next Steps in which workshop participants identifed and described a truly transformative ("unreasonable") change that InnovATE should advocate to promote AET institutional transformation over the course of the next year. Participants focused on: more effectively telling how AET investment improves food security; involving the private sector and youth in AET client services; and preparing AET institutions to be more transparent and fiscally competent.

The workshop closed with words from InnovATE Director Larry Vaughan and InnovATE AOR Clara Cohen who invited final thoughts from InnovATE Advisory Committee members and USAID mission representatives.

Implementing a Learning Approach

Workshop participants were encouraged to view AET institutional transformation as a 'wicked problem' (see <u>Moore, 2016</u>). Shared experiences confirmed this perspective. The complexity of AET systems and the diversity of local institutional contexts creates conditions of indeterminacy. Consequently, multiple competitive or mutually exclusive outcomes are possible; each of these design solutions creates new circumstances and problems. Furthermore, if local systems (structures and/or agents) aren't ready for project-induced changes, they are likely to dissipate, ultimately undermining the achievement of food security.

Design thinking was invoked to examine our collective attempts to improve AET institutions. It draws our attention to the process by which a valued product (improved AET) emerges. Design thinking takes into account multiple options and perspectives, ensuring that improved practices are acceptable to system actors for which they have been designed. For this to occur 'users' need to be part of the design process. Through iterative interaction, system actors can be engaged in a dialog producing successive approximations to identify and implement mutually acceptable solutions.

Throughout the workshop, participants emphasized scaling-up, impact, and evaluation, as well as the extent to which the default project framework was conducive to institutional transformation. Recurrent themes included experiential learning, conversations that matter, trust and relationship building, financial and absorptive capacity, champions, youth, teacher training, and telling the story.

Workshop Summary

Key Note Addresses

Peter Trenchard

USAID has had considerable experience investing in education. Peter told us the story behind the design of USAID/Senegal's Education and Research in Agriculture Project (ERA). An opportunity arose in Senegal resulting from a convergence of factors. The 2008 food crisis led to a considerable increase in USAID funding for agriculture. At the same time, consistent with NEPAD's Comprehensive African Agricultural Development Plan (CAADP), the Senegalese government developed a unified vision for economic growth led by agriculture through private sector investment. The universities were seen as a critical partner linking AET with research. Relations of trust between USAID/Senegal and these critical actors had been developing over the years. This allowed USAID/Senegal to mobilize a design team including partners from all the Senegalese agricultural training institutions and led by land grant university experts. While the resulting USAID/ERA plan was consistent with food security goals, it was funded before the centrally led Feed the Future program narrowed flexibility for creative local initiatives.

The ERA project applied a systems approach to moving knowledge from universities and vocational schools to the private sector and farmers. Operationally, there were two dimensions to this systems approach. Funding systematically targeted multiple partners (universities, research, and training institutions, etc.) while focal activities targeted systemic barriers to growth within agricultural value chains (from field to table) and incorporating the private sector in the process. In addition, ERA was a component in USAID/Senegal's set of interlinked value chain projects.



ERA was based on the concept that AET was not an isolated investment, but integral to the transformation of agriculture. The project tapped into and developed local innovation and talent linking it to key value chains. In this way, the knowledge and skills of all Senegalese AET institutions were mobilized and combined with research to accelerate agricultural growth. The success of this approach comes from being client-focused, linking research and outreach with farmers and the private sector in a dynamic process.

Peter emphasized the next step in design thinking as developing local grant mechanisms whereby AET institutions set up their own research agendas. This work will involve the painstaking process of developing local financial management procedures that are both internally and externally transparent.

Keith M. Moore

Keith set the stage for conversations exploring new possibilities to improve interventions for AET institutional development. The focus was centered on the way that highly qualified and

motivated agricultural professionals and entrepreneurs are produced in developing countries. The problem was characterized by ingrained traditions of memorization and the absence of a culture of problem solving and critical thinking. An emphasis on research was insufficient to stimulate innovation. A paradigm shift from research to active learning is required for the full engagement of users in the knowledge creation/learning process. Learning-by-doing (adaptive management) is an iterative process and requires soft skills development for the implied negotiations among multiple stakeholders. Context matters. This places AET squarely in USAID's Local Systems Approach for Local Solutions.

There is a growing awareness of the need for long-term perspectives in the fostering of institutional change. AET assessments in both Europe and the United States are questioning the project logic underlying contemporary HICD programming (Salm,et al., 2014; Annor-Frempong, 2015; Dichter, et al., 2015). The 'pressure for results' is undermining the capacity to produce sustained change. We need to develop alternative methods to effectively communicate iterative feedback in order to demonstrate accountability to both donors and host institutions.

Design thinking is a valuable approach to reflect on interventions for institutional transformation. The fundamental issue defining design practice is that of indeterminacy. Indeterminacy says that there are no definitive conditions or limits to design problems (i.e., 'wicked problems'). Consequently, viable solutions are achieved through iterative interaction with decision makers and stakeholders in their local context. Interventions involve many small steps, not a few big ones. Thus, interaction with users weeds out bad designs and builds confidence in good ones.



Transitioning to the workshop thematic sessions, Keith drew attention to the Conversation Coleader blogs for their contributions to improved management and implementation of AET projects and programs. Although grounded in diverse contexts, recurrent issues were

identified. These included: the role of trust in viable working relationships; building confidence and making adjustments; the role of leaders and champions; transparency and flexibility; budgeting, contracting and accountability in relationship building; and good governance.

Workshop Session Highlights

Building on participant-prioritized feedback, the following sections synthesize the common perceptions, critical insights, and leading themes that emerged from Conversation Co-Leader presentations and participant debate. Not everyone processed the ideas in the same way; some participants focused on specific technical interventions; a few emphasized program effectiveness and sustainability; others stressed accountability. All were concerned with impact. Differences of opinion often reflected scale and definitions. Taking all these perspectives into account, this summary highlights policy implications for effective AET transformation. The summary is arranged chronologically by session title to provide a sense of how different ideas arose and were discussed by participants.

Project implementation perspectives

Project Implementers

Conversation Co-Leaders for this session were Mike Bertelsen (RHEA), Dave Kraybill (iAGRI), Michael Parr (BACET), Jim Simon (EHELD), and Larry Vaughan (ERA). All were implementers of AET projects for USAID. They introduced and debated a range of issues including the importance of local political support for project implementation, situating a project within a single institution versus multiple institutions or system-level interventions, the organizational structure of project partners and relationships, the critical importance of stakeholder engagement, the role of luck versus opportunity during project implementation, and the implications of project contracting mechanisms.

Political support for project implementation was presented as critical to all projects. It may develop during early negotiations or evolve with implementation. This support is most valuable when it derives from a local/national agenda involving different ministries and private sector stakeholders. When direct project partners know that their political hierarchy supports their project efforts morale is considerably improved. Political support is a leadership issue on which everyone was in agreement. However, some nuances were noted. In particular, that champions may shift into or out of government positions, creating instability at the institutional level. Individual leaders do make a difference, particularly when considerable time and effort have been put in to building relationships.

Project size, number of partners, and duration are key factors in project organization, either dependent on objectives or limiting the



capacity to achieve some objectives. The level of project intervention, whether at the individual researcher, department, institution, or system level, was critical to what could be accomplished and how to go about it. Short-term projects seemed to successfully target individual-level impacts (i.e. human resource development). But those impacts appear years later after project close-out. The scale of impact is also hard to measure because it is tied to the success of particular individuals, although cumulative impact of multiple, concurrent interventions could be achieved.

The threshold level for transformative interventions appeared to be when projects directly addressed the institutional or system level. The stakes are much higher and consequently resource investments must be much more substantial to address the increased number of project components necessary to operate at this scale. Implementers would need to staff their own project office in country with expatriate leadership. Institutional projects were seen as long-term investments with the potential for sustained system-wide impact. Capacity building should go beyond just working with faculty members, but also include administrators and their staff. Building financial and project management capacity was identified as critical.

The question of whether to work with a single institution or multiple institutions was raised. The issue involved the choice of pathways to improve agricultural value chains and benefit stakeholders. The choice was seen as dependent on local context and available investment resources, as much as project goals.

Engagement with stakeholders was central to much of the discussion. Two analytic categories of stakeholders merge in the messy reality of project implementation: those directly involved in targeted AET institutions; and those within the agricultural sector to be served by those institutions. The question that arose to capture the intervention dynamics was: "How do we help AET institutions step forward to help their stakeholders?"

Implementers were most concerned about the challenges involved in engaging institutional actors. Two concepts were noted: 'organizational resistance' and 'organizational sustainability'. Organizational resistance could be overcome in two ways. Informal conversations were used to discover what AET improvements were desirable and feasible, as well as a means to identify those more open to change. In addition, participants noted that implementing several types of small changes (building women's bathrooms, improving basic classroom facilities, etc.) improved morale and relationships, built trust, and mutual accountability. The ultimate objective was to attain organizational sustainability, that is, embedding new and improved practices in the formal system. This involves extending the informal conversations to everyone.

Study tours were also noted as an important engagement tool. They expose institutional and ministerial leaders to new ideas, promote peer-to-peer learning, and provide opportunities for extended conversations.

Luck and opportunity were discussed often, sometimes interchangeably. Each time the conclusion involved the necessity of being prepared. Some implementers saw project contracting mechanism imposed programmatic rigidity and linearity in planning and implementation as a constraint. USAID representatives expressed some surprise at this since there are mechanisms that can allow for flexibility. However, the question arose: are these solutions expedient under the circumstances? The short-time frames for project proposals and implementation, the expectation of immediate results, and the consequent incentive systems that characterize the Feed the Future framework can hinder flexible project implementation.

The iAGRI three-step theory of change and indicators were presented as implementable within the current project framework given contractual space and a supportive mission. Step one involves engaging institutional partners in informal "conversations that matter" that lead to specific plans. Step two is implementing organizational experiments to pilot these ideas. Step three is scaling up institutional changes where progress is happening. There are indicators of progress applicable to each step.

Host Country Institution Representatives

Conversation Co-Leaders for this session included Irene Annor-Frempong (director of research and innovation, FARA,Ghana), Ipolito da Costa (ministry representative, BACET, East Timor), Kandioura Noba (college dean, ERA, Senegal), Fr. Michael Schultheis (rector, RHEA, South Sudan), and Daniel Yahba (college dean, EHELD, Liberia).

They discussed what needs to be done and how to do it covering issues such as: sustainability, the land grant model, project design, process ownership, financing, and a strong emphasis on youth development.

National counterparts were clearly focused on building AET systemic capacity at two levels: within institutions (as in the post-conflict cases); or across the AET system, linking with stakeholders and contributing directly to productivity improvements. In the first instance, efforts focused on filling out the middle levels of the employment pyramid, particularly through development of strong two-year technical programs, but also the preparation of professors, who in turn train teachers throughout the system.



Secondly, counterparts spoke about efforts to adapt the U.S. land grant model linking agricultural research, extension, and education with stakeholders. Focus

was squarely on increasing AET collaboration, particularly with stakeholders through networks like the Reflection Group on Agriculture in Senegal (GRAAS) and the iAGRI innovation connection. This increased collaboration involved a shift to the innovation systems paradigm, working with the private sector through incubator mechanisms led by universities (e.g., UNIBRAIN).

Questions about how project interventions could be used to achieve these goals stressed the idea that the process be owned and led by local institutions. It was necessary that local partners play strategic roles, sharing in the ownership of the program from the start, both technically and politically. Furthermore, ownership and leadership were seen as part of the package of capacities that needed development. Partnership engagement and accountability through good coordination and communication was recommended to ensure this capacity strengthening. Sustainable transformation followed directly from the conversation on ownership. Issues discussed included involvement in the original design of the project and assuring that it was consistent with the national AET agenda.

The rationale often cited for project interventions is the importance of investing in AET for youth development. Project stakeholders should be considered inclusively: universities, research institutions, private sector, NGOs, ministries, technical colleges and secondary schools, etc. From the stakeholders, champions could be identified and problems clearly specified. Project ideas included clustering projects to be mutually supportive around a central institution or system. Individual capacity development should contribute to organizational and institutional capacity development. Among the ideas for human capacity development, study tours were noted for their policy impact

Concerns were expressed about the dependence of AET institutions on either donor or government funding. Some institutions were more advanced in diversifying their income streams than others. Building to this advanced level of systemic capacity would require sustained funding and supportive leadership. Implementation capacity was also seen as important to reinforce.

Thematic Discussions

Trust and Partnerships

Conversation Co-Leaders for this session were Peter Koehn (University of Montana), Amon Mattee (Sokoine University), and Daniel Yahba (Cuttington University).

In their introductory remarks, they spoke of trust and relationship building. Trust was seen as the essence of institutional transformation creating the new relationships that change the way things are done.

Participants found trust to be very complicated. It is a rich concept with multiple qualities that can be applied to a range of relationships. Trust is sensitive to how it is created and transferred. Like credit, trust can be built through successive interactions. Trust as accountability is demonstrated through the transparent and mutually acceptable management of material resources. Consequently, credibility and confidence are generated over the course of multiple interactions. Trust is also recognized in a shared commitment to certain values or understandings.

There are different types of relationships in which trust may be expressed. Like social capital (of which it is often an indicator), trust can exist between and across groups (bonding and bridging social capital). Participants discussed building trust among and between multiple levels: within departments; between disciplines; across different levels of the hierarchy (as between faculty members and administration); between donors and beneficiaries; and with various sets of external stakeholders. Trust may be institutionally structured through MOUs, contracts, and various sorts of formalized agreements. Although these forms of trust may be initiated by a hand shake, they often involve formalized means of accountability.

There was widespread agreement that trust was in the first instance generated between individuals. Consequently, face-to-face interactions were preferred as they enhanced the quality

of the relationships, providing opportunities to make the engagement more meaningful, drawing on multiple sources of commonalities and mutual understanding (family, community, hobbies, etc.). Trust is transferable from one partner in a relationship to a



contact of the other partner, as in the sharing of contact information, or more formally, with the change in leadership of an organization with a formal contractual relationship. Confidence can be demonstrated through the sharing of contacts or relationships. However, in these cases, reaffirmation of trust through accountability mechanisms was often needed.

Trust usually took some time to build, but could be lost in a moment. Overcoming mistrust and skepticism was found to be a common occurrence in the context of these multi-partner relationships. Mistrust often resulted from misunderstandings of what was expected from partners. Setting and managing expectations for a project could easily be miscommunicated across levels of a hierarchy, or between implementer and host institution representatives. A good deal of the session's discussion focused on mechanisms to build or re-build trust and often focused on defining the parameters of a relationship between institutional cultures and setting the terms of understanding and accountability.

Project interventions promoting social interactions were considered helpful for building trust in a relationship. These interventions included: needs assessments, study tours, informal "conversations that matter", and small scale initiatives requiring little initial investment in order to build credit. For example, small scale organizational experiments provide a way to take small steps in which new ideas can be tested and outcomes evaluated.

Day One Take-Aways

Participants appreciated the great dialog, good listening, and incredible opportunity for meaningful engagement among practitioners. From the 31 respondents of the participant feedback survey, building trust was the key idea highlighted in day one. Implementation of a phased, portfolio approach using small experiments or interventions with frequent feedback emerged as another top result. This approach allows implementers to flexibly adapt to opportunities and failures. There was also a preference for locally developed solutions.

- **1** Personal relationship and importance of trust take time
- 2 AET is addressing barrier to growth
- 3 Incentives are critical in governance
- **4** Flexibility of design and implementation
- 5 Fail quickly and adapt
- 6 This has been an effective dialog between USAID and project implementers should happen more
- 7 Both small scale and large scale/big picture have to happen simultaneously (i.e., classroom improvements and institutional change)
- 8 Exploration of different modes of capacity building
- 9 Universities can have great contributions to AET and sustainable development should be used more
- 10 Implementation in a phased approach to avoid larger failures
- 11 Women are critical for effective stakeholder engagement
- 12 Same problems addressed in different ways with different methodologies
- 13 Many of these issues are present in the US as well (silos in universities, etc.)
- **14** Sustainability is not well-defined
- **15** Appreciate great level of listening at this workshop continue afterwards
- **16** Lasting trust is critical for lasting partnerships

- 17 Focus on young people and workforce development
- 18 Local solutions for local problems local solutions not so well documented
- **19** 1,000 years of experience in the room great but where are young faculty? How can we help?
- 20 Create space for failure but recognize success portfolio approach
- 21 Failures lead to illumination. We need to share our failures how do we share failures as much as we share successes?
- 22 Systems need feedback loops how to integrate small projects and trust into our systems
- 23 5Rs approach (resources, roles, relationships, rules, and results) is the way to frame this
- 24 Project design must involve recipients of the project
- 25 Luck versus design opportunity favors the well-prepared and flexible (how?)
- 26 Incredible opportunity for meaningful engagement moving forward
- 27 Think globally, act locally sustainability
- 28 Capacity building focus on impact of these projects after they end
- **29** Need to break barriers between universities and surrounding communities universities as extension, policy makers, a shared vision, rather than separate from communities

Thematic Discussions – Day Two

National AET Systems

Conversation Co-Leaders for this session were Larry Vaughan (ERA/Senegal) and Kandioura Noba (ERA/Senegal) supported by Andrew Kovarik (AEMIP/Guinea) and Josiah Tlou of Virginia Tech (UPIC/Malawi).

National AET systems face significant challenges. Although each nation has a different context or arrangement of their education, research, and stakeholder relations, similar challenges are faced. In particular, turf wars and governance issues constrain intra- and inter-institutional partnerships. As a consequence, AET can fall through the cracks between ministries. Conversely, ministry support and high level dialogue is crucial for the successful transformation of AET institutions.

Three sets of challenges were raised: inter-ministerial coordination; functional relationships between research and education; and the integration of stakeholder priorities. The AET pipeline from secondary school, through technical institutes and universities can involve up to five or more ministries, each with their own set of priorities and concerns. Research institutes may be housed separately in the ministry of agriculture. The vocational technical institute faculty is

recruited from the universities, but has not necessarily been educated with an agricultural vocation in mind. Consequently, curriculum change involves working with both universities and technical schools requiring assessments at both levels.



Raising the quality of curriculum and instruction has often targeted increasing advanced

educational opportunities for university faculty members, including training at both the Masters and PhD levels.

Research is critical to the advancement of agricultural knowledge, but housing education and research knowledge in separate institutions leads to competition rather than collaboration. Various initiatives have been implemented to address this isolation including the promotion of research grants that require partners from both educational and research institutions (e.g. ERA).

Perhaps the most dramatic change has been the incorporation of stakeholders in the transformation of AET institutions. The private sector including NGOs, local and multi-national food and fiber processors, farmers, farmer federations, other producer associations, community organizations, and students have all come to play increasingly important roles. Stakeholders are being engaged in collaborative research projects, sitting on boards of directors, and participating in workshops and outreach activities. A new mode of stakeholder intervention is developing through semi-autonomous quality assurance agencies and the tracking of students.

In Senegal, a group of AET institution representatives and private sector stakeholders has formed a body for reflection on the national food and agricultural system (GRAAS). This group discusses and explores AET policy options with the intent of sharing good ideas and proposing systemic changes at the national level. Choosing a convening institution for GRAAS is a challenge because of the diversity of stakeholders in its membership.

Takeaway Point	Votes
Barriers to intra and inter-institutional partnerships for transformation from turf wars and governance issues – multiple ministries, in which AET often falls through cracks [<i>recognition of</i>]	4
Begin stakeholder relationships	3
Ministries provide enabling environment: Can AET transforming occur without ministry support? Can post-conflict countries learn from these examples?	3
Measuring impact	2
Shift from competition to collaboration	2
Meet needs of community, workforce, stakeholders	2
In AET systems involving several ministries, high-level dialogue is helpful in transforming institutions	1
Mechanism needed to bring university into research/ extension	1
Provide opportunity for TRUE stakeholder voice	1
Create working groups for agricultural universities	1
Convening stakeholders: identifying felt needs, sector specific, neutral convener, harmonization, have topics to discuss (ag sector, science academy)	1

Curriculum Development and Pedagogical Reform

Conversation Co-Leaders for this session were Michael Parr (Land O' Lakes, BACET, East Timor), Fr. Michael Schultheis (Catholic University of South Sudan, RHEA, South Sudan), and Jim Simon (Rutgers University, EHELD, Liberia).

Three themes dominated the conversations during this session: 1) content and process of curriculum development, 2) curriculum delivery issues, and 3) teacher professional development. Participants agreed that experiential learning was an important component for AET transformational interventions.

Participants noted several subjects that should be included in any new curriculum. Most popular were entrepreneurial skills, value chains, critical thinking, gender, leadership, business plans, literacy, numeracy, problem solving, and local history and culture. These were embedded in discussions about the process by which curriculum development should be implemented. There are formal and informal modes. Although there was a consensus that formal modes were necessary, some identified informal mechanisms by which existing curriculum could be adjusted to achieve limited objectives.

Stakeholder involvement was noted as key for curriculum development. Stakeholders included government ministries, administration, faculty, students, and outside stakeholders (private sector, NGOs, and research). Emphasis was placed on the local nature of curriculum development. Relevant curriculum development includes national, faculty, student, and employer needs. Two modes of engagement were discussed: 1) dialog at the upper levels of the hierarchy and 2) faculty retreats and workshops for needs assessment, design and review, often involving external stakeholders. Formal recognition of new curricula requires some form of national approval. This dialog should begin early in the process. Institution, program, and degree accreditation legitimize system accountability.

Once the content of the curriculum is determined, how is it applied? Issues addressed included: technical teaching skills, critical thinking, cultural context, and use of local examples. Despite terminological differences, there was a consensus that experiential learning should be promoted. Experiential learning has several dimensions. It was seen both as a pedagogical tool integrated with content, and as an added element such as, internships. Some felt that experiential learning was resource heavy (requiring special equipment and transportation for field trips). Others proposed a more practical classroom-oriented, problem-solving approach for learning-by-doing. Here the concept of Pedagogical Content Knowledge (PCK) was introduced to highlight the



interdependency between specific content knowledge and how that content could be most effectively taught (pedagogical knowledge) in a particular context.

Teacher professional development was seen as a significant barrier to the advance of curriculum reform. The quality of available instructors, particularly in the case of post-conflict countries, was poor. Even in more advanced contexts, existing faculty members may only have a bachelor's degree. One challenge that concerned several participants was how to select individuals for additional training (whether for study tours, short-term or degree training). What stakeholders should be involved? Issues of favoritism were raised. Ultimately, a local solution would have to be found to generate a cohort of trained faculty available for 30-40 years of service.

For many the causal relationship between institutional transformation and curriculum revision was seen as in a chicken-and-egg question. Problem-oriented experiential learning was proposed. Have faculty members conduct research on gaps in value chains and incorporate students into the research process. Private sector entrepreneurs could be brought into the classroom to teach. All students should have the development of business plans as an essential learning goal, much as learning the concept of evapotranspiration was (in a previous era) for agronomic expertise.

The issues of intake student quality, vocational technical curriculum and students, formative versus summative evaluation, and quality assurance were also raised.

Takeaway Point	Votes
New Curriculum : values, value chain analysis, gender, remedial education, critical thinking problem solving, stakeholder involvement, big picture policies, experiential learning	5
Experiential Education: Integrating stakeholders in education process, faculty consultancies	4
Teacher Professional Development- PCK	3
Experiential Learning: Co-op education, entire cycle, cultural/ policy change	2
Faculty development is critical for experiential learning to work (time and resource heavy)	2
Value Chains: Teaching basic concept, processing gaps in V.C., engaging students in V.C	1
Can AET be evaluated in terms of impacts? Ex: entrepreneurial training	1

Budget and Contracting

Conversation Co-Leaders for this session were Ipolito da Costa (Ministry of Fisheries and Agriculture, East Timor), Jim Foreman (Finance and Administration, OIRED, Virginia Tech), and Dave Kraybill (iAGRI Chief of Party).

The conversation began with a presentation of accounting and administrative details of project implementation. The discussion quickly found traction linking minutiae of contracts and accounting with issues at the heart of institutional transformation. Yet, projects are often designed to address these challenges.

Administering contracts and budgets is characterized by a tension between control and trust. Three interdependent themes were discerned: 1) accounting capacity; 2) risk and its distribution; and 3) program integrity. Project implementation involves considerable accounting and administrative capacity. Contract partners must coordinate the development of budgets, monitor expenses, submit invoices, calculate indirect costs, prepare for audits, manage exchange rates and wire transfers, to name but a few tasks. These mundane tasks are regulated by rules and routines governed by the standard administrative procedures of each institution which must be harmonized to conform to donor standards. Implementing partners are motivated to be both efficient and reduce risk. Host country partners are concerned with their own national and institutional policy agendas, as well as those of other donors.

Accountability for project funds follows a set of reporting links from task executor (e.g., professor or researcher) through host institution and implementing partner to the donor. Others may also be included depending on the scope and nature of the activity. Task executors expect sufficient resources to be available in a timely fashion. To assure achievement of their project objectives, they prefer direct budgetary distributions from donors or implementing partners. In this way they are in control and reduce their risk. On the other hand, host institution administrators are responsible for the institutional ensemble of such activities and expect control over the resources to assure and account for institutional performance. Implementing partners tasked with assuring the sustained impact and accountability of their activities are faced with a dilemma. Do they fund an activity directly for immediate impact, or do they work through the host institution system to sustain those impacts? In either case, they will likely need to advance operating capital with its increased risk exposure.

Achieving contracted objectives involves implementing and monitoring project work plans. Project contracts in support of institutional development should be complementary with and reinforcing of institutional budgets and work plans. Such inclusiveness at the negotiation stage of contract development may not be possible because of procurement limitations and other contractual technicalities. There may be need for innovation in the development of contracts in support of Local Solutions programming.

There was considerable support for the development of local accounting capacity. Implementers will need to assess local capacities and adapt mechanisms accordingly. Best practice consensus indicated a learning-by-doing model where partner institutions are initially given small sums as capacity and trust develops. Training should be included for accountants and administrators. Trust in this case is not something that develops between individuals, but must be based on trust between institutional systems. Consequently, success takes time and considerable coaching.

Fixed Obligation Grants were not seen as effective funding mechanisms for transformation at the institutional level. They were fine for single goal/task activities, but were not flexible enough to enable adaptive management.

Takeaway Point	Votes
How far to develop local accounting capacity? Far enough that external funds can be managed at institutional and project/ research levels	3
What is transparency? What does it look like? Context-specific?	3
Use youth development (curriculum/ programming i.e. ethics, leadership, etc) as a fraud prevention tool	2
Local accounting capacity? Learn from process using actual expenditures from the field; strengthen acting infrastructure	2
Implementer should select the mechanism based on balancing risk, efficiency and/ or the need for capacity building: phased grants (trust), obligations tied to results and time	2
Decentralize? To the level that there is capacity to manage and trust	1
Decentralized control (capacity, efficiency, trust)	1
Revenue streams- building capacity of the institution- help capture alternative revenue streams and facilitate links to other services	1
Innovation	1

World Café Summary

Small groups engaged in 15-minute brainstorming exercises. Core themes are summarized here.

Intervention weaknesses: Weaknesses of past AET efforts revolved around poor grounding in the local context. There were three approaches to addressing these weaknesses: (1) establish and use baseline studies for design and future assessment; (2) improve communication with stakeholders; and (3) adaptive management.

Addressing complexity: In order to account for contextual complexity, participants advocated early local assessment (SWOT, GAP, etc.) and listening to stakeholders. It is important to embrace complexity by including multiple levels and perspectives in design and feedback. Flexible contracting should be used to facilitate iterative adaptation.

Theories of change: No elaborated theories of change were proposed, but there was stress on a few key elements. Local stakeholders need to be engaged



throughout a project. Identify and mobilize champions; local leadership was important. There

was a strong emphasis on youth engagement, as well as professional mentorships, changing mindsets, and new incentive structures.

Organizational experiments: Lots of ideas were proposed for organizational experiments that could be tailored locally. Many focused on youth; others on engaging the private sector in AET experimentation. To develop and share ideas, peer-to-peer learning through study tours, exchanges, simulations, and other fora was suggested.

Day Two Take-Aways

Reflecting the range of topics discussed this day, participants shared a diverse set of take-aways. Several noted the diversity of perspectives, the disagreements that were provoked, and multiple approaches to complex realities. The day held something for everyone.

- **1** Importance of adult education
- 2 Highlights integrated transdisciplinary approach, across disciplines on complex problems
- 3 We started to disagree diversity of opinions. Not a single one step xxxxx of alternative poverty
- 4 Experiential learning, curricular reforms and budgeting
- 5 Talent in the room. Be part of discussions. Need for HICD.
- 6 Complicated lots of ideas, no answers
- 7 Personal engagement in facilitating positive institutional change. Building trust and acceptance of positive change.
- 8 Diversity the way we manage our institutions. We are academics the group should be enlarged we have different perspectives
- 9 Understand the market for trainees or students. talk about youth and focus on their needs
- **10** Intrigued by curriculum development of many perspectives
- 11 Modified world café mistakes. Begin to synthesize. Identifying actions from learning
- 12 Every question created 10 more questions
- 13 Creative ways for organization experiments small change to big change
- **14** Champion for positive deviance
- 15 Passion
- **16** The importance of process
- **17** The importance of budgeting
- **18** Project designs are not mistake proof'
- **19** The capacities of institutional linkages
- 20 The institutional evaluation process
- 21 Avoid the assumption of shared language/terms
- 22 Investigate what change emerges from workshops like this
- 23 Learning others' pitfalls and successes helps generate fresh ideas
- 24 There is a great capacity for adaptive management with diverse groups
- 25 Unpacking the challenges of the institution
- 26 Involving stakeholders in project design and evaluation
- 27 Assumptions that didn't work should [be subjected] to new experimentation
- 28 Mentorship and coaching is valuable at every level
- **29** Engage local counterparts at every stage
- **30** Contracting relationship are key in every program
- 31 Sustain the energy, passion and zeal of the conference

Thematic Discussions – Day Three

Governance and Leadership

Conversation Co-Leaders for this session were Peter Koehn (University of Montana), Amon Mattee (Sokoine University of Agriculture, Tanzania), and Kandioura Noba (Université de Cheikh Anta Diop, Senegal).

Participants discussed governance structures and practices for project-induced transformation of AET institutions. A three-stage process could be discerned whereby institutional leaders come to embrace change through (1) project establishment of organizational mechanisms that (2) promote good communication leading to (3) leadership development for sustained transformation.

Different mechanisms have been used to associate project implementing institutions with host AET institutions. There was some debate over whether a project implementing structure should be embedded in the host institution. There was general agreement that access across the institution was important for institutional buy-in and that independence of action was important for introducing innovative ideas and ways of doing things. Recognizing power differentials, the concept of 'near symmetry' was introduced to characterize relationships where sides are not equal but the overall balance between project and host institutions is acheived. Project co-coordinators would need to negotiate a set of operational roles and responsibilities to achieve the desired complementarity.

Leadership development was seen as critical to generating the mindset for sustainable transformation. Mechanisms for this include groups for discussion and reflection among AET institutions as well as within them. Mentoring champions was seen as valuable, but not necessarily in the traditional dyadic form. Group and peer mentoring (within age cohorts and social hierarchies) can initiate conversations that matter, later to become more inclusive. There need to be incentives to encourage junior faculty to become involved in order to provide for leadership renewal.

Institutional transformation is dependent on convincing university leaders who are custodians of the status quo. These leaders need to be exposed to influences outside of their formal system. Informal conversations, workshops



with outside consultants, and study tours can begin to build the understanding and critical mass to support change. Lobbying can also involve authorities (ministry officials, private sector entrepreneurs) outside of the university. Resistance is to be expected and dealing with it involves listening and developing shared understandings. Formative assessment activities can stimulate valuable dialog.

Takeaway Point	Votes
Formative Assessment: purposeful communication plans, regularly scheduled, reviewing perspectives of all "actors) on what has been done and what needs to be done	4
Role of program: enabling environment (systems and structures); leadership (capacity building and leadership); and support for champions and leaders	3
AET transformation is dependent upon building trust and mutual respect between the agents and voices of change, both formally and informally with institutional actors.	3
Strategic planning with broad stakeholder input can support positive change and continuity as stakeholders/partners renew.	2
Mechanisms for transforming governance structure: pressure from the top; pressure from within; and building leadership capacity	1

Next Steps

Working groups were asked conclude the workshop by identifying a change innovATE could make in the coming year that would foster transformation in AET institutions. The five groups came up with the following:

- Effectively tell the story of the ways in which AET transformation improves food security.
- Use social impact bond design to partner an AET institution with a local private sector entrepreneur to invest in AET transformation at the local level.
- Conduct a needs assessment with an AET partner to find out what client services they are willing to pay for.
- Listen to student voices through new social media and incorporate their ideas into project design.
- Prepare institutions to be transparent and fiscally competent beyond the end of project and invest indirect costs into focused professional development.

Last Thoughts

Larry Vaughan (InnovATE Director, OIRED/VT) and Clara Cohen (AOR, BFS/USAID) thanked workshop participants and offered the opportunity for parting thoughts to InnovATE

Advisors Donna Westfall-Rudd (ALCE/VT) and Charles Maguire (ex-World Bank), and USAID representatives Gary Alex (BFS/USAID), Ronit Gerard (USAID/Senegal), Bill Bradley (USAID/Guinea) and Jessica Bagdonis (BFS/USAID).

Quoting Dave Kraybill, Donna Westfall-Rudd summed up the workshop with the



phrase, "change is based on conversations" urging participants to continue these conversations and build collaborative relationships.

Charles Maguire stressed that in most countries AET was governed by two masters, the Ministry of Education and the Ministry of Agriculture. He was impressed with the progress building middle management, but pointed out the need to target the AET message to Ministries of Finance and Planning.

Following up on this theme, Clara Cohen noted the need to convince USAID missions and communicate the AET message to Washington staff, private sector clients, Congress, and innovation lab partners. Clara went on to note that only modest resources may be required to break out of the project model and achieve the scaling that is being sought.

Building on Clara's interest in a matrix of institutional transformation, Gary Alex suggested that there were two types: building institutions and reforming institutions. Building institutions was appropriate for post-conflict situations, and we have had considerable experience since the 1960s and 1970s. On the other hand, we have had less experience in reforming institutions, and this is the knowledge that InnovATE was designed to deliver.

Ronit Gerard mentioned that she would like to learn more about what some of the specific interventions of iAGRI and how the goals and objectives compared with ERA.

Bill Bradley suggested that we need to learn more about the different ways that youth get information today and apply that knowledge in using ICT to transform our AET modules to become useful for people in rural areas.

Conclusion

Many conversations were engaged by AET project implementers, institutional counterparts, and donors during this workshop. Those that matter will continue. Particularly those that can help us achieve our mutual goals of youth employment and nutritional food security. Concern with youth employment was clearly the driving force behind this event. AET programming must foster the increased production of highly qualified and motivated agricultural professionals and entrepreneurs in developing countries to feed the future.

Sustainably addressing this challenge in a complex and dynamic global environment involves a systemic, long-term, institutional development perspective. Adaptive management at the local level is required, but there



are some basic design thinking themes that can help focus our efforts. The conversations held during this workshop were guided by expert-identified "conversations that matter". What follows is an inventory of those conversations that survived workshop scrutiny.

Major Take-Aways

Three conditions appear to be universal in AET transformation: context, trust and time. Context matters. Taking local conditions (culture, infrastructure, capabilities, resources, and idiosyncracies) into account means that introducing specific practices or techniques are not as critical as how they are adapted in the particular situation. Trust is the essential element that binds effective development relationships. Trust builds from face-to-face relationships, but makes the greatest impact when it is manifested in formal agreements, contracts and accountability mechanisms. Furthermore, successful institutional transformation takes time. It is not a linear process, but involves the give-and-take of bringing partners on board, negotiating operational relationships, and mutually testing and implementing a feasible plan of action. This means that pressure for immediate, quantitative results is counter-productive.

Stakeholders are key

In all of these conversations, stakeholders were central. Stakeholders are key to understanding and effectively negotiating the local context. Quality stakeholder relationships are critical to sustained improvements in AET. Early engagement with stakeholders ensures practical project design and implementation. Stakeholders are the AET leaders and champions. They mobilize local resources and provide political support including inter-ministerial coordination, institutional commitment, and employee morale. Negotiation with and among stakeholders is critical to building the consensus necessary to undertaking AET transformation and achieving organizational sustainability.

Stakeholders include: farmers, processors and other value chain actors, the private sector, entrepreneurs, government and ministry officials, donors, university administrators, faculties,

staff and students. Although individual relevance may vary from issue to issue, none can be ignored. This includes the variety of different actors within a stakeholder institution, from hierarchy to working staff. All can be champions. Cultivating stakeholder relationships is a core activity of project managers. A consensus emerged around engaging in informal conversations that:

- build trusting relationships,
- identify priorities relevant to the local context, and
- provide locally adapted mechanisms for AET transformation.

Serious conversations rarely begin on the first day. Trust and mutual respect must develop and this takes time. Setbacks can occur, and trust must be re-built. Furthermore, sustained transformation requires buy-in and ownership on the part of a wide range of institutional actors. Conversations must extend beyond direct project contacts, as trust is transferred and champions are developed.

Contracting relationships

The link between contracts and accounting capability, on one hand, and AET institutional transformation, on the other, may not be so obvious. The workshop conversations frequently raised this crucial relationship. The systemic capacity of host institutions to manage USAID contracts influences effective programmatic opportunities for agricultural development, yet projects are often not designed to address these issues. Three dimensions were identified:

- poor institutional accounting capacity;
- project partner risk and control issues, and
- lack of project flexibility to adapt to opportunities and failures.

Implementing partners are often confronted with the choice of whether to fund an activity directly or have their host institution partner manage the finances. Effective project management encourages direct funding to ensure timely completion of the activity and immediate results. Passing funds through the host institution builds systemic capacity for more sustained results, but this puts at risk late and/or incomplete activity implementation, and adds more paper work requiring additional management resources.

There are fiduciary and programmatic risks that all partners experience. Each partner, whether donor, implementing agent, or host institution, attempts to control these circumstances through internally balancing risks or shifting risks (fiduciary or programmatic) to partners. Contracts and the negotiation of contract terms sort these issues out between partners.

There was considerable support for developing local accounting capacity and a learning-bydoing model. Fixed obligation grants, however, were not seen as appropriate for the adaptive management and coaching needed for institutional development. Contracts limiting programmatic flexibility were also seen as problematic. If beneficiary independence is part of achieving food security, as suggested by USAID Forward and Local Solutions, innovation in development contract design may be required. Contract officers should be invited into these conversations.

Project implementation

Ensuring successful project implementation was also stressed as a priority concern of participants. It focused primarily on two features:

- Organizational forms that structure project relationships for effective communication and coordination.
- Processes of change that build on small successes and allow for flexibility to adapt to opportunities and failures.

How project-organization relationships are structured is important to the facilitation of conversations. Open lines of project communication need to be assured across the partner AET organization. These lines of communication should involve:

- face-to-face relationships (trust building);
- conversations that matter (mindset change); and
- shared governance (ownership).

Workshop participants preferred an implementation process which featured a phased portfolio approach using small experiments/interventions with frequent feedback and flexibility in adaptation to opportunities and failures. In this way, consensus for scaling up could be built through expanded conversations with solid evidence. In addition, the impacts of failures (expected in adaptive management and experiential learning) could be limited.

Experiential Learning

Perhaps no other theme had such heartfelt support as experiential learning. It is at the core of real AET institutional transformation. Three aspects were indicated. Experiential learning:

- 1) is a holistic, multidimensional concept;
- 2) requires teacher professional development; and
- 3) should be inclusive of all faculty members and administers in organizational conversations in developing programming.

Experiential learning is more than internships, study tours, and supplying laboratories with instructional materials. Entrepreneurial culture is based on critical thinking and problem solving skills for innovation. It is not just subject matter that needs changing; the system and mindset of an institution should be addressed for transformation, involving both the curriculum and pedagogy that supports it.

It requires teacher professional development, as well as building curriculum design, research, and outreach relationships with stakeholders/clients. Subjects need to be developed with respect to both their content and delivery mechanism as suggested by the concept of pedagogical content knowledge (PCK).

Telling the story

Agricultural education and training is fundamental to sustained improvements in a country's food security. However, the link is rarely direct. Institutionally linked transformations in curriculum, pedagogy, teacher professional education and administrative systems can generate

highly qualified and motivated agricultural professionals and entrepreneurs. As these agricultural professionals become a critical mass in a country's agricultural value chains, production and incomes will improve leading to nutritional security. The pathway to that goal can be indicated through graduate tracer studies and employer surveys to demonstrate placement of improved human capital in agricultural value chains.

Articulating a theory of change that effectively tells the story of institutional transformation story is challenging, particularly to those seeking immediate, quantitative indicators. The conversations were not conclusive, but as far as the big picture was concerned there was consensus that small steps with frequent feedback would produce the best overall results. This was because failures could be quickly identified, accepted and resolved, rather than left to fester and remain unresolved.

Pathway to a theory of change

Institutional improvements come through confronting challenges together (from multiple stakeholder perspectives), determining political will and systemic capacity, and then collectively implementing small experiments that when successful can be scaled up to change institutional practices.

- 1. Engage stakeholders across system levels, including:
 - a. the top of the hierarchy
 - b. those who will be implementing day-to-day improvements
 - c. supporting partners
- 2. Initiate informal conversations to:
 - a. explore locally experienced institutional challenges for improvement (interpretations, definitions, and opportunities)
 - b. identify 'improvement' champions
 - c. conceive a number of small organizational experiments (to test strategies and practices for improvements)
 - d. determine absorptive capacity
- 3. Share experimental outcomes and formally discuss how they may be brought to scale within the institution or system
 - a. involving champions and formal decision-makers
 - b. change is incremental; multiple small experiments distribute risk
 - c. successful experiments can be brought to scale
- 4. Institutionalize quality improvement:
 - a. Collect data from the outset (to inform conversations and decision making, and to assess progress)
 - b. instill a culture of quality improvement.

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