



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Education and Research in Agriculture (ERA)

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List of Abbreviations

AETR	Agricultural Education, Training and Research Institution
ANAQ-Sup	<i>Autorité Nationale d'Assurance Qualité de l'Enseignement Supérieur</i>
ANCAR	<i>Agence Nationale de Conseil Agricole et Rural</i>
APROVAL	<i>Association des Professionnels de l'Alimentation pour la Valorisation des Produits Locaux</i>
BAME	<i>Bureau d'Analyse Macro-économique</i>
CA	Conservation agriculture
CBSP	Community-based Service Provider
CFPH	<i>Centre de Formation Professionnelle en Horticulture</i>
CNFTEIA	<i>Centre National de Formation des Techniciens d'Elevage et des Industries Animales</i>
CNFTEFCPN	<i>Centre National de Formation des Techniciens des Eaux et Forêts, Chasse et des Parcs Nationaux</i>
CONGAD	<i>Conseil des ONG d'Appui au Développement</i>
CROP	Collaborative Research and Outreach Partnership
DRDR	<i>Direction Régional de Développement Rurale</i>
ENSA	<i>Ecole Nationale Supérieure d'Agriculture</i>
ERA	Education and Research in Agriculture
FEPRODES	<i>Fédération des Groupements et Association des Femmes Productrices de La Région de Saint Louis</i>
FIARA	<i>Foire internationale d'agriculture et de ressources animales</i>
FNRAA	<i>Fonds National de Recherche Agricole et Agro-Alimentaire</i>
FTF	Feed the Future (presidential food security initiative)
FTFMS	Feed the Future Monitoring System
FY	Fiscal year
GIE	<i>Groupement d'intérêt économique</i>
GRAAS	<i>Groupe de Réflexion sur l'Agriculture et l'Agro-alimentaire au Sénégal</i>
HACCP	Hazard Analysis and Critical Control Points
IPM	Integrated pest management
IRD	International Relief and Development
ISFAR	<i>Institut Supérieur de Formation Agricole et Rurale</i>
ISRA	<i>Institut Sénégalais pour la Recherche Agricole</i>
ITA	<i>Institut de Technologie Alimentaire</i>
LTAEB	<i>Lycée Technique Agricole Emile Badiane</i>
MEDD	<i>Ministère de l'Environnement et du Développement Durable</i>
MESR	<i>Ministère de l'Enseignement Supérieur et de la Recherche</i>
OIRED	Office of International Research, Education, and Development (Virginia Tech)

PMP	Performance Monitoring Plan
PMU	Project Management Unit (Dakar project office)
PPP	Public-Private Partnership
POPAS	<i>Plateforme des Organisations Professionnelles de l'Agroalimentaire du Sénégal</i>
Q1, Q2	1st quarter, 2 nd quarter, etc.
SAED	<i>Société Nationale d'Aménagement et d'Exploitation des Terres du Delta du Fleuve Sénégal et des Vallées du Fleuve et de la Falémé</i>
SNRER	<i>Réseau National pour l'Enseignement Supérieur et la Recherche du Sénégal</i>
TU	Tuskegee University
UASZ	<i>Université Assane Seck de Ziguinchor</i>
UC	University of Connecticut
UCAD	<i>Université Cheikh Anta Diop de Dakar</i>
UGB	<i>Université Gaston Berger</i>
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USSEIN	<i>Université du Sine Saloum El-Hadji Ibrahima Niasse (formerly USSK)</i>
USSK	<i>Université du Sine Saloum à Kaolack</i>
UT	<i>Université de Thies</i>
UVS	<i>Université Virtuelle Sénégalaise</i>
VT	Virginia Tech

Executive Summary

Agriculture in Senegal is changing, with the help of innovations from Feed the Future (FTF), USAID, and related initiatives. Senegal’s agricultural education, training, research, and extension system must also change in order to provide relevant knowledge-based innovations and to foster high-quality local leadership for these agricultural developments. To that end, ERA continues to develop human and institutional capacity in agricultural education, training, and research (AETR) institutions in order to help those institutions better serve the needs of the Senegalese public and private sectors, including farmers at all levels. In FY16, ERA entered a one-year extension, which is Year 6 of the project. In the first half of Year 6, the project was quite active, producing a variety of results.

In the domain of **Component 1, “Strengthening Agricultural Education and Training,”** the project continued to offer capacity building workshops on syllabus creation, collaborative curriculum develop, learner-centered pedagogy, experiential learning, student assessment, e-learning, the common book, and other innovative pedagogical approaches. More so than in past years, these workshops were led by local experts rather than international ones, which will contribute to the sustainability of this work after ERA is gone. ERA also continued to support five AETR institutions in their systems evaluation-influenced tracer study, following up on the employment and educational outcomes of their graduates.

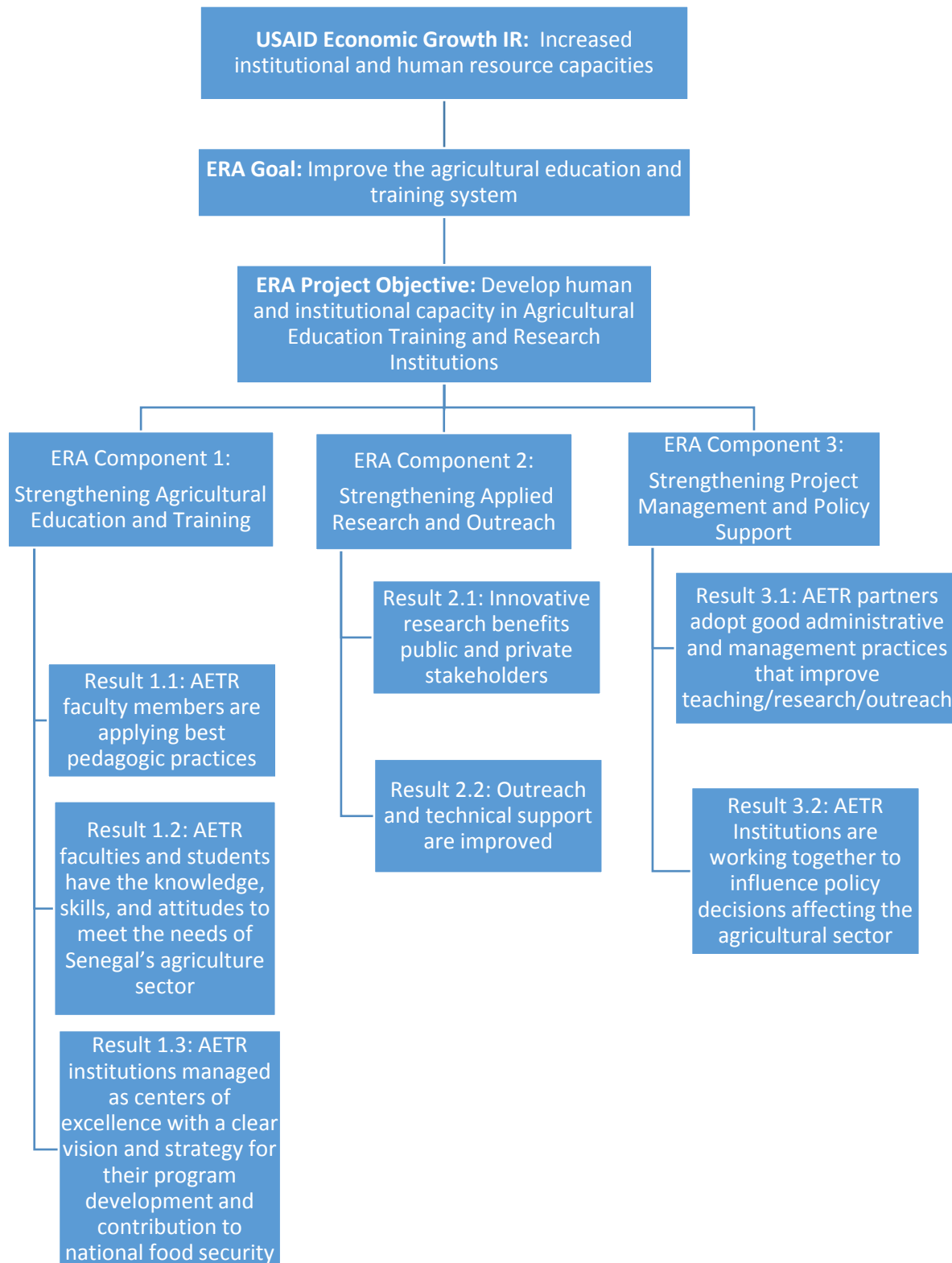
As pertains to **Component 2, “Strengthening Applied Research and Outreach,”** Senegalese AETR staff, students, and faculty members, with other partners continued ongoing multi-institutional, interdisciplinary applied research high-priority crops and issues, such as millet, rice, sweet corn, and instant flours; these projects continued their focus on discovering and sharing climate-smart ecologies able to adapt to salty soils, an increasingly important constraint in Senegalese agriculture.

Regarding PPPs for agro-alimentary development, the UCAD and POPAS partnership continued to unite faculty members, interns, and women’s economic empowerment groups in a training and development partnership. In the first half of FY16, an extensive scaling-up process began, designed to reach a large number of GIE members to disseminate the evidence-based approaches to local food processing that have been developed. In attrition, new platforms were developed in Ziguinchor and Bignona to scale up these activities and results still further.

The 4-H Senegal Positive Youth Development (PYD) program in agriculture and entrepreneurship for sustainable community development continued to take hold and develop. The three pilot clubs in Toubacouta continue to improve their implementation of PYD, reaching over 100 youth, and receiving high praise from the local community. Through continued collaboration with 4-H experts from Virginia Cooperative Extension, as well as with Peace Corps and additional partners, the program has now been scaled up to St. Louis, Ziguinchor, and Bignona.

Finally, in the domain of **Component 3, “Strengthening Project Management and Policy Support,”** ERA continues to endeavor to help the Government of Senegal and AETR partners to operationalize the new law governing universities (*Loi n°18/2014*), which added outreach as a university mission (*service à la communauté*). In addition, ERA facilitated meetings to lay the groundwork for a national e-learning network, and finalized the gender assessment with the Ministry of Environment and Sustainable Development.

USAID/ERA Results Framework



Component I: Strengthening Agricultural Education and Training

ERA targets three results under this component: (1) Improved teaching practices; (2) Increased knowledge, skills, and attitudes of students and faculty; and (3) Improved management of AETR institutions as centers of excellence.

Result 1.1: AETR faculty members are applying best pedagogic practices

Achievements

A week-long pedagogy and syllabus development workshop was held for roughly 200 UCAD and CFPH teachers and researchers, led using local expertise from within UCAD's Direction of Pedagogy and School of Education. Press coverage of the workshop can be found [here](#). A similar workshop was held with ITA food processing trainers, led using local expertise from University of Thiès (the Director of Pedagogy). This activity also strengthened the institutional partnership through training between UT and ITA.

The Common Book initiative—which provides an innovative example of how AETRs can stimulate students' critical thinking and build a sense of community among them—continued to be scaled up, with session being held with students of ISFAR, UASZ, and CFPH. The chosen book *L'Agriculture Sénégalaise de 1958 à 2012* was distributed at each institution and the activity was managed by a committee of 2 or 3 members in charge to encourage discussion among students. Animation sessions were organized in these institutions in the presence of the author who answered the students' questions and shared their understanding of his book.

Additionally, a workshop was held for UGB teachers and researchers to build capacity around good practices in the assessment of student learning.

Result 1.2: AETR faculties and students have the knowledge, skills, and attitudes to meet the needs of Senegal's agriculture sector

Achievements

While thirteen scholars continued their work in the US towards completing their degrees, returned scholar Diouma Faye, who completed her Master's at UConn, has been appointed as Chief of the "Production and Marketing" office at PRODAC, a 5-year agricultural program being implemented by the Senegalese Government.

In support of efforts to connect ENSA's Master's in Value Chains to real-life FTF value chain case study examples, ERA organized exchange visit with COMFISH and Naatal Mbay oriented towards achievements in value chains (ENSA, ISFAR).

To strengthen capacity of some key partners who lead efforts to instill experiential, community-focused agroforestry pedagogy and training at UASZ, support was provided to faculty members to participate in national and international events related to food security: Drs. Daouda Ngom and

Mohamed Charahabil participated in the third of three sessions comprising the Master training program on Cashew Value Chain Promotion organized by the African Cashew initiative. Upon their return, they began planning a series of trainings in the community and changes to their course design, all of which will be implemented in the second half of FY16.

Related to the “Public-private Partnerships for the Development of Training Programs on the Seed Sector” initiative, partners made strides towards both implementing the curricula and sharing the processes and results of this collaborative curricular design activity.

In addition, ERA facilitated a series of workshops on development of research projects, scientific writing that reached over 100 teachers and researchers from UCAD, CFPH, ISRA and ITA (Dakar), UGB, CNFTEIA, DRDR, SAED, and FEPRODES (St. Louis), and UASZ and ISRA (Ziguinchor). In addition, focusing on the partners who received small sub-awards, ERA facilitated a separate workshop on scientific writing, publishing, and knowledge translation (e.g., via policy briefs) to promote dissemination of results from ERA’s collaborative research innovation platforms.

Result 1.3 AETR institutions managed as centers of excellence

Achievements

ERA facilitated workshops with university librarians on Invenio (a digital library management framework) software, plus the previously mentioned workshop for UGB teachers and researchers on good practices in the assessment of student learning. Both of these workshops will help improve the management of AETR institutions.

Additionally, a work meeting in Dakar and ongoing collaboration by distance on the implementation of the tracer study allowed partners from the implicated AETRs (ISFAR, LTAEB, ENSA, UASZ, and UGB) to make good progress on their studies. The studies contain some elements that are standardized across the systems, and others that are particular to each institution, to allow for variation in the institutional contexts.

In the domain of self-evaluation by institutions in search of accreditation for their educational degree programs, ERA worked in partnership with ANAQ-Sup to formalize and disseminate the harmonized tools and methodologies of how to evaluate and assure the quality of agricultural higher education and training programs.

Constraints encountered and unresolved issues

Some activities, such as the completion of the tracer studies and scheduling of value chain study tours are taking longer to be fully implemented and to come to fruition than we had initially planned, for various reasons. Largely this is due to the difficulty of arranging multiple partners’ schedules.

Component 2: Strengthening Applied Research and Outreach

ERA targets two results under this component: (1) Public and private stakeholders benefit from innovative research conducted by AETR institutions; and (2) Outreach and technical support are improved. One primary way in which ERA supports applied research is via Collaborative Research and Outreach Partnerships (CROPs) that were funded as three-year sub-awards to a lead Senegalese institution through a call for proposals requiring inter-institutional collaboration. Another way is to promote innovative ways to share knowledge and to encourage universities and other AETRs to do community-engaged work.

Result 2.1: Innovative research is benefiting public and private stakeholders

Achievements

Work continued the CROP multi-institutional interdisciplinary innovation platforms, as well as related applied research platforms, on:

- Intensification & sustainable management of millet production in areas of Thies, Louga and Nioro: Improving, expanding and strengthening the value chain of superior varieties
- Production & processing of sweet corn in Senegal
- Sustainable improvement of cereal productivity in salty environments
- Improving the productivity of rainfed rice in Casamance
- Promotion of local rice in the valley and delta of the Senegal River
- Fortified instant cereal-based products for the Senegalese market
- Conservation agriculture using legumes in millet systems

However, for the first half of FY16, progress on the CROPs was slower than expected. The projects will officially come to an end by June, at which time only targeted support will be offered to ensure that the results of the research platforms are translated into impacts.

Based on Dr. Ozzie Abaye's previous work, along with U.S. Master's student Patrick Trail (who graduated and thus is no longer directly associated with ERA), ERA is exploring a new applied research and extension platform based on testing and developing mungbean as a viable crop and value chain in Senegal. Achievements involved with this aspect include an initial training in Kaolack for lead producers and extension agents of ANCAR and members of Yaajeende, UCAD and ISRA, including the Shared Laboratory of Microbiology (UCAD-IRD-ISRA) on the mungbean value chain. This was followed by a field visit on mungbean trials with trained producers, extension agents and other partners in 14 villages around Kaolack to demonstrate the virtues of the association of millet with mungbean to increase yields. The human nutrition benefits of mungbean were also be introduced, part of ERA's partnership with Yaajeende on knowledge mobilization for nutrition-led agriculture. Twelve fields at Matam and Bakel were used to launch the test and about 30 producers participated on the launch. The microbiology lab provides locally sourced inoculum which is required for the success of this agricultural system.

ERA and Yaaajeende also worked together to test a mungbean intercropping system at Bakel and Matam during dry season. This activity followed the guiding principles of Conservation Agriculture (CA), focusing on intercropping of mungbean and maize. Additional applied research and extension plots were established to test mungbean in the *decrue*, the floodplains in riparian areas which are available for planting during the dry season.

Result 2.2: Improved Outreach and Technical Support

Achievements

Promoting institutional outreach to rural youth through 4-H

Following the two-week master training for 25 people including community leaders, faculty members from ENSA and ISFAR, ANCAR extension agents, and Peace's Corps volunteers that was facilitated in March of 2015, the three pilot clubs in the Toubacouta area have become well established and are functioning relatively well. In the first half of FY16, ERA supported this development through the provision of small gardening materials for the three pilot clubs, collaborative planning for 4-H activities with Peace Corps, ENSA, ANCAR and ISFAR, and the posting of a 3rd Year Peace Corps volunteer to coordinate 4-H in Toubacouta. The clubs are engaged in gardening, tree-nursery activities, fund-raisers (e.g., through hosting traditional wrestling competitions), and various craft projects.

In addition, the first half of FY16 witnessed the scaling up and implementation of the 4-H Senegal program in Ziguinchor and Saint-Louis, via a master train-the-trainer involving three US experts from Virginia Cooperative Extension, plus new local grassroots leaders and new partners, such as Synapse Center. These trainings involved field visits to areas around each new town to scope out club sites and to identify local leaders who will subsequently be trained.

Strengthening private/public partnerships

To continue the successful work from FY15 in joining university expertise with women's economic empowerment groups in value-added processing of local cereals and fruits through the POPAS platform, ERA began the facilitation of an extensive series of scaling-up workshops on training modules based on the local food products that were analyzed and formalized by UCAD food science faculty. Through co-facilitation between POPAS leadership, UCAD faculty, and UCAD interns these evidence-based agro-alimentary processes for approved products were disseminated to the wide network of GIEs making up the POPAS platform. Products covered included arraw, thiacy perfume, couscous, couscous with gomme arabique, among others. Scaling-up sessions were held in Dakar, Rufisque, and other suburbs of Dakar.

As with 4-H, this activity also scaled up to the north and south, with training workshops on the development and implementation of multi-institutional interdisciplinary public-private partnership platforms and revolving funds for women's GIEs working with value-added agro-alimentary products in Ziguinchor and producers' groups in Bignona.

Non-degree training of agricultural professionals

In Year 6 thus far, most non-degree training of agricultural professionals has been associated with outreach through the CROPs and with additional applied research and outreach work, such as that on mungbean.

Constraints encountered and unresolved issues

As with Component 1, the largest constraint is the slowness with which many activities unfold. The CROP projects have been notoriously behind schedule, due in part to ERA inefficiencies and poor communication, in part due to lack of follow through by partners, and in part due to natural contextual issues such as rainfall.

Component 3: Management and Policy Support Strengthened

Component 3 supports development of a sustainable administrative and policy environment for human and institutional capital investments of AETR partners. Two key results are targeted in support of this effort: (1) Partner management and administrative systems are strengthened; and (2) Collaboration increases among AETR institutions in the development of policies that improve their contributions to the agricultural sector.

Result 3.1: Management and administration systems of targeted AETR partners strengthened

Achievements

The harmonized methodology in the process quality assurance and institutional strategic planning for accreditation of agricultural curricula and programs continued to be used. Work in the first half of FY16 also progressed towards finalizing the guide and report for the harmonized methodology, which will subsequently make this approach available to other AETR systems elsewhere in francophone Africa.

Working towards sustainability in gender work, ERA achieved finalization of the gender assessment with the *Ministère de l'Environnement et du Développement Durable*. ERA and its partners also participated in a number of events that promote strengthening of AETR management systems, such as the following:

- Participation in and presentation of the ERA model at the *Colloque international sur l'assurance qualité de l'enseignement supérieur en Afrique francophone: Bilan, bonnes pratiques et perspectives*.
- Participation in an international conference on funding of research organized by the National Academy of Science, Technology and Innovation of Senegal.
- Participation in the “*Forum de l'Emploi*” organized by UASZ, with the facilitation of a signing of a MoU between UASZ and a new platform of women’s economic empowerment groups (GIEs) involved in value-added processing of local foods. The forum was also used to announce the official launch of 4-H activities at Casamance. Press coverage of the event can be found [here](#).
- Participation in fora on employment and entrepreneurship at UT and at UCAD
- Preparations to foster inter-institutional networking and awareness strengthening by planning for participation in FIARA (*Foire Internationale de l'Agriculture et des Ressources animales*)
- Facilitation of scientific exchange visit for Dr. Turekian, Science and Technology Advisor to the U.S. Secretary of State.

Result 3.2: AETR Institutions are working together to influence policy decisions affecting the agricultural sector

Achievements

ERA continues to assist the Government of Senegal in operationalizing law n°18/2014, providing new missions and governance for universities. Also, this year has seen the establishment of UCAD's *Institute Supérieur d'Agriculture et Entrepreneuriat* (ISAE), the creation of which was in part inspired by ERA. Placed as it is within the oldest and largest university in all of francophone West Africa, and in an era when university roles in sustainable agricultural and community economic development are gaining attention, ISAE is well-placed to contribute to and influence policy decisions affecting the agricultural sector.

ERA also led the facilitation of a series of meetings to lay the groundwork for the creation of a national e-learning network involving 11 institutions. The network is expected to be operational within the year, and will offer a place of institutional sharing and networking on policies and practices to promote e-learning and distance education in Senegal.

Constraints encountered and unresolved issues

TWGs, which ideally present the organizational structure by which gender and other work will continue without ERA investment, continue to languish. In part, this is likely due to the fact that many TWGs were established as parallel structures, sometime duplicating structures that were already place, and thus never gaining real buy-in. This was a concern raised in the mid-term evaluation and must still be addressed.

Also, the *Groupe de Réflexion sur l'Agriculture et l'Agro-alimentaire au Sénégal* (GRAAS) has been largely dormant in this half of the year, which is troubling because it occupies an important place in the plan for sustainability of ERA activities. In part, this inactivity is due to lack of availability of key actors, yet it is clear that ERA must make this more of a priority in the future.

Operations and Administration

Some salient activities and other factors that pertain to the operation and administration of the ERA PMU include the following:

- **Change in COP.** Once again, ERA experienced a change in leadership in the PMU (as well as in the Home Office, OIRED). Larry Vaughan returned to the U.S. and was replaced by Tom Archibald.
- **Change in DAF.** The head finance and administrative staff person, Libasse Sylla, accepted a position elsewhere and was replaced first in an interim capacity and later in a full capacity, by Fatou Mbaye, who had serves under Libasse. These two transitions may have led to a slowing of some activities, but generally the PMU continued to function as in the past.

- **Internal evaluative thinking workshop conducted.** ERA conducted an internal retreat to develop a theory of change (pathway) model to support the project's learning agenda and eventual impact evaluation. This is part of a larger endeavor to instill a culture of evaluative thinking into ERA's everyday project management.
- **Photography training for drivers.** ERA drivers were trained in photography, to increase the quantity and quality of photos of ERA activities that are useable for communications materials. This is a lower cost way of obtaining usable photos, and also builds the capacity of PMU staff to contribute to their career advancement.

Communication

Weekly activity summaries were sent regularly to USAID and project personnel. In addition to these regular communications, a videos to highlight the experiences of the returning Scholars was begun. Also, many events organized by the project were covered by national media (TV, newspapers, radio, online media), giving good visibility to the activities of the project.

Constraints encountered and unresolved issues

Constraints were mostly related to turnover at the COP and DAF position and to perennial inefficiencies in administrative functioning. There were some difficulties in operations of FOGs. A frequent issue for ERA is the slow administrative processing of payments and deliverables for FOGs. This continued in the first half of FY16, exacerbated in part by the transitions of COP and DAF. The FOGs, which in theory are good de facto mechanisms to build financial management capacity, will come to a close in the second half of this year, and any additional funds required by partners to translate their research results into impacts will be handled through On Behalf Of arrangements or other direct costs.

Appendix I. Cross-Cutting USAID Thematic Areas

ERA is closely linked to USAID/Senegal's strategic objective of increased inclusive economic growth and the FTF goal of sustainably reducing global poverty and hunger in Senegal. The FTF initiative themes of improving farming systems, agri-businesses, community efforts, value chain productivity, and production system sustainability guide and inspire the work of ERA. In addition, ERA partners with other FTF projects to ensure that Senegalese agricultural education and research institutions are linked synergistically with USAID/Senegal's food security innovations. Part of this linkage is achieved by ensuring that ERA also contributes to broad cross-cutting themes such as the ones presented briefly below.

Environment

ERA contributes to sustainable environmental management primarily by supporting applied research and extension on climate-smart crops and production techniques which are able to produce well in drought conditions and in salty soils. These technologies can contribute to efforts to more efficiently use crop land, and even to rehabilitate crop land lost to salinization. In addition, especially with DCOP and Research Coordinator's past experience at an Africa-wide level in policies and practices of pesticide management and IPM, all ERA research and outreach activities conform to required rules and regulations about use of pesticides and related products.

Small and Medium Enterprise Development

ERA's largest contribution to small and medium enterprise (SME) development occurs through our support for the PPP between POPAS and UCAD, and now in our support for similar arrangements in the areas of St. Louis and the Casamance. By the end of FY16 we aim to have reached roughly 3,000 small entrepreneurs (nearly 100% women) who, by virtue of the increased quality of their value-added local food products, should be in a position of competitive advantage over other local food processors. There is a need for ERA (along with other USAID partners such as Africa Lead) to follow-up this technical support with entrepreneurship skill building, revolving funds for purchasing of packaging, and other benefits of their economies of scale, such as bargaining power when purchasing primary materials and when seeking access to markets.

Gender

Other than completing the gender assessment with the *Ministère de l'Environnement et du Développement Durable*, gender has received insufficient attention in the first half of FY16, although gender is at least tacitly included in almost all ERA activities (such as the strong role of women in the GIE groups comprising POPAS and the other platforms). We recently received a recommendation from USAID/Senegal to increase our personnel capacity in the area of 4-H Youth Development, which would also have the effect of freeing up some time from our current youth and gender coordinator to focus more on gender.

Youth

ERA's flagship efforts in youth are the 4-H Senegal Positive Youth Development (PYD) program, which aims to connect AETRs, grassroots leaders, Peace Corps volunteers, and other partners, to foster holistic development for young people (aged roughly between 8 and 25). Rooted in over 100 years of experience in rural youth development in the U.S., augmented by 20 years of research-based knowledge on PYD, and with an emphasis on agriculture and entrepreneurship, this activity has the potential to offer both technical solutions and social solutions to the issues of youth un- and under-employment, a major national issue in Senegal. Three unique aspects to 4-H that set it apart from the myriad other youth-focused NGOs, projects, and government initiatives working in this space are: (1) its global connection to the strong network of 4-H based in Washington, D.C (from which we are planning to seek official recognition); (2) its connection to Senegalese universities and other AETRs (thus providing otherwise untapped expertise to youth while simultaneously helping universities operationalize the call to provide service to the community); and (3) its focus on PYD, which is passed on premises such as: Youth are resources to be developed not problems to be solved; Youth voice, leadership, and participation are important; Problem-free is not fully prepared, etc. 4-H Senegal will capitalize on the rich research base in this area to offer a high quality youth development program that will be institutionalized in order to yield lasting impacts on Senegal's economic growth and development.

Appendix II. Mid-Year Performance Indicator Table

Indicator	Disaggregation		FY16 Targets	Mid-Year	% of Target	Comments	
1.1.1. Number of AETR professors trained in syllabus development/ curriculum design			200	181	95.5%		
1.1.2. Number of syllabi developed by AETR institutions			120	127	105.83%		
1.1.3 Number of students in classrooms receiving course syllabi		Male	1400	333	23.78%		
		Female	600	110	18.33%		
		Total	1900	443	23.31%		
1.2.1 Number of individuals who have received USG supported long-term agriculture sector productivity or food security training [FTF 4.5.2(6)]	Local scholars	Male	0	0	--		
		Female	0	0	--		
		Total	0	0	--		
	US scholars	Male	6	6	100%		
		Female	8	8	100%		
		Total	14	14	100%		
	New	Male	0	0	--		
		Female	0	0	--		
		Total	0	0	--		
	Continuing	Male	6	6	100%		
		Female	8	8	100%		
		Total	14	14	100%		
	Total		14	14	100%		
	1.2.2 Number of faculty members and students trained in:	Faculty members (distance and distributed learning, subject matter competencies, other)	Male	80	157	196.25%	
			Female	20	64	320%	
Total			100	221	221%		
Students (distance and distributed learning, career management, other)		Male	200	115	57.5%		
		Female	100	38	38%		
		Total	300	153	51%		
Total		400	374	93.5%			
1.2.3 Number of students participating in private sector internships			Male	60	0	--	
			Female	30	0	--	
	Total		90	0	--		

Indicator	Disaggregation		FY16 Targets	Mid-Year	% of Target	Comments
1.2.4 Number of AETR faculty members and students registered on InnovATE's online community of practice		UCAD	3	0	--	
		UGB	3	0	--	
		UASZ	10	0	--	
		UT	3	0	--	
		ENSA	3	0	--	
		ISFAR	3	0	--	
		ITA	3	0	--	
		ISRA	3	0	--	
		CFPH	1	0	--	
		CNFTEFCPN	1	0	--	
		CNFTEIA	1	0	--	
		LTAEB	5	0	--	
		Others	10	0	--	
		Total	49	0	--	
1.3.1 Number of public-private partnerships formed as a result of FTF assistance [FTF 4.5.2(12)]			6	0	--	
1.3.2 Number of higher education partnerships between international institutions and host country higher education institutions that address regional, national, and local development needs			0	0	--	
1.3.3 Number of AETR institutions tracking the employment of graduates			5	0	--	
1.3.4 Number of AETR institutions conducting self-assessments to improve institutional performance			2	0	--	
2.1.1 Number of new technologies or management practices under		Millet	17	18	105.88%	
		Maize	1	1	100%	
		Rice	5	7	140%	
		Climate change	2	0	--	

Indicator	Disaggregation		FY16 Targets	Mid-Year	% of Target	Comments
research as a result of USG assistance [FTF 4.5.2(39)-I]		Other aspects of Food security or economic growth	1	2	200%	
	Total		39	28	71.79%	
2.1.2 Number of new technologies or management under field testing as a result of USG assistance [FTF 4.5.2(39)-II]		Millet	1	1	100%	
		Maize	0	0	--	
		Rice	1	3	300%	
		Climate change	1	0	--	
		Other aspects of Food security or economic growth	2	0	--	
	Total		5	4	80%	
2.1.3. Number of new technologies or management practices made available for transfer as a result of USG assistance [FTF 4.5.2(39)-III]		Millet	1	0	--	
		Maize	0	0	--	
		Rice	1	0	--	
		Climate change	1	0	--	
		Other aspects of food security or economic growth	0	0	--	
	Total		3	0	--	
2.1.4. Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance [FTF 4.5.2(5)]		Male	300	13	4.33%	We anecdotally have hundreds more farmers and others applying improved technology, but the M&E system failed to adequately track them. This lack will be corrected by the end of FY16.
		Female	150	5	3.33%	
	Total		450	18	4%	
2.1.5 Number of private enterprises, producers organizations, water users assoc, women's groups, trade and business assoc and community-based organizations (CBOs) that applied improved technologies or		Private enterprises	3	0	--	
		Producer organizations	15	0	--	
		Water users	0	0	--	
		Women's groups	140	0	--	
		Trade & business associations	4	0	--	
		Community based organizations	0	0	--	

Indicator	Disaggregation		FY16 Targets	Mid-Year	% of Target	Comments
management practices as a result of USG assistance [FTF 4.5.2(42)]		Total	162	0	--	
		New	122	0	--	
		Continuing	37	0	--	
		Total	159	0	--	
2.1.6 Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations and community-based organizations (CBOs) receiving USG assistance [FTF 4.5.2(11)]		Private enterprises	0	6	600%	
		Producer organizations	15	29	193.33%	
		Water users	0	0	--	
		Women's groups	140	80	57.14%	
		Trade & business associations	4	1	25%	
		Community-based organizations	0	0	--	
		Total	159	116	72.95%	
		New	137	108	78.83%	
		Continuing	22	8	36.36%	
		Total	159	116	72.95%	
2.2.1. Number of individuals who have received USG supported short-term agriculture sector productivity or food security training [FTF 4.5.2(7)]	Producers	Male	450	46	10.22%	
		Female	3300	502	15.21%	
	People in government	Male	20	43	215%	
		Female	10	29	290%	
	People in private sector	Male	10	18	180%	
		Female	10	21	210%	
	People in civil society	Male	0	13	130%	
		Female	0	26	260%	
	Total	4300	698	16.23%		
2.2.2. Number of partnerships developed to deliver training services to local farmers and the private sector			1	1	100%	
3.1.1 Number of AETR members trained in administration, finance or M&E			20	0	--	
3.1.2 Number of AETR institutions completing performance contracts with their respective ministries			2	0	--	

Indicator	Disaggregation		FY16 Targets	Mid-Year	% of Target	Comments
as a result of FtF assistance						
3.2.1.Number of AETR stakeholder action plans for improving higher education policies for quality assurance			1	0	--	
Communication plan available and updated			1	1	100%	
Number of communication updates			40	0	--	
Number of newsletters			12	0	--	
Number of weekly reports			45	12	26.66%	
Number of success stories			7	0	--	
Number of highlight media coverage			12	9	75%	
Number of insertions in national newspapers			2	0	--	
Number of video reports			3	1	33.33%	
Number of participations on fairs and exhibitions			1	0	--	