

# Education and Research in Agriculture (USAID/ERA)

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# 3<sup>rd</sup> Quarter Report

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List of Abbreviations

# List of Abbreviations

AETR	Agricultural Education, Training and Research
AGRA	Alliance for a Green Revolution in Africa
ANAQ-Sup	Autorité Nationale d'Assurance Qualité de l'Enseignement Supérieur
ANCAR	Agence Nationale de Conseil Agricole et Rural
BAME	Bureau d'Analyse Macro-économique
CDH	Centre pour la Développement de Horticulture (ISRA)
CERAAS	Centre d'Etudes Régional pour l'Amélioration de l'Adaptation à la Sécheresse
CFPH	Centre de Formation Professionnelle en Horticulture
CNFTEIA	Centre National de Formation des Techniciens d'Elevage et des Industries Animales
CNFTEFCPN	Centre National de Formation des Techniciens des Eaux et Forêts, Chasse et des Parcs
	Nationaux
CROP	Collaborative Research and Outreach Partnership
DRDR	Direction Régional de Développement Rurale
ENSA	Ecole Nationale Supérieure d'Agriculture
ERA	Education and Research in Agriculture
ESEA	Ecole Supérieure d'Economie Appliquée
ESP	Ecole Supérieur Polytechnique (UCAD)
FEPRODES	Fédération des Groupements et Association des Femmes Productrices de La Région de
	Saint Louis
FIARA	Foire internationale d'agriculture et de ressources animales
FNRAA	Fonds National de Recherche Agricole et Agro-Alimentaire
FRA	authorization to manufacture and sell (autorisation de fabrication et de mis en vente)
FTF	Feed the Future (presidential food security initiative)
FTFMS	Feed the Future Monitoring System
FY	fiscal year
GIE	groupement d'intérêt économique
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development
	Cooperation)
GRAAS	Groupe de Réflexion sur l'Agriculture et l'Agro-alimentaire au Sénégal
HACCP	Hazard Analysis and Critical Control Points
ISFAR	Institut Supérieur de Formation Agricole et Rurale
ISRA	Institut Sénégalais pour la Recherche Agricole
IRD	International Relief and Development
ITA	Institut de Technologie Alimentaire
LTAEB	Lycée Technique Agricole Emile Badiane
LS	ligne spécialisée
MESR	Ministère de l'Enseignement Supérieur et de la Recherche
OIRED	Office of International Research, Education, and Development (Virginia Tech)
PMP	Performance Monitoring Plan
PMU	Project Management Unit (Dakar project office)
POPAS	Plateforme des Organisations Professionnelles de l'Agroalimentaire du Sénégal

Q1, Q2 SAED	1st quarter, 2 <sup>nd</sup> quarter, etc. Société Nationale d'Aménagement et d'Exploitation des Terres du Delta du Fleuve Sénégal et des Vallées du Fleuve et da la Falémé
SNRER	Réseaux National pour l'Enseignement Supérieur et la Recherche du Sénégal
SWOT	strengths, weaknesses, opportunities, and threats
TU	Tuskegee University
UCAD	Université Cheikh Anta Diop de Dakar
UADB	Université Alioune Diop de Bambey
UGB	Université Gaston Berger
UConn	University of Connecticut
UT	Université de Thies
UASZ	Université Assane Seck de Ziguinchor
USSEIN	Université du Sine Saloum El-Hadji Ibrahima Niass (formerly USSK)
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
UVS	Université Virtuelle Sénégalaise
VT	Virginia Tech

# **Executive Summary**

During the third quarter of FY2015 UCAD continued the multi-phase training program for 36 smallscale food processors as part of its long-term collaborative relationship with the POPAS women's association. This collaboration is a major outreach activity for UCAD. ERA held a three-day national workshop on e-learning and other pedagogy innovations involving 16 Senegalese institutions and 138 professionals. This symposium was the first comprehensive gathering of Senegalese expertise in distance learning. The Common Book activity began for students at UGB and CNFTEIA. The Common Book activity proceeded at LTAEB and CNFTECPN, where the book's author visited students. Serigne Saine became ERA's first graduate, returning to Senegal in June from Tuskegee University. The seed science curriculum passed its penultimate review, and preparations were made for the external validation in Q4. Two faculty members completed the first in a year-long series of trainings in professional cashew production that will enable UASZ to expand its agroforestry program. Twenty librarians were trained in digital archiving. Twenty-six professionals participated in a study tour of student services offices in Ziguinchor to expand such services to other partner institutions. The Ministry of Environment and Sustainable Development undertook an assessment of gender issues at its three training institutions. ERA supported exhibits of partner institutions during the 18 days of the national agricultural fair to highlight USAID's Feed the Future investment in agricultural capacity building.

# **Component 1 – Strengthening Agricultural Education and Training**

Component 1 has three project results: 1) faculty members are applying best practices in pedagogy; 2) faculty members and students have the knowledge, skills, and attitudes to meet the needs of Senegal's agricultural sector; and 3) partner institutions are being managed as centers of excellence.

# Accomplishments

#### **Result 1.1 AETR faculties are applying best pedagogic practices**

**Pedagogy innovation.** In March, ERA convened a three-day symposium on pedagogy innovations in agriculture: syllabus development, student-centered learning, participatory curriculum development, and distance learning. In Q3 as a result of the symposium, UGB and CNFTEIA collaborated in planning a Q4 training in syllabus development for CNFTEIA's faculty.

**E-learning.** ERA planned and supported a national symposium on e-learning in higher education. Hosted by MESR and held at UCAD, the symposium brought together for the first time a majority of expertise in e-learning residing at Senegalese higher education institutions. Most of this expertise resides outside the country's agriculture-oriented departments and training centers involved in ERA. By bringing together this expertise in one place with members of agriculture faculties, ERA created an event at which its agriculturally-oriented partners could learn from local leaders in e-learning. The e-learning symposium in June brought together agriculture faculty members and Senegalese elearning specialists independent of their discipline to share experiences at the first nationwide forum for e-learning. One hundred-thirty-eight participants from 16 higher education institutions (ISFAR, UT, ENSA, UASZ, LTAEB, CNEFTEFCPN, UGB, UCAD, CNFTEIA, USSEIN, ISRA, ITA, CFPH, UAF, UADB, and UVS), the Sonatel Foundation, and two ministries. Agriculture faculties in Senegal are generally less advanced in distance learning technologies than their counterparts in other departments and colleges. The symposium put agriculture faculty members in contact with the expertise residing among faculty members from other disciplines whose e-learning activities are more advanced. The themes of the symposium were: governance of distance learning; management of distance learning centers; technology and services for distance learning; and good practice and innovation.

**Experiential learning.** The Q2 experiential learning field trip to Toubacouta by students from ENSA, ISFAR, and VT led to the demonstration of a prototype silage chopper. In Q3 a plan was elaborated for students of ENSA and ISFAR to take leadership in running a competition for artisanal metalworkers to construct silage choppers that will be evaluated by villagers. The contest requires that ENSA and ISFAR have subawards. The timing of the academic year, the time necessary to build the machines, and the availability of fresh vegetation for ensilage make this activity likely to be moved to Y6.

**Common Book.** The Common Book activity at UGB and CNFTEIA kicked off in May with the distribution of 286 copies of *L'Agriculture Sénégalaise de 1958 à 2012* to students. Amadou Ndiaye, author of the book, traveled to Casamance in May to meet with students at LTAEB and CNFTEFCP, whose Common Book activities began in the previous quarter.

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

# **Graduate Education**. Seven of ERA's 19 Senegalese graduate students in the U.S. returned to Senegal to work on their thesis research as the agricultural season began. One American graduate student came to Senegal to survey Senegalese professors about attitudes and experience with student-centered learning. Serigne Saine of Tuskegee University was the first ERA scholar to graduate from his U.S. master's program. He returned to Senegal in late June, rejoining the faculty of CNEFTEFCPN in Ziguinchor.

**Undergraduate Education.** One hundred five scholarship recipients (ERA *bourse d'excellence*) were enrolled in Senegalese institutions during Q3. Four women and one men were newly enrolled during the quarter, having becoming eligible for their second and final year of their scholarship. The Era family suffered a loss when UCAD scholarship holder Aissatou Ndong died in May due to complications during childbirth.

**Seed curriculum development.** The internal validation of a university curriculum in seed science and technology for a bachelor's and master's degree was completed during a two-day workshop during Q2. The intern-institutional seed committee evaluated four proposals for institutional leadership of the

curriculum. A joint proposal by UCAD and UT was retained as the preferred option. The committee met in Q2 on 6 June to prepare the presentation of the curriculum to academic leadership.

On June 16, the committee presented the seed curriculum for approval by academic leadership. Nine committee members from seven partner institutions participated. Ten academic representatives from five institutions attended. Khadidiatou Ndir and Samba Sylla gave an overview of the unique inter-institutional approach used to develop the curriculum. The committee formally presented the degree programs for bachelor's and master's degrees as well as the governing texts for implementing the programs. After revisions were mad, the academic group recommended that it be vetted by each institution's legal department.

When implemented, this new degree program will be the first in Senegal that is co-administered by multiple universities.

#### Expanding faculty teaching competencies.

*Fruit tree management in Casamance*. ERA cooperated with the USDA Senegambia Cashew Enhancement Project to develop institutional capacity building in cashew production for the Casamance. IRD, which manages the project, approached ERA regarding the Master Training Program for the Promotion of Cashew Value Chains in Africa – an element of GIZ's African Cashew Initiative. The USDA project supported CNTFEFCPN, and ERA supported UASZ for this three-phase training opportunity. Daouda Ngom and Mohamed Charahabil participated for UASZ in the first training in May in Bobo Dioulasso, Burkina Faso. Developing the capacity to teach fruit tree production and management at UASZ was a recommendation of the community-led curriculum development exercise in FY14.

*Measuring economic impact of projects.* Twenty-three faculty members learned the theory and techniques for measuring the economic impact of agricultural development projects over five days in May. The training was held for the benefit of the Value Chain Master's Program at ENSA, but included faculty members from other partner institutions as well (ISFAR, UGB, CNFTEIA, UASZ, LTAEB, CFPH, ISRA, ITA, and UT).

**Gender competency in agricultural teaching.** With ERA's assistance, The Ministry of Environment and Rural Development conducted a gender analysis to assess the adequacy of gender considerations at its three training centers. The evaluation started with one week at the forestry center in Thies. Four MEDD personnel and two ERA personnel spent five days working with the faculty of CNFTEFCPN in Casamance and then five days evaluating the park ranger training center at Dalaba in Niokolo Koba National Park.

Individual and focus group interviews were held with faculty members, students, and trainers about how gender is handled in their programs. They were asked to make recommendations regarding attitudes and procedures that need to change in order to make the institutions more responsive to gender. The gender assessment helped capture the realities on the ground and pointed out possibilities for unintended gender consequences in education and research-based programs. The findings will assist in MEDD's strategic planning and its application of the USAID/ERA gender institutionalization scheme.

#### **Result 1.3 AETR institutions managed as centers of excellence**

**Student services tour.** An exchange visit from 31 March – 3 April provided 26 participants from ten institutions (ENSA, ISFAR, UT, UGB, UCAD, CNFTEIA, LTAEB, UASZ, CNFTEFCPN, CFPH) the opportunity to learn about the student career service offices at UASZ and LTAEB. The tour exposed participants to good practices in services that help students find internships and help graduates find jobs. The event fostered an exchange of ideas among individuals having a professional interest in improving student career services.

**School management software.** The PMU held work sessions mid-April with seven members of CNFTEFCPN and seven members of LTAEB in order to define technical and performance specifications for a school management software system. ERA subsequently used these specifications to request bids to procure the software. An additional day was dedicated to specifying website design criteria for the two institutions.

**Digitizing library documents.** A five-day training was held in Thies for 20 librarians to learn high-speed scanning software for digitizing document collections.

# **Constraints encountered and unresolved issues**

The tracer studies of the employment fates of graduates did not advance during the quarter. A workshop in January prepared individuals to carry out such studies. The ERA staff member following up the activity resigned in June. A follow-up workshop was anticipated for August as a motivator for reporting preliminary results. Given staff constraints, no further effort could be allocated.

With the success of the community-led curriculum development exercise in Casamance in FY2014, two more such exercises were planned for FY15 – one in the Peanut Basin and one in the Senegal River Valley. The Casamance exercise helped UASZ and LTAEB understand community perspectives of their institutions' roles and the local problems that should be a focus of the institutions' academic capabilities. PMU staff limitations and the unavailability of U.S. counterparts during the scheduling window caused both exercises to be postponed.

The long-standing request for an irrigation system by CNFTEIA for its training farm needs to be advanced. The preparation of other partner subawards took precedence.

# Tasks planned for the next quarter

- Syllabus workshop for CNFTEIA
- Complete the seed technician training cycle begun last season
- National validation workshop for the seed technology curriculum

# **Component 2 – Strengthening Applied Research and Outreach**

# Accomplishments

Component 2 has two project results: 1) innovative research to benefit public and private stakeholders; 2) outreach and technical support provided by partner institutions.

Most research activities awaited the beginning of the rainy season. Irrigated sweet corn trials were planted. By the end of the quarter, rain-fed rice activities had begun in Casamance.

#### Result 2.1 Innovative research benefits public and private stakeholders

# Intensification and Sustainable Management of millet production in areas of Thies, Louga and Nioro: Improving, expanding and strengthening the value chain of superior varieties

ISRA/Bambey established a trial under irrigation with four elite millet varieties. Using irrigation, water availability could be controlled to test responses under various water stress scenarios. In late May, graduate student Fatou Tine began her second season of master's degree field work in cooperation with ISRA's CERAAS laboratory in Bambey.

#### Production and Processing of Sweet Corn in Senegal

A documentary film on sweet corn production was in production by ITA, awaiting additions from the upcoming growing season. Trials were repeated by CDH in Nioro, Sangalkam, and Ndiol to determine the optimal planting density and fertilizer doses. The biochemical properties of harvested ears were tested by ITA and UCAD/ESP. Graduate student Marieme Dramé planned data collection in collaboration with CDH for her master's thesis on nutrient management.

#### Sustainable Improvement of Cereal Productivity in Salty Environments

André Diatta, ERA Scholar at VT, traveled to Senegal to prepare his field study on the effect of amendments on soil salinity in three varieties of millet in collaboration with ISFAR. ISFAR planned its own field experiments as well.

#### Improving the Productivity of Rainfed Rice in Casamance

ISRA/Djibelor assisted VT graduate student Thioro Fall in preparing her and graduate student Ndeye Helene Diallo's field experiments on rice production in salty soils.

#### Promotion of Local Rice in the Valley and Delta of the Senegal River

ISRA planted five hectares of demonstration plots with growers at Gaya featuring six registered varieties grown under good production practices.

#### Fortified instant cereal-based products for the Senegalese market

Graduate student Cheikh Ndiaye of Purdue University continued his research on nutrient-enriched instant flour produced from local products.

ITA Senegal and Purdue University collaborated on the development and assessment of fortified instant local cereal products with high protein quality and high micronutrient bioaccessibility for beverage and porridge applications. Papaya-enriched formulas prepared from millet, sorghum, and maize are being taste-tested.

#### Conservation agriculture using legumes in millet systems

The USDA Title II millet project implemented by CLUSA was identified as a partner to test conservation agriculture with its network of sixty millet farmers. ERA discussed the possibility of working with the farmer network to test millet intercropping with mungbean.

#### **Result 2.2 Improved Outreach and Technical Support**

**Technology transfer through outreach.** After a February field visit as part of an experiential learning activity with ISFAR and ENSA, VT engineering students completed the silage cutter prototype. The prototype silage cutter will be shipped to Senegal as a model for artisans participating a student-run competition to determine the best machine.

**Promoting institutional outreach to rural youth through 4-H.** Following the two-week training of youth development leaders in March in Toubacouta and the subsequent kick-off of three youth clubs there, ERA maintained momentum with the clubs during follow-up visits by ENSA, ISFAR, and Peace Corps at the end of April and again in mid-June.

**Strengthening private/public partnerships** – **outreach training for the private sector.** UCAD continued its training series in food processing quality 36 women from 12 enterprises under the umbrella of POPAS. These 12 enterprises had been selected for quality control and hygiene training that began during the second quarter. HACCP training was offered in May, at which time an extensive on-site diagnostics exercise of 12 members' food processing enterprises was undertaken. Each diagnostic exercise took several days. HACCP training was followed by trainings in packaging, bar codes, nutritional labels, and marketing. Twelve UCAD students were provided internships to work with each GIE. They formed their own online community of practice. Having noted challenges for some GIEs in recording the data required to complete the diagnostic exercise, UCAD offered an additional free five-day training in data collection to 24 women. The training was offered, although it was not an obligation by UCAD in its ERA subaward.

ERA intends to make subawards to UASZ and LTAEB in order to undertake a training program of GIEs in Casamance similar to that offered by UCAD to members of POPAS in Dakar. In April, an assessment of Casamance food processors was completed. Ibou Diedhiou, director of LTAEB, Simon Diatta of LTAEB, Abdoul Ader Diedhiou of UASZ, and Yaye Fatou Seck of the ERA PMU composed the assessment team. Thirty-five enterprises and organizations were visited of which 17 were food processing GIEs, representing 212 women beneficiaries. Fourteen GIEs remain for later visits in the course of the subaward. During the assessment it was noted that, unlike POPAS where cereal products are dominant, the predominant products in Casamance are made from mango. Second are products from other fruit, then cereal products and products from vegetables. The independent GIEs are not represented by a platform organization such as POPAS. One recommendation from the assessment was that UASZ facilitate the creation of such a platform as an initial part of its outreach training to GIEs.

# **Constraints encountered and unresolved issues**

Despite efforts by the coordinator at ITA, insufficient communication among partners involved in the sweet corn project resulted in a missed opportunity to set up two experiments in the same field at Sangalkam as had been planned.

Tied to the completion of the prototype silage chopper is an experiential learning activity for students at ENSA and ISFAR. Their task is to engage artisans to build silage choppers and then manage a contest in Toubacouta culminating in the evaluation of these choppers. The timing of the scholastic year makes this schedule no longer feasible. The experiential learning activity will be postponed to Y6. It will be funded through respective subawards to ENSA and ISFAR.

The characterization of nutrient bioaccessibility of instant cereal flour developed at ITA is being postponed until early in November when Djibril Traoré will visit a laboratory at Purdue University.

A workshop on scientific writing scheduled for the quarter was postponed. Partner interest remains high, but other ERA activities prevented scheduling during the quarter.

In order for ENSA and ISFAR to fully engage in the youth development outreach activities in Toubacouta, they each need an activity budget through a subaward with ERA. The material needs expressed by the clubs need to be considered with prudence to ensure that the self-sufficiency philosophy behind the 4-H model is not compromised.

# Tasks planned for the next quarter

- Field tour to observe progress on research projects
- Consumer preference testing completed for select products of POPAS
- Complete food processing training for POPAS and award training certificates

# **Component 3: Project Management and Policy Support**

# Accomplishments

**Strategic planning.** The institutional self-assessment activities were completed in Year 4. The step following institutional self-assessment is strategic planning. CFPH submitted a request for support to conduct its institutional strategic planning as part of a multi-activity subaward. The subaward was undergoing review and preparation during Q3.

**Animating technical working groups.** Each institutional partner created a technical working group. During Year 5, the TWGs at each institution are supposed to engage in issues broader than merely ERA. In May the PMU had meetings with the TWGs of UGB and CNFTEIA.

**Increase visibility of partner institutions at the national agricultural fair.** The *Foire Internationale de l'Agriculture et des Ressources Animales* (FIARA) was held in Dakar from 26 March to 12 April. ERA obtained space for a spacious "village" where its partner institutions were provided booths to present both themselves and their USAID-supported activities. The village highlighted public/private cooperation by the presence of women entrepreneurs (POPAS, Casamance GIEs, and FEPRODES) throughout the duration of the fair. The free sweet corn prepared by ITA drew a large number of vistiors to the ERA village. Ambassador Zumwalt visited the village 7 April and spent time at each of the stands including the women food processors of POPAS who explained the benefits from UCAD's training made possible by ERA. The "Journée d'ERA" at the fair was 8 April. ERA held a public forum in the conference center on the challenges for higher education in agriculture. There were 156 attendees, excluding ERA personnel. POPAS provided a lunch of locally produced foods. The ERA village provided considerable time for dialogue between the Casamance food processors and those of POPAS.

**Policy facilitation.** GRAAS is a broad stakeholder body for dialogue. It provides recommendations to ministries regarding issues in agricultural education and its intersection with the private sector. A new university law was passed in December 2014 leading to conflict with academics at Senegalese universities. In Q3, the PMU began preparing for a Q4 GRAAS meeting dedicated to discussing the implications of the new law and making recommendations on how to implement it.

# **Constraints encountered and unresolved issues**

Staff workloads prevented the implementation of two training events that depended upon PMU human resources –training in scientific writing for researchers and financial management training. The GRAAS meeting would have best been held in June, but Ramadan required that it be postponed to the next quarter.

# Tasks planned for the next quarter

- Encourage more TWG meetings and selection of gender representatives at partner institutions that have not done so.
- Convene GRAAS
- Complete subawards to partner institutions for capacity building activities

# **Operations, Administration and Communications**

The ERA "village" at the FIARA was a major effort for ERA's communications officer and the designated point people of ERA's partner institutions. An internally circulated weekly activity summary was sent to project personnel and USAID. One electronic newsletter was circulated widely to stakeholders.

Ambassador Zumwalt visited LTAEB on April 24. He was welcomed by Director Ibou Diedhiou. Diedhiou explained the benefits to LTAEB from USAID's investment in ERA and invited the Ambassador to cut the ribbon on a student computer laboratory dedicated to teaching business planning. The visit highlighted collaboration that has developed between ERA's Casamance partners by the participation of UASZ, CNFTEFCPN, and ISRA/Djibelor. There was also a heavy turnout by local producers who benefit from outreach efforts by LTAEB.

The PMU and home office worked on a justification and budget to request a one-year extension of ERA.

Administratively, the PMU and home office at Virginia Tech prepared a budget to request a one-year extension to ERA. The PMU negotiated budgets and deliverables with partner institutions while preparing packages for fixed-price subawards. Progress on these subawards was slow, partly due to the detail required in finalizing a budget. All prices must be verified ahead of time in a fixed obligation instrument before a budget can be finalized.

The work load on the project staff during the quarter was high. The staff demonstrated its ability to organize and host major events in quick succession and sometimes simultaneously. The resignation of one program officer left a gap that required postponement of some efforts for the quarter. A long faculty strike due to the new university law occasionally posed challenges for bringing together stakeholders and carrying out events as scheduled.

# Gender

The most important activity during Q3 regarding gender was the institutional assessment of gender issues at MEDD training centers. The other ongoing effort was for each partner institution to add two gender representatives (one woman, one man) to the technical working groups.

# **Monitoring and Evaluation**

**The following tables** report performance indicator measures for Q3. Most indicators were trending on target. Those that were not are discussed.

Performance indicators 1.1.1 and 1.1.2. Syllabus training was zero for the quarter because no training was offered during the quarter, nor were partners surveyed about the number of new syllabi produced. A syllabus training is planned for Q4. The impact of ERA's syllabus training will become increasingly difficult to measure. As ANAQ begins accreditation of agriculture degree programs, course syllabi are required. Three years of training in syllabus development by ERA has enabled institutions to meet this requirement. However, now that syllabus development is no longer closely tied to project training efforts, measuring new syllabi due to ERA will become increasingly difficult.

1.3.1 A formal public/private partnership was expected in Casamance. Formation of an association of women food processors by UASZ will not happen until the subaward is made by ERA to UASZ.

2.1.4. No application of approved technologies has been counted since Q1 because the planting season had not begun by the end of Q3. The technologies being taught to POPAS by UCAD were not counted because the training cycle was not completed by the end of Q3, and the FRAs had not been awarded to the products that POPAS members were submitting.

2.1.5. Groups applying technologies cannot be counted until the 2015 growing season.

# **Performance Indicator Tables**

# **3<sup>rd</sup> Quarter Performance Indicators (April – June 2014)**

**Result 1.1.** AETR faculty are applying best pedagogic practices

Indicator	Disaggregatio	n	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
1.1.1. Number of AETR professors trained in syllabus development/curriculum design			50	0	0	0	0	0%
1.1.2. Number of syllabi developed by AETR institutions			100	0	0	0	0	0%
		Male	1400	314	960	148	1422	101.6%
1.1.3 Number of students in classrooms receiving course syllabi		Female	600	117	277	56	450	75.0%
		Total	2000	431	1237	154	1822	93.6%

Indicator	Disaggregatio	n	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
		Male	46	46	48	46	48	104.3%
	Local scholars	Female	59	59	59	59	59	100.0%
		Total	105	105	107	105	107	101.9%
		Male	11	11	10	10	10	90.9%
	US scholars	Female	9	9	9	9	9	100.0%
1.2.1 Number of individuals who have received USG		Total	20	19	19	19	19	95.0%
1.2.1 Number of individuals who have received USG supported long-term agriculture sector productivity or food security training (FtF output Indicator 4.5.5-6) 1.2.2 Number of faculty members and students trained in: 1.2.3 Number of students participating in private		Male	0	0	2	0	2	over
	New	Female	0	0	0	0	0	
		Total	0	0	2	0	2	over
		Male	57	56	56	56	56	98.3%
	Continuing	Female	68	68	68	68	68	100.0%
		Total	125	124	124	124	124	99.2%
	Total		125	124	126	124	126	100.8%
	Faculty members (distance	Male	90	58	44	43	145	161.1%
	and distributed learning, subject matter competencies,	Female	10	9	10	14	33	330.0%
	other)	Total	100	67	54	57	178	178.0%
	Students (distance and	Male	57	1	16	46	63	110.5%
	distributed learning, career	Female	68	0	15	2	17	25.0%
	management, other)	Total	125	1	31	48	80	64.0%
	Total		225	68	85	105	258	114.7%
		Male	40	0	0	8	8	20.0%
1.2.3 Number of students participating in private sector internships		Female	20	0	0	7	7	35.0%
		Total	60	0	0	15	15	25.0%
1.2.4 Number of AETR faculty members and students registered on Innovate's online community of practice		Total	30	4	7	24	35	116,7%

	Result 1.2. AETR faculties and students have the knowledge, s	skills and attitudes to meet the needs of Senegal's agriculture sector
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Annex page 2

**Result 1.3**. AETR institutions managed as centers of excellence with a clear vision and strategy of their program development and contribution to national food security

Indicator	Disaggregation	FY15 Cargets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
1.3.1 Number of public-private partnerships formed as a result of FtF assistance		1	0	0	0	0	0.0%
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	1	0	0	1	over
1.3.3 Number of AETR institutions tracking the employment of graduates		2	0	5	0	5	250.0%
1.3.4 Number of AETR institutions conducting self- assessments to improve institutional performance		1	1	1	0	2	200.0%

#### **Result 2.1**. Innovative research for public and private clients

Indicator	Disaggregatio	n	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
		Millet	17	18	18	18	18	105.9%
		Maize	1	1	1	1	1	100.0%
		Rice	5	7	7	7	7	140.0%
2.1.1 Number of new technologies or management		Climate change	0	0	0	0	0	
practices under research as a result of USG assistance		Other aspects of Food security or economic growth	1	2	2	2	2	200.0%
		Total	24	28	28	28	28	116.7%

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Indicator	Disaggregatio	n	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
		Millet	1	1	1	1	1	100.0%
		Maize	0	0	0	0	0	
		Rice	1	3	3	3	3	300.0%
2.1.2 Number of new technologies or management		Climate change	0	0	0	0	0	
under field testing as a result of USG assistance		Other aspects of Food security or economic growth	2	0	0	0	0	100.0%
		Total	4	4	4	4	4	100.0%
		Millet	0	0	0	0	0	0.0%
2.1.3. Number of new technologies or management		Maize	0	0	0	0	0	0.0%
		Rice	2	0	0	0	0	0.0%
		Climate change	0	0	0	0	0	0.0%
USG assistance		Other aspects of food security or economic growth	1	0	1	0	1	100.0 %
under field testing as a result of USG assistance         2.1.3. Number of new technologies or management practices made available for transfer as a result of USG assistance         2.1.4. Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance         2.1.5. Number of private enterprises, producers organizations, water users associations, women's groups, trade and business associations and community-based organizations (CBOs) that applied improved technologies or management practices as a	Total	3	0	1	0	1	33.3%	
		Male	500	0	0	0	0	0.0%
applied improved technologies or management		Female	250	0	0	0	0	0.0%
F		Total	750	0	0	0	0	0.0%
		Private enterprises	6	0	0	0	0	0.0%
groups, trade and business associations and community-based organizations (CBOs) that applied		Producer organizations	9	0	0	0	0	0.0%
		Water users	0	0	0	0	0	0.0%
result of USG assistance		Women's groups	11	0	0	0	0	0.0%

		Trade & business associations	2	0	0	0	0	0.0%
		Community based organizations	0	0	0	0	0	0.0%
		Total	28	0	0	0	0	0.0%
		New	13	0	0	0	0	0.0%
		Continuing	15	0	0	0	0	0.0%
		Total	28	0	0		0	0.0%
Indicator	Disaggregatio	n	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
		Private enterprises	10	7	7	3	17	170.0%
		Producer organizations	11	42	4	46	46	418.2%
		Water users	0	0	0	0	0	
2.1.6 Number of food security private enterprises (for		Women's groups	32	4	5	2	11	34.4%
profit), producers organizations, water users associations, women's groups, trade and business associations and community-based organizations		Trade & business associations	2	1	0	0	1	50.0%
(CBOs) receiving USG assistance		Community- based organizations	0	0	0	0	0	0.0%
		Total	55	54	12	5	75	136.4%
		New	0	52	12	7	67	100.0%
		Continuing	55	2	0	2	2	7.3%
		Total	55	54	12	9	75	136.4%

## **Result 2.2**. Improved outreach and technical support

Indicator	Disaggregatio	on	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
	Producers	Male	480	191	46	0	237	49.4%
	Tioducers	Female	300	35	14	0	49	16.3%
	People in government	Male	30	40	7	0	47	156.7%
2.2.1. Number of individuals who have received USG supported short-term agriculture sector productivity		Female	10	3	2	0	5	50.0%
	People in private sector	Male	30	10	9	0	19	63.3%
or food security training		Female	10	0	34	0	34	340.0%
	Deemle in sivil segisty	Male	0	0	9	0	9	over
	People in civil society	Female	0	0	4	0	4	over
		Total	860	279	125	0	404	47.0%
2.2.2. Number of partnerships developed to deliver training services to local farmers and the private sector			2	0	1	0	1	50%

## Result 3.1. Management and administrative systems of targeted AETR strengthened

Indicator	Disaggregation		FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
3.1.1 Number of AETR members trained in administration, finance or M&E			30	0	0	23	0	76.7%
3.1.2 Number of AETR institutions completing performance contracts with their respective ministries as a result of FtF assistance			1	0	0	0	0	0.0%

Indicator	Disaggregation	FY15 Targets	Q1	Q2	Q3 Actual	Q1+Q2 +Q3	% FY15 Target
3.2.1.Number of AETR stakeholder action plans for improving higher education policies for quality assurance		0	0	0	1	0	100.0%

#### **Result 3.2.** AETR institutions are working together to influence policy decisions affecting the agricultural sector