HARMONIZATION OF QUALITY ASSURANCE APPROACHES FOR AGRICULTURAL HIGHER EDUCATION IN SENEGAL : THE CASE OF USAID-ERA AND ANAQ-SUP COLLABORATION

Abstract

Quality Assurance (QA) in African higher education has been driven by internal and external forces. This article examines an experiment in bringing these forces together in an applied setting through collaboration between a donor-funded agricultural development project and a Senegalese government agency in charge of Quality Assurance. Independently initiated, these two entities found common ground to develop and implement a shared vision for institutional and academic program self-assessment. The accreditation approach of the National Authority for Quality Assurance of Higher Education (ANAQ-Sup) effectively combined with the economic development approach of the United States Agency for International Development (USAID)-Education and Research in Agriculture (ERA) Project to generalize a process of self-assessment in Senegalese agricultural higher education. The place of employability in the development and implementation of academic programs has become recognized as critical (Mindi et al., 2015; The World Bank, 2011). This recognition encourages the development of human resources capable of meeting workplace and employer requirements. Given the positive results in terms of both pedagogical improvements and institutional governance developed in collaboration with a development project, it appears that the institutionalization of self-assessment provides a valuable tool for the promotion of excellence and quality assurance in higher education.

Keywords: Higher education, Quality Assurance, Agricultural development, Accreditation, Self-assessment

« HARMONISATION D'APPROCHES D'ASSURANCE QUALITE POUR L'ENSEIGNEMENT SUPERIEUR AGRICOLE AU SENEGAL : LE CAS DE LA COLLABORATION USAID-ERA ET ANAQ-SUP »

Résumé

L'assurance qualité (AQ) dans l'enseignement supérieur africain a été conduite par des forces internes et externes. Cet article examine une expérience visant à rassembler ces forces dans un contexte appliqué grâce à la collaboration entre un projet de développement agricole financé par un donateur et une agence gouvernementale sénégalaise prenant en charge l'assurance qualité dans l'enseignement supérieur. Indépendamment mises en place, ces deux entités ont trouvé un terrain d'entente pour développer et mettre en œuvre une vision commune de l'auto-évaluation des programmes institutionnels et académiques. L'approche d'accréditation de l'Autorité Nationale pour l'Assurance de la Qualité de l'Enseignement Supérieur (ANAQ-Sup) efficacement combinée avec l'approche de développement économique du Projet d'Éducation et de Recherche en Agriculture (ERA) de l'Agence Américaine pour le Développement International (USAID) pour généraliser un processus de l'auto-évaluation dans l'enseignement supérieur agricole sénégalais. La place de l'employabilité dans le développement et la mise en œuvre des programmes académiques ont été reconnues comme des enjeux importants (Mindi et al. 2015; The World Bank, 2011). Cette reconnaissance favorise le développement de ressources humaines capables de répondre aux exigences du milieu de travail et des employeurs. Compte tenu des résultats positifs en termes d'améliorations pédagogiques et de gouvernance institutionnelle développées en collaboration avec un projet de développement, il semble que l'institutionnalisation de l'auto-évaluation constitue un outil précieux pour la promotion de l'excellence et de l'assurance qualité dans l'enseignement supérieur.

Mots-clés : Enseignement supérieur, Assurance qualité, Développement agricole, Accréditation, Autoévaluation

Introduction

The inspiration for quality assurance (QA) in African higher education has been the result of the interaction of external and internal forces. On one hand, external accountability to a range of publics concerned with technological competitiveness and resilience in globalized markets; on the other, national leaders have been promoting improved educational systems that supply academic excellence across the curriculum and stimulate cultural revitalization. In the face of increasing public demand for higher education, the number of tertiary institutions has exploded in Africa. This demand has been driven by an increasing division of labor and technological sophistication in production, processing and distribution, and a shift to the knowledge economy (Shirley et al., 2015; Cloete et al, 2015; Castells, 1998). The resulting "massification" of higher education has transformed elite-oriented tertiary institutions from providing government employees and national leaders into overcrowded institutions expected to produce technologically competent and employable graduates for their national economies.

African leaders have been long aware that the quality and relevance of tertiary education was in desperate need of transformational reform (Aina, 1995; Ajayi et al., 1996; Mamdani, 1993; Mohamedbhai, 2008; Sawyerr, 2004), but it was the establishment of private tertiary institutions that stimulated a reconsideration of policy assumptions (Materu, 2007), and a reconfiguration of governance mechanisms (Varghese, 2013). The proximate concern involved the growing "diploma mills" that came with opening higher education to market forces (Hayward, 2006; Okebukola, 2010). Once tertiary institutions could introduce new educational programs outside of the government hierarchy, new mechanisms were needed to ensure the quality of these new curricula.

In 2005, the New Partnership for Africa's Development (NEPAD) renewed the commitment to African higher education and revived the idea of the African "developmental university" (NEPAD, 2005). Declaring 2006-2015 the Second Decade of Education for Africa, AU heads of state signed a MOU with the Association of African Universities (AAU) to be the implementing agency for harmonizing accreditation and building national QA capacities and agencies across the continent (Obasi & Olutayo, 2009). In francophone Africa, the Council for African and Malagasy Higher Education (CAMES) has taken the lead. It has been providing quality control through the accreditation of diplomas and degrees since 1972 and the evaluation of faculty qualifications since 1982 (CAMES, 2014). Promoting QA at the national level has required a change of mindset. This change is from a top-down administrative approach to a results-based approach where institutions take on responsibility for their own quality improvement. This has involved providing training in QA for national leaders in higher education, CAMES launched a pilot accreditation program in Senegal in 2012 creating the National Authority for Quality Assurance of Higher Education of Senegal (ANAQ-Sup).

Agricultural higher education in Senegal was originally intended for the training of agricultural specialists to work in the public sector (ministries, extension and research). Little of this training trickled down to farmers (Ndiaye 2013). Since independence the agricultural sector has not made any real progress. However, during the 2000s the government tried to launch new initiatives to promote and accelerate agricultural development as part of the continental NEPAD program. Programs like the Great Agricultural Offensive for Food and Abundance (GOANA) and the Return to Agriculture (REVA) Plan involved the private sector as a key partner in their implementation. Unfortunately, the initial results have been undermined by the poor quality of human resources. Faculty and administrators of agricultural education and training institutions have been willing to respond. However, their response has not been sufficient to meet private sector demand for well-trained and effective human resources, critical to the production of value added (income and food) that stimulates the economy as a whole.

Privatized higher education has not served agricultural development either. Private institutions have concentrated in population centers (not rural areas), served students that could afford the fees, and

found a profitable niche in the fields of information and communication technologies (ICT), business, and the humanities (Teferra and Altbach 2004; Sawyerr 2004; Oanda et al. 2008). These fields were perceived as providing immediate employment opportunities. However, agriculture is unlike other educational sectors. STEM education, a foundation for the agricultural sciences, was not promoted as part of the privatization business model. Furthermore, the modality for these new private tertiary institutions involved no changes in pedagogical methods and lacked any role for knowledge production.

Similarly concerned about the poor quality of human resources as a drag on agricultural development programs in Senegal, the United States Agency for International Development (USAID) initiated the Education and Research in Agriculture (ERA) in 2010. The purpose of the USAID-ERA project was to build human and institutional capacity in education, research and extension to dynamize Senegalese agriculture. Pursuing these parallel interests, ANAQ-Sup and USAID-ERA signed a partnership agreement in 2014 to coordinate their programs for quality improvement in major agricultural education and training institutions in Senegal.

It is in this context that USAID-ERA project was introduced in 2010 in Senegal. It aimed to strengthen institutional and technical capacity of agricultural research and training institutions. The institutional scope of the project consisted of agricultural universities, and technical training and research institutes (see Appendix 1). USAID-ERA launched this project with a study of the supply and demand for human resources among both public and private agricultural employers (Bravo-Ureta et al. 2012). The results of this study were shared during three regional workshops (in the north, south, and center of the country). These workshops involved faculty representatives of each partner institution, officials of various government development agencies (ANCAR, ISRA DRDR, CIFA, SAED, ARD, etc.), and members of the private sector. The study findings indicated a major gap between what employers were seeking in new employees and the capacities of recent graduates. Subsequently, each project partner decided to conduct an institutional self-assessment (USAID-ERA 2012a; 2012b; 2012c). The objective of this activity was to establish a culture of evaluation, and the institutionalization of self-reflection to improve the quality of agricultural education programs in Senegal. This paper seeks to elucidate the convergence of these academic, economic, and governmental interests in quality assurance for agricultural higher education.

1. Quality assurance in higher education

National quality assurance in higher education may target either institutions or programs. Two types of QA assessment are normally carried out. Although variations in terminology exist, they all refer to similar processes (Moore 2017). Audits (as used here) refer to an institution's own standards; whereas, accreditation focuses on standards external to the institution. Given the level of financial and human resource constraints, QA agencies have been normally charged with institutional accreditation (Hayward 2006; Cloete et al. 2015). Program evaluation is often left to self-study by the targeted institutions and those results incorporated into institutional quality assurance and accreditation reports and reviews. Professional associations also provide QA in the form of certification of professional competence independent of government and higher education hierarchies.

The basis for accreditation rests on a process and benchmarks. The general outline for the process has become quite standardized around a set of procedures that include but are not limited to: a self-study; an external peer review; a site visit; a site-visit report; and a resulting accreditation decision (Hayward 2006). This process usually takes from a year to 18 months before a final report is completed and a decision reached. Benchmarks have been more difficult to specify and have led to considerable debate (Obasi and Olutayo 2009; Aina 2010; Cloete et al 2015). Given the diversity of institutions, their histories, resources levels, capacities and objectives, audits, and consequently accreditation, have been tailored to assess each individual institution's 'fitness for purpose', where an institution's mission and goals define a set of behavioral expectations.

As a national QA service, ANAQ-Sup had developed two frames of reference: one for program assessment, and the other institutional assessment. Both ANAQ-Sup frames of reference were elaborated by taking into account the context of higher education in Senegal, strategic options of the government, and best practices in quality assurance (ANAQ-Sup, 2013a). They were inspired by the Swiss quality assurance agency following a broad benchmarking (AAQ, 2016). The frameworks were designed, shared and validated with all stakeholders (higher education institutions, ministries, technical and social partners, and ANAQ-Sup) through a series of workshops. Each framework has fields, standards, reference points, and evidence. The development of data collection tools is left to the institution according to its mission, organization, and practices. The program evaluation framework consists of six (6) evaluation fields:

- (1) Objectives and implementation of the program;
- (2) Internal organization and quality management;
- (3) Curriculum and teaching methods;
- (4) Teaching and/or research staff;
- (5) Students;
- (6) Depreciation of equipment and premises.

The Government of Senegal created the National Authority for Quality Assurance (ANAQ-Sup) in August 2012 by Decree 2012-0837. This reform aimed to monitor, verify, and ensure the quality of higher education institutions and their programs. It became the first national higher education accreditation agency in francophone Africa. The objectives of this new structure are to:

- Define, in connection with the Ministry of Higher Education and higher education institutions, the quality standards to be met by higher education institutions and their programs;
- Design and implement a consistent quality assurance mechanism with the objectives and requirements of higher education;
- Establish formal procedures and identify criteria for assessing the quality of higher education institutions;
- Provide technical advice to the Minister of Higher Education on applications for accreditation of higher education institutions;
- Periodically evaluate the instruction, tools and teaching methods in institutions and programs;
- Assist and support institutions in the development and implementation of their internal procedures for quality assurance and self-assessment.

This decree attaches great importance to self-assessment procedures for the accreditation of programs and institutions. Quality assurance is a mechanism that allows an institution to assess the achievement of its mission and to measure its own performance. It is designed to provide a basis for the administration, faculty and other stakeholders, to review programs and institutions in a systematic way. Quality assurance is documented through a self-assessment process that prepares the institution for external evaluation of programs and institutions for their accreditation. Thus, self-assessment is a key tool for quality assurance in higher education, suitable for developing strategic interventions in order to obtain more appropriate and efficient outputs: improved human capital and informed citizens.

This structured self-reflection permits the identification of key actions for the continuous improvement of educational programs. The resulting report is a management and accountability tool for the highest officials of an institution, as well as one for faculty struggling to improve their academic programs. Internally, self-assessment practices can promote constructive discussions. The self-assessment report also helps to indicate the responsibilities of each actor and encourage careful

consideration and planning for the necessary corrective actions. Thus, the self-assessment specifically:

- identifies strengths and weaknesses and the opportunities and threats;
- establishes a reference database for the institution;
- prioritizes actions necessary for improvements to be implemented;
- creates a new vision of the institution;
- provides a basis for the development of a strategic plan;
- establishes the conditions for performance contracts;
- positions programs and institutions within a changing environment to more effectively meet the demand of stakeholders;
- facilitates political support for programs and institutions;
- promotes the development of local, national and international linkages;
- assists in the mobilization of financial resources.

ANAQ-Sup and USAID-ERA used very similar procedures and standards. The frame of reference for the USAID-ERA template was inspired by the 'Guidelines' of the 'Society of American Foresters' (SAF) for the reporting of self-studies for accreditation of academic programs. It was originally modified for use in Liberia for the self-assessment college degree programs in agriculture and forestry at the University of Liberia and the Forestry Training Institute (Moore et al. 2010; Hammett et al. 2010). It was later translated and adapted for use by Senegalese agricultural institutions and programs for USAID-ERA project self-assessment activities. The first component of the tool is an Analytical Guide that focuses on the description and analysis of six (6) standards. Each standard contains a series of specific questions that lead faculty and administration to reflect on their own practices. The standards are:

- (1) The institution's mission and goals;
- (2) Curriculum (content and pedagogy);
- (3) The organization and administration of the program;
- (4) Faculty members;
- (5) Students;
- (6) Institutional support.

The second part of the USAID-ERA tool consists of generic tables to collect quantitative and qualitative information. These data document existing conditions in the various disciplines and are used to respond to questions associated with the standards in order to facilitate the analysis of institutional practices. Senegalese adaptations included new indicators from the market demand survey. It also applied Bloom's taxonomy of learning levels in the curriculum analysis (Bloom et al. 1956).

Following contacts with international partners, the USAID-ERA project learned that CAMES had launched a pilot accreditation program in Senegal. USAID-ERA contacted those responsible for this program through the Senegalese Ministry of Higher Education and Research to explore potential complementarities between a donor-funded agricultural development project and the national higher education accreditation service. After initial discussions it was determined that despite differences in intervention objectives, the two activities could be highly compatible. On one hand, ANAQ-Sup is responsible for the accreditation of all higher education programs in Senegal. On the other, the USAID-ERA project targeted the improvement of human resources for agriculture. Further

discussions led to identification of common themes and indicated a natural division of labor. The first step of this collaboration was marked by a mutual sharing of methods, procedures, and tools. Similarities in self-assessment practices were noted. It was believed that the harmonization of methods, procedures, and tools would involve only minor adaptations and could optimize achievement of mutual goals. The technical focus of the USAID-ERA project could strengthen ANAQ-Sup's institutional accreditation program.

2. Methodology

2.1. Harmonization of procedures and tools

To organize working relationships between the two structures, ANAQ-Sup and the USAID-ERA project signed a Memorandum of Understanding in May 2014 (ANAQ-Sup/USAID-ERA 2014). It is focused on the following points:

- Comparative examination of working methodologies and evaluation procedures;
- Promotion of quality assurance with respective partners;
- Strengthening the capacity of members ANAQ-Sup on USAID-ERA's self-assessment approach;
- Support for the appropriation of USAID-ERA activities through its programs in curriculum and pedagogy;
- Networking with national, regional and international partners interested in their mutual activities.

2.2. Integration of the methodologies

The process of self-assessment comes in several stages. The ultimate goal of ANAQ-Sup selfassessment procedures is accreditation. These procedures subject internal self-assessment to external validation. The objective of USAID-ERA is improvement of the quality of agricultural education and training institutions. Consequently, USAID-ERA procedures were subsumed within those of ANAQ-Sup to ensure institutional continuity for national quality assurance.

The six fields of ANAQ-Sup and six USAID-ERA standards overlap and take into account similar components and curricula concerns. Indeed, many of the questions used to identify data points are almost identical. The major substantive difference being that of subject matter; the ANAQ-Sup framework being general and applicable to the evaluation of any program, while the USAID-ERA one targets agricultural programs. Thus, the two frameworks were easy to consolidate into one for applied scientific programs in agriculture, forestry, and natural resource management. Thus, a common USAID-ERA/ANAQ-Sup methodology was easily established to pool resources and avoid overloading institutions with self-assessment exercises.

2.2.1. Accreditation procedures of ANAQ-Sup

The accreditation procedure of ANAQ-Sup has two major objectives: documentation of continuous improvement; and evidence of program quality levels. To do so, the procedure consists of two main steps: self-assessment and external evaluation (ANAQ-Sup, 2013a; 2013b; 2013c).

Program self-assessment is triggered by a call for expressions of interest and subsequent submission by program universities of that expression as part of their performance contract with the ministry. Following acceptance of the accreditation request a meeting to launch the process is organized with representatives of institution's CIAQ and the relevant programs. ANAQ-Sup requirements and expectations are explained, then the CIAQ and academic program representatives are requested to prepare a self-assessment report. It is at this point in the process that the USAID-ERA self-assessment procedures take effect (see below). The institution and targeted programs have a period of three to six months to submit their self-assessment report.

The next step involves an external examination of the submitted report. The external evaluation team is generally composed of two academic and one professional experts. To ensure the transparency and the objectivity of decisions, evaluation experts must certify that they have no conflict of interest or formal relationships with the programs in question. The institution/program must also give notice of non-objection to the composition of the evaluating team. Once an acceptable team has been selected, the team conducts a site visit to the institution. The objective of their visit is to verify the information documented in the self-assessment report and to deepen analysis with the program to identify strengths, weaknesses, and the dynamics for improvement. The experts prepare and submit an external evaluation report at the end of their visit.

On the basis of the self-assessment report, the external evaluation report, and a decision paper prepared by the Executive Secretary of ANAQ-Sup, the ANAQ-Sup Scientific Council makes the decision to accredit or not the submitted program. The evaluation report and the accreditation decision are then sent to the institution/program before being officially published on the ANAQ-Sup website.

2.2.2. Self-assessment procedures of USAID-ERA

The procedures for self-assessment organized by USAID-ERA followed a four phase institutional development process to engage faculty members in meaningful self-assessment of their academic programs. This process involved public and private sector stakeholders and two validation workshops. Given the learning and scheduling issues involved, it is usually completed within nine months.

Phase 1: Phase 1 is the preparatory stage for introducing the process at an institution. When an agricultural education and training (AET) institution/program agrees to consider conducting a self-assessment, USAID-ERA consultants introduce the self-assessment process, and explain the forms to be completed and report to be drafted. Two or three faculty members from the project's Technical Working Group (TWG) in each institution are appointed to lead the effort. A TWG is similar to ANAQ-Sup's CIAQ at each institution involving selected faculty members and the Director of Studies. This committee was assisted by USAID-ERA consultants on the documentation and reporting for the most recent year of their agricultural training program.

Phase 2: The committee collects data to document current institutional conditions and write a report explaining these findings. The consultants assist the TWG in drafting the report organized according to the six self-assessment standards. This draft report is shared with the institution's administration, faculty and staff during an internal validation workshop.

Phase 3: This phase begins with the organization of the workshop to share and validate study findings. The technical working group members formally present and discuss the study findings with the entire faculty. Other institutional representatives ask questions and debate the findings. The USAID-ERA consultants observe the discussion, ask occasional questions of clarification to guide the discussion, and identify and collect information on less measurable items such as motivation, leadership, cooperation and study environment.

Phase 4: The committee revises the report in light of the internal workshop findings. A revised report is prepared for review at an external validation workshop to be held with institutional stakeholders (both public and private). The purpose of the external validation workshop is to: analyze the strengths and weaknesses of programs with respect to agricultural sector needs as perceived by stakeholders; identify opportunities to improve service quality; and determine the adequacy of resources for program support. Subsequently the self-assessment report is finalized and becomes the property of the institution in order to monitor quality improvements.

2.2.3. Integration of the procedures

Integration of the procedures was based on the ANAQ-Sup framework in order to maintain compliance with Senegalese accreditation policy and procedures. The self-assessment process, however, was enriched by documentation and reporting innovations found in the USAID-ERA framework. Thus, important aspects were added. These included, among others, the introduction of professional ethics, tabular data collection on teaching units, faculty, students, and financial resources. The integrated framework was shared and validated by AET institutions represented by their CIAQ, TWG, and agricultural faculty.

The harmonization of procedures led to a common USAID-ERA/ANAQ-Sup methodology for selfassessment of higher education programs for agriculture in October 2014. Workshops validating the methodology were held with each ANAQ-Sup Internal Quality Assurance Cell (CIAQ) and USAID-ERA Technical Working Group (TWG) at departments involved in agronomy in Cheikh Anta Diop University of Dakar (UCAD), the University Gaston Berger (UGB) of St. Louis, the University of Thies (UT) the Assane Seck University in Ziguinchor (UASZ) and Alioune Diop University of Bambey (UADB).

3. Results

After harmonizing their methodologies into a single framework, both structures collaborated in the training of the CIAQs established in each public university and the USAID-ERA TWGs. This was done in two steps:

- (1) Awareness briefings were held to acquaint all actors (students, teachers, service personnel, etc.) in each institution with the consolidated quality assurance and self-assessment methodology. This awareness building was important to obtaining the participation of all concerned actors.
- (2) The second step involved holding a technical training workshop introducing the harmonized methodology and tools to members of the Internal Quality Assurance Cells (CIAQ).

3.1. Results of 13 agricultural programs submitted for accreditation by five institutions (ISFAR, UASZ, UGB, UCAD, and ENSA)

The collaboration between the USAID-ERA and ANAQ-Sup project produced in three years conclusive results with respect to programs of higher agricultural education. Five institutions (ISFAR, UASZ, UGB, UCAD and ENSA) submitted the first 13 agricultural programs inscribed for accreditation; each conducting a self-assessment and having been subject to an external evaluation by ANAQ-Sup. Twelve programs have completed the process; nine of them have been fully accredited (see Table 1). It should be noted that those who have mastered the USAID-ERA process moved through ahead of the others.

The self-assessment tool resulting from the harmonization of procedures for the two structures is well-suited to the context of agricultural training in Senegal. It takes into account all relevant fields or areas for evaluation of the objectives and mission of each institution or program, as well as a welldocumented, practical approach to its content, teaching methods, administration and program management, students, faculty, technical and administrative staff, infrastructure and financial support, etc.

The acceptance and ownership of this tool by those responsible for quality assurance as well as agricultural value chain leaders has allowed for the identification of the strengths and weaknesses, opportunities and threats, as well as priority actions relevant to the agricultural sector. A willingness to question existing practices that have impeded past improvement efforts has arisen within the institutions that have conducted their self-assessments.

Some institutional partners were able to develop for the first time a strategic plan resulting from their institutional and program self-assessment, specifically, ISFAR and LTAEB. Other institutions developed a clear vision of actions to implement in order to strengthen capacity, improve their

performance, and ensure better visibility for their agricultural programs (UCAD and CNFTEFCPN). Self-assessment was considered by the institutions as a key step in the development of strategic plans and project initiatives. Eventually this will facilitate the development of their performance contracts that have now become obligatory for universities to be eligible for donor funding (in particular, the World Bank).

Self-assessment has strengthened the climate of trust in institutions marked by a more effective governance based on transparency and a vision shared by all members and institutional partners. In addition, the institutions have begun the practice of establishing stronger partnerships with the private sector, developing appropriate infrastructure, and training specialists that better meet labor market demand.

The most significant and important effects are undoubtedly those which are observed at the level of phased pedagogical improvements in most of these institutions:

- Development and adoption of syllabi by many of the permanent faculty and some part-time faculty;
- gradual acceptance by faculty of student course evaluations;
- increasing numbers of private sector professionals teaching in their areas of expertise;
- pedagogical innovations in the teaching (particularly, distance learning);
- establishment and consolidation of student placement offices, etc.

Institutions	Program	Situation
UFR S2AT/UGB	License in animal production and breeding	Completed accreditation procedure; program accredited
	License in food processing technologies	Completed accreditation procedure; program accredited
	License in crop production and agronomy	Completed accreditation procedure; program accredited
	License in aquaculture	Completed accreditation procedure; program not accredited
ISFAR/UTHIES	Engineer in livestock breeding	Completed accreditation procedure; program accredited
	Engineer in Agriculture	Completed accreditation procedure; program accredited
	Engineer in Forestry	Completed accreditation procedure; program accredited
ENSA/UTHIES	Master of value chain development, agricultural entrepreneurship, and agribusiness	Completed accreditation procedure; program not accredited
	Master of forestry and environment for sustainable natural resource management	Completed accreditation procedure; program accredited
FST/UCAD	Agro-resources and entrepreneurship license	Completed accreditation procedure; program accredited
	License in professional animal production	Completed accreditation procedure; program not accredited
UFR AGRO/UASZ	Agroforestry license	Completed accreditation procedure; program accredited
	Agroforestry Master	Self-assessment report submitted and deemed admissible; external evaluation done. Waiting for result

 Table 1: Progress of agricultural programs submitted for accreditation.

Following their self-assessment experiences some partners have felt the need to establish partnerships with the private sector beyond the framework of simple, single student internships. Indeed, they have understood that private sector partners can also help them improve their curricula, introduce more innovative teaching methods, and especially, facilitate employment of their graduates. Some public-private partnerships have already been established: UASZ with the GIE Jiribalut; LTAEB with the GIES Bignona; ISFAR and ENSA with agricultural producers in Bambey and Thies.

3.2. Challenges and Issues

Despite initial acceptance required before commencing self-assessments, some difficulties, challenges and issues were identified throughout the implementation process. The most significant among these were the following.

3.2.1. Resistance to change

Self-assessment is a new practice within academic institutions. As with all innovations, it must overcome many difficulties in its early days. Many teachers are not accustomed to being challenged in their domain of expertise. Defiance and obstruction can be aroused by the fact of being evaluated by students, criticized by one's peers, and even being led to criticize one's own teaching practices. In practice, we realize that some faculty do not want to be involved and present strong resistance to implementation simply by not contributing to this kind of participatory, inclusive, and reflexive group work.

3.2.2. Low mobilization of actors in self-assessment activities

It proved difficult to mobilize all actors for the duration of the self-assessment exercises. Indeed, in some institutions part-time instructors provide the majority of a program's curriculum. They are only present to give their courses and are not available for self-assessment or other institutional activities. In terms of permanent faculty, the director of studies, already sufficiently overwhelmed by his teaching and program administration tasks, is often not supported by the other faculty members to complete the self-assessment exercise in the allotted time. This can negatively impact the quality of the self-assessment and prolongs its implementation.

3.2.3. Lack of respect for deadlines

Scheduling remains the most sensitive and the weakest point in the implementation process. It is always slippery. Frequently, a consensually scheduled work session can be postponed up to three or four times. A planned exercise scheduled to be carried out in four months, could take between 8 and 9 months of the academic year. Efforts are still needed to ensure that a self-assessment is completed in one academic year.

3.2.4. Slowness in report writing

The collection of information from the targeted actors is almost always incomplete. It takes several scheduled sessions to remind faculty and staff about their obligations to submit the required information to the writing team. The report must be written and validated collegially. But due to the unavailability of all members involved in the writing committee, drafting often drags on. In some cases, it is a core of only two or three people who complete the report. Furthermore, the analytical and critical elements of the report are often lacking. This is most likely explained by the insufficient data gathered despite the provision of tabular format adapted to facilitate the process.

Conclusion

Collaboration between ANAQ-Sup and USAID-ERA led to the harmonization of internal and external drives for QA. This can be considered a success for higher education because it allowed for mutual enrichment. Despite resistance to change, often low participation rates, and lack of respect for deadlines, the self-assessment approaches of both ANAQ-Sup and USAID-ERA struck a common chord among many faculty. Collective progress is contributing to the continuous improvement of agricultural education programs in Senegal. Among the institutional partners, sustained reflection on the missions and objectives of agricultural institutions and programs has been generated. This has allowed for a reconsideration of personal and institutional practices. A paradigm shift may have been initiated.

The place of employability in the development and implementation of academic programs has become recognized as critical. This recognition encourages the development of human resources capable of meeting workplace and employer requirements. Given the positive results in terms of both pedagogical improvements and institutional governance developed in collaboration with a development project, it appears that the institutionalization of self-assessment provides a valuable tool for the promotion of excellence and quality assurance in higher education. Therefore, it is important and appropriate to generalize the process of self-assessment in all public higher education institutions, adapting it to their institutional missions.

With the establishment and effective functioning of ANAQ-Sup, all Senegalese higher education programs must now be accredited every five years. The content and workplace-oriented approach of USAID-ERA has helped to promote a methodology for a more meaningful and effective self-assessment experience for faculty. As a consequence, self-assessment has become a valued activity in the academic calendar and a key component for strategic planning in all institutions of higher education.

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Appendix 1:

List of agricultural higher education institutions and USAID partners / ERA

- 1. Université Cheikh Anta Diop (UCAD) in Dakar
- 2. Université Assane Seck University de Ziguinchor (UASZ)
- 3. Université de Thiès (UT)
- 4. Université Gaston Berger (UGB) de Saint Louis
- 5. Ecole National Supérieur d'Agriculture (ENSA) de Thiès
- 6. Institut Supérieur de Formation Agricole et Rurale (ISFAR) Bambey
- 7. Centre National de Formation des Techniciens des Eaux, Forêts, Chasses et des Parcs Nationaux (CNFTEFCPN) Djibelor
- 8. Lycée Technique Agricole Emile Badiane (LTAEB) Bignona
- 9. Centre de Formation Professionnelle Horticole (CFPH) de Camberene
- 10. Centre National de Formation des Techniciens d'Elevage et Industries Animales (CNFTEIA) Saint Louis