

Research Application Summary

Key challenges and issues facing African Universities: A case study of selected African Universities

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Abstract

This study assessed the “health” of seven universities in eastern, central and southern Africa with respect to agricultural training and skill enhancement opportunities, appropriateness of curricula, staffing and access to learning resources and other databases. The selected universities represented varied socio-political backgrounds, different histories and length of involvement in agricultural training. Most of the universities were grossly understaffed, few staff had PhDs, and many of these were close to retirement or were engaged outside the university system. There was limited research output, and most of the universities lacked organised students and staff data bases. Except for Egerton University, none of the other universities had a well established Quality Assurance Unit. However, efforts were being made to ensure curriculum were responsive to market needs. Indeed stakeholders were regularly consulted but limited funding did not permit effective implementation of several skill enhancement activities for both students and staff, including field practicals for students.

Key words: Agricultural tertiary education, African Universities, Quality Assurance, staff/student skill enhancement

Résumé

Cette étude a évalué la «santé» de sept universités de l'Est, du Centre et du Sud de l'Afrique à l'égard de la formation agricole et les possibilités d'amélioration des compétences, la pertinence des programmes d'enseignement, la dotation et l'accès aux ressources d'apprentissage et autres bases de données. Les universités sélectionnées représentaient divers milieux sociopolitiques, une histoire différente, et la durée de participation à la formation agricole. La plupart des universités n'avaient pas de personnel suffisant, très peu avaient des docteurs, et beaucoup d'entre eux étaient proches de la retraite ou ont été engagés en dehors du système universitaire. Il y avait des

résultats limités de recherche, et la plupart d'universités n'avaient pas de banque de données organisées pour les étudiants et le personnel. Sauf pour l'Université d'Egerton, aucune autre université n'avait une institution bien établie d'assurance. Toutefois, des efforts ont été déployés pour assurer des programmes, adaptés aux besoins du marché. En effet, les dépositaires ont été consultés régulièrement, mais un financement limité n'a pas permis la mise en œuvre effective de plusieurs activités de renforcement des compétences pour les étudiants et le personnel, y compris les travaux pratiques sur le terrain pour les étudiants.

Mots clés: Enseignement agricole supérieur, les universités africaines, l'assurance de qualité, le personnel / l'amélioration des compétences des étudiants

Background

Tertiary education is facing several challenges arising from globalization, the increasing importance of knowledge as a principal driver of growth, and the information and communication revolution (World Bank, 2002). The role of education in general, and of tertiary education in particular, is now more influential than ever in the construction of knowledge economies and democratic societies. Tertiary education is indeed central to the creation of the intellectual capacity on which knowledge production and utilisation depend and to the promotion of the lifelong-learning practices necessary for updating people's knowledge and skills. New types of tertiary institutions and new forms of competition require that traditional institutions change their modes of operation and delivery. In response to these challenges, a number of countries are transforming their tertiary education systems, including financing and governance, institutional differentiation, creation of evaluation and accreditation mechanisms, curriculum reforms, and technological innovations. But progress has been uneven, and sharp contrasts remain between and within tertiary education systems worldwide (Altbach *et al.*, 2009).

Although tertiary-level enrollments have grown significantly in the developing world, the enrollment gap between the most advanced economies and developing countries has widened with sub-Saharan Africa registering the lowest (Altbach *et al.*, 2009). In addition, tertiary education systems continue to be elitist as regards to access to education and the socioeconomic composition of the student body. Financial resources, rigid governance models and management practices are preventing

tertiary education institutions from embracing change and launching reforms and innovations. There is need therefore for tertiary institutions in the developing world to be pro-active to initiate the needed reforms in order to improve performance and become more relevant to development agenda of their countries and regions.

A study was therefore commissioned by the Technical Centre for Agricultural and Rural Cooperation (CTA) in collaboration with the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) to profile selected African Universities Faculties of Agriculture and related faculties. The aim of the study was to assess the current status of the academic programmes and update the existing databases on higher education in agriculture, with a view of improving the outreach and impact of the work university networks and CTA and other partners do in the field of agricultural tertiary education. It also aimed at identifying training and capacity development needs of agricultural faculties in eastern, central and southern Africa. A related study was conducted in Cameroon and Niger but is not the focus of this paper.

Literature Summary

This study builds on several previous studies especially of Sawyerr (2004), World Bank (2007) and Malcolm *et al.* (2009). In addition, it links to other earlier findings from the World Development Reports such as the lifelong learning for all (OECD, 1996), World Bank (1994; 1997; 1999; 2000; 2002), and World Education report (UNESCO, 2000a and b).

Study Description

The study involved a review of databases and information on tertiary education institutions in seven Africa universities. In addition a mini interview was conducted with students at the respective universities. The study encompassed Eastern/Central Africa, covering Kenya, Uganda and Rwanda; and Southern Africa covering Zambia, Zimbabwe, Malawi and Mozambique. The target universities were chosen to represent varied historical set-ups.

Makerere University is the oldest university in East Africa with a well established faculty of agriculture. On the other hand Egerton University was founded as an agricultural college and has maintained that focus, while the National University of Rwanda represented a country emerging from conflicts but operating in an agricultural environment with a strong desire to rebuild its human resource. The University of Malawi, Bunda

College of Agriculture was selected as a university college with a stable history located in an agricultural country. Bunda College was established to build capacity for the agricultural sector in Malawi, but has also taken on a regional role to train for the Southern African Development Community (SADC) and RUFORUM network in aquaculture and fisheries, and agricultural economics and policy analysis. Until recently, Malawi experienced frequent food shortages. University of Zimbabwe until recently was a prime university in a striving agricultural and overall national economy but has not been spared by the political challenges that have affected the country in recent years. University of Zambia is based in a stable democracy where agriculture is at the forefront of its economic development after previously depending on copper. Eduardo Mondlane University represented a recent institution from a country also emerging from conflict but a different geo-political history (a former colony of Portugal). These diverse backgrounds and histories and social political set ups provided useful case scenarios for making references to the overall health of agricultural tertiary education in Eastern, Central and Southern Africa.

The study also engaged with faculty, former graduate students and employers. The study also assessed current staff capacities to implement programmes and the views of the current students. Data collected included: (i) existing agricultural training programmes and recent reforms in curricula, (ii) nature of employers/potential employers and the employment of agricultural graduates – in informal, formal and self-employment, (iii) academic staff levels, students enrolment, research and outreach activities, and (iv) demand and need for agricultural related programmes in higher education institutions

Research Application

Faculties of Agriculture in the region have significantly grown with many of the characteristics and problems that are symptomatic of African Higher Education in general. Below is an overview of the challenges and issues identified during the study facing faculties of agriculture in the seven countries that participated in the study. More detailed reviews can be found on: knowledge.cta.int/index.php/.../FINAL_RUFORUM_CTA_REPORT.pdf. Generally, the situation differed little among countries. However, there are serious issues that need mention:

- a) In Rwanda, the departments were under-capacitated with very small masters classes which were clearly not cost-

- effective. There was lack of fellowships or sponsorship for students. This was also true in some instances at Egerton.
- b) The National University of Rwanda had only one Masters Programme in the Department of Soil Science.
 - c) In most faculties of agriculture surveyed, many of the senior faculty staff who had PhDs were close to retirement. They were often absent from the universities working on consultancies and other assignments. As a result, most of the teaching load was carried by relatively junior staff.
 - d) There was poor staff retention due to low salaries. In addition, opportunities for professional development through supported research, sabbaticals, post doctoral fellowships, and sponsorships for PhDs were largely absent.
 - e) Research output was low probably due to high teaching loads, lack of post graduate students, limited availability of research grants and the fact that the staff were engaged in other activities to supplement the inadequate salaries with incomes from other sources especially the privately driven programmes.
 - f) The curricula in most universities needed updating to incorporate emerging global challenges such as climate change etc. This has started in some universities such as Makerere in Uganda.
 - g) The faculty staff at all levels felt the need to retool themselves with some of the more recent teaching methodologies and analytical techniques through undergoing pedagogical courses to enable them deliver better.
 - h) The University of Zimbabwe had many students but appeared not to have a streamlined curriculum review process. Under the circumstances individual lecturers updated their curriculum by taking on new knowledge and technologies from research work, scientific publications and occasionally as a response to stakeholders' requests.
 - i) Most of the universities did not feature among 100 top most ranked African universities, although many questioned the web-based ranking system.
 - j) Most universities did not have sound data bases for tracking former students and research outputs.
 - k) While the focus of this study was post-graduate training, all the universities reported having more undergraduate students than they could accommodate with existing facilities and staff.

The discussion with various deans and other faculties sought to identify opportunities that existed. It was indicated that;

Academic programmes were demand driven with curriculum development and review involving a diversity of actors. But as indicated earlier, curriculum reviews were held infrequently. All the universities recognised the importance of quality assurance, although most of them, except Egerton, did not have established Quality Assurance Units. There were also efforts to strengthen pedagogy including development of e-resources in addition to staff exchange programmes.

Nevertheless turning these opportunities into tangible results will require (i) updating universities and faculties databases for information sharing and networking, (ii) adopting modern teaching methods and strengthening review of curricula, (iii) improving institutional linkages and students exchanges, and (iv) retooling faculty staff.

The gaps found in this study show that developing and transition countries are at risk of being further marginalised in a highly competitive world economy because their tertiary education systems are not adequately prepared to capitalise on the creation and use of knowledge. This study brings out the glaring need to broaden access to agricultural education, and that advancement and application of knowledge is necessary for higher education institutions to achieve social and economic progress. Hopefully, findings of this study will provide impetus for higher education policy makers and other actors to increase the funding base of universities to improve both human and infrastructural resources. This is important because tertiary education is necessary for the effective creation, dissemination, and application of knowledge and for building technical and professional capacity to support agricultural and other innovations.

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