

The African Renaissance: Engaging communities to strengthen agricultural tertiary Education

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Abstract

Poverty remains a central character to the Sub-Saharan African landscape. Despite the allocation of close to US\$50 per person on the African continent from various donors in 2008, much remains unchanged. The United States alone quadrupled her aid budget to Africa from US\$1.4 billion in 2001 to over 5.6 billion in 2006. Yet African countries are far from reaching targets agreed to at the Millennium summit held in New York in September of 2000. Strong arguments can be made that many African countries are worse off than at the time of their independence. Based on the hypothesis that a key missing ingredient to reducing poverty on the continent is the lack of human capital to drive and sustainably support agricultural and other development processes, this paper describes a pilot initiative by African universities in Eastern and Southern Africa, with support of external partners, to improve teaching, learning and research in the region. This is being done through increased engagement with communities, in a bid to improve the relevance and contribution of universities to development impact. The paper highlights the importance of linkages with partners, experiential learning and involvement in action research as a strategy towards improving the role of universities in supporting development.

Key words: African universities, agriculture, community action research, experiential learning, RUFORUM

Résumé

La pauvreté reste un personnage central dans le paysage de l'Afrique au Sud de Sahara. Malgré l'affectation de près de US \$ 50 par personne sur le continent africain auprès de divers donateurs en 2008, beaucoup restent inchangé. Les seuls États-Unis ont quadruplé son budget d'aide à l'Afrique à partir de US \$ 1,4 milliards en 2001 à plus de 5,6 milliards de dollars en 2006. Pourtant, les pays africains sont loin d'atteindre les cibles convenues lors du Sommet du Millénaire tenu à New York en

Septembre 2000. Des arguments forts peuvent être avancés que de nombreux pays africains sont moins bien lotis qu'au moment de leur indépendance. Sur la base de l'hypothèse selon laquelle un élément clé qui manque à la réduction de la pauvreté sur le continent est le manque de capital humain pour conduire et soutenir durablement l'agriculture et d'autres processus de développement, cet article décrit une initiative pilote conduite par les universités africaines en Afrique orientale et australe, avec le soutien de partenaires extérieurs, pour amélioration de l'enseignement, l'apprentissage et la recherche dans la région. Cela se fait grâce à un engagement accru avec les collectivités, dans le but d'améliorer la pertinence et la contribution des universités à l'impact du développement. Le document souligne l'importance des liens avec des partenaires, l'apprentissage expérientiel et l'engagement dans la recherche-action comme une stratégie visant à améliorer le rôle des universités dans le soutien au développement.

Mots clés: Les universités Africaines, l'agriculture, la recherche-action communautaire, l'apprentissage expérientiel, RUFORUM

Background

Sub-Saharan Africa is home to some of the highest poverties in the World where nearly 140 million people live in poverty (under \$1 a day). Highlighting the need for urgent action, in 2009, FAO noted that there was a sharp increase in the number of person in Africa that were undernourished, rising from 854 million people to 1.02 billion between 2006 and 2009. Due to the high percentage of people who rely on agriculture for employment, agriculture has been identified as the key vehicle for fighting poverty (NEPAD, 2003). As a result, there are efforts to revitalise agriculture, boost economic recovery and help SSA move closer to achieving the Millennium Development Goals (MDGs). The Comprehensive Agricultural African Development Programme (CAADP) was designed in 2003 as a framework for achieving the MDG targets (NEPAD, 2003). The CAADP is designed into four mutually reinforcing pillars through which different countries will design national level agricultural strategies for fighting poverty. The CAADP targets to achieve a 6% annual growth in the agricultural sector by among others enhancing agricultural research, technology dissemination and adoption through the National Agricultural Research and Extension Systems (NARES). The CAADP was designed to bring to reality visions of a new Africa through an African Renaissance.

**Enhancing
Innovativeness of
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Unfortunately, the human capital equipped with skills to guide innovative approaches to foster agricultural development is lacking in most SSA countries. In addition, there are other challenges related to changes in consumer demands and socio-economic environment, and new emerging challenges such as climate changes, urban migration, and competition between bio-fuels and food demands. There is therefore, in addition to addressing human capital gaps, an increasing need to approach agriculture from the full spectrum of the value chain. This requires adoption of innovation systems approaches. Unfortunately, although universities are recognized as important players in revitalizing agricultural productivity and creating innovations, they are currently ill-harnessed and equipped and cannot respond effectively to the demand for the much needed knowledge-based graduates and faculty, who can address real-world problems and drive development. University research and training curricula are still subject based and not able to respond to multi-faceted challenges of poverty and other development needs. This paper describes a pilot initiative in response to the above challenges by SSA universities to build capacity to impart skills in their graduates that address current and future development challenges.

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) is a consortium of 25 universities in Eastern, Central and Southern Africa with a mandate to strengthen the capacities of universities to foster innovations responsive to demands of small-holder farmers through the training of high quality researchers, the output of impact-oriented research, and the maintenance of collaborative working relations among researchers, farmers, national agricultural research institutions, and governments. The RUFORUM approach encourages rationalisation of resources across African universities to benefit from the scarce resources in the region. It also enhances linkages between African universities and relevant partners in Europe, North America and globally. RUFORUM plays an active role in advocacy and resource mobilisation for African universities across the Continent, beyond her membership. Based on studies undertaken during the last few years, it is clear that although the major employer of agricultural graduates has been the public sector, in most countries, public sector employment is declining and the fast emerging employers are the civil society and, to a lesser extent, the private sector (Blackie *et al.*, 2009). Although the public sector has been employing graduates, employers agreed that

this was not likely in the near future. For example, the Government of Uganda has suggested a reduction in retirement age from 60 to 55 to cater for the fast rising unemployment, and lack of public sector opportunities. This and other challenges, re-emphasise the need for a new agricultural graduate of the 21st Century to support emerging needs and fit into the fast changing landscape and who is entrepreneurial.

The shift in focus from simple agro-production to value chains requires a complete shift in graduates' knowledge and skills. Traditionally, universities have concentrated on training graduates in field production often delinked from the communities who are interested to benefit from the university outputs. The current economic trends demand that graduates are skilful in also post-field production activities such as agro-processing, marketing and negotiations (Altbach, 1998; Gibbons, 1998). Moreover, the development of agro-processing and marketing has not received the level of research support it deserves. This has resulted in weak linkages between researchers and farmers and a mismatch between what the farmers want and actually obtain. There is thus a big disjoint between agriculture and agro-industry, and yet for farmers to benefit, agriculture should be considered incomplete unless it incorporates agro-processing and marketing. The RUFORUM approach is discussed in the next section.

Engaging communities to create responsive university programmes. Universities have a key role to play in influencing rural development by training the workforce of tomorrow. The hypothesis is that if universities can engage with stakeholders and end users of universities products, particularly the non-research actors, development impact can be improved. Universities can increase their present engagement levels by facilitating the creation of responsive university programmes. Such programmes (research, training and outreach) should have the capacity to deliver competent graduates trained to support farmers and Small and Medium Enterprises (SMEs) to establish sustainable agri-food value chains. The RUFORUM initiative will focus on the following activities:

1. Identifying best practices and co-designing pilot experiential models with stakeholders;
2. Adapting and piloting selected experiential models on specific value chains in target pilot countries;
3. Creating a Community of Practice (CoP) and alumni network to support the learning process and for up-scaling;

4. Creating open education resources and other communication products that allow lesson sharing globally; and,
5. Building intra-ACP and global partnership for peer learning and mutual support.

Through facilitation of development of responsive university programmes (research, education and outreach) that deliver competent graduates to support farmers and SMEs to establish sustainable agro-food value chains, this initiative hopes to transform the way universities engage in research, training and outreach services. The creation of responsive programme is to be done through placing university staff and students within given real world situation as part of experiential learning process. The uniqueness of the action lies in its use of experiential learning cycles to respond to the above-mentioned challenges. Actors learn by doing, and indeed learn by being – the latter is of a transformative nature. Experiential learning requires that students and faculty engage and interact with other disciplines, the wider community and between cultures and in so doing master the competence to integrate, connect, confront and reconcile multiple ways of looking at the world. Farmers' leaders and farmer service providers will be engaged as 'programme fellows' so that their inputs and priorities are fully incorporated into the proposed programmes and to build their ownership of the universities, their staff, students, and activities. They directly contribute their specialist knowledge and skills. This moves the programme clearly from a 'top down' information flow to a full partnership across the value chain where previously ignored activities will become central to the entire production process.

The Community Action Research Programme

The Community Action Research Programme (CARP), is a pilot programme by RUFORUM to strengthen engagement of RUFORUM universities with development practice, more specifically smallholder farming communities and other actors engaged in agricultural R&D practice in support of smallholder farmers in the eastern, central and southern Africa region. RUFORUM is supporting three CARP projects with the following purpose:

1. Piloting innovative approaches for university outreach to build community entrepreneurial capacity. Although initial grants are for 3 years, it is hoped that activities will be up and out-scaled for another 3-5 years, thus facilitating long term engagement of universities with communities;

2. Scaling up and out research outputs from especially the most successful FORUM/RUFORUM Competitive Grant System projects;
3. Use the CARP to promote experiential learning and feedback lessons from CARP to strengthen university curricula and overall university research, training and outreach programmes; and,
4. Demonstrate that university capacity can and should be harnessed to support agricultural communities.

To kickstart this process, university led initiatives have been initiated in three countries at Bunda College in Malawi, Moi University in Kenya and Makerere University in Uganda. A brief description of the three pilot projects is given below.

University Outreach Support to Farmer Associations in Western Kenya. This project seeks to better understand and document the process through which associations of smallhold farmers improve their range of services offered to members through university outreach. The general approach of this project is to facilitate the expanded operations of the farmers' associations in a manner that offers many options to their growth and development, and then to monitor and evaluate, and if necessary adjust the directions taken and impacts achieved by them. Moi University will backstop the activities and operations of the associations leading to research areas for one Ph.D and four M.Sc students. The project will link these organizations to other existing agencies and businesses that provide information, technologies, farm inputs, credit and marketing services. Each of the associations will be assisted to develop business plans and provided funds to establish and staff a service facility with the intention of developing self-sufficient operations after three years. The project will also serve as a platform for testing and integrating numerous "recommended" technologies promoted by other organizations. Partners in the project include the Western Regional Alliance for Technology Evaluation (FORMAT-WeRate) and three farmer associations in Kenya.

Developing an outreach framework for strengthening university-farming community engagement for improved and sustainable livelihoods (SUFACE). SUFACE seeks to develop an operation framework where universities can work with communities to enhance productivity and competitiveness of smallholder agriculture as well as responsiveness and impact of universities in agricultural development. It will build on past

experiences of FORUM and RUFORUM, by piloting the use of novel approaches (ICTs and others) to strengthen functionality of multi-commodity value chains with a focus on rice, cowpeas and soybeans. Developing strong partnerships across the research to development continuum will be the basis for enhancing functionality of the value chains on one hand and building the capacity of rural communities to access, utilise and intensify the use on technologies on the other hand. Partner institutions include the National Agricultural Advisory Services (NAADS), Women of Uganda Network (WOUGNET), Uganda Oilseed Producers Association and the National Agricultural Research Organisation (NARO).

Enhancing fish production and marketing for food security and rural incomes of small-scale producers in Malawi.

Three underlying principles including action research, value chain analysis, and linking university and other actors to the farmers will guide implementation of the project to enhance fish production and marketing in the central part of Malawi. The objectives are to consolidate breeding nuclei for improved fish strain of *Oreochromis shiranus* and link it with multiplier and production farmers; determine and adapt best bet technologies for improved strain of the strain, understand socio-economic and institutional factors that affect adoption and marketing of fish in order to identify alternative marketing strategies, identify critical success factors for farmer organisation and microfinance institutions and their impact on rural livelihoods and identify key determinant factors for successful innovations within Malawi fish farming systems. The partners in the project, which is led by University of Malawi Bunda College, are the World Fish Center, Farmers Union of Malawi, National Aquaculture Center and the Department for International Development (DFID) Research into Use Programme in Malawi.

Conclusion

Urgent action must be taken to restore the quality of graduate and postgraduate agricultural education in Africa (FAAP, NEPAD, 2006). It is also agreed that these required actions call for a new approach, or business unusual approach towards agricultural tertiary education on the Continent that highlight the responsiveness of agricultural graduates to the relevant contexts and challenges that are being faced by African farmers. The initiative described in this paper documents pilot actions by RUFORUM and three universities in East and Southern Africa to improve the relevance of agricultural tertiary education

through inclusion of experience learning that involves relevant stakeholders, particularly the non-governmental and private sector organisations who will be the major employers of agricultural graduates in the future. The large human resource pool available in universities and the potential of universities in catalysing broad change in African countries needs to be harnessed in order for Africa to achieve her renaissance.

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