

Research Application Summary

The RUFORUM Community Action Research Programme: A programme to link African Universities to communities and agribusiness

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Abstract

The Community Action Research Programme of the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) is an initiative that aims to support universities in Africa to better support rural communities to improve their production systems by better targeting their knowledge and expertise to the needs of the rural communities and contribute to meeting the targets of the Comprehensive African Agricultural Development Programme. Universities have mandate for teaching, research and extension and are often staffed with a significant pool of trained experts, many at Masters and PhD level but are challenged by their inability to respond to the needs of small farm holders. This paper highlights the underlying design of the CARP Programme and describes its underpinning: 1) African universities need to be able to improve their ability to identify research priorities based on local issues and challenges and mobilise the relevant funding, particularly from local sources to support research; 2) Universities should enhance their ability to learn and adapt on-going research and development efforts to ensure that they can improve the targeting of research and enhance the impacts of their research on the target population, the rural African farmer; 3) Universities should design and implement better mechanisms for integrating the lessons learnt from research into curriculum as a means of improving the sharing of knowledge and providing the next generation of leaders with the relevant knowledge required to enable them support African production for the coming generations, and 4) Universities should support the private sector through the strengthening of specific value chains to improve the competitiveness of African products.

Key words: African Universities, communities, agricultural development, value chains, action research, curriculum development

Résumé

Le Programme de recherche d'actions communautaires du Forum des universitaires régionales pour le renforcement des capacités en agriculture (RUFORUM) est une initiative qui vise à aider les universités en Afrique pour mieux soutenir les communautés rurales à améliorer leurs systèmes de production en ciblant mieux leurs connaissances et leur expertise aux besoins de la communautés rurales et de contribuer à atteindre les objectifs du Programme complet pour le développement de l'agriculture africaine. Les universités ont le mandat d'organiser l'enseignement, la recherche et la vulgarisation, et sont souvent dotés d'un important groupe d'experts formés, dont beaucoup au niveau du master et du doctorat, mais sont remis en cause par leur incapacité à répondre aux besoins des petits agriculteurs. Ce document met en évidence la conception sous-jacente du programme «CARPE » et décrit son fondement: 1) les universités africaines doivent être en mesure d'améliorer leur capacité à identifier les priorités de recherche en fonction des questions et des défis locaux et de mobiliser des financements disponibles, en particulier à partir de sources locales pour soutenir la recherche, 2) Les universités doivent renforcer leur capacité à apprendre et à adapter les efforts de la recherche en cours et de développement, afin de s'assurer qu'ils peuvent améliorer le ciblage de la recherche et d'améliorer l'impact de leurs recherches sur la population cible, le fermier rural africain; 3) Les universités devraient concevoir et mettre en œuvre de meilleurs mécanismes pour intégrer les leçons tirées de la recherche au programme scolaire comme un moyen d'améliorer le partage des connaissances et de fournir la prochaine génération de chefs de file de la connaissance pertinente requise pour leur permettre de soutenir la production africaine pour les générations à venir, et 4) Les universités devraient soutenir le secteur privé à travers le renforcement des chaînes de valeur spécifiques pour améliorer la compétitivité des produits africains.

Mots clés: Universités africaines, les communautés, le développement agricole, chaînes de valeur, la recherche-action, développement de programmes d'enseignement

Background

African Universities have an important role to play in building Africa's capacity, by preparing the next generation of Africa's leaders, entrepreneurs and agricultural advisors. Africa has often been criticised for overseeing weak institutions, including within the national agricultural research systems (NARS). With recent improvements in economic growth across the continent, strengthening the capacity of universities to do their core business

of research, training and outreach is a practical and sustainable approach towards strengthening the ability of the wider national agricultural system. Such an approach would lead to more efficient and effective operation of national institutions; improve implementation of development programmes, growth of the private sector and the expected subsequent reduction in poverty.

The focus on universities is timely:

1. Universities have mandate for teaching, research and extension and are often staffed with a significant pool of trained experts, many at Masters and PhD level. They often constitute a high proportion of the country's agricultural human capital and we need to find ways to connect them closely to development and policy-making initiatives;
2. Universities are burgeoning with student populations and hundreds of universities are being established annually across the continent;
3. Agricultural Education is now being recognised by African governments, stakeholders, including major bilateral and multi-lateral donors, as critical for ensuring agricultural development.

Current university challenges can be responded to. Key challenges are that much of the curriculums and teaching practice remain ineffectual at supporting knowledge generation, uptake and facilitating innovation. Curriculums are worryingly out-dated, and many teaching staff continue to use 'yellow' notes to train students that often and increasingly have access to more recent information from the internet. Other criticisms include the low staff-student ratios and overall poor infrastructure (and design) that limit the capacity to teach in experiential learning approaches. The faculty themselves often remain isolated from the rural areas, farms and food systems that they service which makes it difficult for them to adapt their classes for relevance. The graduates are often unsuited to address development needs.

Literature Summary

University staffs spend time on teaching and supervising students, but also undertake a significant amount of research activities, predominately donor funded (Beintema, 2010). The impact of university research could be far reaching for effective development, but in most cases the impact is limited and much

of the research is not fed into the NARS, or back to the producers, In addition, universities have not been good at monitoring and evaluating the outcomes of their research. Furthermore there is a loose linkage between the generation of knowledge at universities and their integration within the curriculum (Hawkins, 2010). Further, as more focus is being placed on post-production technologies, such as in food processing and storage, traditional approaches that have been developed to support production systems in the past are often unable to respond. These are necessary to ensure that African farmers are able to add value to their products and improve competitiveness. Further, with such a high proportion of youth and lack of matching opportunities for employment within sub-Saharan African countries, university graduates must have ability to create their own employment opportunities. Universities have been known to adopt teaching material from foreign, usually US or European Universities, without much regard for local conditions at their home universities, resulting in a mismatch between taught information and reality and limited learning.

The urgency for enhancing the integration of universities into the broader agricultural development agenda at national and regional levels has been recognised by a number of players in the region (IAASTD, 2008). The Comprehensive African Agricultural Development Programme (CAADP) of the African Union was designed in 2002 by African Heads of States as a framework for responding to the challenges of improving agricultural productivity and output on the continent (NEPAD, 2003). CAADP recognises the importance of strengthening stakeholder engagement, including the private sector, as a means of strengthening the agricultural sector. The CAADP further provides a mechanism to ensure that agricultural education stakeholders, including universities, can access local (national) funding for enhancing the quality of higher education in Africa. Universities and the broader TAE sector must be able to engage meaningfully with the agricultural sector to enable them to access funding from the sector. CAADP recognises the importance of strengthening the private sector in African as an engine for economic growth and poverty reduction. The Tertiary Education for Agriculture Mechanism (TEAM Africa) is an initiative being driven by The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), ANAFE and FARA that is focused specifically on increasing and improving funding for TAE, including its harmonisation at various levels.

Research Application

As part of its mission, RUFORUM is keen to support African Universities to improve their integration in the agricultural sector. RUFORUM recognises the need for universities to be able to deliver competent graduates and research outputs as the basis for the improved collaboration. As such, RUFORUM recently initiated the Community Action Research Programme (CARP), an initiative that aims to provide opportunity of staff and students of African universities to engage with other agricultural stakeholders along value chains in a bid to improve understanding of communities, and also to identify and undertake action research. The CARP initiative also focuses on ensuring that lessons from such university led action research initiatives are integrated back into the university as a learning institution. The CARP Programme is currently being piloted in three universities: Bunda College of Agriculture of the University of Malawi; Moi University in Kenya and Makerere University in Uganda. Each of the universities is currently working on specific value chains to identify specific lessons for university integration with communities and how teaching and curriculum in general at African universities can be improved. The CARP Programme is currently in its second year of implementation and efforts are being made to take stock of lessons to improve implementation.

CARP was initiated as a mechanism to enhance the ability of universities to improve the relevance and effectiveness of agricultural education at African Universities. The Programme builds on the RUFORUM Graduate Research Grants (GRG)¹ that focuses on field based research and training for MSc students offering university staff opportunity to, among others, gain experience at managing research grants, strengthen student supervision and mentoring and developing and delivering knowledge and innovations (as evidenced in peer reviewed publications) that respond to small-holder farmer needs. The CARP provides² an opportunity for more comprehensive and sustained action research studies concentrated on particular geographical areas or on selected commodities. The approach in either case is on enhancement of value chains, strengthening student training, responding to farmer problems through action

¹The RUFORUM GRG provides up to US\$60,000 for the training of 2 MSc students and relevant research outputs. More information can be found in the Grants Manual at www.ruforum.org

²The CARP grants are for up to \$300,000 over a three year period and should include the training of at least 1 doctoral and 3 M.Sc. students.

research, and improving feedback of these experiences into university curricula for future training (Fig. 1). It is expected that sustained action at postgraduate level will spill over into curricula at African universities and similarly enhance the capacity of teaching staff to innovate and subsequently enhance training capacity.

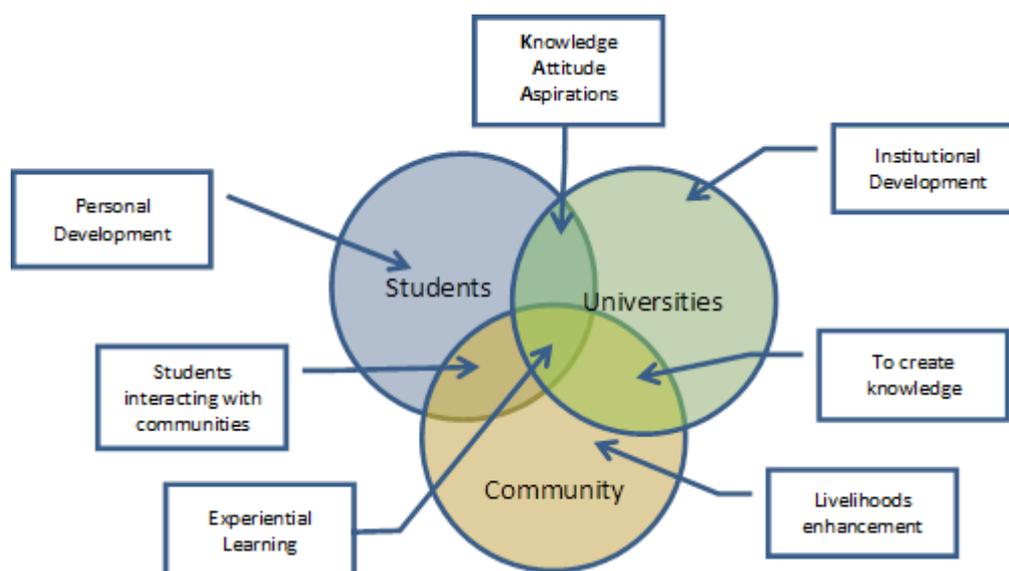


Figure 1. The Community Action Research Framework.

The CARP builds on the findings of a comparative and gap analysis on Experiential learning, action research and outreach that was undertaken by RUFORUM in 2010 (Hawkins, 2010). The study made practical recommendations on how to initiate and promote experiential learning approaches in African universities. The study found that unlike schoolteachers, most university lecturers have had little or no formal training in learning theory or teaching and that most of the programmes offered at the universities visited are disciplinary focused, and oriented towards knowledge acquisition rather than skills development.

In contrast with the RUFORUM GRG, the CARP projects are expected to involve senior faculty who will have had previous experience in action research initiatives, such as through the GRG, and as such CARP has a much greater emphasis on enhancing the involvement of non-university partners in value chain based, inter-disciplinary, multi-disciplinary action research along an innovation systems framework. The RUFORUM National Forums are used as a means of engaging with other

stakeholders, particularly for aggregating farmer demands and sharing of experiences, including receiving feedback on university programmes and activities. Other mechanisms such as use of communities of practice, the RUFORUM Alumni towards the objectives of the CARP are also encouraged. The CARP recognises the changing competencies and skills being demanded by job markets on the continent and as such, experiential learning and entrepreneurship are important concepts within the programme. CARP hopes to improve teaching delivery and content by bringing on board more student centered approaches and aspects of entrepreneurship to spur innovation, building on context specific new knowledge created through the focused research programmes.

The pilot CARP projects currently being implemented are expected to provide relevant lessons and experiences for integrating these aspects into the research programmes of African universities. RUFORUM hopes to ensure this by benefitting from lessons of other partners with longer experience and greater success at running such programmes, such as Earth University in Costa Rica, Wageningen University and Research Center in the Netherlands. However, an important component will also be the sharing of experiences from the pilot participating African universities (Makerere University, Moi and Bunda College of Agriculture) in Eastern, Central and Southern Africa (ECSA). RUFORUM also works to improve both entrepreneurship and experiential learning approaches within universities by providing training opportunities for staff.

The CARP aims to improve matching of expertise and experience that are resident in universities, including the vibrancy of students, to the needs of African communities, particularly rural farmers. The CARP focuses on 1) identifying senior researchers who have a track record in undertaking innovative research 2) supporting African faculty to co-identify and refine with farmers relevant technologies that have been previously produced by universities and focus on refining these for utilisation by farmers; 3) provide opportunities for experiential learning by moving faculty and students out of the university and into the farmers' fields and improve their understanding of the challenges that farmers face; 4) enhance the linkages between the lessons and experiences in the field with the university curriculum by improving the feedback linkages and 5) identifying relevant experiences from other models and institutions within and outside Africa, such as Earth University

in Costa Rica and various innovation platforms on the Continent, that can provide lessons to improve the CARP model.

It is hoped that strengthening farmer use of knowledge co-constructed by universities and communities by building the capacity of African universities to incorporate these experiences into training programmes at universities and inculcate into African graduates experiences will enable them to circumvent the pitfalls inherent in African agriculture and small holder farming. The MSc and PhD students that graduate from African universities are the future advisors and implementers of African agriculture and by improving their capacities, we can sustainably ensure the future of African agriculture.

The CARP approach is underpinned by four major ‘pillars’: 1) African universities need to be able to improve their ability to identify research priorities based on local issues and challenges and mobilise the relevant funding, particularly from local sources to support research; 2) Universities should enhance their ability to learn and adapt on-going research and development efforts to ensure that they can improve the targeting of research and enhance the impacts of their research on the target population, the rural African farmer; 3) Universities should design and implement better mechanisms for integrating the lessons learnt from research into curriculum as a means of improving the sharing of knowledge and providing the next generation of leaders with the relevant knowledge required to enable them support African production for the coming generations, and 4) Universities should support the private sector through the strengthening of specific value chains to improve the competitiveness of African products. Lessons from pilot implementation are being used to refine the approach.

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