

Research Application Summary

Financing a massified African higher education: Emerging approaches and issues

Okalany, E. and Adipala, E.

Regional Universities Forum for Capacity Building in Agriculture, RUFORUM Secretariat,
Makerere University Main Campus, P.O Box 16811, Wandegaya, Kampala, Uganda

Corresponding Author: e.okalany@ruforum.org

Abstract

Increased recognition of higher education's role in Africa's economic transformation has led to massification of higher education in Africa. The immediate consequences of massification have been half-baked graduates due to reduction in practical sessions, inadequate library and laboratory facilities, and large staff to students' ratios, limited class room space and limited time for faculty to conduct research. The increasing outputs from secondary schools in Africa make it impossible to reverse the massification policy but rather focus has to be on quality enhancement amidst increased enrolment and number of universities. At national and continental level, quality assurance mechanisms and institutions have been established but funds required to operationalize these strategies in universities are limited. It is therefore proposed that universities should adopt fund raising strategies that enable them function amidst declining Government funding and development partner support. Proposed is institutionalization of research consultancies for Governments and other institutions and strong marketing of university services. Intensification and institutionalization of resource mobilization for research, training and from development partners needs to be done. North-South and South-South cooperation in training and research to share and leverage existing resources among African universities will contribute to sustain the training and research functions of universities. Engagement of private sector to support research, host internships and field attachment for students, establishment of business incubation and university enterprises to generate income and engagement of Alumni are some of the approaches that African universities can employ based on the success of these approaches in developed countries. For success, joint advocacy by universities at national and continental level for increased financing and long term support is needed while at institutional level, established of designated Offices and strategies for fund raising/development programmes, international relations, university enterprises and Alumni relations should be encouraged.

Key words: African Universities, development relevance, fundraising

Résumé

La reconnaissance accrue du rôle de l'enseignement supérieur dans la transformation économique de l'Afrique a conduit à la massification de l'enseignement supérieur en Afrique. Les conséquences immédiates de la massification ont été des diplômés peu compétents en raison de la réduction des séances de pratiques, de l'insuffisance des bibliothèques et des laboratoires, et un taux élevé du nombre d'étudiants à encadrer par enseignant, des salles de

cours peu espacées et le temps limité pour la recherche. Les résultats croissants des écoles secondaires en Afrique rendent impossible l'inversion de la politique de massification, mais l'accent doit être mis sur l'amélioration de la qualité dans le contexte d'accroissement des inscriptions et du nombre des universités. Au niveau national et continental, des mécanismes et des institutions d'assurance de la qualité ont été établis, mais les fonds nécessaires à la mise en œuvre de ces stratégies dans les universités sont limités. Il est donc proposé que les universités adoptent des stratégies de collecte de fonds qui leur permettent de fonctionner face à un financement gouvernemental en baisse et de l'appui des partenaires au développement. Il est proposé d'institutionnaliser des consultations de recherches pour les gouvernements et d'autres institutions et de promouvoir les services des universités. Il est nécessaire d'intensifier et institutionnaliser la mobilisation des ressources pour la recherche, la formation et les partenaires au développement. La coopération Nord-Sud et Sud-Sud en matière de formation et de recherche pour partager et exploiter les ressources existantes entre les universités africaines contribuera à soutenir les fonctions de formation et de recherche des universités. L'engagement du secteur privé pour soutenir la recherche, les stages pratiques et professionnels des étudiants, la création d'entreprises d'incubation et des entreprises universitaires pour générer des revenus et l'engagement des Alumni sont quelques-unes des approches que les universités africaines peuvent employer en fonction du succès de ces approches dans les pays développés. Pour réussir, il faut des plaidoyers conjoints de la part des universités au niveau national et continental pour accroître le financement et le soutien à long terme, tout en favorisant au niveau institutionnel l'installation des bureaux délégués et des stratégies pour les programmes de collecte de fonds et de développement, et encourage les relations internationales, les entreprises universitaires et les relations avec les Alumni .

Mots clés: Universités africaines, collecte de fonds; pertinence en matière de développement

Introduction

The importance of Higher Education in economic transformation cannot be over emphasized. Empirical evidence and reviews provided by Bloom *et al.* (2006), Montenegro and Patrinos (2013), Bloom *et al.* (2014), Idowu (2014), Cloete and Maassen (2015), and Valero and Van Reenen (2016) provide evidence that Higher Education is the key vehicle for economic transformation in the era of knowledge based and globalized economies. This is further emphasized in the Africa Continent's Education Strategy (AUC, 2016). This link to economic development in the recent past has spurred efforts to increase access and equity in Higher Education through policies such as massification but with no clear map of ensuring quality. The approach to access has been by increasing number of universities and enrolment within universities and opening higher education to the private sector to reduce the load on public universities. While number and enrolments in public universities increased, funding has decimally increased or remained constant (Mohamedbhai, 2008). As a result there is critical shortage of teaching and learning infrastructure such as classrooms, libraries laboratories, student and staff residences which are critical in producing quality

students (Mohamedbhai, 2008; Oketch, 2016). Reduction of practical sessions, field trips and rigorous supervision and mentorship during internship and research has greatly reduced the quality of graduates. Staff to student ratios were as high as 1:100 by 2008 and likely to be higher today as a result of increasing number of universities and enrolment within universities. Staff therefore have a heavier teaching load and consequently limited or no time committed to research and outreach, which are critical roles of higher education institutions in knowledge production and transfer for economic transformation (AUC, 2016). As Mohamedbhai (2014) plainly puts it, massification has had negative consequences on almost all of the public higher education institutions in Africa, including physical infrastructure, staffing, educational quality, graduate employment, and student mobility.

While the challenges posed by massification are evident, complete reversal of the policy for example, through closure of universities or reduction of student numbers to former states is not possible. While in some countries such as Kenya, the Government has had to close newly opened universities due to critical shortage of infrastructure and staffing, complete reduction has not been done. The challenge African Higher Education system faces is to enhance quality of teaching, research and outreach in universities amidst increased number of universities and student enrolment, which is an opportunity to enhance the impact of higher education in Africa's economic development. Mohamedbhai (2008) highlights the global efforts to cope with negative effects of massification to include cost sharing between Governments and students, decentralization through academies, establishment of quality assurance mechanisms, cooperate partnerships, etc. Mohamedbhai (2014) documents the strategies that African governments, higher education institutions are deploying to enhance quality of Higher Education amidst higher student numbers and limited infrastructure and staffing. Among the responses within institutions are introduction and adoption of semester based teaching systems, creation of evening based classes and modularization of courses to allow for flexibility for teaching staff and customize the learning process and allow them do research. Other approaches are adoption of open and distance learning, deployment of ICTs for learning and teaching within universities, privatization of student residences and catering services, among others (Mohamedbhai, 2011; Mohamedbhai, 2014). At national and continental level establishment of quality assurance mechanisms, cost sharing through private students schemes and students' loans schemes have been introduced. New institutions of higher learning and open universities to accommodate the increased number of students from secondary education have been created as well as creation of research focused institutions such as the Pan African University initiative of the African Union Commission (Mohamedbhai, 2014; Oketch, 2016).

All these approaches are either new or modifications of what the universities have been doing hence their financing diverges from the traditional funding streams in public universities as well as the mainstream financing in the increasing private institutions. Emerging models for financing higher education need to be identified and recommendations developed on how universities can practically deploy these models. Mohamedbhai (2011) and Oketch (2016) discuss in detail private students and students' loans schemes as cost sharing financing models in public African universities and thus

this approach will not be discussed in this paper. This paper focuses on models that generate funds directly to institutions for students training, research and outreach and proposes strategies for institutionalizing these approaches, considering the interest of students, staff, universities as institutions and the industry (Government, private sector, NGOs and other institutions which employ graduates and consume research products from universities) for national and continental economic transformation.

Strengthening Existing Financing Models

Government support to higher education institutions. From colonial days to the era of liberalization of higher education, universities were started as Government apparatus for training human resources and building national ideologies, receiving up to 100% of their funding from Government. Public service, though declining, also remains one of the highest sinks of university graduates while policy making remains one of the highest consumers of research products from universities. It is therefore logical for universities to remain relevant to the interest of their country and communities. Given that mainstream funding from the Ministries of Education are declining and in some countries like Ghana, Government is proposing to put a complete stop to funding Higher Education, Universities, through diverse units should reposition themselves to produce products and services which the Government will pay for. First, Universities need to be more proactive in engaging with government to develop a better understanding of priorities, how they can best support the priorities and build more collaboration to win back their glory and then continue to interact more with the Government, the communities and their stakeholders to build trust, and ensure they are better understood. The Universities need to make themselves more accessible so that they can play a bigger role in the transformation process to avoid other partners stepping into the place of Universities to do the job, thus diluting the role that Universities can play in national development. Universities should conduct research needed to inform policy making processes and make the Government pay for such services. To make it more organized, the universities should develop a policy governing such consultancy work. For example, all the consultancies should be done as institutions rather than individuals, but a small percentage of the revenue is paid to the university say 30% while the 70% goes to the individual conducting the research or developing products. If research is broader, students can be deployed to support the research process within the consultancy and they are allowed to write their theses and receive mentorship from the senior faculty leading the consultancy. This has a triple advantage – training students, making universities relevant to national development and restoring the currently fragile relationship between universities and national governments. If done well, this has a potential to restore Government faith in higher education institutions and increase financial support to them. To further strengthen this role, universities need to invest in developing a catalogue of services they can offer either as individual institutions or as national universities and strongly market these to the government and other stakeholders so that they can generate extra revenue as institutions.

Funding from development partners. After Government support, development assistance to higher education is the second largest source of funding in universities. It takes mainly three forms; direct students scholarships, research funding and institutional

management capacity development such as building leadership and management capacity, staff exchanges, strengthening quality assurance mechanisms, physical and virtual infrastructural development etc. Montanini (2013) and USAID (2014) outline the major development partners supporting African Higher Education with specifications on the countries areas of support. While there has been reductions in direct support to Higher Education by some development partners such as Rockefeller Foundation and Canada's International Development Research Centre, they still provide a greater opportunity for African universities to tap into their resources. The focus of most of the development partners is creating impact at community level through development of cutting edge solutions to prevailing challenges and supporting rural communities adopt such innovations. They therefore provide resources for research and community outreach, which governments and students tuition cannot cater for. While conducting research, integration of post-graduate students in the research process as a capacity building strategy is emerging in most development partner programmes, providing funds for both tuition and research for the very expensive post graduate training which most individuals in Africa cannot afford. Other development partners such as the Carnegie Cooperation of New York provide funds for staff exchanges within and outside Africa with special programme for Africans in the diaspora. Universities need to reposition themselves to harness these funds as institutions rather than individual researchers. This can be done effectively by dedicating specialized fundraising/development Offices responsible for developing and coordinating such programmes and Projects.

Emerging Opportunities

While the above areas are likely to remain important funding streams to higher education in the next decades and thus need innovation in harnessing and sustaining them, new funding streams for universities are emerging. These are needs-based and adopted by established universities in developed countries and are likely to be more sustainable for African universities too.

South-south/North-South partnerships among universities. Within Africa, some universities have resources available for establishment of learning and teaching infrastructure while others have expertise. Partnerships and collaborations among them will allow sharing and leveraging of these resources among each other. For example, within the RUFORUM Network, Lilongwe University of Agriculture and Natural Resources needed to establish a Faculty of Veterinary Medicine and had the financial resources but did not have the expertise. Makerere University in Uganda offered senior Faculty to be resident Dean, Deputy Dean and other teaching staff to support establishment of the faculty. The other approach, the Graduate Teaching Assistantship Programme within the RUFORUM Network allows African universities to train their Faculty within Africa. The sending university which needs its staff to be trained pays for travel and research costs, while the hosting university waives tuition as the staff under training participates in teaching in the host university. Such initiatives, among others, allow sharing of resources for training and research within African institutions.

Partnerships between North and Southern universities adopting the same model will enhance the enrolment especially at graduate level. Northern universities have resources available either through their Governments or from development partners through their international Offices for both training and research and are looking for countries where training and research impact can be felt – Africa being one of the most sought destinations. African universities should therefore reposition themselves and open their doors as institutions to these opportunities to jointly train and conduct research. In most African universities, these partnerships have been occurring through individual researchers but institutionalization will enhance the ultimate impact. For effective coordination of such partnerships, an international relations Office should be established or strengthened to package what the University can offer.

Engagement with the Private Sector. The Private sector or industry at large, constituted by institutions and communities which employ graduates and consume research products from universities are potentially the most strategic funders of university programmes. The key issue to be addressed is the relevance of products or services and the value add to what the industry is doing or needs for its business. Universities should therefore package areas of potential support from industry to portray a win-win situation by for example increasing productivity and profit while training students for the relevant enterprises. Industry can host internships and field attachment of students, host students research and facilitate innovation centres for business incubation and support practical training of university staff as a capacity development approach. Established private sector companies can also support full scholarships for post-graduate training. This has successfully worked in South Africa, where, for example, Stellenbosch University partners with the Standard Bank to support business incubation and agri-business research by students. For this to work effectively, each College/School/Faculty in the university should deliberately package and market itself and source for partnerships with the private sector with a potential to support training of large number of students in a particular field or support research and product development in partnership with the university.

Establishment of university enterprises. African universities need to establish and strengthen a business oriented entity that is semi-autonomous from the university as a training institution but managing the commercialization of university products to include patenting and Intellectual Property Rights of its innovations and products. This unit would coordinate and manage the Consultancies conducted by university lecturers. Universities may establish commercial enterprises such as industries and farms that generate additional income to the universities. This approach has worked for institutions such as EARTH University in Costa Rica and at Moi University that owns a Textile Industry and a Flying School to train pilots. The funds generated can be used to support additional students' scholarships and research while students can be hosted to conduct research in the established Projects.

Engagement with University Alumni. Alumni remain the university's best ambassadors and have the potential to both market and support the university. Most of the Alumni get employed within three years of graduation and have a greater potential to lobby for financial support for the university operations. While most universities have Convocation Offices, their role in raising funds for the universities has been very limited. They need to be strengthened to develop fund raising programmes and Projects to support training and research within universities. Well positioned Alumni can make financial contributions to train a particular number of students especially at post graduate level. Alumni can also be the entry points to internship positions for students, establishment of partnerships with private sector and development partner institutions since they will be employed in such institutions. However, for Alumni to effectively support universities, a sense of belonging should be created among the students while they are still at the university. The Alumni and the University administration should create a conducive environment for the students and win their hearts for the institution. A dedicated Alumni liaison Office should be established in the universities to link the administration, students and the Alumni as well as coordinating Projects and programmes. Alumni can organize crowd funding and donation events where the public can make contributions for supporting university students, research and community outreach by the university. There is need for lesson learning from especially USA universities on engaging alumni.

Conclusion and Recommendations for harnessing the present opportunities

With the increased number of universities and enrolment within universities, the traditional funding mechanisms are no longer sufficient for producing the required quality of graduates while maintaining universities as research and outreach hubs. The two main funding streams – Governments and development partners can no longer meet all the training and research costs of African universities. It is up to the universities to develop ways of raising funds to keep themselves functioning and relevant to the societies they serve. Now opportunities, which have worked in universities in the developed world are available for testing, adaptation and adoption in the African context. These approaches provide opportunity to lower the universities from the “ivory tower” syndrome to the actors they serve and also make them address the challenges they are facing thus providing a win-win situation for both universities and the industry. These approaches will also restore trust in African universities by Government, Private sector and other industry players which consume university products.

To harness opportunities presented in these approaches, universities need to first organize themselves and strategically plan on execution. First, at national and continental level, universities need to recognize that they are operating in the same landscape and cooperation rather than competition will enhance the impact of higher education to Africa's economic development. This highlights the importance of Networks such as Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), Association of African Universities (AAU), The African Network for Agriculture, Agroforestry and Natural Resources Education (ANAPE), Conseil Africain et Malgache pour l'enseignement

supérieur (CAMES), Southern African Regional Universities Association (SARUA). First this will provide an opportunity for universities to leverage resources as well as provide peer capacity building. It also increases the voice for lobbying for funds from development partners since higher reach and impact is guaranteed. At national level, universities should cooperate with one another and speak a common language to the Government in requesting for research and training support. This provides a guarantee to Government that their support will have a wider reach, a mix of all national experts and higher impact and sustainability. At institutional level, universities need to establish or strengthen units for fund raising and management of relationships with potential funders. One of such units is development or fundraising unit to coordinate development and management of programmes and Projects. The unit should document and widely disseminate its achievements in partnership with the marketing and communication department, and keep the relationship and build trust with development partners through effective management and reporting of Projects. The second important unit is the International relations Office. Under this Office, activities such as students and staff exchanges, Programmes and Projects with international universities and cooperation that engage diverse international universities are developed and coordinated. The third Office is the Alumni/Convocation Office to develop and coordinate Alumni activities within and outside the university. The Office should be responsible for linking Alumni, university administration and students to create a sense of belonging to the university while at university and after university. The fifth Office/Unit is the University Enterprise responsible for management of all private income generating projects such as farms, consultancies, etc. The unit should package a list of services that universities can offer as institutions rather than individuals and offer a percentage of consultancy fees to the institution.

To strengthen the operation and relevance of these units, strategies guiding their operations should be developed. All relevant actors likely to benefit from the operations of these units should be consulted and engaged in the development of these strategies, their implementation and regular review.

Acknowledgement

This paper is a contribution to the 2016 Fifth African Higher Education Week and RUFORUM Biennial Conference.

References

- African Union Commission (AUC). 2016. Continental Education Strategy for Africa (CESA 16-25) 2016 – 2025. 44pp. African Union Commission. Addis Ababa, Ethiopia.
- Bloom, D., Canning, D. and Chan, K. 2006. Higher Education and Economic Development in Africa. 90pp. The World Bank Group, Washington, D.C.
- Bloom, D. E., Canning, D., Chan, K. and Dara, L. L. 2014. Higher Education and

- Economic Growth in Africa. *International Journal of African Higher Education* 1 (1): 23-57. ISSN 2313-5069.
- Cloete, N. and Maassen, P. 2015. Roles of Universities and the African Context. pp. 1-17. In: Knowledge Production, Contradictory Functions in African Higher Education. African Higher Education Dynamics. Series Vol. 1. ISBN 978-1-920677-85-5
- Idowu, B. 2014. Higher education and African development. *Educational Research* 5 (3): 107-115.
- Mohamedbhai, G. 2008. The Effects of Massification on Higher Education in Africa. Association of African Universities. 88pp. Mauritius.
- Mohamedbhai, G. 2011. Higher Education in Africa: Facing the Challenges in the 21st Century. *International Higher Education* – No. 63 Spring 2011, pp 20-21.
- Mohamedbhai, G. 2014. Massification in Higher Education Institutions in Africa: Causes, Consequences, and Responses. *International Journal of African Higher Education* 1 (1): 59-83. ISSN 2313-5069.
- Montanini, M. 2013. Supporting Tertiary Education, Enhancing Economic Development. Strategies for Effective Higher Education Funding in Sub-Saharan Africa. Working Paper No. 49. Istituto per Gli Studi di Politica Internazionale.
- Montenegro, C. E. and Patrinos, H. A. 2013. Returns to Schooling around the World. 25pp. The World Bank Washington D.C.
- Oketch, M. 2016. Financing higher Education in Sub-Saharan Africa: Some Reflections and Implications for Sustainable Development. *Higher Education* 72 (4): 525–539. Springer Publishers.
- USAID, 2014. African Higher Education: Opportunities for Transformative Change for Sustainable Development. 138pp. USAID, Washington, D.C.
- Valero, A. and Van Reenen, J. 2016. The economic impact of Universities: Evidence from across the globe. NBER Working Paper Series No. 22501. National Bureau of Economic Research. Massachusetts, USA.