Ministerial Conference on Higher Education in Agriculture in Africa (CHEA)

Proceedings of the PRE-CONFERENCE & ROLICY SIDE EVENTS

15 - 19 November 2010 | Speke Resort & Conference Center | Kampala, Uganda

Edited by Dr. Nicholas Ozor Prof. Kevin Urama Prof. Ekwamu Adipala Engr. John Okuonzi Dr. Moses Osiru Mr. Trust Saidi Anne Sorennsen





Danish Development Research Network Bringing together knowledge and development

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Organizing Institutions: African Technology Policy Studies Network (ATPS), Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Danish Development Research Network (DDRN)





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The African Technology Policy Studies Network (ATPS) is a multidisciplinary network of researchers, private sector actors and policy makers promoting the generation, dissemination, use and mastery of science, technology and innovation (ST&I) for African development, environmental sustainability and global inclusion. ATPS intends to achieve its mandate through research, capacity building and training, science communication/dissemination and sensitization, participatory multi-stakeholder dialogue, knowledge brokerage, and policy advocacy.



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Finally, we are grateful to the entire workshop participants, whose enthusiasm enriched the debates and discussions during the Ministerial conference. We look forward to their engagement in future discussions on the roadmap for strengthening higher education in agriculture linkage to policy and practice for Africa's development.

Abbreviations & Acronyms

AAU	Association of African Universities
ACP	African Caribbean and Pacific
ADSI	African Development Solutions International
ASTI	Advanced Science and Technology Institute
ATPS	African Technology Policy Studies Network
AU	African Union
CAADP	Comprehensive African Agricultural Development Programme
CEO	Chief Executive Officer
CHEA	Conference on Higher Education in Agriculture in Africa
СТА	Technical Centre for Agricultural and Rural Cooperation ACP-EU
DDRN	Danish Development Research Network
GDP	Gross domestic product
IAASTD	International Assessment of Agricultural Knowledge, Science
	and Technology for Development
ISH	Innovation Strategy House
NEPAD	New Partnership for Africa's Development
ODI	Overseas Development Institute
OECD	Organization for Economic Co-operation and Development
PRSPs	Poverty Reduction Support Papers
R&D	Research and Development
RAPID	Research and Policy in Development
ROMA RAPID	Outcome Mapping Approach
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture

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1. Introduction

The African Technology Policy Studies Network (ATPS) convened a pre-conference workshop meeting with some of its partners including the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and the Danish Development Research Network (DDRN) to organize a Ministerial Conference on Higher Education in Agriculture in Africa (CHEA) at the Speke Resort and Conference Centre, Munyonyo in Kampala, Uganda from 13-14 November 2010. The workshop outline and materials were developed by the Research and Policy in Development (RAPID) Programme. The main purpose of the two day training workshop for University staff and other stakeholders was to strengthen their knowledge and competencies in skills required to better engage with policy. The list of the participants and programme of events is provided in Annexes 1 and 3 respectively.

Specifically, the objectives of the training workshop were to:

- > Identify guiding policy objectives related to strengthening the relationship between universities and development policy and practice;
- > Identify and share university success stories and best practices as a way of contributing to

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development of a coherent argument on the contribution of universities to development;

- > Identify strategies for improving the engagement and increasing relevance of universities to development practice;
- Contribute towards strengthening the capacity of universities for engaging with policy makers; and,
- > Provide recommendations for universities and policy for enhancing the relevance of universities to national development strategies, including Poverty Reduction Support Papers (PRSPs), Development Strategies and Investment Plans/CAADP country compacts, and to share these recommendations with policy makers.

Expected outcomes

- > Obtain understanding and knowledge of concrete research communication tools and strategies for informing and influencing policy and practice.
- > Create university capacity for engaging with policy-makers
- > Design of specific strategic objectives and lines of action for engaging with policy-makers.

Approach and activities

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), together with the Association of African Universities (AAU), the African Technology Policy Studies Network (ATPS), the Danish Development Research Network (DDRN) and other partners, invited 25 public relations officers from RUFORUM universities, 5 program officers from the RUFORUM Secretariat and 2 university staff from Danish universities, to participate in this pre-conference research communication and policy training.

The objective of the training was to give these stakeholders hands-on experience with some of the key tools and strategies used in bridging research and policy, and to get insight into how to develop engagement strategies for evidence-based policy-making.

The stakeholders participated in the sessions under theme 5: Placing Agricultural Tertiary Education on the Policy Agenda. As part of the training, brief interventions and presentations were prepared to provide input into the sessions and discussions under this theme.

Impact and beneficiaries

The primary beneficiaries are university and RUFORUM program staff concerned with informing policy debates with research-based knowledge and advocating for the need to give the highest priority to African tertiary education in agriculture and natural resource. Other beneficiaries include participants in the Ministerial Conference especially those in the parallel session on Theme 5.

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1.1 Background

Higher education and research are increasingly being recognized globally as key ingredients for achieving sustainable development, even though funding from the international community as well as from many developing country governments remains low. This is underpinned by the assumption that human resource constraints pose severe limitations on implementation of national economic development strategies, and that by investing in knowledge for development, national economic development can be stimulated. It has been noted, however, that many countries have been slow to support their higher education sectors and are failing to back rhetoric with action (Harvard University Review, 2005).

There are several barriers to making higher education work for development in Africa, including inadequate quality of graduates produced due to poor infrastructure, inadequate capacity for training, weak curricula, high cost of higher education, overcrowding, and weak university management. At the heart of this problem is the limited funding that is channeled to higher education institutions and the education sector as a whole. In addition, Higher Education Institutions have been criticized for failing to justify their contributions. For example, university staffs have not adequately communicated the current and future impacts of their output, including research, in a way that breaks down the barriers between research, policy and practice.

What is lacking is a proper understanding of research communication and knowledge translation so as to facilitate the use of research evidence to influence policy and effect change. This can be addressed through systematic interactions and capacity building amongst key stakeholders including researchers, policymakers, and practitioners. There is need to ensure that policy makers understand the contributions that universities are making and could potentially make towards enhancing national economic development, and towards strengthening Africa's ability to build capacity in agriculture and natural resources, through their mandated role of educating students and generating knowledge.

Universities are well placed to support sustainable development processes by instilling in the workforce the desired values, attitudes and skills required. However, universities in many African countries have in the past and still continue to be detached from direct linkages with policy makers who spearhead development agenda. In supporting the development process, universities are required to become more proactive in engaging with policy makers through improved research priority setting, information flow and direct contribution to political aims of governments through science and technology education and training. As a first step, this conference provides a platform to build the competencies and capacities of key staff in universities on the approach to better engage policy and policy makers, and to increase the relevance of universities contribution to the development process.

1.2 Opening Remarks

1.2.1 Remarks from ATPS by Dr Nicholas Ozor, Senior Research Officer (ATPS)

Dr. Nicholas Ozor welcomed participants to the training on behalf of the African Technology Policy Studies Network (ATPS) and urged them to share lessons learned at the workshop with their colleagues. He noted the importance of engagement with policy, as a means of catalyzing change in African countries.

1.2.2 Remarks from RUFORUM by Dr. Moses Osiru, Grants and Networking Manager of RUFORUM

Dr. Moses Osiru welcomed participants to the meeting on behalf of Prof. Adipala Ekwamu (CEO of RUFORUM) and the RUFORUM Secretariat. Dr. Osiru's remarks were followed by remarks from Anne Sorensen on behalf of the Danish Development Research Network (DDRN), who pointed out that DDRN is glad to be working with RUFORUM and that it was present at the training as a facilitator. She also informed participants that DDRN is a knowledge and development network for researchers and practitioners comprising more than 2,000 members in Denmark and the South, mainly from Africa.

1.2.3 Remarks from Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA) by Judith Francis, Senior Programme Specialist CTA

Judith made a brief presentation about the Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA). She informed participants that CTA covers seventy nine (79) countries in the African Caribbean and Pacific (ACP) with collaborations and partnerships in some European countries with the aim to develop agricultural research and improve the livelihoods of communities in their areas of operation. She asked participants, somewhat rhetorically, why is it that if policy makers, communication specialists, researchers and academicians had the same objectives, and seeing the same things and same commitment to development then aren't there changes in our institutions? She also informed participants that last year CTA commissioned a study, where young researchers in Africa were asked to assess the health of their institutions in terms of courses taught, relevance of curricula and teaching approaches. Students felt that they were being cheated by their mentors as they had been found incompetent with no job opportunities to absorb them. They felt there was need for institutions and policymakers to become more relevant in what they were doing for national development.

Judith pointed out that CTA is trying to respond to the challenges found in the study through the ASTI programme that is being conducted in various African countries where researchers and university managers are being trained on how to influence policy and in ensuring that these policies are evidence based. She said that there are a number of good policies among the ACP countries that have been well designed, but the problem was that, these policies are not well known and even universities are not aware of their existence and how they can get involved in influencing policy development. She mentioned that in cases where these policies are known and exist, they are not being implemented and the question was, again, why? She concluded her opening remarks by urging universities to work together to increase their visibility in community actions and engaging in policy development and implementation. She thanked RUFORUM, DDRN and ATPS for organizing the forum. She also acknowledged the Director at CTA for being supportive of such initiatives and all the participants who made it to the meeting.



2.0 Plenary Sessions

2.1 Roles of the African Universities by Dr. Moses Osiru

Dr. Osiru started his presentation by asking participants to consider the roles that African universities were playing over the years. Why are they being continually referred to as 'ivory towers'? Why has higher education funding remained low over the years?

From his presentation he also clarified the overall objective of the meeting which is to strengthen the knowledge and competencies of academicians, researchers and development practitioners in skills required to better engage with policy. With these overall objective the expected workshop outputs included;

- > A better understanding and knowledge of concrete research communication tools and strategies for informing and influencing policy and practice;
- > Capacity of selected key university staff for engaging with policy-makers; and,
- > Specific strategic objectives and lines of action for engaging with policy-makers.

In his conclusion, he thanked DDRN, RUFORUM, ATPS and ODI for joining hands to

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ensure that the meeting took place and all participants for being present. After the remarks by Dr. Osiru, participants gave brief introductions of themselves.

2.2 RAPID Outcome Mapping Approach in policy research by Enrique Mendizabal, Head of RAPID programme

Enrique gave an introduction of the RAPID Outcome Mapping. The ROMA approach, according to Enrique, is a way of systematically planning policy influencing interventions. ROMA follows a rational and well recognized planning narrative to support policy entrepreneurs to take advantage of the often limited information they possess and to develop the most appropriate influencing strategies. The approach encourages the polity entrepreneur to pay particular attention to the vision of change, the context and how change actually happens in their sector, their own circumstances, mandate, competencies and skills and the roles played by all relevant actors. The approach is not prescriptive but instead encourages critical thinking – ideally among peers and allies. After the necessary introductions, participants were asked to work in groups – which included participants from different countries - to address two key questions:

- 1. Why are universities important for the development of policy, practice and outcomes?
- 2. How can universities strengthen policy, practice and outcomes?

The participants engaged in plenary sessions and a number of issues emerged on the importance and roles of universities. They expressed that universities are centres of knowledge production and generation as they do various research to generate knowledge. Research helps in understanding underlying policy assumptions. In this regard, universities are centers for research to inform policies which enrich the policy making process. In addition, universities help in solving practical problems, by providing improved materials. Universities also help in understanding the social, economic and cultural aspects of the country and they serve as the main actors in national development. This implies that universities help improve the livelihoods of people as they have the expertise that drive the country forward.

Universities can strengthen their engagement in policy by changing their own roles such as teaching, research and engaging communities. They can influence policies at various levels including scaling-up their practices to national levels, offering policy training and education and enhancing the general understanding of policies among their stakeholders. For example, at Mekelle University in Mekelle, Ethiopia, there is a short course on ways of conducting research. Apart from these, universities can strengthen policies by creating an enabling environment for research, entering into agreements with policy making bodies, engaging policy makers in workshops and conferences, establishing centers of excellence which house think tank groups, and having representatives from universities in policy making organs (e.g. parliaments). Universities can also engage in open days and workshops, conduct outreach

activities and research along the value chains, increase their visibility in national development, and identify themselves as agents of change and providers of solutions for development.

2.3 Summary of the roles of the university

Universities play a number of roles in their context, namely: teaching, research and policy and community outreach. They influence policy change through their teaching role by molding future policymakers, as well as providing research based evidence to policymakers. Universities provide innovations and solutions to farmers and other users of research findings and undertake a number of influencing and communication activities to reach policymakers. Furthermore, universities engage with policymakers as well as other stakeholders throughout the research cycle.

2.4 Developing an effective message

Enrique Mendizabal gave a presentation on 'How to develop an effective message?' The presentation emphasized on three main components of an effective message: the message itself, the audience of the message, and the channels through which the message is communicated. He made a number of important points and illustrated the relevance of understanding the audience of which he pointed out that understanding must go well beyond information that is publicly available. As such, researchers should seek to understand policymakers' own personal influences and the factors that affect their value and interpretation of evidence. Knowledge of the network of trust and their political, economic and personal allegiances to people, organizations and ideas is indispensible. Researchers must understand why an issue may or may not be of interest or relevance to their audiences. The message must be seen less as an 'ask' and more as an argument. The more complete and coherent the argument, the more effective and memorable it will be. An effective message is all about prioritizing and not dumping down. Researchers must decide what is worth communicating to their various audiences, and at different moments as not everyone is interested in the same things all the time. When developing a message, researchers need to try to answer the following questions:

- > What background information is required to understand the issue?
- > Why is this issue important or urgent?
- > How does this affect your target audience? Why should they care?
- > What action can they take based on the situation?

A good message attempts to establish a personal relationship between the messenger and the audience. Researchers must be confident as people tend to listen to those whom they trust or those who act with confidence. Enrique emphasized that there are a number of communication channels that researchers must keep in mind. After the presentation, participants were asked to work in groups and think about their own messages. The guiding

question was: What would they tell a minister or member of parliament (MP) if they met him/her during the CHEA event? After a few minutes some participants volunteered to share their messages. Some of the feedback provided included:

- > Create a personal relation with the audience mention a meeting you both attended, or refer to a presentation, or TV interview they gave.
- > Give them enough background so that they know who they are talking to and what about.
- > Give them something they need: votes, good news and reassurance that they are not doing everything wrong.
- > Provide them with a clear action for them to follow up on. If it feels too daunting, they won't know what to do.
- > Leave them with some information or give it to their aides.



3.0 University Research - Policy Llinkage

3.1 University Research – Policy Linkage: Why the Problems Persist in Africa by Professor Osita Ogbu (Ph.D., FNAE), Executive Director, African Development Solutions International (ADSI)

Professor Ogbu raised a number of important issues related to the orientation and attitudes of researchers, the isolation of the researcher, the lack of entrepreneurial spirit to market ideas, failure to understand how decisions are made, arrogance and naive attitudes by thinking that research will speak for itself and that policymakers must accept their research. He outlined the construction of research and the research process. He pointed out that the researcher is isolated and this has led to lack of collaboration. He pointed out that most researchers are trained to operate in the silos of their discipline and are overwhelmed by teaching and publishing for promotion. The absence of mentors affect the work of researchers as some may be sentimental (populist) and driven by ideology rather than reality. He argued that some researchers are arrogant and naive which works against them as humility is required to be able to influence policy. Their naivety is based on lack of knowledge by the researcher of the dispositions of the policymaker.

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Another challenge is the lack of appropriate language for communicating with policymakers in order for researchers to be deemed relevant. Most researchers are driven by the assumption that they possess priceless information that policymakers need. As such, they do not understand how policies are made and do not study the policy making process, which is crucial. He also noted that researchers lack the skills to participate in the market place for ideas such as public debates, championing of a certain view points and writing for popular readership. The researcher lacks the entrepreneurial spirit to market his/her ideas and fails to establish a strong reputation.

On the construction of research and the research process, Professor Ogbu asserted that the design of research ignores the potential user. As such, the research is problem-defined and executed by the researcher hence no buy-in by the policymaker. Initial buy-in is important but not enough; the research process lacks constant interaction and feedback failing to take advantage of emerging policy concerns. With regards to the research – policy environment, Professor Ogbu asserted that serious political trade-offs take place: not every demand can be met. Access often demands trust –policymakers are unlikely to trust anyone's advice because they are pre-programmed to be cautious. African governments are likely to depend on external knowledge from where they get funding for their projects. He also argued that governments create institutions that they do not properly fund and the researchers are not making themselves relevant to attract government attention.

With regard to governance, Professor Ogbu argued that budgeting itself is a political process and African governments place less emphasis on R&D. Most governments are not promoting knowledge brokerage, some governments are only struggling to survive, and there are no incentives to reward policy researchers. On the way forward, he recommended the need to create platforms that bring researchers and policy makers together to interact. Universities must have 'big bangs' on certain fields and have authority to tell policymakers what to do and the risks associated thereof.

In a nutshell, Prof. Ogbu offered a number of recommendations:

- > Capacity building and skills acquisition to bridge the knowledge gap on both sides.
- > The platform to support research in the universities should go beyond their current preoccupation for revenue generation to policy influence; innovations and patents as measures of their performance.
- > Build trust and avoid self-doubt.
- > Researchers must be able and willing to compete with the private sector for research and other policy-related research consultancies advertised by the government.
- . Need for humility on the part of the university researchers and an understanding on the part of government that the universities can equally deliver quality and on-time research.

- > University collaboration and coordination need to be enhanced to create big projects and create a pool of skills.
- > Universities must acquire reputation in certain fields and make themselves indispensable authorities in given fields.
- > Researchers must become risk takers and acquire a persevering attitude.
- > Under the Office of the Vice Chancellor, a similar unit can be used to organize research and intellectual discourse that is targeted at policymakers.

There is need to design training programs that will build the capacity of selected university researchers and administrators and government officials on how the three can meet (i.e. on how productive relationship that serves the interest of the parties can be constructed).

Professor Ogbu explained that policymakers are influenced by a number of factors. Evidence is viewed through various lenses including: experience, judgment, resource constraints, values, political and economic interests, habit and tradition, pressure group influences, pragmatism or ideology, etc.

Policymakers and researchers, due to the nature of their work, tend to see evidence in different ways:

- > Researchers think of evidence as context free, theoretically driven, empirically proven, long term enterprises, etc.
- > Policymakers think of evidence as context dependent and not ideologically driven so no need to use evidence to develop/support a view point or approach.

It is possible for research to play a role and in particular to influence the value for money and outcome of a policy once it is implemented. Policy entrepreneurs should attempt to understand external and internal landscape as much as possible. This includes thinking about the nature of their organizations and their position in the policy space. For example, universities as policy research centres compete or collaborate with other organizations such as private think tanks, consultancies and the media. Similarly, they must understand how change actually happens in the context in which they work.

For example, in some cases, change can be explained as a coincidence of a number of factors like tipping point that leads to great shifts in policy; or as the consequence of the concerted action of coalitions; or as the decisions of political, economic and intellectual elites; or as a result of changes in the way that ideas or messages are framed and understood by the public. Policy entrepreneurs need a set of skills such as storytelling, networking, managing, fixing or political negotiation and research skills.

3.2 RAPID Outcome Mapping Approach (ROMA) Models by Enrique Mendizabal, Head of RAPID programme

Enrique proceeded to present the RAPID Outcome Mapping Approach (ROMA). He explained that the approach is based on a number of models and what is accepted as good practice in planning. To illustrate this, Enrique asked the participants to think of the steps they would take to develop a strategy to influence policy. The steps that they came up with were almost the same as the ones suggested by the ROMA.

He explained that the approach should help policy entrepreneur collect more information to assist in developing the most appropriate strategy. These may include a number of influencing approaches, such as more research, academic publications, online communications, media engagement, networking and coalition building, capacity building and teaching. The ROMA is described in detail in the Briefing Paper: Helping Researchers become Policy Entrepreneurs: http://bit.ly/c3PUXk.

Enrique Mendizabal introduced a new step: Step 0. This step was thought of as a way of kickstarting the ROMA process while avoiding the usual tendency of its users jumping straight to



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filling boxes or suggesting tactics. During the 2010 retreat, the RAPID Programme team discussed the possibility of encouraging discussion based on three components. The fourth component was added by Enrique Mendizabal for this workshop, after testing it in a meeting of European think tanks in ODI, as shown in Figure 1.

The idea is that teams should start the planning process by establishing a vision, i.e what the future looks like, the particular role that they play in this future world in relation to other relevant actors, considering the way change takes place (using theories or examples to illustrate this and highlighting the role of various actors), and reflecting on their organisation's' own nature and competencies.

The teams were encouraged to discuss these issues with each other, allowing the answers for each to influence the others. The process reflected the nature of policy change and influence – slightly chaotic and iterative, strengthened by feedback loops. Out of this discussion, policy objectives, details of the context, key actors, risks and opportunities should emerge.

The ROMA process can then kick in by defining the policy objectives, studying the context, identifying and assessing the position of key actors, establishing specific policy objectives for them, developing a strategy, considering the resources and capacities necessary to implement the strategy and developing a monitoring, learning and evaluation framework.

The ROMA presentation highlighted that there are a number of tools that can be used in each step of the outcome mapping approach. RAPID suggests some tools that the programme finds useful but others can be used as well. He noted that not all steps are mandatory. The first few steps are designed to provide more detailed information about the context, the actors involved and how they are expected to change. This information should make decision making easier and better informed. It is possible, though, that an initial assessment of the context provides the policy entrepreneur with the necessary information to decide what to do. The same tools used for planning can be used for monitoring progress. On specific steps, he pointed out that although setting the policy objective can be a difficult task, it is possible to begin with a broad objective and then through a deeper analysis of the context and the prevailing situation of the education sector and the policies to address it, refine the objective until it is 'SMART'. The more specific the objective the easier it is to identify actions to achieve it. For understanding the context, there are many tools and levels of analysis: political economy analysis - to understand the institutional framework and incentive structure that promote or hinder change, social network analysis or organisational assessments - to addresss intra and inter organisation relations and the causes of their support or opposition to change, and even behavioral economics or sociology - to better understand the motivations of individuals.

The analysis of the actors requires a careful consideration of the various causes for their support or opposition and interest or lack of interest on a particular issue or policy objective. Actors can be mapped onto the same position in the Alignment, Interest and Influence Matrix, for different reasons and therefore the policy entrepreneur will have to attempt to influence them in different ways. Also of great importance is the need to prioritise the focus of the intervention: maybe on those who have the most influence over the outcome of a policy process. Policy objectives can also be analysed in greater detail. For example, they can be described as changes in discourse, attitudes, processes, content and behaviours. They could refer to changes in the policy making environment, the policies themselves or the policy makers. This greater detail, again, helps the policy entrepreneur decide how to bring about change. It is not the same thing to change the discourse as it is to change the content of a policy. Enrique Mendizabal closed the first day by describing the Alignment, Interest and Influence Matrix (AIIM) and the Force Field Analysis tools.

3.2.1 Lessons learnt from RAPID programme

Enrique Mendizabal presented the lessons learnt from the RAPID programme and the ROMA. He pointed out that the participants should consider that the literature, case studies and the experience of policy research centres across the world confirmed his views. On the main lessons learnt from the RAPID programme, Enrique pointed out that policy processes and social realities are complex. In this regard, complexity refers to the degree of uncertainty that exists in the context, about the possible course of action available to the policy entrepreneur and the expected outcomes of those actions. Complexity requires the use of analytical tools designed to better understand the context, find patterns, guidelines and recommendations. Complexity is simplified by thinking of the research-policy interface in terms of two completely separate communities with a gap in the middle that needs to be bridged. This interpretation of reality leads researchers to think of impersonal but direct influencing strategies such as media, publications, campaigning, etc. He argued that upon closer examination, there are a number of actors and spaces that link policy and research. These include researchers who are also policymakers, think tanks, regulatory bodies and expert editors in the media; and the options to influence or reach those who have power to open up to the possibility of influencing others.

3.3 Summary of the discussions

Participants were asked to consider and share what they found interesting from the presentations. Some highlights include:

- > The importance of breaking down 'policy change' into more detailed components: discourse, attitude and content.
- > The importance of planning and greater pro-active policy entrepreneurship.
- > The threat that knowledge dependency poses on African researchers and policy making.

- > The importance of the ability to construct effective messages and to be clear when communicating.
- > Engaging all possible options to influence policy makers, for example introducing courses on policy.
- > Research and policy environment analysis is essential for researchers and policymakers to work together.
- > The relationship between researchers and policy makers is not linear but rather complex and involves a number of stakeholders with diverse interests.
- > It is important to prioritize who to work with and to decide what aspect of policy one would like to influence as one approaches policy makers.
- > Policy entrepreneurs need to be aware of the context within which policies are made in order to be actively involved in the policy making process.
- > Getting into agreements with policy making organs and universities is an effective mechanism for influencing policy as is evident in the Catholic University in the Democratic Republic of Congo (DRC).
- > Networking with local and international institutions is important.
- > Being able to communicate strategically is crucial.

Participants were then asked to attempt to kick-start the ROMA process with the 'Step 0' discussion. Enrique suggested that in each group, one person should be responsible for keeping track of the conversation in relation to one of the four components: vision, change, organization and actors. This would ensure that the participants did not leave out any of them. The discussion would allow the participants to begin drafting a strategy. Enrique suggested that they write short statements about: vision and impact as well as purpose and policy objectives.

During the group work, the outcomes were interesting in the sense that in some cases, participants found it difficult to tell the difference between 'how change happens' and 'how they intend to bring about change'. The objective of the question 'how does change happen?' was to explain the political economy of change – the forces that promote or hinder change, the roles that different actors play, etc. The suggestion about how change can be promoted by researchers was based on the description of how change happens.

Another interesting thing was that it was difficult to avoid filling in the boxes. Although participants were encouraged to 'just have a conversation' about these issues, in no particular order and in an iterative manner, many went straight to write things down. This reflected a culture that exists in the development sector in which people are used to completing tables and frameworks: the input-output logical chain. One of the objectives of this 'Step 0' is to change this form-filling culture.



4.0 Research Communications

4.1 Strategies for research communications By Enrique Mendizabal, Head of RAPID programme

Enrique gave a presentation on research communications focusing on the development of strategies. He stressed that while research communication strategies contribute to broadening influencing strategies, communication activities can be useful for influencing policy. The other communication strategies are networks and partnership building, capacity development and teaching, and collaborative research.

A communication strategy normally has communication objectives which are not the same as policy influencing objectives. For example, a policy objective may be to change the budget allocated to universities for research on agricultural development; but the communication objectives may be to raise the profile of the researchers so that they may be called by MPs to give input into budget debates, increase the participation of a wider group of actors in the tertiary education funding debate, position an organization's brand in a new area of work, etc. These communication objectives should contribute to the achievement of the policy

objectives. Of importance in the communication strategy are the audiences, contextual issues on the factors that affect and explain policy change, as well as tools and activities. In communication, there are a number of options for researchers to use: publications (journal articles, working papers, briefing papers, policy briefs, opinion pieces, etc.), online communications (websites, blogs, online communities, updates to Wikipedia, etc.), media engagement (op-eds, press releases, features, articles, interviews, etc.), events (public, private, workshops, seminars, conferences, etc.). Resources, timescales, evaluation and learning should also be considered.

After this input, the participants were asked to revisit their strategies and in light of the options presented by communication strategies; attempt to outline the approaches and specific activities for influence. At the same time, participants were asked to share good practices for engaging with policy makers and other stakeholders.

4.2 The draft strategy

Participants presented their draft strategy outlines using the model presented below. They were also asked to write good practices that were later displayed and discussed.



Draft Strategy Outlines

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4.3 Case Studies

The purpose of the case studies was to bring out the dynamics of policy evolution, enabling environment and best practices from various countries.

4.3.1 Nigeria



4.3.2 Sudan



The Nigerian case study offered an example of how policy had been changed in the past, illustrating how change happens. The case demonstrated that change can take place if the university is able to improve its own systems and competencies through curricula, incentives for lecturers and students, etc. Such changes can help secure more funding from the private sector and also encourage the participation of other stakeholders, such as women in the agriculture sector.

The Sudan case study presented a strategy that focused on establishing universities in Sudan as key contributors to the development of a peaceful and economically stable society. The participants stressed the role that universities can play in building the capacity to broker and promote peace and to encourage sustainable growth through its teaching and research.

4.4 Good Practices

The following practices presented by participants (as indicated) were considered good for influencing the policy making process.

- > Participation in the drafting of relevant policies (Kenya).
- > Promote researchers to engage in consultancies with policy makers (Tanzania).
- > Share research findings in Agricultural Shows (Tanzania).
- Establish agreements between universities and parliaments to review draft legislation and offer advice (DRC).

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- Establish alliances with other universities to petition the government for support (DRC)
- > Communicate research on key policy areas to political parties and the media during the electoral period.
- > Open days where policymakers, the private sector, NGOs, and other stakeholders come to the university to learn about recent research and innovations (Malawi).
- > Members of the university or department council should be appointed from the government and the private sector (Swaziland).

4.5 Recommendations for influencing change in Universities

The last sessions of the day focused on identifying a list of recommendations that could be taken to ministers and MPs during the Conference and that could serve as a guide for the participants to attempt to influence change in their own contexts. Four participants volunteered to discuss this further and to present them during the Theme 5 event. They were: Prof. Moses Kwapata from University of Malawi, Bunda College of Agriculture; Prof. Martin Obanda from Jomo Kenyatta University of Agriculture; Dr. Anslem Onyimonyi from University of Nigeria, Nsukka; and Prof. Marietta Dlamini from University of Swaziland. After some debate, the final list was agreed as follows:

- > Universities can be supported in a number of ways in addition to direct funding. For example, they can be supported by encouraging development of the agriculture sector which would demand more experts and professionals from universities, or through changes in the policies that govern university curricula, or through incentive structures.
- Researchers recognize that they must be more careful about their engagement with policy makers: understand their constraints, interests, improve their communications, engage with them from the start of a research project, organize trainings and workshops to support their teams, develop open days to encourage direct transfer of ideas, etc. However, policy makers need to attend these events, read the research and provide feedback and let researchers know what their capacity needs are.
- > Promote inter and intra country collaboration and sharing of best practices. At the regional and national level, universities can seek to specialize in areas of comparative advantage to become known as experts in those issues or in relation to the needs of their communities.
- Encourage the use of local experts: Policy makers should be confident that African universities have expertise in key policy areas. if the right expertise is not present, engage the 'North'. To support this, universities should be more proactive in their marketing of experts to the government and the private sector.
- > There is an urgent need to invest in human resources and infrastructure.
- > There is a need to re-think the roles that universities play in the development process and in African societies.

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- > Governments can support the enabling environment for higher education in agriculture to allow universities to meet their primary mandates producing relevant high level human resources, promote equity, quality and accessibility in tertiary agriculture education.
- > University managers, academicians and researchers have isolated themselves from the policy making process of government, to the extent that even when opportunities are availed to them, they still remain inactive. This limits their inputs into the policy making process. In spite of these shortfalls, however, universities have a critical role to play in the social and economic development of not only their individual countries but of the region and the continent as a whole.
- > Governments can alleviate the situation by effectively utilizing the existing pool of expertise (examples, the Faculty of Law at the Catholic University of Eastern Africa, DRC is engaged in the drafting and reviews of bills; In Malawi, the Ministry of Finance conducts pre-budget consultations with the University of Malawi).
- > Governments should invest in and rationalize human resource and infrastructure development to enhance education and research in agriculture. For instance, there are many situations where resources are mismatched, and therefore not effectively utilized.
- > In the spirit of African unity, governments should support in-country and cross-country collaborations in the interest of optimizing existing human and material resource utilization across the continent. For example, it should not be extraordinary for a faculty member from a university in Nigeria to visit a university in Kenya for a sabbatical leave and vice-versa.
- > In this fast changing world governments should assist faculty members and universities to reposition themselves to meet emerging challenges and expectations and make their institutions global centres of excellence.





5.0 Introduction

This session aimed at exposing policy makers to the critical role and benefits of higher education to economic development in sub Saharan Africa. This meeting was graced by the attendance of various Members of Parliament from East Africa and Southern Africa. By composition there were 4 Members of Parliament from Uganda, including the House Speaker, Hon. Edward Ssekandi, one Permanent Secretary from the National Republic of Lesotho and one Member of Parliament from the National Assembly of the Republic of Zambia. The side event attracted other practitioners from research institutions and media organizations. The lists of participants and event programmes are provided in Annexes 2 and 4 respectively.

5.1 Background

Africa still lags behind in meeting her own development targets. Much can be surmised from the fact that farmers in the state of Iowa, USA, produced more maize (Africa's most important staple food) in 2007 than all African countries put together in the same year (Eicher, 2009). In spite of this poor performance, Africa continues to receive large amounts

of aid from the international community every year. For example, aid was reported to be in the region of 35% of the total official development assistance (ODA) in 2009¹. According to the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report, there is a need to refocus design of new initiatives within the following contexts:

- Current social and economic inequities and political uncertainties about war and conflicts;
- > Uncertainties about the ability to sustainably produce and access sufficient food;
- > Uncertainties about the future of world food prices;
- > Changes in the economics of fossil-based energy use;
- > The emergence of new competitors for natural resources;
- > Increasing chronic diseases that are partially a consequence of poor nutrition and poor food quality as well as poor food safety; and
- > Changing environmental conditions and the growing awareness of human responsibility for the maintenance of global ecosystem services (provisioning, regulating, cultural and supporting) (IAASTD, 2009) in order to spur sustainable development.

Similarly, new approaches are required that bring together all stakeholders in innovation systems approaches to tackle new and emerging challenges (Eicher, 2006).

Purpose and objectives:

The purpose of the side event is to provide exposure to policy makers on the critical role and benefit of higher education to economic development in SSA. Specifically, the workshop aimed to achieve the following:

- 1. Derive lessons learnt from case examples of successful partnerships between researchers, policymakers and practitioners in Africa and elsewhere;
- 2. Provide recommendations for universities and policymakers for enhancing the relevance of universities to national development strategies, including Poverty Reduction Support Papers (PRSPs), Development Strategies and Investment Plans/CAADP country compacts, and share with policy makers at the Ministerial Conference for Higher Education in Africa; and
- 3. Create a network of institutions to sustain improved linkages of stakeholders in development research policy and practice for Africa's development.

The African Union (AU), through the New Partnership for Africa's Development (NEPAD), has developed the Comprehensive African Agricultural Development Programme (CAADP) as the leading strategy for driving economic development on the African continent. CAADP,

¹ Development Aid at a Glance: Statistics by Region. Chapter 2. Africa. 2011 edition

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through four interlinked pillars, calls for a six percent annual increase in national GDP growth. As a key instrument in achieving its vision of developing quality human resources and contributing towards increased mobility of Africans around Africa and globally, the AU regards education as an issue cutting across all CAADP pillars. There is an explicit acknowledgement by the political leadership of Africa, including the AU, of the indispensable place of a revitalized and reoriented higher education system in the development of Africa's agriculture, and subsequently poverty eradication in the 21st Century. Thus, the AU has, for the first time, identified higher education as an area of focus in its Framework of Action for the 2nd Decade of Education in Africa, and has created a working group on higher education (one of seven working groups) to develop the higher education component of the Framework. After decades of neglect of higher education, African Universities and their networks must now take advantage of this goodwill to achieve the following:

- > Re-engineer themselves for development relevance;
- Lobby for political commitment through sustained engagement with policy processes, including advocacy; and
- > Strengthen networking capacity to foster cross-learning and achieve economies of scale and scope.

If research is to have any major impact in terms of guaranteeing the development gains in Africa, the results must inform and shape policies and programmes, and be adopted into practice. Research outputs are meaningless unless they make a change in the direction desired by the researcher. However, it needs to be appreciated that the process of realizing this goal is complex as it involves other actors who may not share the same views as the researcher. This is because researchers and these other actors, especially policymakers and practitioners, often live in very separate and different worlds. For example, their dynamics, values and ways of handling evidence are very different. For instance, the language of the researcher and that of the policymaker or practitioner are so different that unless decoded, they might not make much sense to each other. As a result, research-based evidence is often only a minor factor when policies for development are formulated and practices shaped. On the other hand, the research sector believes that it is only when the products and processes of research efforts are applied that sustainable development can be achieved. Likewise, tacit knowledge from the practitioners rarely reaches the researchers or those that make decisions. This lack of agreement between the various development actors has created wide gaps between them hence limiting the realization of development gains.

Research results often need to be contested, debated and tested again and again before consensus can be reached on recommendations for policy and practice. Besides, the process of policymaking is never straightforward and does not absorb just any evidence from research to be put into policy. For example, although most policy processes do involve a sequence of

stages from agenda-setting through decision making to implementation and evaluation, they rarely take place in this orderly manner. Instead, often times, policymakers tend to be more heavily influenced by their own values, experience, expertise and judgment. They succumb more to the influence of lobbyists and pressure groups and pragmatism based on the amount of resources they have available rather than by research-based evidence. This is a serious issue, especially in most developing countries of Africa where national policy processes are often distorted by external influences and donor policies.

It becomes imperative, therefore, to review the linkages between research, policy and practice with a view to identifying strategies for strengthening the uptake of development research into policy and practice in Africa. It is important, going forward, to note that sustainable policy research and implementation linkages in Africa will require the development of a strategic vision and a proactive approach that contextualizes the research agenda and its consequent activities. It requires a proper understanding of research communication and knowledge translation so as to facilitate the use of research evidence to influence policy and effect change. This can be achieved through systematic interactions and capacity building amongst key stakeholders including researchers, policymakers, and practitioners.

Meeting Beneficiaries

The immediate beneficiaries of the workshop are universities in Africa and higher education networks concerned with informing policy debate with research based knowledge; participants in the Ministerial Conference on Higher Education in Agriculture, especially in the parallel session on Theme 5 and other agricultural stakeholders on the continent who will benefit from returns from higher education.

5.2 Remarks by Dr. Nicholas Ozor, ATPS

Dr. Ozor giving his welcome remarksIn his remarks on behalf of ATPS, Dr. Ozor, Senior Research Officer highlighted the need for universities involved in agricultural training to be actively engaged in development processes especially by influencing policy through policy research. He also noted that though agriculture is the mainstay of many African economies, many countries had failed to adhere to the 10% budgetary allocation as per the Maputo Declaration on Agriculture and Food Security in Africa. He also stressed that it is necessary good will for scholars and policy makers to sit together, an opportunity that this Ministerial conference has provided, to make a difference.

5.3 Remarks from DDRN by Dr. Anne Sorennsen, Danish Development Research Network (DDRN)

Dr. Anne Sorensen gave a brief background about DDRN. In her introductory remarks she thanked the organizers and all those that facilitated the meeting. She informed participants

that DDRN is a non-profit making institution that promotes knowledge use in development. She also pointed out that DDRN has recently expanded its operations and is now operating in the sub Saharan Africa region where it is collaborating with a number of institutions by supporting research based findings to facilitate development.

5.4 Remarks from Haramaya University-Ethiopia by Professor Billy Kassie, Vice Chancellor, Haramaya University-Ethiopia

Prof. Billy Kassie, in his opening remarks noted that most African scholars are not actively involved in policy decisions relating to agricultural education in tertiary institutions. He urged the academic community to work closely with policy makers to ensure that the current mistrust existing between academia and policy makers is resolved, and to refocus the curricula to ensure that the labour force being produced fits the labour market.

5.5 Opening Address by The Rt. Hon. Edward K. Ssekandi, The Speaker of Parliament of the Republic of Uganda

Delivering the opening address, the Rt. Hon. Edward K. Ssekandi, Speaker of Parliament of the Republic of Uganda extended his warm greetings to all the participants. He was pleased with the invitation to give the opening address at this side event. He was excited to be part of among the team to deliberate on the position of African's Agricultural tertiary education. He was grateful to be among you and witness great minds debate this challenge of our times, given the significance of Agriculture to the economies of African countries.



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African Universities have contributed to the continent's development in several ways, and placing the university system in policy limelight through raising their profiles is indeed very important. It is important to note that African governments are committed to the development of tertiary education in general and agricultural education in particular. This is on the premise that higher education is the most sensitive area of investment. It is politically and socially sensitive in that governments need both highly-trained people and top-quality researchers to formulate policies, develop programmes, and implement projects that are essential to national development.

Policy support to agricultural education and research is even more important given the role the sector plays in Africa's development. The sub-optimal performance of the sector over the decades is a reason good enough to have agricultural tertiary education given more focus. A number of pronouncements at many high level meetings by African leaders and leaders of institutions of higher learning in the region have continuously reaffirmed the urgent need to develop university education in Africa and to ensure adequate policy support.

In my opinion, this support should not be blinded by emotional and less evidence-based consideration. The drive to address the challenges facing the expanding university system lies in the successful resolution of the tension between the efficient and effective utilization of existing resources, on the one hand, and intensified demand for more and better qualified and high performing agricultural experts, on the other hand. Transformative policies are required to boost this effort.

The drive for effective policy support should also not be a mere blame game or diversionary tactic but it should be with the intention of identifying the real causes and providing appropriate solutions. In many of our countries the objectives of tertiary education are clearly spelt out and the policy support should only come in to boost their realization. These among others, include:

- Participation in the discovery, transmission and preservation of knowledge as well as stimulation of the cultural and intellectual life of society;
- > Determination of who may teach and what may be taught and how it should be taught in the university;
- > Playing an effective role in the development and expansion of opportunities for African communities.

At the heart of policy decisions to be made by our governments lies the question of investment. Investments in human and institutional capacity development are critically important decisions in the development process for both the public and private sector decision makers in Africa.
Many reports provide credible evidence for returns to investing in tertiary education. In Africa, similar investments in agricultural tertiary education in particular would enhance productivity. From reliable literature, the total public budget devoted to education in sub-Saharan Africa is 17.4% - a bit above average for the world's 15.2%. In addition, the proportion of these investments in higher education is also significant, ranging from 15-25% of the overall education budget for many African countries. What has not gotten a fair share is agricultural tertiary education, despite its significance to our economies.

At the tertiary education level such an investment could go towards improving the quality of postgraduate training and research. Today, there are questions about the productivity of investments in Agricultural tertiary Education in Africa and around the world. Some think there are low returns on investment and certainly long lag times to these investments. To many, agricultural tertiary education is seen as urgent. When public funds are relatively scarce, the "tyranny of the urgent" tends to limit investments in higher education in favor of more time-critical investments. The good will from our governments is there. My only challenge to this gathering is to craft better policy engagement strategies practical enough for realization of university goals for development. Any policy support must, as a matter of urgency, be geared toward enabling the achievement of the following among others:

- > Quality and relevant agricultural capacity demands
- > Ability to capture the benefits of universities in terms of their social productivity

You are aware, as I am, that recent discussions about investing in education for development are often couched in terms of whether it is best to invest in primary or secondary or tertiary levels within the education system. The segmenting of education systems into separate parts may not be a useful perspective, however, for obtaining the most productive outcomes of national investments in education. I would, therefore, recommend a holistic and long term view for sustainability. It is best that primary, secondary and tertiary education is viewed as a stream of activities but because the legislative process tends to separate them, it is important that there be close co-ordination in investment, advocacy and appropriations for education. Within the tertiary education subsector, decisions on allocation to different professional lines, including agriculture, should also be formed with strategic regional and national development aspirations.

In agricultural education, investments and programs should be focused on production of qualified human resources to man the various technology and policy development spheres. Agricultural tertiary education should not be thought of as another "silo" or sector to invest in competition with, for example, military, health, environment, and governance sectors. It is a cross cutting theme that contributes to meeting goals of these other sector development programs. Therefore, if we are interested in the overall economic growth of the SSA region,

we should be interested in agricultural tertiary education. Even If we are interested in better health outcomes, we should be interested in higher education. The same can be said for environmental, governance, and alleviating poverty goals. In summary, higher education helps build the fundamental capacity to address national problems, drive economic development, reduce poverty and create social stability. Agricultural tertiary education even goes beyond this to offer substantial cadre of professionals to ensure essential human and institutional capacity to respond to challenges faced in our countries on all fronts.

I have laid a lot of emphasis on investment in agricultural tertiary education because it is a key policy tipping point for our universities. I leave it up to this esteemed gathering to lay bare the facets of policy engagement that would give the requisite profile for agricultural tertiary education in Africa. On behalf of the Parliament of Uganda, I wish to pledge my unconditional support towards the noble cause of placing Agricultural Tertiary Education in the Policy Agenda. The doors of the Parliament of Uganda and that of the Speaker will continually remain open whenever any support is required. I look forward to seeing concrete recommendations to this end.

Honorable Ministers, Distinguished Delegates, Ladies and Gentlemen, It is now my sincere pleasure to declare this side event on "Placing Tertiary Education in the Policy Agenda" officially opened and wish you all successful deliberations."



6.0 Placing Agricultural Tertiary Education in the Policy Agenda by Dr. Musa Dube, University of Swaziland

Abstract

The purpose of this paper was to discuss placing agricultural tertiary education in the policy agenda. Desk research, insights of the author, and lessons learnt from a Southern Africa Development Community (SADC) four-sector study on the provision of education were used to address the theme of the paper. The study is built on the premise that education in general is the foundation while policy commitment forms the fulcrum of the Innovation Strategy House (ISP). The paper outlines ten (10) important considerations in the endeavour to place agricultural tertiary education in the policy agenda. These considerations include: curriculum review processes; integration of entrepreneurial training; integration of ICT in agricultural training; monitoring and evaluation; recruitment and appointment of teaching staff; exploitation of university human resource; funding agricultural tertiary education; articulation of the role of agricultural universities; appreciation of emergence of private agricultural universities; and strategic plan for staff development. The paper concludes by reiterating that placing agricultural tertiary education on the agenda alone cannot make a

difference, but through partnership with other factors that are reflected in the Innovation Strategy House (ISH). It is recommended that, (a) Policy initiatives aimed at investing and developing agricultural tertiary education be adopted, policy innovations and investment that targets agricultural research will inform and shape policies and agricultural development programs and that should be adopted and practice; and appropriate technologies to stimulate agricultural production should be developed based on robust technology evidence for effective policy development.

6.1 Introduction

Globally, the demand for quality agricultural tertiary education is ever-escalating. Faculties of Agriculture are being challenged to be more responsive to the public needs and current demands of research and outreach programs. At a Conference on the Association of African Universities (AAFA), Contant (1984) stated that Faculties of Agriculture should recruit competent lecturers who are willing to teach, conduct research and conduct outreach programmes. Such a situation cannot be easily achieved unless agricultural tertiary education is placed at the top of the policy agenda. We need to have committed lecturers, and manage staff to student ratios and manageable teaching loads. Staff should constantly conduct research in order to remain at the cutting edge. Experience has shown that one of the greatest sources of instructional materials is research and constant interaction with the public, private sector and industry.

The current financial importance of the agriculture sector varies and this variation is presented in the map in the . According to UNEP (2006) agriculture represented 50-60% of the total economy in some countries (Guinea Bissau, Ethiopia and Central Africa) and 20-40% in the rest of sub Saharan Africa.

Climate change and HIV/AIDS present formidable challenges to agricultural production. With global warming and climate change, rainfall has become more erratic, less predictable with a greater frequency of extreme events in the form of droughts, prolonged dry spells of high temperatures, intense storms and associated floods (Ehrhart, 2009). HIV/AIDS has meant that more farm labourers are no longer healthy enough to give a full day's labor (Simtowe and Kinkingninhoun-Medagbe, 2011). This gets complicated by very minimal returns for a lot of energy invested in planting. Conflict does remain a serious challenge in patches around the continent (World Bank, 2008).

6.1.1 Perceived problem with agricultural tertiary education

In recent years, economic recession has limited funding to universities in Africa prompting a review of programmes being offered. The case of Swaziland is no different from the rest of African universities; funding has become a major constraint. Hence, the Faculty of



Source: World Bank, World Development Indicators, through UNEP DEWA/Geneva Data Portal http://geodata.grid.unep.ch/ Accessed January 2006

Figure 2: Contribution of agriculture to GDP in Africa States

Agriculture, for example, has engaged consultants to review all the programmes offered with the intention of consolidating them and even strengthening practicals (McCorckle, et al. 1987).

The University as a whole has embarked on strategic planning which has to some extent provided proper guidance and direction to the Faculty of Agriculture. However, against this background, the Faculty of Agriculture in Swaziland continues to be criticized for not being responsive to the needs of the public and for not providing the leadership it should provide.

Perhaps, if the Faculty of Agriculture as a provider of tertiary education is placed on the policy agenda, its image might be improved significantly.

6.2 **Purpose and objectives of the paper**

The purpose of this paper is to discuss the role of agricultural tertiary education institutions in view of the increasing demand for quality tertiary education and benefits accrued by being more responsive to the public needs and demands. Specifically, the paper seeks to:

- I. Discuss the need for agricultural tertiary educational institutions to be placed on the policy agenda.
- II. Suggest how agricultural tertiary education institutions could be placed on the policy agenda.

6.3 Challenges of developing effective tertiary education in policy Agenda

6.3.1 The curriculum review process

Curriculum design and development needs to respond to the needs of agriculture clientele groups, in terms of relevance and timeliness. Furthermore, there is need for exposure of trainees in agriculture to fieldwork since agriculture is a practical subject, to attain a balance between theory and practice. Learning experiences must be diversified in the form of classroom lessons and internships; field classes or field attachment. The African continent is varied in terms of resource endowment; hence, globalisation of the curriculum is necessary to allow mobility of graduates between countries and between regions. Curricula and therefore training need not be country specific in terms of content.

6.3.2 Integration of entrepreneurial training

Agriculture is a business; hence, university training needs to expose graduates to selfemployment and agribusiness skills. Entrepreneurial training is also necessary because often university graduates, agricultural graduates included, are faced with unemployment on completion of their studies. Entrepreneurial skills are vital to enhance the abilities of graduates to recognize and evaluate new opportunities and to use farm based resources in the exploitation of new, often non-agricultural markets.

Graduate unemployment represents wasteful expenditure of scarce financial resources to train human resources. It has become disturbing phenomena in the lives of graduates and high incidences of it tend to define institutional ineffectiveness and inefficiency.

6.3.3 Integration of ICT in Agriculture Training

It is important to promote and emphasise the use of ICT in agricultural training. ICT can be used as a means to train graduates in the various applications relevant to the agriculture industry and for skills development. The main applications of ICT in Agriculture sector may include the following:



Figure 3: Composition of tertiary unemployment in South Africa.

Source: Development Policy Research Unit of the School of Economics, University of Cape Town (2006)

- > Application of office automation
- > Application of Knowledge Management System
- > Application of E-commerce and E-learning
- > Application of ICT for managing Agricultural Resources and Services
- > Application of Radio-frequency identification (RFIDs), Computer Aided Designs (CAD) and Computer Aided Manufacturing (CAM)
- > Application of Wireless Technologies
- > Application of Global Positioning Systems (GPS) and Geographic Information Systems (GIS)
- > Application of Computer controlled devices (Automated systems)

Information and Communication Technology (Computer Technology, Communication Technology and Information Management Technology) are applied for processing, exchanging and managing data, information and knowledge. The tools provided by ICT are having ability to:

- > Record text, drawings, photographs, audio, video, process descriptions, and other information in digital formats,
- > Produce exact duplicates of such information at significantly lower cost,
- > Transfer information and knowledge rapidly over large distances through communications networks.
- > Develop standardized algorithms to large quantities of information relatively rapidly.

> Achieve greater interactivity in communicating, evaluating, producing and sharing useful information and knowledge.

E-Agriculture is an emerging field focusing on the enhancement of agricultural and rural development by means of improved information and communication processes. More specifically, e-Agriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use information and communication technologies (ICT) with a primary focus on agriculture. This term (e-Agriculture) is relatively new and we fully expect its scope to change and evolve as our understanding of the area grows.

6.3.4 Monitoring and Evaluation

Periodical monitoring and evaluation (internally and externally) is necessary to ensure and insure quality control and assurance). Monitoring and evaluation is an essential component in and in this instance focus first on the curriculum. Monitoring and evaluation activities must consider

- > curriculum relevance and effectiveness;
- > the depth and breadth of the curriculum;
- > aim at moderating the balance between practicals and theory;
- > keeping up with modern trends in agriculture and best practices globally.

Ultimately, university graduates need to be absorbed into the formal employment sector, if not self-employment. Employment statistics are vital to the evaluation of university training, and various attributes can be targeted for this purpose. These attributes could include the percentage employed in a period of time, say 3 months or 1 year after graduation; pay levels at job entry; promotions, and so on.

The University of Swaziland for instance, sanctioned a study on its responsiveness to labour market environments in Swaziland (Zamberia et al. 2009). The study sought to describe the unemployment and employment situations and events of graduates; determine the relevance of graduates' education to their jobs; assess the responsiveness of departmental programmes to the world of work and also solicit suggestions for curriculum design considerations in departments. It did emerge from the study that most graduates secured their jobs after six months, and some over a year.

6.3.4 Procedures for the Recruitment and Appointment of New Teaching Staff

The objective of the recruitment process is to obtain the number and quality of employees to help the organisation to achieve its goals and objectives. With the same objective, recruitment helps to create a pool of prospective employees for the organisation so that the management can select the right candidate for the right job from this pool

Recruitment and selection is the major function of the human resource department and recruitment process is the first step towards creating the competitive strength and the recruitment strategic advantage for the organisation. The recruitment process involves a systematic procedure from sourcing the candidates to arranging and conducting the interviews and requires many resources and time. However, these procedures vary from institution to institution in the continent presently, hence, the need to seek best practice, achieve harmonisation and standardisation.

Ideally, the process of recruitment which is immediately followed by the selection process involves the following stages:

- 1. Identify vacancy
- 2. Prepare job description and person specification
- 3. Advertising the vacancy
- 4. Managing the response
- 5. Short-listing
- 6. Arrange interviews
- 7. Conducting interview and decision-making



Figure 4: Stages in the Recruitment Process

These stages are nonetheless not followed universally, and currently in some universities, the process is completed only after the 5th stage which tends to impacts negatively on the recruitment process.

6.3.5 Exploitation of University Human Resources

Universities have a pool or reservoir of experts in diverse fields. It may therefore be possible to tap into this repertoire of expertise, skills and experience of university personnel by taking advantage of the traditional roles of academic staff (research, teaching and outreach). This may be harnessed further by developing and maintaining linkages with industry to keep academia up-to-date with the prevailing trends, which would ensure dynamism and relevance of course work. Links to industry may also help enrich classroom instruction in as much as they are necessary to inform formative curriculum evaluation and hence instruct reform.



Figure 5: Researchers per million people Source: The World Bank Group (2010)

Lessons from leading economies in America and Europe, emerging and rapidly growing economies in Asia (Figure 5) indicate considerable social and economic development accruing from investment in knowledge, and these are important lessons for the African continent. In Asia (Korea and Singapore, for example) there are emphases on research based training of scientists and engineers at high levels of academic quality. Such training has been associated with a broad base of researchers in the population (Figure 5).

6.3.6 Funding of Agricultural Tertiary Institutions

The per capita cost of tertiary education is generally high. And in contrast with either secondary or primary education, investment in this sector often benefits a few, although the returns from tertiary education to the individual are much higher. This represents the challenge and dilemma governments are faced with regarding the budgetary allocation in these sectors of education.

These Asian nations also invested considerably in training real life applications of knowledge (Marope, 2010). Information presented in Figure 6 indicates that the output of a high proportion of researchers in the population has a strong correlation with the level of investment in research and development.



Source: UNSCO (2000)

Most of the funding for industrial research and development (R&D) in each of the G8 countries is provided by the business sector. In 1981, government provided 22% of funds used by industry, in conducting research in the OECD countries, whereas by 2002, government's share of industrial R&D had fallen to 7% (National Science Board, 2008).

When speaking jointly, the EU (European Union) member states have a common goal to make Europe the leading knowledge-based economy in the world. The means of achieving this is to increase R&D expenditure to approximately 3% of GDP for all EU countries before the year 2010; close to the levels of expenditure of the USA. It was decided that two- thirds of this should come from industry, with the remaining one-third (that is, 1% of GDP) being the government's responsibility. At the moment, the average expenditure of the EU member

states is 1.9% of GDP. In contrast, African countries spend less than 1% on R&D when the world average is just over 2% (Table 1).

Research in the African countries relies heavily on foreign direct investment (Figure 7), yet the information presented in the figure shows that foreign direct investment alone cannot drive development (UN Millennium Project 2005). The challenge for the continent is whether Africa can emulate Asia because seemingly, the speed of technology change traps African countries in low growth. In Europe and Asia, most of the funding for research and development is derived from industry and private business suggesting that it is product or service driven. This suggests that huge support is needed in linking innovation and enterprise development, more so to rely less on government and donor funding for research and development which is the case in Uganda.

Most African countries hence lag behind the rest of the world with respect to knowledge based development, with the number of researchers per million people about 10% that of China and 1% of that in leading industrialised countries. The dire situation is further compounded by scientific diaspora. These trends are associated with modest outputs in terms of both basic and applied research (Marope, 2010), hence in 2004/2005, the number of patents obtained by residents in Africa was 16 compared with 67 0000 in East Asia. Africa's share of international research publications is extremely low. Nevertheless, the relative proportion of the academic sector's R&D in a country often correlates with the basic research reported by the country. Academic R&D is usually more focused on basic research in contrast with R&D. China, with emphasis on applied research and development aimed at short term economic development follows patterns set by Taiwan, Singapore and Japan, reports the lowest basic research/GDP ratios (0.07%).

		Year	
Country	2005	2006	2007
Zambia	0.03		
Algeria	0.07		
Burkina Faso	0.17		0.11
Madagascar	0.18	0.16	0.14
Uganda	0.23	0.32	0.41
Turkey	0.59	0.58	0.71
South Africa	0.92	0.96	
Ireland	1.26	1.32	1.34
Luxembourg	1.61	1.7	1.69
The Netherlands	1.75	1.75	1.75
United Kingdom	1.77	1.8	1.84
Belgium	1.86	1.9	1.91
Canada	2.05	1.99	2.03
World	2.05	2.11	2.21
Singapore	2.3	2.31	2.61
Denmark	2.45	2.47	2.57
Germany	2.49	2.55	2.55
United States	2.61	2.65	2.67
Republic of Korea	2.98	3.22	3.47
Japan	3.33	3.4	3.45
Finland	3.48	3.43	3.47
Sweden	3.69	3.83	3.68
Israel	4.51	4.53	4.74

Table 1: Expenditure on R&D as % of GDP in different countries over the years 2005-2007





Funding is necessary for facilities and equipment; instructional materials; infrastructure development; monitoring new programmes and providing scholarship for students, both undergraduate and graduate students to cover fees and maintenance requirements as well as research (grants and small, undergraduate research projects). It is essential to build the size and quality of higher education systems that can produce knowledge workers required to lead knowledge driven growth and spur competitiveness (Marope, 2010). Planning should also cater for expansion requirements, anticipating increased demands for education with an increasing population, to update and upgrade resources, ensure recurrence and hence meet dynamic needs of clientele.

6.3.7 Articulation of the Role of Agricultural Universities

Traditionally, universities perform three essential functions; teaching, research and extension/community outreach. A balance between these remains an elusive objective. One approach adopted, especially in the USA is the time apportionment to facilitate linkages and exploitation, so that an academician is expected to spend set proportions of their time on each of these commitments.

Student to teacher ratios and instructional facilities are a concern in many universities in Africa; hence many qualifying students are denied access to tertiary education due to limited

resources. There has been a bias, however, in the academic circles towards research output which is often the basis for promotion. It is nevertheless vital that the research output is relevant, that the knowledge generated and the lessons learnt be applied to the teaching and learning process. The dissemination and quality of the research output are important considerations in agricultural research; in as much as the extension/community outreach function provides a link with private sector/industry/NGOs.

There is an increasing expectation that rigorous, replicable, relevant, and independent research should make an important contribution to the evidence base for action. This has led to the calls for evidence based policy depicted in Figure 8.



Figure 8: Evolution in policy development over time: from opinion based to evidence based policy and practice. *After Muir Gray (1997)*

Evidence based policy making represents a strategic approach to the creation of evidence in priority areas, with concomitant systematic evidence in the form of robust bodies of knowledge. It involves effective dissemination of evidence to where it is most needed and the development of effective means of providing wide access to knowledge. More specifically, evidence based policy making embodies initiatives to ensure the integration of evidence into policy and encourage the utilisation of evidence in practice as well as to engender agreement as to what counts as evidence and in specific circumstances what efforts to accumulate evidence into policy.

What is of critical importance is the fact that all policies are based on evidence - the question is more whether the evidence itself and the processes, through which this evidence is put to turn

it into policy options, are of sufficiently high quality. Hence, evidence based policy making in practice is fraught with challenges, which could pertain to the availability of evidence; the nature of the evidence; the context in which the evidence is generated or used; the types (e.g. embedded vs. detached) and specialisms of researchers; the processes through which the evidence is generated and or processed, as well as the culture. Culture could promote risk aversion or be based on optimism which is associated with the bias and the tendency to emphasise the positive. The culture of evidence generation or gathering may also be biased due to the tendency to privilege quantitative data as opposed to qualitative data.

6.3.8 Globally appreciate the emergence of private universities

In recent years, there has been an upsurge in the numbers of private universities. Many have an agenda that is at variance that of traditional/public universities. The orientation or goals and approaches of the private universities, which are profit driven, are dissimilar to the traditional/public universities. This understanding is essential when considering the kind of expectation to be made of them. More so, it suggests a need for quality control. Private universities have introduced culture of customer service approach to the education sector, and the student body perceived as a 'market' and the students their 'customers'. These perceptions define and guide the relationship between the university and the students, as well as the expectations of each other. They also influence the suite of incentives for staff, and also impact on staff retention and turnover.

This development necessitates regulation and therefore policy guiding the provision of higher education. Policy interventions may address the following issues:

- > What is a university?
- > Who should teach at the university (qualification and performance standards)?
- > What standards are to be expected of a university?
- > Peer review mechanisms for lecturing staff, ensuring best practice as well as the dissemination of the results which may help guide students in institution selection

6.3.9 Strategic plan for staff development

One of the objectives of the recruitment process should be to determine present and future manpower needs of the institution. The recruitment process should also enhance the effectiveness of various recruiting techniques. The development of a strategic plan for staff development, guided by student and job market needs, may be based on results of a research/teaching staff assessment or peer review exercise. Traditionally, these performance assessments and job promotion of researchers have been based on research publication, especially in esteemed international journals of high impact factors. Innovation in this instance may be necessary so that the assessment exercised may well be localised to recognise the extension and community outreach role of academics.

6.4 Strategic placement of agricultural tertiary education in policy agenda

Improving knowledge in agriculture is essential to the development of an economy. In Sub-Saharan Africa (SSA), scarcity of qualified human capital to meet the developmental needs remains a serious concern. This situation hinders growth and undermines the foundation for sustainable development.

Because agricultural knowledge and skills for development somehow mature at the at the tertiary education level, improving agricultural tertiary education should be high on sub-Saharan Africa's development agenda. Therefore African tertiary education institutions and policy makers must ensure that the workforce acquires the requisite skills to compete, innovate, and respond adequately to developmental agenda. Figure 9 outline some issues for consideration in placing agricultural tertiary education.



Figure 9: Issues for consideration in placing agricultural tertiary education

6.5 Conclusion

Increasingly, the international competitiveness of a modern economy is defined by its ability to operate, absorb and commercialize knowledge. Although it is no panacea, scientific and technological knowledge has proven valuable in addressing the challenges countries face in a variety of areas such as agricultural production, economic growth, and sustainable development.

In a continent where over 70% of the people live in the rural areas, most of them deriving livelihoods from various forms of agricultural activity (World Bank, 2010), the importance of agriculture to the economies of the different countries cannot be emphasised. The agricultural sector in Africa is however fraught with challenges, from lack of meaningful investment to poor infrastructure. Farmers have often been blamed for their 'failure' to apply modern farming techniques, resulting in poor yields and hence a failure by African countries to feed their citizens. The continent holds 60% of the world's uncultivated land and there is potential to grow yields by more than threefold by 2030, from the current US\$ 280 billion to US\$ 880 billion (International Business Times June 25, 2010; Southern Times Africa 9, Mar 2010).

Pro-poor scientific applications and innovation flows/brokerage are also under-resourced. 'Northern' models and institutions persistently shape, dictate and distort 'Southern' needs and processes, hence the failure of science and knowledge to contribute significantly to development. The creation of science-based rules and standards, ignoring and marginalising indigenous and local based knowledge further disenfranchise the poorest.

6.6 Recommendations

Research scientists and academicians have not been blameless, especially for irrelevant research that targets, most often than not, patents, copyrights and publications in esteemed international journals but not matters of national and public interest. Hence, the call for policy initiatives aimed at investing in and developing agricultural tertiary education in institutions with an agenda that seeks greater recognition of extension or community outreach work. This paper calls for policy innovations and investments in research that target

- (a) Agricultural research that will inform and shape policies and agricultural development programmes, and become adopted into practice;
- (b) The development of appropriate low technologies to stimulate agricultural production; and
- (c) Technology robust evidence for effective policy making.

Lessons from the SADC four sector studies - on the provision of secondary education, technical education and training (TVET), teacher training and tertiary education – indicated

that these policy interventions should be comprehensive and not focus individual sectors or subsectors. There are important linkages between the different sectors and these linkages that need to be recognized, harmonized and harnessed (Dube, 2010).

There are alternative ways to bridge the innovation domains through

- (i) community-centred, not technology-centred thinking;
- (ii) innovative knowledge access and transformation systems;
- (iii) stakeholders learning & innovating together, managing benefits and risks;
- (iv) institutional reorientation and changed attitudes/values, and most importantly;
- (v) convergence of R&D, education and business policies and resources.

6.7 Discussions on Lead Paper

- > What policy issues are put in place to improve quality of agricultural graduates?
- > How do we harmonize policies in agriculture as tertiary education policies fall under the Ministry of Education?
- > How do we make policies that support agriculture at primary and secondary school levels?
- > What support is there for graduates interested in agricultural enterprises?
- > If we focus only on applied research, who will do basic research?
- > What do we mean by quality research? Researchers are needed to address local issues, but when these are taken to global journals they are regarded as local hence not published and this makes the university score poorly on ranking. How do we score both globally and locally in publications?

6.7.1 Responses

- > The research needs to take both basic and applied components, but starting from the applied level to solve emerging issues.
- > It is wrong to classify papers as 'Local'. There is need for journals that would recognize the so-called 'local publications'.
- > Copies of the recommendations need to be submitted to the Hon. Speaker so that the issues are articulated, not just for the Government of Uganda but for the region. This can be achieved by approaching the East African Assembly.
- > On reconciling ministry deliberations, there are sector policy committees that look into such areas and give directions.
- > A policy framework that places private universities at the same pedestal with public universities is needed.

6.8 Panel Discussions

6.8.1 Making Curricula more challenging by Dr. Eric Smaling, M.P., Netherlands

Dr Smaling pointed out that interaction between science and policy is two way. He noted that Asia has made progress in increasing production per unit area, while Latin America has worked on increasing production per unit labour. Africa needs to discover what it needs to focus on. On the curriculum, he asserted the need to make students think along an entire value chain with emphasis placed on the enterprise presentation. The students need to be equipped with life skills and to develop joint food security scenarios.

6.8.2 Higher Education Policies in Ethiopia by Prof. Mituki Haile, VC University of Ethiopia

Professor Haille pointed out that Ethiopia has increased the number of its universities to 21 since 2002, and 10 are underway. There are efforts to link tertiary education to development and industry. He pointed out that there is need to focus on long term solutions to address long term problems. At the moment, donors are focusing on short term solutions making Africa have long term problems.

6.8.3 Remarks from Uganda by Hon M.P. Ssebuliba Mutumba, Parliament of Uganda

According to Hon Mutumba, many private universities are coming up due to the demand for higher education, but the rate of unemployment is increasing. He suggested that there is need to review career development in agriculture as there is declining interest in investment in agriculture as emerging opportunities such as oil are taking up more investments. He also noted the need for scholars to be actively involved in developing manifestos.

6.8.4 Remarks from Rwanda by Hon Dr. Agnes Khalibarta, Minister of Agriculture, Republic of Rwanda

Dr Khalibarta pointed out that researchers are as strong as the weakest link, and capacity building is the weakest link that needs to be addressed. She pointed out that universities are underfunded hence the retention of staff is a problem. She made the following recommendations

- > There is needed to look at structures between governments and universities. Research is done by universities but dissemination is done by government extension.
- > University lecturers are constrained to work with politicians because politicians speak without facts which limit interaction.
- > The focus in Ethiopia to degree programmes and shift from certificate and diploma programmes could be detrimental in the long run since for every graduate, there is need for eight other supportive people.

- > The higher education institutions should follow up on opportunities and commitments that have been made.
- > The salary for university lecturers is very poor compared to that of other sectors and it's a matter that needs to be looked into.
- > Researchers need to simplify findings to make them better understood.
- > There is need for a clear framework on how to harmonize development policies to make African countries benefit from higher education.
- > Universities need to be more problem solving oriented in their operations so that they sell to the public the need to make more funds available for universities.
- > The advocacy skills of higher education institutions are weak.
- > Diploma programs should be phased out of universities but should be developed in the Technical colleges.

6.9 Recommendations for Policy Training by Prof. Moses Kwapata, Principal, Bunda College of Agriculture, and University of Malawi.

In his presentation, Professor Kwapata acknowledged on behalf of the participants the support by governments to higher education, although the role of universities in enhancing socio-economic development was underscored. The following recommendations were arrived at:

- > Strengthen university competence to deliver on development.
- > Governments to support development of an enabling policy environment for universities as university managers are isolated from the policy-making process.
- > Universities are to be consulted when laws are being developed.
- > Governments need to increase investment in agriculture.
- > Governments need to support in-country and cross-country collaboration.
- > Governments to facilitate higher institutions to re-position themselves to meet emerging challenges and expectations.

6.10 Questions and Comments

- > Who is supposed to initiate the policy move? It has to be lecturers.
- > Have effective recommendations. Let the experts meet and churn out policy issues at least 5 months before the budget is read. This should be an annual event.
- > There is need to have governments subsidize internet access to universities.
- > We need to flag examples instead of just giving blanket recommendation.
- > A forum of universities and parliamentarians needs to be established and strengthened.
- > The Nyerere initiative by NEPAD could be flagged out.
- > Governments have not actively engaged the universities to review policy.
- > Leadership weaknesses are a factor that undermines progress in higher education.



7.0 Recommendations from the Training Workshop

The recommendations from the training workshop and a policy brief were developed from the following questions.

7.1 What can governments do differently?

- > Repackage agriculture to make it more attractive and address emerging issues
- > Graduates should focus on the entire value chain
- > Honour obligations such as the Maputo declaration
- > There is need to benchmark and set our own targets and evaluate ourselves
- > Avoid political decisions in key issues such as creation of new universities
- > Universities need to co-opt others in making the change
- > Invest more on policy education as most people are not aware

7.2 Why Are African Universities Important?

> Universities are centers of knowledge creation, innovation and community service/extension service

- > Universities have critical mass of intellectuals capable of conducting multidisciplinary research needed by policy makers
- > Involved in technology development
- > Produce high level human resource
- > Source of critical expertise
- > Place of free speech and free thinking
- > Investigative research and watch dogs

7.3 Summary of the main discussion points

Topic 1: Placing Agricultural Tertiary Education in the Policy Agenda

- > Curriculum design and development relevance and timeliness of the curriculum to factor emerging issues such as climate change and globalization
- > Entrepreneurial training need to make graduates employers and not job seekers. Tracer studies are needed
- > Increased funding to universities and making universities develop innovative resource mobilization strategies

Topic 2: Why are African countries not benefiting from current investments in higher education?

- > Curriculum needs to make students think along an entire value chain, with emphasis placed on the enterprise presentation.
- > There is declining interest in investment in agriculture as emerging opportunities such as oil are taking more investments. This is a dangerous setting that needs to be addressed.
- > People in higher education are not actively lobbying for the change. The universities need to develop a smart lobbying framework and the government needs to give a forum to have issues aired.

Topic 3: Agricultural Tertiary Education and Returns on Investment

- > The current figures on returns on investment are inaccurate and paint a grim image. There is need to support studies that will give accurate data.
- > The traditional agriculture needs to be're-packaged' to make it attractive in the value chain so that it is not perceived as traditional farming.

Topic 4: Recommendations of the Pre-Conference Policy Training workshop

- > Governments to establish mechanisms for support of innovations and growth in institutions of higher learning.
- > University managers need to develop mechanisms to proactively engage policy makers and in the policy making process.

- > Governments to create or strengthen mechanisms to ensure that institutions of higher learning are engaged and contribute to the policy making process.
- > Governments to increase investment in agricultural education at all levels.
- > Governments to develop/strengthen in-country and cross-country collaborations especially issues regarding immigration.
- > Governments to facilitate higher institutions to re-position themselves to meet emerging challenges and expectation.

Topic 5: Why are African countries not benefiting from current investments in Higher Education?

- > Underfunding in research and development
- > Policies are not harmonized
- > Poor/weak incentives and packages hence brain drain and brain wash
- > Heavy workload with focus on churning out graduates

Topic 6: What Opportunities exist for African policy makers to improve higher tertiary education in Africa?

- > The recommendations from the CHEA Conference to be communicated for action plans by respective governments
- > Formation of parliamentary committees that hold regular meetings with higher education institutions
- > Improve leadership framework that allows universities to operate professionally without political interference

Topic 7: How does change in tertiary education policy and practice happen?

- > Develop a panel that brings together policy makers and academia.
- > Hold governments to task for failing to comply with declarations such as the Maputo declaration.

Topic 8: What can governments do differently?

- > Honor their obligations under signed treaties such as the Maputo Declaration.
- > Repackage agriculture to make it more attractive and address emerging issues in a value chain approach.
- > Avoid political decisions in key issues such as creation of new universities.
- > Universities need to co-opt others in making the change.
- > Invest more on policy education as most people are not aware.

7.4 Recommendations from the side event to policy makers

7.4.1 How universities can strengthen policy?

- > Provision of evidence based advice
- Creation of institutional platforms within universities for policy development, advocacy, monitoring and impact assessment
- . Lobbying the policy makers to use research outputs
- > Review of curricula on topical issues
- > Need driven research
- > Networking with key stakeholders
- > Effective communication of outputs

7.4.2 What must universities do to strengthen policy?

- > Curricula must be relevant and attractive
- > Build competencies in specialized disciplines (e.g. Agriculture, Engineering)
- > Aggressively market themselves (open days, round table, field days)
- Capacity strengthening of policy makers (e.g. pairing of MPs with university researchers, short courses)
- > Participate in the formulation and implementation of policies
- > Create platform for policy dialogue and advocacy

7.5 What must the policy makers do?

- > Recognize the importance of universities and utilize them in policy making and implementation processes
- > Provide the enabling policy and legal frameworks to enable universities function effectively
- > Provide adequate financial resources to universities for effective teaching, learning, research and community service
- Strengthen coordination among ministries dealing with tertiary education through national system of innovation



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Annex 3: Pre-Conference Event Program

Day 1- 13 Nov		Notes
08:30a.m 09:00a.m.	Welcome remarks	RUFORUM, AAU, DDRN & ATPS Dr. Judith Francis, CTA
	Opening Remarks	
9:00a.m. – 09:30a.m.	Introductions and expectations Background to the event and the participants	
09:30a.m 11:00a.m.	Presentation of experiences and best practices from the participants	3-4 participants need to be identified beforehand to present on 1 or two things: Why are universities important for development policy, practice and outcomes? How can universities strengthen development
11:00a.m 11:15a.m.	Coffee Break	
11:15a.m 11:45a.m.	How to develop an effective message	Presentation
11:45a.m 12:30p.m.	Group work on developing an argument/message Plenary presentation of answers	In smaller groups, participants try to answer three questions: How does change in tertiary education policy and practice happen? How can universities make a difference (Provide examples)? What do governments and universities need to do differently?
12:30p.m 13:45p.m.	Lunch	
13:45p.m 15:45p.m.	University Research – Policy Linkage: Why the Problems Persist in Africa by Prof. Osita Ogbu, Ph.D., FNAE	Presentation
15:45p.m 16:00p.m.	Теа	
16:00p.m 17:00p.m.	Developing a strategy for policy engagement Including Q and A decide how to go ahead trying to influence	Presentation of RAPID Outcome Mapping Approach –with a particular focus on Theories of Policy Change to understand how policy changes in different contexts (which will help)

Day 2 - 14 Nov		
08:30a.m 09:00a.m.	RE-cap and welcome back	
09:00a.m 10:30a.m. 10:30a.m 10:45a.m.	Identify strategic guidelines for intervention Plus presentation to the plenary Coffee	Presentation (in plenary) and use (in groups) of the Alignment, Interest and Influence Matrix (AIIM) to identify main lines of action related
10:45a.m 11:30a.m.	Focus on Communications	Presentation on how to develop
11:30a.m 12:30p.m.	Group work on developing draft	communication strategies and what tools and channels are available (just a taste of what is available) – additional materials will be referred to and provided via email
11:30a.m 12:30p.m.	strategies for specific national level interventions	In national teams (where relevant) participants use the ROMA approach and AIIM tool to develop specific strategic objectives and lines of action for their own context. Including: Theory of change Objectives Key audiences Main message
12:30p.m 14:00p.m.	Lunch	Main approaches to influence Flipcharts with the strategic objectives and lines of action are left in the room during lunch so that participants can have a look.
14:00p.m. – 15:00p.m.	Presentation of proposed actions	Presentations from the countries – using flipcharts
15:00p.m 15:15p.m.	Теа	
15:15p.m 16:15p.m.	Planning for CHEA	Participants decide what to do during the event: who they will target, who to talk to, how to share information about what is going on, how to share information about what happened
16:15p.m 16:45p.m.	Next steps - what would be useful next?	
16:45p.m 17:00p.m.	Closing Speech	
17:15p.m.	Post workshop meeting for 'leadership' team	

Annex 4 : Policy Side event Programme

Tuesday 16 November, 2010		Notes/Responsible
08:30 a.m 08:45 a.m.	Welcome remarks and side event objectives	ATPS/DDRN/RUFORUM
08:45 a.m 09:15 a.m.	Opening Remarks	Prof. Cisco M. Magagula; Vice Chancellor, University of Swaziland
	Opening Address	Rt. Hon Edward Ssekandi, Speaker of Parliament, Uganda
09:15 a.m 09:30 a.m.	Lead Paper: Placing Agricultural Tertiary Education in the Policy Agenda	Dr. Musa Dube, Swaziland
09:30 a.m 09:40 a.m.	Discussions	
09:40 a.m 09:55 a.m.	Background paper: Agricultural Tertiary Education and Returns to Investments	Prof. Montague Demment, APLU
09:55 a.m 10:05 a.m.	Discussions	
10:05 a.m 10:45 a.m.	Group Photo and Tea Break	
11:00 a.m 12:30 p.m.	Panel DiscussionPanelists: Hon. David Mafabi: MP, Uganda Hon. Aggrey Bagiire: Minister of State for Agriculture, Uganda Prof. Agnes Mwangombe, Principal, College of Veterinary Science, Kenya Dr. Eric Smaling, MP, Netherlands Prof. Mitiku Haile, Vice Chancellor, Ethiopia	Key issues: Why are African countries not benefitting from current investments in higher education? What opportunities exist for African policy makers to improve higher tertiary education in Africa?
	Facilitator: Dr. Nick Ozor, ATPS	
12:30 p.m. - 14:00 p.m.	Lunch	
14:00 p.m. - 14:10 p.m.	Presentation of recommendation from the Policy training event	DDRN
14:10 p.m.	Discussions	All

Lead Rapportuer: Kevin Urama, ATPS | Resolution Team: Nick Ozor, Anne Sorenson, Patrick Okori

The African Technology Policy Studies Network (ATPS) is a multidisciplinary network of researchers, private sector actors and policy makers promoting the generation, dissemination, use and mastery of science, technology and innovation (ST&I) for African development, environmental sustainability and global inclusion. ATPS intends to achieve its mandate through research, capacity building and training, science communication/dissemination and sensitization, participatory multi-stakeholder dialogue, knowledge brokerage, and policy advocacy.



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