

1st National Policy Forum for STI held: academia encouraged to take lead in the National STI Ecosystem

The 1st National Policy Forum for Science, Technology, and Innovation (STI) ended with calls for academia in Uganda to take lead in the STI ecosystem by identifying talent, knowledge management as well as creation of links with industry to support innovations. This is based on the effective models witnessed across the world as associated with the universities such as Harvard, MIT, and Stanford in the United States of America, and University of Cape Town in South Africa. It was reiterated that a better STI ecosystem will help catalyze national development for Uganda.

Makerere University through its College of Natural Sciences (CoNAS) organized, hosted, and virtually held the 1st National Policy Forum on Science, Technology, and Innovations (STIs) Advancement for Development on the August 26th and 27th, 2021 under the theme **“Positioning STI to address emerging threats to national development”**. Makerere University deemed it strategic to initiate a national multi-stakeholder dialogue with an aim of contributing to the discourse on the role of STI in socio-economic transformation of the country even in the face of global and national challenges such as Covid – 19. Assoc. Prof. Arthur Tugume, Head - Department of Plant Sciences Microbiology and Biotechnology chaired the organizing team.

In the opening remarks delivered by the Deputy Vice Chancellor/ Academic Affairs, Makerere University Prof. Kakumba Umar on behalf of the Vice Chancellor, Makerere University; Prof. Nawangwe Barnabas, he said ‘Makerere is well positioned with capacity to support STI for national development in Uganda’. He thanked H.E. Yoweri Kaguta Museveni for the vision in establishing the Presidential Initiative for Science and Technology that benefited various colleges of Makerere University and enabled staff as well students to initiate innovations like the KIRA E.V. at the College of Engineering, Design, Art, and Technology. ‘The Government of Uganda has further committed 30bn Uganda shillings towards the Makerere University Research and Innovation Fund (MakRIF) that has supported over 700 projects since 2019’, as an institution, Makerere University is very grateful for this support, the Vice Chancellor noted.

The forum was officially opened by Hon. Dr. Monica Musenero – Minister for Science and Technology, who was the Chief Guest of the conference. In her speech, she thanked the Vice Chancellor, Makerere University and CoNAS for taking lead in the direction of STI especially during the Covid19 pandemic which has affected nations greatly. The Minister advised that ‘publication of research papers is good however, written material is not enough. We need action from government institutions, academia, students and general population otherwise Uganda will not change’. She further noted that ‘research, science and innovation has become too elitist ignoring the simple man/woman in the village reiterating that there has to be a mindset change otherwise nothing will happen’. We must involve the simple man, mother down in the village who is the client for a better Uganda, and I am hopeful that a detailed report of the discussions from this forum will be shared to guide us going forward, the Minister advised.

The keynote speaker, Dr. Fred Muhumuza from Makerere University, College of Business and Management Studies highlighted the most pressing challenges affecting role of STI in national development and the link the in addressing these challenges in Uganda’s STI

ecosystem. The challenges highlighted included: Poor coordination and facilitation of training for STI professionals; the increased salaries of science teachers are welcome but should be supported by investment in the learners and facilities; facilitation of research and development; general and specific financing for all activities in the STI space; and visionary leadership, strategic planning, coordination of policies as well as implementation.

Prof. Eliab Lugujjo, the Vice Chancellor, Ndejje University delivered a presentation on skills and education needed for a modern knowledge-based economy. He noted the need to balance vocational skills and higher education for STI advancement; at what stage/ level of education a scientist or innovator is made, and the gaps in the education system hindering STI advancement. This was a thought-provoking presentation and garnered a lot of discussion.

Multiple exciting presentations by speakers during the forum were delivered and discussions on topical issues of Uganda's STI ecosystem including skilling our population, pharmaceuticals and healthcare systems, agro-industrialization, knowledge economy, e-Commerce, governance, policy, and incubation ecosystems were held during the forum. Participants at the forum included policy makers, researchers, academicians, government leaders, students, and the public. Some of the key issues noted during the forum deliberations included:

1. All of us have a role to play in the STI, research, education and development that has become too elitist where the 'simple man' is ignored, written material like research papers, policy documents not enough to drive national development but concerted efforts from government institutions, universities, researchers, teachers, students, and the public required to ensure steady fast national development while addressing national challenges like slow economic growth, inclusiveness, insecurity, climate change, etc.
2. There is need to have a mindset change by the entire population and also directly involve the layman who is the beneficiary of elite innovations but with unique innovations too that need to be harnessed so as to maximize every fund directed towards STI.
3. There is need to always ask the question "How do we benefit as Uganda?" during international collaborations and implementation of research grants received outside the "Slave Model".
4. No one is safe unless the development benefits us all as exposed by the issue of inequality during Covid – 19. It has reawakened us to the fact that we must explore home-based capacity and innovation as has been demonstrated by indigenous pharmaceutical potential. The approach of the pathogen economy proposed by Government is in the right direction, but all stakeholders, including the academia, private sector and others are not involved in shaping it up.
5. What is the missing link to turn our STI into viable commercial products and what metrics are we using to measure the role and contribution of STI for national development? The missing link is mindset change and high-level political support and strategic approach to STI governance. The latter is taking shape, but the former is yet to be realized

The STI forum was officially closed by the Vice Chancellor of Makerere University, Prof. Barnabas Nawangwe. He thanked the leadership of the College of Natural Sciences for organizing the 1st National Policy Forum for Science Technology and Innovation. He also

thanked Hon. Monica Musenero for honoring our invitation and officiating at the opening of the conference. He said, 'we thank the government for the support given to Makerere University in its move to become a research-led university. We are grateful that Science has attained highest level of political interest and support'. The Vice Chancellor also thanked the participants who dedicated time to attend the conference and contributed the discussions. 'As Makerere, we are privileged that most of our researchers are young people. This will give us a lot of momentum', Prof. Nawangwe noted. The Vice Chancellor emphasized that it our role as the major and key University in the country to lead policy discourse; if we don't do that no one else will. Prof. Nawangwe ended by saying that 'the STI Conference will now become an annual event hosted by Makerere University'.

A communique and detailed report from the conference will be prepared and shared with stakeholders.