

**SUPPORTING STUDENTS' INNOVATIONS**

Universities need to transfer research into products and services as opposed to leaving the brilliant ideas in journals and libraries

By Geoffrey Mutegeki

Experts have called on Ugandan universities to forge partnerships with industries to drive innovation and development.

World over, tertiary institutions which have good partnerships with industries have had an increased success rate of university start-ups. Many Ugandan universities have had research and start-ups that have not gone beyond laboratories, libraries and journals.

Prof. Eriabu Lugujjo, the vice-chancellor of Ndejje University, notes that heads of tertiary institutions need to make industry-university partnerships a strategic priority.

"If we can partner with industries, we can make more products that can be sold on the market," Lugujjo said.

He noted that universities need to transfer research into products and services as opposed to leaving the brilliant ideas in journals and libraries.

"A lot of research and innovations are being done and developed by universities but are not being scaled up. However, if universities partner with industries, there will be a big difference," Lugujjo said.

He made the remarks last week during the first National Policy Forum on Science, Technology and Innovations (STIs) Advancement for Development.

Organised by the College of Natural Science at Makerere University, the two-day virtual event ran under the theme, "Positioning STI to address emerging threats to national development."

According to experts, when companies and universities work in tandem to push the frontiers of knowledge, they become a powerful engine for innovation and economic growth in any country.

Makerere University has come up with a number of start-ups, but these have not been scaled up due to lack of partnerships with industries.

Barnabas Nawangwe, the vice-chancellor of Makerere University, said Uganda's STI sector is at a critical point in the history of the nation and is destined to redirect how the country will develop and transform.

"And for that reason, it has attained high political interest and support. Political interest alone will not be able to properly position STI for national development. The academia, the private sector, as well as the civil society and the media are critical players in this arena," Nawangwe said.

He, however, decried the lack of



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# SHOULD UNIVERSITIES WORK WITH INDUSTRIES?

## ENABLING POLICIES

The minister in charge of Science, Technology and Innovation, Dr Monica Musenero, said the Government is to put in place enabling policies and laws that will support innovation and generation of products and services locally.

At the same time, more support is to be given to scientists, including those in universities.

Through support to local innovation, Uganda has been able to innovate the Kiira EV vehicle that is at the verge of revolutionising the public transportation industry in Uganda.

"We are in the process of reorganising and strengthening the science, technology and innovation 'sector' to deliver on its mandate. We want to ensure that science, technology and innovation (STI) impact society and contribute to transformation of our country," Musenero said.

She revealed that Science Technology and Innovation is at the centre of the implementation

of the National Development Plan III as Programme 17, where all sectors should use the best available scientific tools and must be innovative to save the taxpayers money and to deploy it where the country can reap maximum returns.

"We need to optimise STI to increase our export potential and to create jobs. Universities and academic institutions have a huge responsibility within the STI ecosystem as generators of knowledge and ground-breaking innovations," Musenero said.

As COVID-19 continues to destabilise the world, Musenero said Ugandan scientists should focus on the opportunities it presents.

"We have taken up the COVID-19 situation as an opportunity and that is why we are supporting scientists to innovate vaccines and therapeutics," Musenero said.

enough support to propel innovation.

"The policy coherence to support research and innovation remains a challenge. There are many copy-and-paste technologies, limited translation of innovation into products and a host of other challenges," Nawangwe said.

Through the Makerere University Research & Innovations Fund, the Government contributes sh30b annually to Makerere University, which has boosted research and innovation capacity.

Ajay Kumar Pal, the manager of CiplaQcl, noted that when

universities collaborate with industries, it facilitates additional development and training for students.

"By working on these projects, students develop the necessary skills, including teamwork, creativity, communication and critical thinking," Kumar said.

He revealed that students or researchers and industries need to come together if the country is to benefit more from research and innovation.

Industry partnerships give students and faculties additional funding.

With government funding to research in public universities still low and zero to private universities, by striking up corporate partnerships, universities have more resources to undertake research and are able to diversify their research areas.

While universities and industries enjoy a symbiotic relationship, society also benefits from a trained workforce answering today's most pressing challenges and creating technology to improve lives.

Dr Asuman Guloba, the director of development planning at the



Makerere University vice-chancellor Barnabas Nawangwe

National Planning Authority (NPA), said there is need to create a linkage between scientific evidence and policy-making.

"We need to use research and innovation to grow our productivity. Our value-addition is still at its infancy, but with research and innovation, we can grow it further," Guloba said.

According to Prof. Buyinza Mukadasi, universities provide the earliest look at where the next big idea or innovation will come from.

Because of financial constraints many companies are hungry for ideas and the actual technologies and intellectual properties to commercialise those ideas.

Collaborations also offers an opportunity to expose students to the industry culture, which prepares learners for the market after graduation.

During the forum, some exciting sessions on topical issues of Uganda's STI ecosystem, pharmaceuticals and healthcare systems, agro-industrialisation, knowledge economy, e-commerce, governance, policy and incubation ecosystems were discussed.