



Third Ndizotheka Eminent Speaker's Series Event

Date: 12th August 2020

Report

1. Introduction

On 12 August 2020, MwAPATA Institute in collaboration with the National Planning Commission (NPC) and Lilongwe University of Agriculture and Natural Resources (LUANAR) hosted its 3rd Ndizotheka Eminent Speaker Series event. The Eminent Speaker Series aim at promoting a positive mindset on Malawi's development possibilities. It welcomes speakers from a diverse range of disciplines and backgrounds seeking to impact and transform Malawi's development landscape. The events are promoting candid and honest public interaction/dialogue with distinguished thinkers both within Malawi and beyond to generate implementable solutions for accelerating Malawi's socio-economic transformation

The 3rd Event featured Prof. Paul Tiyambe Zeleza, Professor of the Social Science and Humanities and Vice-Chancellor of United States International University, Nairobi Kenya. The theme for the event was “*The Role of Science and Technology in Economic Transformation: How Can Malawi's Academic and Research Institution Contribute*”. Prof. Address Malata, Vice-Chancellor of Malawi University of Science and Technology (MUST) served as the Discussant for the presentation. This was a virtual event conducted via Zoom with live streaming via Facebook and YouTube. The event attracted about 100 participants on zoom from various local and international institutions. The discussion was simultaneously followed by an online Zoom discussion (chat) (See Annex 1).

Eminent Speaker: Prof. Paul Tiyambe Zeleza is Vice-Chancellor (President) and Professor of the Humanities and Social Sciences of the United States International University-Africa, Nairobi, Kenya. He holds a PhD in Economic History from Dalhousie University, Canada and a Master of Arts from the University of London's School of Oriental and African Studies and the London School of Economics. He obtained his Bachelor of Arts Degree (with Distinction) from the University of Malawi, where he majored in History and English.

Prof. Zeleza has published more than 300 journal articles, book chapters, reviews, short stories and online essays and authored or edited 27 books, several of which have won international awards including Africa's most prestigious book prize, the Noma Award, for his books *A Modern Economic History of Africa* (1993) and *Manufacturing African Studies and Crises* (1997). His most recent books include *In Search of African Diasporas: Testimonies and Encounters* (2012), *Africa's Resurgence: Domestic, Global and Diaspora Transformations* (2014), and *The Transformations of Global Higher Education* (forthcoming 2016). He has presented nearly 250 keynote addresses, papers, and public lectures at leading universities and international conferences in 31 countries and served on the editorial boards of more than two dozen journals and book series and edited a personal online magazine, *The Zeleza Post*, from 2004-2012.

HP: <https://www.usiu.ac.ke/vice-chancellor/>

Discussant: Prof. Address Malata, Vice-Chancellor for Malawi University of Science and Technology, Thyolo Malawi. Prof. Address Malata is the Vice-Chancellor of the Malawi University of Science and Technology (MUST), Acting Director for the International Centre for Quality Management and Research (ICQMR) at MUST. She is the former President of Africa Honor Society of Nursing of Sigma Theta Tau International; former Vice President of International Confederation of Midwives and former Principal of Kamuzu College of Nursing (KCN), a constituent college of the

University of Malawi where she spearheaded efforts to make KCN a World Health Organization (WHO) Collaborating Centre for Inter-Professional Education and Leadership in 2016.

She is a Virginia Henderson Fellow of Sigma Theta Tau International (STTI) and an Adjunct Professor at Michigan State University. She received a Doctor Honoris Causa by the University of Oslo in Norway, and an Award of Excellence in Nursing & Midwifery by the National Organization of Nurses and Midwives of Malawi. She is a Fellow of the American Academy of Nursing and was awarded a Medal of Distinction by the University of Malawi for being one of the first female Professors in the Country. She received a Customer-Focused Executive of the Year Award by the Chartered Institute of Customer Management in 2015.

HP: <https://www.must.ac.mw/staffs/professor-address-malata/>

2. Agenda

- Remarks by Prof. Richard Mkandawire, Chair, MwAPATA Institute Board, and Chair, National Planning Commission (NPC) of Malawi
- Remarks by Dr. Thomas Munthali, Director General, National Planning Commission (NPC)
- Remarks by Prof. Lewis Dzimbiri, Deputy Vice-Chancellor, Lilongwe University of Agriculture and Natural Resources (LUANAR)
- Eminent Speech: Prof. Paul Tiyambe Zeleza, Vice-Chancellor (President) and Professor of the Humanities and Social Sciences at the United States International University-Africa, Nairobi, Kenya.
- Discussion by Prof. Address Malata, Vice Chancellor for Malawi University of Science and Technology, Thyolo Malawi.
- Closing remarks by Mr. William Chadza, Acting Executive Director for MwAPATA Institute

- Moderator: Mr. Tamani Nkhoma-Mvula

3. Highlight's from the Eminent Speech

The Eminent Speaker presented about “**Science, Technology and Innovation in African Development: The Role of Universities**”. In his speech, he discussed the significance of STI in the development and democracy of Africa. In his presentation, the presenter discussed 5 key areas:

(1) The conundrum of development

In his presentation, Prof, Zeleza started by discussing the landscape of development throughout history. He summarized the factors to have influenced development over the years into race, ethnicity, geographical location, culture, history, market freedom and the emergence and expansion of inclusive economic, political, and social institutions. He concluded by stating the significance of the indestructible link between intellectual inquiry, research, and innovation from the first industrial revolution to date.

(2) Africa's standing in the global STI landscape

In unfolding Africa's standing in the global STI landscape, Prof. Zeleza started by sharing the four key trends to the global knowledge economy. These include research & development expenditures, scholarly publications, number and proportion of researchers, and patents.

(3) Engineering of African STI future

On the future of STI in Africa, Prof. Zeleza alluded that Africa is improving. He said that African countries have become increasingly committed to strengthening their STI capacities as a critical driver for sustainable development, democratization, and self-determination. They understand that STI is essential for the public good, private enterprise development, and building productive capacity for sustainable

development. He, however, stated that translating aspirations into reality is often an issue due to bureaucratic inertia and lack of political will and resources.

(4) Universities as incubators of STI

Prof. Zeleza said that Universities have a critical role to play in promoting STIs in Africa. He indicated that Universities are crucial for Africa's drive to build effective transdisciplinary, collaborative, and participatory STI capacities as well as systems that address the pressing needs and the development challenges and opportunities facing the continent. He then suggested the need to increase the number of tertiary institutions and enrollment ratios, levels of research productivity, and institutional commitments to public service, engagement, innovation, and entrepreneurship.

(5) Lessons for Malawi

With regard to Malawi, Prof. Zeleza reports a poor performance in several STI indicators. He continued to suggest a political will towards enhancement of STI in Malawi. In his response to the questions presented by the audience, Prof. Zeleza said the key to improving Malawi's STI's and the drivers to successful STI's is to put the politics of all institutions right. He said there should be integrated, innovative and sustainable institutions that will deal with the nation's development needs. As for the required structures that would allow those in the diaspora to contribute, he said that there is need to focus on those in the diaspora as a pipeline for intellectual remittances. He further said that there is need to mobilize people through joint appointments, teaching and learning and research. He finally concluded by saying that both pure and applied research is critical to nations' development as such they both need to be taken aboard.

4. Highlights from the Discussant

The Discussant, Prof. Malata, mentioned that science, technology, and innovation in Africa is still a struggle. Reacting to the issues raised by the audience on weak linkages between research findings from the university and the industry, the solutions

to students' failure to employ themselves using the skills acquired from university and the issues of gender in promoting science and technology. In her response, she said that universities struggle to link with the industry, however, she proposed that the solution to this, is to work together. She mentioned that there is need to employ integrated learning where students and teachers will be exposed to the industry through attachments to understand the needs of the industry and how the lesson taught and learned at the university can be applied in the current industrial setting. Prof. Malata suggested that the private sector should challenge Universities with problems and request them to offer solutions. As for solutions to failure of graduates to employ themselves, she said that as of now all students regardless of their program of study are requested to undergo an entrepreneurship module. She concluded by addressing the need to empower females and expose them to science and technology starting from the lower education levels and support them till they complete their tertiary education.

5. Plenary Session

After the two key presentations, the floor was open for discussion and questions where key issues were raised. These issues ranged from What Malawi can learn from other African Countries, how the sector can begin to create opportunities for graduates of Science and Technology to be effective in the field and not shun the sector as well as becoming entrepreneurs in the field among others. Concerns were also raised where it was seen that Countries have not put in much interest in promoting the sector despite the gaps identified.

Reacting to some of the questions all the panelists which included LUANAR and National Planning Commission of Malawi (NPC), it was seen that there is a high need to involve all the sectors to ensure that progress is made and everyone is included in the development agenda. Prof Dzimhiri, the Deputy Vice-Chancellor to LUANAR said that there are enough institutions, frameworks, and infrastructures to enhance science and technology in Malawi. He, however, stressed that there is limited funding to support these institutions. He then proposed linkages between universities and the

private sector as a way of mobilizing resources for the institutions. He then agreed with the eminent speaker on the need to have a political will to deal with the problem of research funding.

The discussion was concluded by Dr. Munthali who responded to the role of non-science and technology Ministries in promoting science and technology. In his response, he said that there should be collaborations with these ministries to ensure that the research and innovations developed are implemented.

In conclusion, the discussion proved that STI has a very critical role in Malawi's economy. However, there should be a political will to support investment in science, technology, and innovation. There is rapid growth in digital technology across the world, as such Malawi needs to work towards improving its science, technology, and innovations. It further observed that Universities face challenges in as far as STI funding is concerned as such it was concluded that there is a need for Public Universities to source external funding to support building STI as a way of reducing decency on government funding. It was also suggested that there should be linkages between the private sector and universities to bridge the gap of research findings and implementation. Finally, on the issues of gender, it was suggested that STI should be introduced to girls at a younger age and support them till they finalize their tertiary studies.

Parting shot from Prof Zeleza.

“Development is for us and we have to do it ourselves. We should not allow regionalism, nepotism, and all these other things that divide the nation. We must empower young girls and men, the rural masses and everyone. The youth should be given opportunities to flourish.”

6. Closing Remarks

In closing, Mr. William Chadza -Acting Executive Director for MwAPATA Institute thanked everyone for participating with specific mention to Prof. Paul Zeleza for the

thought-provoking presentation. He also thanked Prof. Address Malata for opening the floor for discussion and specific appreciation went to Michigan State University (MSU) for providing support towards the event and to Dr. Candida Nakhumwa the Country Director for Agricultural Transformation Initiative (ATI), MwAPATA's Development partner for being present throughout the presentation. Recognition went to NPC and LUANAR for the collaboration that exists in organizing the Ndizotheka Eminent Speaker Series Event.

Annex 1: Zoom Chat discussion

From Bayethe Nkosi to Everyone: 05:32 PM: The statistics speak for themselves indeed. We are doing very poorly as a Country. In your opinion, what would be the enablers that can foster Malawi's economic development to leapfrog into 3rd and industrial revolution 4.0?

***From Chisomo Kalumula to Everyone: 05:37 PM:** key takeaway is. If we are to move forward and play a role in the 4TH Industrial revolution, we really need to review certain policies on STI as well as identifying strategic local and foreign direct investment in the STI sector.*

From Mathildah Chithila-Munthali to Everyone: 05:34 PM: STI has also led to big data and AI, tilting the balance of power towards tech companies such as Google and Facebook, how can African countries approach this challenge?

From David Mkwambisi to Everyone: 05:35 PM: Based on these gaps at Country level, does the creation of a Ministry to drive STI be a solution? What framework can we have to make sure that local innovations are driving the development agenda with minimal external intervention?

***From Dr. Robert Ridley to Everyone: 05:37 PM:** In response to David Mkwambisi, investment in STI, whether through a ministry or other institutions needs to be cross-cutting across different sectors and not be seen in isolation from e.g. agriculture, health, ICT etc.*

From David Kamchacha to Everyone: 05:38 PM: the heart of development is science and technology. This has been talked about in many forums in Malawi. Professor Zeleza has brought it again and prof Malata has picked it as well. what are the challenges in Malawi? is it resources? interest in the discipline or commitment by those who need to promote it?

***From Tusekile Munkhondya to Everyone: 05:42 PM:** in response to David kamchamcha yes as much as we have learnt in schools things to do with*

science but much of it is theory we do not have the resources that would help us to put theory into practice

From Henrie-Njoloma to Everyone: 05:38 PM: Research Institutions, Academia and Industry are disjointed in the scheme of things that should promote STI and adoption of the same for economic development; someone needs to deliberately put an effort to close the gap and enhance adoption and improvement of STI to solve the many problems humans face, especially here in Malawi.

From WKachaka to Everyone: 05:39 PM: What can the National Commission for Science and Technology (NCST) do to have a Science and Technology Research agenda targeted at closing these gaping holes on most R&D outcomes.

***From Dr Wanda to Everyone: 05:48 PM:** To respond to WKachaka's question, the National Commission for Science and Technology (NCST) has a well-defined Science and Technology Research agenda targeted at closing these gaping holes on most R&D outcomes as guided by the Science and Technology Act no 16 of 2003 as well as sector-wide national research agenda and NCSTs strategic Plans. The major challenge possibly is on the fact that we haven't done very well as Country since 2010 when the National Commission for Science and Technology with respect to implementation of the policies. The Science and Technology Act no 16 of 2003 also provides for the establishment of the science and technology Fund to support research, science, technology and Innovations. Nevertheless, 10 years down the line the Science and Technology Fund has not been operationalized. Possibly we need to move a step further and operationalize the S & T fund, come up with science and technology fund regulation, provide seed money to support researchers, innovators, innovation hubs etc.*

From HP to Everyone: 05:41 PM: For me, one of the reasons why we are doing badly on scientific research and publications in Malawi is that such a task seems to be the preserve of public universities. Yet we have many private institutions mushrooming

and accredited for that matter. Wouldn't it make sense that track record on research and publications should be the prerequisite milestone towards accreditation?

From David Mkwambisi to Everyone: 05:42 PM: The STI national strategy is required but we need a different approach in implementing this agenda. NPC has not the platform to champion STI agenda through for the NT2063.

From Greenwell to Everyone: 05:45 PM: Greenwell Matchaya here: I can relate to a number of issues that the Prof ably brought to the fore. As the topic is huge with many nuances, at some point my colleagues and I at University reading did some studies on the question of how to encourage innovation...Intellectual property rights, and returns to innovations were among the key factors driving innovation. What is the Prof's take on this?

From Mathildah Chithila-Munthali to Everyone: 05:46 PM: Synergy and coordination among the national institutions such NPC, NCST universities is urgently needed to support implementation of any national agenda

From Dr Wanda to Everyone: 05:51 PM: I agree with Madam Mathilda Chithila that we urgently need a synergy and coordination among the national institutions such NPC, NCST universities. NPC and NCST should complement each other if we are make a headway as far as achievement of agenda 2063 is concerned.

From Francis to Everyone: 05:48 PM: Are we ready to change our whole curriculum to include computational thinking from primary to tertiary level?

From Im2234 to Everyone: 05:51 PM: How do you think Our Academic and Research Institutions can contribute to Economic Transformation amidst weak institutional power characterized by corruption and poor governance by the state and competing agendas of the universities in Malawi?

From Yvonne Mmangisa to Everyone: 05:54 PM: There are a lot of competing basic needs in the Country. How do we balance the need to develop STI and addressing the lack of basic needs?

From Tusekile Munkhondya to Everyone: 05:59 PM: Can Malawi with all the different cultural set ups manage to adjust to the technological innovation as soon as we should to catch up with our neighbors because we have to be developing without leaving others behind as more than 50% of our population is based in the rural areas?

From David Mkwambisi to Everyone: 06:01 PM: Last month we initiated an Innovation Coordination Team involving all public Universities and UNDP. But soon to extend membership to other institutions.

From Steve Sharra to Everyone: 06:10 PM: @DavidMkwambisi - great initiative that one; congratulations. Involving private universities as well will be even better.

From Sophie to Everyone: 06:11 PM: The initiative mentioned by David Mkwambisi can assist in addressing what Dr Wanda has alluded to. We need coordinated and focused research that can address national problems at the appropriate time

From SMEDI- C.E.O to Everyone: 06:07 PM: I think it is commitment at highest level and investment in the area. Need to have an institute to drive this area.

From Dr Wanda to Everyone: 06:08 PM: Research and development should try to focus on finding key practical solutions to address practical problems that the Malawi nation is facing

From Blessings to Everyone: 06:14 PM: Sustainable investment on STI should be demand driven and catalyzed from private sector. let us put private sector at forefront in such discussions. funding from public sector will always be meagre to drive the agenda. best collaboration, key with political will. Any ideas on this prof?

From Tusekile Munkhondya to Everyone: 06:15 PM: The universities should really take a look in the industries which the student are going to do their internships you find that you go to the industry but all your doing is sit in the office

From Steve Sharra to Everyone: 06:15 PM: Here in Malawi Science and Technology has been tacked to the Ministry of Education, Science and Technology (MoEST). Prof Zeleza mentioned that several African countries have introduced ministries responsible for Science, Technology, and Innovation (STI). But as Prof Ridley says it needs to be cross-cutting. Taiwan has that arrangement, a super Digital ministry with staff in all other ministries.

From Dr. Robert Ridley to Everyone: 06:16 PM: The Egyptian model is also worth looking at. Their 'ministry' works through, and provides funding to, other ministries for STI.

From Mathildah Chithila-Munthali to Everyone: 06:18 PM: How can Malawi generate funds to increase its investment in education.

From SMEDI- C.E.O to Everyone: 06:22 PM: We need to ensure that we move away in Malawi from the more theoretical to more practical learning or a balanced approach that encourages our students to be more innovative and creative. Also encourage close collaboration between the Universities and the private sector to find solutions to National importance and solutions as is done Europe, to create solutions to develop products which become relevant to the private sector and attract private sector to invest or channel investment in research and innovation

From Tusekile Munkhondya to Everyone: 06:27 PM: @ SMEDI I agree with that much of what is taught it's theory we really need to revise our curriculum and if we can also try to incorporate simulation models

From Henrie-Njoloma to Everyone: 06:25 PM: Industry can fund STI only if they see need and if at all it benefits their business. This is where “someone” needs to come in and coordinate.

From steve sharra to Everyone: 06:29 PM: @HenrieNjoloma - Industry needs to understand that they have a vested interest in the education system. They hire people who have been educated by either the government or by private institutions. Largely by public funding.

From Jephthah Maliro to Everyone: 06:30 PM: I'm also in agreement with @SMEDI and @Henrie-Njoloma. Our learning needs to be practical and induce innovation. STI Products and services needs to also appeal to the public and private sector.

From steve sharra to Everyone: 06:33 PM: @Henrie-Njoloma - Great idea for someone to move them. Perhaps we should consider a Ministry of Higher Education, Science, Technology and Innovation. Botswana has that ministry.

From Henrie-Njoloma to Everyone: 06:31 PM: @steve share...I agree fully, but they are not doing that. "someone" needs to move them to do the needful. Similarly ploughing back into the academia where they obtained this trained officer working for them.

From Henrie-Njoloma to Everyone: 06:35 PM: Sugar Companies & Horticulture Companies, as examples in Malawi still love to use tissue culture material from RSA or India why can't they support local institutions as a way of growing STI locally.

From Solomon Mkumbwa to Everyone: 06:29 PM: Do we envisage creating a Malawian Silicon Valley? In my mind is the William Kamkwamba and many others in the rural areas

From Kondwani to Everyone: 06:30 PM: The professor has highlighted that Institutes of Higher learning private sector and Government are not working in corroborations to register significant contributions to development. This has an application on how we use knowledge suffice to say how among other challenges are issues of competition in the industries. It takes a framework of ownership on the intellectual property and on how we use it at all levels. In most instances, private

sector appears to be small, and there is no clear line as to corporate governances and such brings in collusion as to how any intellectual papers might bring immediate benefits rather than sabotage. Is there a way we could go back to the basics support business idea without secret ways to success as of now? Apparently, BBC focus on Africa reports that as much as Africa Build infrastructure for trade and transportation networks historically has been tailored to serve colonial outlet ports rather than promoting inter Country trading. What can be done more now to support trading?

From David Mkwambisi to Everyone: 06:36 PM: I think structures that will drive STI in all Ministries and sectors will be ideal. We need a coordinating entity. Government funding is very critical. Innovators need to be challenged...currently we have a profile of very over 300 innovation ideas...But we can move them to commercialization due to lack of funding

From Dr Wanda to Everyone: 06:39 PM: Possibly we also need a levy towards research, science and technology at national level just as good as the TEVETA levy?

From Steve Sharra to Everyone: 06:42 PM: *@Dr Wanda - good idea; goes towards answering Dr Chithila-Munthali's question as to how we can fund STI. We have pension funds now close to \$1 billion but lying idle. Actually, close to K1 trillion; more than \$1bn.*

From Madalitso Chipekwe to Everyone: 06:43 PM: Another issue to promote science technology and precisely innovation is to ensure we create a conducive environment for innovations in Malawi. I remember one there was a young guy who invented a helicopter, but it was locked away by the government as it posed a danger to surrounding communities. There should also be a deliberate move by universities to create intellectual groping to provide platforms where innovators discuss. If you can check during the industrial revolution groupings like the lunar society bread key innovators who brought our key innovations to England.