



**Report of the Side Event: “Empowering LDCs through science, technology  
and innovation”**

**24 February 2021**

10:00 – 12:00 Lilongwe

11:00 – 13:00 Istanbul

**Lilongwe, Malawi**

## Background

On 24 February 2021, a side event was held organized by the Technology Bank for Least Developed Countries in collaboration the Government of Malawi, Government of Turkey and the UN Economic Commission for Africa. The theme of the event was “**Empowering LDCs through Science, Technology and Innovation – Lessons Learned**”. The featured speakers and background documents can be found at the following link: <https://www.un.org/technologybank/events/empowering-lDCs-through-science-technology-and-innovation>. Around 100 participants attended the event meeting via Zoom.

## Summary of the meeting

In his opening remarks **H.E. Mr. Gospel Kazako**, Minister of Information, Malawi highlighted the contribution of Information Technology and Communication (ICT) as an important tool for integration and full participation in the more modern global economy for development and to the attainment of the sustainable development goals (SDGs). He noted that LDCs cannot afford to miss the numerous advantages of ICTs. He also outlined how Malawi has incorporated ICT development in the National development frameworks including the Malawi 2063 to improve competitiveness to access markets and the Malawi Medium Term Strategy - Malawi Growth and Development Strategies (MDGS3) where transport and ICT infrastructure are prioritized as enablers for achieving SDGs. Minister noted that COVID19 has demonstrated the importance of ICTs through online education and eCommerce including spill-over effects in other sectors such as transportation, manufacturing and services that have socio-economic impact on Malawi. Minister also highlighted the progress of Malawi on ICT development including, the digital migration project, operationalization of access to information Act of 2016, the national broadband fibre project and rural connectivity project to name a few.

**Mr Setipa**, Managing Director of the United Nations Technology Bank for Least Developed Countries provided an overview of the activities of the Technology Bank since 2018 and lessons learned. He noted that the core driving principle of the Technology Bank has been to design programmes that compliment rather than duplicate, that leverage on existing initiatives of partners within and outside the UN system and listening to governments and other stakeholders and reflecting their national priorities. Some of the activities included conducting Technology Needs Assessments (TNAs); enhancing research capacity in utilisation of satellite technologies for climate change mitigation and disaster management; biotechnology and industrial design in LDCs. Mr Setipa also outlined how the Bank supports LDCs in the establishment and strengthening of Academies of science which play a very critical role of advising governments on STI policy development and implementation. In responding to COVID-19, the Technology Bank together with the UNDP, UNCTAD and WHO launched the Tech Access Partnership (TAP), to strengthen developing and least developed countries’ manufacturing capacities of essential COVID-19 related equipment, medical diagnostic kits, and medical devices. Mr Setipa highlighted that the Technology Bank relies 100% on extra budgetary sources and is not part of the UN regular budget,

therefore, appealed to member States and development partners to provide resources to the Technology Bank to continue contributing to the enhancement of Science, Technology and Innovation in LDCs.

**Prof. Hasan Mandal**, President of The Scientific and Technological Research Council of Turkey, on behalf of the government of Turkey noted that priority in international development and cooperation should be given to LDCs through empowerment based on research and development (R&D) and innovation. He further noted that the impact of COVID-19 pandemic will require stronger support from science, technology and innovation through technology-based collaboration and co-production for sustainable and inclusive clean and renewable solutions. Prof Mandal noted that Turkey has increase support to LDCs during the COVID-19 pandemic with bilateral scientific and technological cooperation with Afghanistan, Burundi, Ethiopia, Sudan and Sierra Leone. He highlighted the importance of enhancing research and development eco-system to attain sustainable development. He further noted that Turkey provides financial support to the Technology Bank in the amount of USD 2 million annually.

**H.E. Dr. Elioda Tumwesigye**, Minister of Science, Technology, and Innovation, Uganda noted the contribution of digital transform and need to embrace local and indigenous technologies for sustainable development. He outlined the activities undertake with support from the Technology Bank that included, workshop on strengthening National Academies of Science in Least Developed Countries; conducting Technology Needs Assessment (TNA) in collaboration with UNCTAD; training in climate change risk management and mitigations in collaboration with UNITAR; establishment of Innovation Hub in partnership with UNDP, Private Sector, Academia and Civil Society; lastly, the SDG Impact Accelerator (SDGia), a global accelerator launched by Turkish Ministry of Foreign Affairs and UNDP for impact entrepreneurs to find innovative solutions in digital agriculture. Minister underlined the support in response to COVID-19 pandemic where the Technology Bank through the Tech Access Partnership by assisting the Ministry of Health to develop their Country Roadmap, a guiding framework for the government and in-country partners to evaluate country needs and capacities, and design a strategy to promote local production.

The Minister reflected on some key lesson learned that included, the role of the Technology Needs Assessment (TNA) report is informing the revision of the STI Policy and the Technology Action Plans (TAPs) and key interventions in the Agro-industrialisation programme. On the sustainability of the Technology Bank, the Minister, called on member States and in particular development partners to provide in-kind and or financial support, to the Technology Bank as the focal point on Science, Technology and Innovation for the Least Developed Countries within the United Nations towards the attainment of Sustainable Development Goals.

**Dr. Solomon Benor**, Director General for Science and Research Affairs Ministry of Science and Higher Education (MoSHe), Ethiopia highlighted the importance of access to knowledge, culture and research. He further noted that collaboration with the Technology Bank has contributed to the review of the STI Policy in Ethiopia including engagement with the private sector. Dr Benor indicated that Ethiopia has prioritized agriculture, manufacturing and tourism towards the achievement of the national development goals in line with African Union Agenda 2063. He expressed appreciation for the role of Technology Bank in open science and supporting the Ethiopian Academy of Science. On key lessons he noted the importance of prioritizing integration of ICT in national development programme and increasing access to technologies.

**Dr. Victor Konde**, Scientific Affairs Officer, UN Economic Commission for Africa provided an overview of the role of partnerships and the role of STI in Agenda 2063 by transforming economies in manufacturing, industrialization, value addition and modern agriculture. Dr Konde highlighted the need for increased investment in R&D and strengthening of intellectual property rights across the continent as knowledge is exported from Africa without protection. He noted that COVID19 pandemic amplified the role of science, technology and innovation and the importance of partnerships and collaboration between the centres of excellence across the African Continent. On the lesson learned, he emphasized that LDCs should focus on partnerships amongst countries and institutions such as academies of sciences to promote STI and be sustainable and resilient to inform policy formulation. In building forward LDCs must be supported in accessing and acquiring technologies including use of Artificial Intelligence (AI) in nano and health technologies.

### **Question and Answers / Discussion**

On **the importance of access to knowledge, information, technology, and know-how** and to support the LDCs in improving their scientific and innovative capacity needed for their structural transformation, Prof Mandal highlighted the importance of integrating stakeholder across competent research institutions and private sector in the ecosystem. The stakeholders will promote human resources development and knowledge and design new tools and technology-based solutions that have social, economic and environmental impact for sustainable development in LDCs.

In addressing the question on **what strategy should be put in place to strengthen the link between academia (universities, research center) the private sector and governments** in LDCs to help structural transformation, Mr Setipa highlighted that innovation centers are established within academic institutions. He also highlighted that technology transfer offices are usually linked with academic research institutions where knowledge, skills, creativity and new concepts are developed. Therefore, an ecosystem must be developed that includes resources mobilization for the innovations that will drive transformational impact. To enable LDCs with limited resources,

they can promote collaboration between private sector and academia to mobilise resources for R&D and innovations that will facilitate competitiveness of LDCs.

On the role of **cooperation and collaboration between research institutions and the private sector, to promote research and development and innovation** in the field of science and technology, Dr Benor noted that it is crucial to strengthen collaborations among Research institutions, Universities, and the Academic ecosystem. Moreover, he emphasized that access to open science and e-journals are critical to enhance the quality and visibility of local journals to be included in scientific indexing databases.

On the **impact of COVID19 to the African Continent and what should be priorities for Building Back Better for LDCs by leveraging on Science, Technology and Innovation**, Dr Konde noted two major lessons, investment in science technology and innovation research increased and mobilization of local institutions to provide testing centers across the continent increased. On the negative, the spillover effects have been on the closure of borders, industries, schools and tourism sector resulting in job losses. To build back better forward and greener, he stressed that local institutions must build capacity to anticipate future problems such mobilizing resources for climate change action and adaptation by using STI to enable economies to build back better.

In responding to what is the **role of STI in stimulating exports from LDCs**, Mr Setipa highlighted that technology is critical to enhancing export competitiveness. The African Continental Free Trade Agreement (AfCFTA) was cited that has included technology as an enabler for trade such as in Trade Facilitation. He reminded participant that during COVID19, traditional supply chains were disrupted, and trade was facilitated through online platforms, from large suppliers to small, medium size business, to access export markets.

In their closing remarks, panelists emphasized the importance of science technology and innovation to development in building productive capacities and promoting structural transformation. They also affirmed the importance of collaboration between scientific research institutions, private sector and academia to cultivate innovation and enhance sustainable capacity development. To build back better the panelists stressed the importance of investing in R&D and innovation to prepare for future pandemics. Panelists also concurred that STI and ICT infrastructure is insufficient for LDCs to meet the SDGs and the impact of COVID-19 has reversed the gains that LDCs had made toward graduating from LDC status and achieving the SDGs. They also concluded that support to the Technology Bank is critical to empower LDCs through science, technology and innovation and called on member States and development partner to provide financial and in-kind support to the Technology Bank.

## **Policy messages**

1. Science Technology and Innovation is critical for development and achievement of sustainable development
2. Capacity development is critical for building productive capacities and structural transformation
3. Enhance research and development capacity in LDCs to facilitate commercialization of innovations
4. STI should be integrated in national development plans and through partnerships and coordination across the ecosystem.
5. Sustainable development requires R&D and innovation from basic sciences to engineering as well as in the social sciences and humanities.
6. Digital transformation and ICT connectivity are critical to stimulate competitiveness and facilitate export of value-added products from LDCs.
7. Increase investment in STI and R&D through collaboration between private sector and academia to enhance innovation and competitiveness.
8. Facilitate technology transfer to LDCs and promote awareness of intellectual property rights for protection of innovations from LDCs.