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Leveraging new technologies' impact through Technology Assessments

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Opening Remarks

- Mr. Chairman,
- I wish to thank Ms. Rebecca Grynszpan, first woman and Central American to wear the shoes of UNCTAD Secretary General, for inviting my government in its capacity as a beneficiary of the Project on Technology Assessment to attend this meeting and share our thoughts with honorable member states.
- Thank to the Other two Pilot Countries, Seychelles and South Africa
- I wish to thank member states too.

Technology Development in Africa

- Mr. Chairman,
- The marginalization of African countries in all aspects of global importance cannot be overemphasized. In particular, African countries are deeply marginalized in global technology assets that are generating increased affluence, poverty reduction, creation of jobs and general improved living standards elsewhere in developed and emerging economies particularly Asia.
- Even more worrying is the divide characterized in frontier technology, explained by OECD as, *“Technology that will reshape industry and communications and provide urgently needed solutions to global challenges like climate change and have the potential to displace existing processes.”* For example, as Table 1 below shows frontier technology readiness index for Rwanda and Zambia, two least developed countries compared with Viet Nam and South Africa, two developing countries and the US, a developed country.

Africa's Readiness in Frontier Technology

- According to UNCTAD, *“An index value closer to 1 indicates that a country is ready for the use and adoption of frontier technologies. On the contrary, an index value closer to 0 indicates that a country is less ready.”* As expected, the US with an index of 1 for the overall index in technology is an example of a country ready while South Africa and Viet Nam with 0.5 index shows their advanced path towards readiness.
- Inversely, Rwanda and Zambia with index of 0.2 and 0.1 respectively shows their unreadiness and a confirmation of global marginalization in technology. You can also see this marginalization embodied in the different elements of technology by sector such as ICT infrastructure, skills, research and development, industry activity and access to finance shown in the same Table.

Table 1: Frontier technology readiness index

Source: Unctadstat

		2019
Rwanda	Overall index	0.2
	ICT	0.2
	Skills	0.2
	Research and Development	0.1
	Industry activity	0.4
	Access to finance	0.4
South Africa	Overall index	0.5
	ICT	0.5
	Skills	0.4
	Research and Development	0.4
	Industry activity	0.5
	Access to finance	0.9
US	Overall index	1.0
	ICT	0.9
	Skills	0.7
	Research and Development	0.9
	Industry activity	0.8
	Access to finance	1.0
Viet Nam	Overall index	0.5
	ICT	0.5
	Skills	0.3
	Research and Development	0.3
	Industry activity	0.7
	Access to finance	0.9
Zambia	Overall index	0.1
	ICT	0.3
	Skills	0.2
	Research and Development	0.1
	Industry activity	0.2
	Access to finance	0.4

Contribution of Technology to National Development

- Yet no country has developed without use of technology. The US, Germany, UK, France, Switzerland and China are what they are today as influential global players in the economy, military, climate change, trade and intellectual property rights due to acquisition of technology assets. They are industrialized and exporting value added products that are dynamic and diversified due to technology content.
- That is why, our new government in Zambia is ensuring that our policies contain value addition. We seek to integrate in global value chains and networks and be able to export value added goods and services in order to reduce poverty, create jobs and improve living standards. However, given limited resources, it is practically impossible for my country to achieve value addition without global support. We have to begin from somewhere.

Technology Assessment in Zambia

- One way is through provision of capacity building for our countries by international organizations like UNCTAD. To this end, I'm glad to report to member states here, that UNCTAD selected my country, Zambia, through bidding to be one of the three pilot countries together with South Africa and Seychelles for the implementation of the Technology Assessment (TA) in Energy and Agriculture using Science, Technology and Innovation as a catalyst.
- Technology Assessment is an important prerequisite on the path to choosing and adopting relevant and appropriate technology for economic development. We no longer can simply pick technology without first understanding its usefulness and impact on our economic, social, cultural and environmental landscape in sectors such as energy and agriculture.

Implementation of TA Project in Zambia

- Zambia is excited to be among the three countries from Africa, to implement this TA Project pilot project.
- Zambia with support of UNCTAD held an inception workshop in Zambia where Physical 60 participants participated with representation from Stakeholders who included STI, Energy and Agriculture Sectors, including participants from Higher Learning Institutions, nationally.
- Virtually was joined by Experts based at UNCTAD, Geneva, Switzerland, and other international Experts from other Countries whom UNCTAD have invited to add value to Zambia's TA Workshop.
- Two UNCTAD Experts, Dr ruslan rakhmatullin and Dr. Miltos Iadikas, travelled to come and facilitate the Workshop together with MoTS, and are here with us.
- Zambian Experts made presentations based on their fields of expertise, will physically present in this meeting as per agenda.

Technology Assessment for Zambia

- The Technology Assessment (TA) National Stakeholders Consultative Workshop was aimed at achieving the following objectives:
- To allow policy makers, universities, public and private sectors understand better, the concept of Technology Assessment in national development;
- To identify gaps in Technology Assessment, especially in agriculture and energy;
- To identify priority areas for Technology Assessment in energy and agriculture for Zambia;
- To develop a work plan for Zambia's participation in the UNCTAD project; and
- To design Zambia's Technology Assessment Methodology in partnership with UNCTAD.
- Zambian participants included Directors and Senior Officials from Ministries that included Energy, Agriculture, Livestock, Fisheries, Commerce, Trades and Industry, public and private universities, research institutions, parastatals, private companies and civil society, among others.

Official Launch of TA Project in Zambia

Zambia's Minister of Technology and Science,

Hon. Felix C. Mutati, MP.

Launched the TA Project
in Zambia on 8th April, 2022,
and Media was invited.



Official Launch of TA Project in Zambia

- Permanent Secretary – Ministry of Technology and Science, Dr. Brilliant Habeenzu, officially opened the TA inception workshop that was held from 5th to 6th April, 2022



Establishment of Steering Committee and Expert Group for TA Project

- Roadmap for the TA Project was revised with support from UNCTAD
- Terms of Reference (ToRs) for Establishment of the Steering Committee (SC) and Expert Group (EG) were developed
- Consequently, the SC and EG were established to support implementation of the TA Project
- Awaiting hold of the inception meeting in consultation with UNCTAD

Recommendations

- Finally, I look forward to more support from UNCTAD Secretary General and her staff, and indeed from member states, in particular through more financing so that my country can achieve the relevant SDGs.

Supported needed for the following:

- Implementation of Zambia's Science, Technology, and Innovation (STI) policies and plans
- Support towards economic sectors including energy and agriculture as envisaged in the TA project;
- Linking results of Technology Assessment with other policy processes in Zambia,
- Support towards follow-up to the STIP review undertaken with assistance from UNCTAD;
- Support towards STI strategies as planned for in the Zambia National STI Policy of 2020 reviewed with support from UNCTAD and Zambia's Eighth National Development Plan (8NDP), particularly the Technology and Innovation Strategy and Startup Bill for Entrepreneurs and Innovators.
- Zambia and other African countries need UNCTAD support in the area of STI policy to achieve national development plans.

Next Steps and Way forward

- Request UNCTAD to support Zambia with financial and Expertize to undertake TA Project as per Roadmap
- UNCTAD to guide on operationalization of SC and EG members, and
- UNCTAD to guide on next steps as per Framework.

Thank you for your attention