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**The role of science, technology, and innovation in advancing sustainable,
inclusive, science-and evidence-based solutions for the 2030 Agenda for
Sustainable Development and its Sustainable Development Goals for leaving
no one behind**

Statement by

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**TALKING POINTS FOR HON. OMARY JUMA KIPANGA (MP), DEPUTY
MINISTER, MINISTRY OF EDUCATION, SCIENCE, AND TECHNOLOGY,
UNITED REPUBLIC OF TANZANIA, DURING THE UNITED NATIONS
COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT
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**THE ROLE OF SCIENCE, TECHNOLOGY, AND INNOVATION IN
ADVANCING SUSTAINABLE, INCLUSIVE, AND EVIDENCE-BASED
SOLUTIONS FOR THE 2030 AGENDA IN TANZANIA**

1. **Honourable Chairperson, Your Excellencies, Distinguished Guests, Ladies and Gentlemen,** it is a great honour and privilege to be here with you at this Annual Session of the United Nations Commission on Science and Technology for Development. On behalf of the Government of the United Republic of Tanzania, I would like to extend our sincere gratitude to the United Nations Office Trade and Development and the Commission on Science and Technology for Development and the organizing committee for their dedication and efforts in preparing and hosting this important meeting.
2. Tanzania, like many developing nations, faces significant economic, social, and environmental challenges that demand the integration of science, technology, and innovation (STI) for sustainable development. The 2030 Agenda for Sustainable Development provide a comprehensive framework for addressing these challenges through STI-driven solutions tailored to meet Tanzania's unique needs.
3. Recognizing the importance of STI, national, regional, and international frameworks and agendas, such as the National Development Vision 2050, Agenda 2063, The Africa We Want, STISA-2034, the Sendai Framework for Disaster Risk Reduction, the

Paris Agreement on Climate Change, and the Addis Ababa Action Agenda on Financing for Development; all emphasize the critical role of STI in achieving sustainable development and fostering inclusive growth.

4. STI play a pivotal role in evidence-based policymaking, offering the foundation for innovative solutions to achieve national development goals. In the context of Tanzania's Development Vision 2050, science is essential for crafting policies and strategies that drive sustainable economic growth, improve public welfare, and elevate the quality of life for all Tanzanians. The Government of Tanzania firmly believes that by harnessing scientific research and technological advancements, the country can realize its long-term aspirations and more effectively address the challenges of development.
5. Notable examples of critical areas of socio-economic development which significantly benefit from Science, Technology and Innovation are.
 - i) **Education and Skills Development:** the integration of digital technologies and e-learning platforms is transforming education, making it more accessible and efficient. Innovations such as online learning, virtual classrooms, and educational apps enable students, even in remote areas, to access high-quality education.
 - ii) **Climate Change & Environmental Sustainability:** Scientific research is vital in addressing climate change and environmental degradation, helping to monitor issues like deforestation, biodiversity loss, and the impacts of climate change on agriculture and water resources. It enables informed decision-making and the development of conservation strategies.

- iii) **Health & Well-being:** Tanzania greatly benefits from ongoing medical research aimed at controlling and combating diseases such as malaria, HIV/AIDS, and tuberculosis, which have historically posed significant public health challenges.
 - iv) **Agriculture & Food Security:** Research institutions, such as the Tanzania Agricultural Research Institute (TARI), play a critical role in enhancing agricultural productivity by developing drought-resistant crops and implementing effective soil fertility management practices.
6. In the realm of **Technology for Economic Growth & Social Inclusion**, STI plays a crucial role in improving access to essential services, enhancing productivity, and driving economic transformation in Tanzania. Notable examples of key technological advancements achieved in the country include:
- i) **Renewable Energy & Clean Technologies:** Tanzania is making significant steps in expanding its renewable energy sector, particularly through solar and hydroelectric energy projects aimed at providing affordable electricity to rural communities. These initiatives are essential for bridging the energy access gap in underserved areas.
 - ii) **Digital Inclusion & ICT:** The rapid growth in mobile phone penetration in Tanzania, with over 50 million subscriptions, has paved the way for the expansion of digital services across various sectors, including finance, education, and healthcare.

- iii) **Smart Agriculture & Precision Farming:** Mobile applications like UjuziKilimo use AI and big data to provide farmers with real-time insights on weather, soil health, and crop performance, enabling informed decision-making.
7. In the realm of **Innovation for Sustainable and Inclusive Growth**, Tanzania is cultivating homegrown innovations that tackle local challenges while creating new economic opportunities. Furthermore, key Innovations Driving Progress include:
- i) **FinTech & Mobile Banking:** Mobile money services such as M-Pesa, Tigo Pesa, and Airtel Money have revolutionized financial inclusion by providing small businesses and rural populations with access to essential banking services.
 - ii) **Startups & Entrepreneurship:** Silicon Dar, Tanzania's emerging tech hub, is fostering local innovations in software development, AI, and IoT applications, positioning the country as a growing player in the tech ecosystem.
 - iii) **Sustainable Manufacturing & Circular Economy:** Local businesses are adopting recycling and eco-friendly packaging solutions, such as converting plastic waste into building materials and furniture. Innovations in sustainable textiles are supporting green manufacturing.
8. For STI to have a **lasting impact on sustainable development**, Tanzania must effectively integrate scientific research and technological advancements into its policy frameworks and development strategies. Key policy actions needed include:

- i) **Investment in Research & Development (R&D):** Increased funding from both the government and the private sector is crucial for advancing scientific research, particularly in key sectors such as agriculture, health, and renewable energy.
- ii) **Strengthening STEM Education (SDG 4):** Encouraging more youth, especially girls, to pursue careers in science, technology, engineering, and mathematics (STEM).
- iii) **Expanding Internet & ICT Infrastructure (SDG 9):** Bridging the digital divide by improving rural internet access and expanding broadband networks.
- iv) **Enhancing Public-Private Partnerships (SDG 17):** Collaborations between universities, startups, and international organizations to drive innovation.

Conclusion: Science, technology, and innovation are key drivers of sustainable and inclusive development in Tanzania. By leveraging scientific research, digital transformation, and local innovations, Tanzania can achieve the SDGs while ensuring that no one is left behind. However, this requires strong policies, investment in education and R&D, and collaboration among stakeholders to create a future that is prosperous, equitable, and sustainable for all Tanzanians.