## MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

## CHIEF GUEST'S ADDRESS

Dr. Beatrice Muganda Inyangala, Ph.D

Principal Secretary, State Department for Higher Education and Research
MINISTRY OF EDUCATION

Good morning and welcome to the MUSTIC2024 Conference, hosted by the Meru University of Science and Technology. It is an immense honour to join you today as the chief guest for this prestigious event. Our theme, "Science in the Service of Climate Action," is not just timely but crucial as we navigate the complexities of our rapidly changing world.

Climate change is undoubtedly one of the most pressing challenges of our time. It transcends borders and disciplines, requiring a united and multi-faceted approach. This conference, with its diverse sub-themes spanning Agriculture, Business, Computing, Education, Engineering, Health, and more, exemplifies the comprehensive effort needed to address climate change.

Here in Kenya, the government is acutely aware of the vital role that research and higher education play in addressing climate change. Our universities and research institutions are at the forefront of developing innovative solutions and fostering the next generation of leaders equipped to tackle these challenges.

Agriculture and Food Sciences are at the forefront of this battle. Sustainable agro-ecological practices are essential for building climate resilience. Our farmers, equipped with scientific knowledge, can turn the tide against the adverse effects of climate change, ensuring food security for future generations. The Ministry of Education, in collaboration with agricultural institutes, is committed to integrating climate-smart agriculture into our curriculum and research initiatives.

In the realm of Business and Economics, sustainable entrepreneurship and carbon credit markets offer innovative strategies for a climate-positive impact. Businesses must evolve, adopting models that not only drive profit but also contribute to the health of our planet. The Kenyan government is actively supporting green business practices through incentives and policy frameworks aimed at promoting sustainable economic growth.

Computing and Informatics technologies provide powerful tools for climate adaptation and resilience. From predictive models to real-time data analysis, these technologies enable us to respond swiftly and effectively to climate-related challenges. Our universities are developing cutting-edge programs to harness these technologies, ensuring our students are at the forefront of digital innovation in climate science.

Education plays a pivotal role in climate change mitigation. Our educational institutions must focus on training individuals with the skills and competencies needed to address climate issues. Social sciences offer insights into behavioural changes necessary for a sustainable future. The Ministry of Education is dedicated to embedding climate education across all levels of learning, ensuring every student understands their role in combating climate change.

In Engineering and Architecture, the development of sustainable infrastructure and sanitation systems is critical. Innovative designs and technologies can create urban environments that are resilient to climate impacts. Our engineering schools are leading research into sustainable construction practices and green technologies, contributing to the development of climate-resilient cities.

Health Sciences highlight the intersection of climate change and public health. Understanding the impact of environmental changes on health allows us to develop responsive strategies that protect and promote community well-being. Kenyan health institutions are conducting vital research on climate-related health risks and developing interventions to safeguard public health.

Pure and Applied Sciences contribute to climate change prediction and the development of nature-based innovations. These scientific endeavours are crucial for managing biological conservation and resource management, ensuring that our natural world can withstand and adapt to climate changes. Our universities are pioneering research in this field, advancing our understanding and capacity to mitigate climate impacts.

Finally, in Nursing, we recognize the significant role that health systems play in mitigating the effects of climate change. Nurses are often on the front lines, addressing health issues exacerbated by environmental changes and advocating for sustainable practices within healthcare. The Ministry of Health, in collaboration with educational institutions, is strengthening nursing programs to include climate health resilience.

As we embark on this journey over the next few days, I encourage you all to engage in meaningful discussions, share your research, and collaborate on innovative solutions. Let us harness the power of science and education to drive climate action and build a resilient future for all.

Thank you, and I wish you a productive and inspiring conference.