High-level roundtable on “Impact of rapid technological change on the achievement of the Sustainable Development Goals”

Statement submitted by

H.E. Mr. Ngaka Ngaka
Minister of Tertiary Education, Research, Science and Technology
Botswana

Monday, 14 May 2018

DISCLAIMER: The views presented here are the contributors’ and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.
THE IMPACT OF RAPID TECHNOLOGICAL CHANGE ON THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS

Excellencies,

Ladies and gentlemen,

From the outset, Chairperson, allow me to congratulate you on your election and also thank the Secretary General of UNCTAD and his staff for the hard work in preparing for this meeting.

It is my pleasure to be here today and present to this important meeting an overview of our experiences with the technological change and our plans towards achievement of the sustainable development goals.

Chairperson,

The subject of rapid technological change and how it impacts the achievement of the sustainable development goals is indeed relevant to us both collectively and as individual countries. Collectively because technology knows no boundaries, but also individually because we need to harness the benefits at country level.

The Government of Botswana highly recognises the role played by Research, Science and Technology and Innovation in spurring economic growth and innovation. The Government has demonstrated this commitment by approving the revised Policy on Research, Science, Technology and Innovation (RSTI) in 2012.
Through the policy, the Government of Botswana intends to transform her economy from being commodity-driven into a knowledge-driven economy, with RSTI playing a major role. The Policy calls for a systemic approach to Research, Science and Technology Innovation with clear vision, programmes, incentives, measures, roles, targets and monitoring indicators. The implementation plan further advocates for the establishment of mechanisms and structures to coordinate linkages across sectors, set priorities and allocate funding for the policy as well as guidelines for specific programmes that can be adopted.

The Policy implementation is ongoing, and requires specific instruments to be put in place in order to achieve its goals. These can be in the form of more specific policies, legislation or mechanisms established to implement specific components of the policy.

Research and Development in Botswana continues to grow, albeit at a slow pace over the years. Some of the greatest impediments to R&D growth include: scarce experienced human resources, low funding of R&D activities, minimal participation of the private sector in R&D activities, fragmented research activities, and minimal meaningful interaction between the industry, institutions of higher learning, research institutions and government just to name a few.

Moreover, in the quest for economic diversification, the Government of Botswana recognises the role of RSTI in economic development and has thus made deliberate efforts to integrate RSTI in all sectors of the economy for maximum impact.

Botswana is endowed with indigenous knowledge, which in essence is an untapped potential wealth that should benefit the growth of the country.
A strategy for research and innovation on indigenous knowledge systems is being drafted. Some Indigenous Knowledge Systems in healing, agriculture, food systems, cosmetics and detergents knowledge areas have potential for beneficiation and economic diversification. We therefore urge this Commission that as we are looking at the application of rapid technologies for sustainable development, we should be mindful of the transformative potential of our indigenous knowledge systems.

Chairperson, as early as 2005 Botswana made efforts to prioritise areas for research and technology development. We have come to the realisation that these priorities need to be further refined in order to focus resources. My country’s goal is to improve the delivery of health, education and agricultural services, enhance accessibility to energy, potable water, information, as well as improve food security.

Let me highlight as examples two (2) of the critical priorities for my country which are the provision of potable water to all, as well as improving energy provision is paramount to my country Botswana, which is vast, drought prone and sparsely populated.

Botswana seeks to improve the availability of cost-effective energy to every citizen. The traditional methodologies of using firewood are no longer sustainable. Similarly, energy and power generation from fossil fuels is destroying our climate, and we have all, in one form or the other, begun to experience the negative impacts. Therefore programmes are already in place, and being planned for us to realise this goal.

Botswana has abundant sunshine of high quality, but our technological development has not yet enabled us to exploit this readily available resource for social betterment.
We have started a project to develop technology to generate solar electricity and feed it into the national grid. Success on this front will be a major breakthrough, as power-generating stations can be established across the country, including in the most remote areas. We also look forward to having rapid technological development improving water availability. With the unrelenting advancement of global warming, in Botswana we experience acute shortage of water even in the cities.

This is due to rainfall patterns that no longer allow us to collect enough water in our dams. Underground water in some places is too salty for both animal and human consumption, or the aquifers are polluted.

You will agree with me that if energy and water are taken care of, almost half of the SDGs will be realized. Rapid technological changes are thus necessary, and where possible leapfrogging should be capitalised. Unfortunately, countries such as Botswana may be at a disadvantage due to inadequate infrastructure and personnel.

It is therefore necessary to have policies and legislation in place, as well as mechanisms established to guide the development of transformative technologies. It is in this light that Botswana has requested for assistance with the review of the research science technology and innovation policy of 2012, so as to cater for the rapid technological changes. At the same time we should develop interventions to reduce or even prevent the negative impacts.

My delegation looks forward to learning from other countries how some of these challenges can be addressed.

I thank you for your attention.