UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD), twenty-first session
Geneva, 14-18 May 2018

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

Statement submitted by

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Monday, 14 May 2018

DRAFT SPEECH

Honorable Federal Minister for Science and Technology

"21ST SESSION OF THE UNITED NATIONS COMMISSION OF SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)"

I am thankful for providing us an opportunity to participate in this very important discussion on scientific and technological cooperation to achieve Sustainable Development Goals (SDGs).

Pakistan's long-term vision and strategy for socio-economic development, named Vision 2025, and the Science, Technology Innovation (STI) Policy-2012 recognizes that investment in human resources and development of S&T infrastructure are critical elements to address the rapid technological change in the world. So, the economic progress today for Pakistan is essentially knowledge-based which requires knowledge workers who can help move the economy from commodity-based to knowledge-intensive products and services. Therefore, the budget for higher education and research has been significantly enhanced to keep these sectors abreast with the defined Sustainable Development Goals (SDGs).

The implementation of SDGs is coinciding with the fourth industrial revolution in which rapidly emerging technologies are presenting both

opportunities and challenges. The rapid technological changes are likely to widen inequalities as knowledge gap between the developed and developing countries.

Those that have and will invest in this sector are likely to be better prepared to meet the fourth wave of the industrial revolution. In so far as lower income countries that have large populations, especially facing youth bulge conditions, lack of employment opportunities or displacement of labour could aggravate poverty leading to marginalization that would create conditions for disparities and conflict; These impacts pose complex challenges for public policy. Integration of SDGs within national plans and devising appropriate strategies and responses to the technological changes is therefore, has become more compound. Pakistan's Vision 2025 provides a suitable framework for meeting the SDGs. However, the ground needs to be prepared to take advantage of the new technologies through education and research and by providing smart employment opportunities.

Goal 6 pertains to Water and Sanitation. These pose huge challenges in so far as developing countries are concerned. Access to clean and safe drinking water is not only a question of Human Right but of immense value in terms of social and economic indicators. Quality of fresh and underground water can be measured and improved through smart technologies such as water testing laboratories,

treatment of waste water, recycling etc. Information of Things smart water metres, sensors can provide continuous monitoring of both quality and quantity) have an important role in the realization of this Goal, Goal 7 talks about affordable and clean energy. With the growing demand of renewable energy hybrid energy system optimization is being mentioned as the solution. In addition to energy efficiency this will also positively impact the environment, Goal 12 talks about Responsible Consumption and Production. The rapid technological developments can become game changer as it would help waste management, ensure sustainable use of natural resources and make production environment friendly. Food processing, biotechnology and food chain working for example can benefit from Artificial Intelligence related technologies. Agriculture practices can be improved that will have a positive bearing on water availability, energy and environment, Goal 15 pertains to Life on Land. Technology is central to tackling with the challenges mentioned under the goal. Protection, restoration and promoting sustainable use of terrestrial ecosystem as well as managing forests, combating desertification, halting reverse land degradation and biodiversity are inextricably linked with Artificial Intelligence and digital technology. For example, use of drones and AI technologies can provide huge dividends in the facilitating the achievement of Goal 15.

Our efforts need to be focused on demand- oriented technologies and their transfer to the end users so that radical changes can be brought about in the welfare of the people. I am certain that fruitful deliberations during this meeting shall be important landmarks on the road to progress and prosperity for the people of our respective countries.

Thank you.