UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD), twenty-second session Geneva, 13-17 May 2019

High-level roundtable on "The impact of rapid technological change on sustainable development"

Statement submitted by

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Tuesday, 14 May 2019

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By Hon. Sujeewa Senasinghe,

Minister of Science, Technology and Research

14 May 2019

The Permanent Mission of Sri Lanka to the United Nations and other International Organizations in Geneva

Ayubowan, Good morning and greetings from Sri Lanka!

Chairperson and other distinguished members,

I am honored and privileged to be speaking to you on behalf of my Country and my ministry.

My Ministry has the mandate to look after Science, Technology, Research, Innovation, as well as Inventions, Standards and Accreditations. Research and Innovation is a priority area for the Ministry and there are 12 Institutions under my Ministry out of which 5 being research institutes. Those research institutions have Fundamental research, Electronics, Electricals, Space Science, Engineering, Biotechnology, Nanotechnology and other industrial related research areas as their focus areas. Moreover, there are other Government Research Institutions under their line ministries operating in Sri Lanka contributing to the research sector of Sri Lanka. There are two institutions that grant funding for most of the Scientific research undertaken in Sri Lanka.

Sri Lanka has understood the importance of Science, Technology and Innovation in ensuring competitiveness and growth. One of the key Policy Initiatives of the current Government is to promote a knowledge economy and hence, development of Science and Technology has become a priority.

Aligning with this objective of the Government, the Ministry of Science, Technology and Research has started several new projects. The Government has also taken several steps in ensuring that innovation led growth gets traction in development decision making.

We are making conscious efforts to ensure that no one is left behind when we embrace new and emerging technologies for development. My ministry's most recent program "<u>Shilpa Sena</u>" has identified as Sri Lanka's Technology Revolution and we are combining emerging technologies, STEM education, Careers and Entrepreneurship. We expect to have this rolling exposition across Sri Lanka as a way of enhancing technology literacy and growth.

The 11 technology themes that we are concentrating on are Nanotechnology, Biotechnology, Neurotechnology, 5G and Internet of Things, Personalised Medicine, Blue-green Technologies, New Energy, Robotics Industrial and Automation, Mechatronics, Artificial Intelligence and Space Technology. We are keen to create ventures in public and private sector partnership and encourage foreign direct investments in these areas. While there is significant human capital in these areas, they do have issues in finding gainful employment.

With the objective of ensuring science literacy diffusion to the grass root levels and technology transfer, we are also taking steps to transform an existing Island-wide network of S&T centers known as **Vidatha Resource Centers** into Technology Transfer Offices with connectivity to research and development institutions.

Another interesting development, which I want to place on record, is the redefining of all SDG's in terms of STI interventions (Science Technology and Innovations). The idea behind this is that, with ST&I interventions, SDG goals are much more realisable than otherwise. We also wish to utilize virtual institutes and connectivity to levelize inequalities.

The concept of Blue-green economy, which is also outlined in "Shilpa Sena" is a major attempt to benefit from Ocean resources and transformative use of Green technologies. This would see the use of available natural resources but with enhanced scientific knowledge. We also wish to utilize Sri Lanka's rich heritage of indigenous knowledge.

Let me provide few examples of the use of new technologies we have prioritized. We are already owners of a state-of-the-art **nanotechnology laboratory** which was launched in 2013. Currently the laboratories are being expanded due to the demand for the research they undertake. They have a Technology Incubation Center and a hi-tech Green House in their premises.

The Private sector has already taken the initiative to start their production plants near this facility so that they can-do high-end research with the center.

One of the directives given to the Sri Lanka nanotechnology institute by the Government is to research on the Natural Minerals of Sri Lanka. They have already started working on Ilmenite, Graphite, Rutile and other mineral sands. They report that they have achieved immense success from the research undertaken and will be demonstrating their achievements in near future.

In addition, we are planning to house another hi-tech **<u>Biotechnology</u>** <u>**Laboratory**</u> complex where the industry can carry out their research work. Simultaneously, a Biotechnology innovation park in the pipeline, will also be established for the Industry partners. It is envisaged that the international partners will bring their industry to Sri Lanka.

To attract students towards science and to promote awareness on science we are planning to build a <u>Science Center</u> which is long overdue in Sri Lanka. We would like to request the member countries with similar experience and best practices to help us through advice, information and modes of operations that you apply in your successful endeavours.

As the world turns to harness renewable energy sources, we are trying to educate people on **Solar Energy** and to train a young group to manufacture

solar cells in one of our major projects, while planning to provide long term loan facility to technology manufacturers and inventors to test, standardize and market their products.

In order to ensure the country headed in the right direction in research, the Ministry had already prepared a "<u>National Research and Development</u> <u>Framework</u>". This framework identified 10 priority areas of Research and 10 interventions. The Framework was accepted by the Sri Lankan Scientists, Funding Agencies and the Treasury. No research will be funded through the Government funding if its not mentioned in the Framework.

Last year my Government has agreed and accepted a "<u>National Export</u> <u>Strategy</u>". This Strategy identified all stakeholders that contribute to the Export market and obtained a consensus for an action plan. My Ministry and the Science, Technology and innovation sector has a major role to play in assisting high-end value addition to our exports and finding niche markets for our unique exports.

Sri Lanka had made a huge step forward by launching a <u>nano satellite</u> which is now in the International Space Station awaiting launching to orbit. This is the first nano-satellite developed by Sri Lankan Scientists. The Arthur C Clarke Institute for Modern Technologies is now in the process of preparing a **Road Map for the Sri Lankan Satellite program** which will become a reality in the near future. With the launching of the nano-satellite, Sri Lanka has entered the space era. This is significant to us as entering the space era and being able to develop even a nano satellite has given immense encouragement and hope to the Sri Lankan Scientists to move the extra mile that is needed for this sector to shine.

In a way Sri Lanka is still on its way to reap the benefits of this sector for economic development of the Country. However, with the positive initiatives taken by my Ministry which is backed by the government policies, I believe we are in the correct path. The efforts of our scientists will give necessary impetus to drive Sri Lanka towards sustainable development.

On that note I would like to conclude this speech. My gratitude for giving me this chance to speak on behalf of my country.

Thank you.