## SOUTH AFRICA STATEMENT Review of Goals Thematic review SDG 17 Advancing science technology and innovation for SDGs Thursday 13 July 2017 4:30 PM - 6:00 PM

South Africa is making progress on implementing of the SDGs currently reviewed.

Working with the support of the National Advisory Council on Innovation, South Africa has concluded a review of our implementation of the 1996 White Paper on Science, Technology and Innovation, confirming commendable progress. This is assisting us in drafting the new white paper to guide the national innovation system over the next twenty years and this will include the implementation of the 2030 Agenda.

The new white paper will take into consideration the merging technological advancements before us, including big data, the Internet of Things, artificial intelligence, and genome mapping. All these are part of the fourth industrial revolution that the global community is intently focused upon. Therefore, we also do not want to be left behind.

Our Government has set a target of raising gross expenditure on research and development to 1, 5% of gross domestic product by 2019, from the level of 0, and 75% by end of 2015. South Africa's National Development Plan (NDP) recognizes the crucial importance of science, technology and innovation in accelerating South Africa's socio-economic development.

We cannot overemaphasise the importance of science policy interface, science policy advice, the role of social scientists and communities, investment in R&D and the role of multi stakeholder partnerships and cooperation at a regional level, for the implementation of the SDGs.

South Africa has a National Bio-economy strategy that is focused on three sectors namely agriculture, health and industrial applications and is also closely linked to other policies such as the Industrial Policy Action Plan, the National Development Plan and the New Growth Path.

To fight poverty and unemployment, pilot projects to determine the technical, environmental and financial feasibility of technology solutions in the cultivation of medicinal plants, fish, essential oils and new plant cultivars has been established.

South Africa established research chairs and centres of excellence to deal with issues of poverty and food security. There are currently 22 established research chairs addressing poverty related issues. The goal is to undertake research, capacity building and dissemination activities to promote a sustainable food system that brings about food security for poor, vulnerable and marginal populations.

Food security is high on the country's list of priorities.

South Africa established a Research Chair in Postharvest Technology and has developed a technology that preserves food for a longer period. The research undertaken by this chair combines engineering expertise with in-depth knowledge of agricultural production and post-production practices to develop novel postharvest technologies to maintain quality and safety, and reduce postharvest losses and food waste. South Africa has invested a lot on radio astronomy that will also assist in climate prediction for agricultural purposes.

South Africa is committed to good health and innovation. Our Strategic Health Innovation Platform, housed at the Medical Research Council, is producing excellent work.

South Africa established a state-owned pharmaceutical company, *Ketlaphela*. The company participates in the supply of anti-retroviral drug, ARV's are now procured at lower prices, less stockouts, job creation and development of indigenous skill base. In partnership with UNICEF, and as part of a trans-disciplinary team engaging scientists and social scientists, the first prototype technology, a diagnostic sensor for CD4 counts has been launched.

South Africa is also progressing with the plans for Biovac to become a fully-fledged vaccine manufacturer, with a recent partnership with the US Programme for Allied Technologies for Health (Path) to develop a Group B Streptococcus vaccine.

To ensure that women are not left behind and fully participates on STI, SA has established different initiatives with an aim of increasing and retaining the number of women researchers mainly in science, engineering and technology fields of work. We have a South African Women in Science Awards (WISA), the DST continues to recognize prominent women scientists who highly-achieved through their research and innovation work by awarding them monetary and incentive prizes. The aim of WISA is to reward and profile women scientists, and encourage emerging younger women scientists to propel forward with their research careers.

Furthermore, the DST has established the South African Research Chairs Initiative (SARChI) which aims at strengthening the ability of the country's universities to produce postgraduate students, high-quality research and innovation outputs, and transform the research and scientific workforce through the brain regain strategy. In 2015/16, 42 new research chairs, were awarded to women researchers, and this increased the total number of women research chairs to 76 out of 199, under the SARChI. In the near future, the DST will be increasing the number of women research chairs.

SAs earth systems, marine and polar sciences projects are playing a key role in our Operation Phakisa (results-driven approach, involving setting clear plans and targets, on-going monitoring of progress and making these results public). There are at least eight research chairs in the areas of oceans, fisheries, marine and climate change. At least three Centres of Excellence comprise of programmes that conduct research in oceans, fisheries, marine and climate change.

South Africa is investing in various initiatives intended to build resilient infrastructure, support research and innovation and domestic technology development in an inclusive and sustainable manner. The policy environment has been designed such that it is conducive and advances an inclusive and sustainable system of innovation that also supports sustainable industrialization. The policies that have been introduced have led to the introduction of various programmes intended to support domestic technology development and research and innovation. These programmes include sector innovation funds, R&D tax incentive, youth technology innovation fund, grassroots innovation fund (to advance an inclusive and responsive innovation system) and the broadband policy to universal access to reliable, affordable and secure broadband infrastructure and services and stimulates sustainable uptake and usage of ICTs.

Furthermore, South Africa is implementing a programme intended to advance the integration of innovative technologies in the delivery of basic services in two aspects namely, (i) the deployment of innovative technologies to enable or improve access to basic services and (ii) the provision of decision-support tools to enable and advance evidence-based service delivery decision-making and practice by relevant and mandated service delivery authorities. The decision-support tools include water, sanitation and energy.

The government has set aside funding towards technology development and precommercialization processes through the Technology and Innovation Agency (TIA), funding is allocated for continued support for SMMEs and initiatives such as the Youth Technology Programme, the Technology Platform Programme, the Technology Stations Programme, and the Technology Innovation Programmes.

South Africa established a sovereign innovation fund, which is a priority for public-private funding partnerships aimed at commercializing innovations from the public and the private sector.

South Africa is making an investment in the existing seven sector innovation funds funding directed for agriculture and manufacturing. The Industry is making funding available for these initiatives. Through the initiative the 189 students at honours, master's and doctoral levels, and 11 interns were supported. The programme has also generated 20 innovation products and 19 journal publications.

South Africa has devised complementary initiatives aimed at developing partnerships with industry, known as the Industry Innovation Partnership Programme. The programme is meant to strengthen the strategic role of the CSIR in industrial development and responds very well to the partnerships Goal.

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In terms of partnerships we have relations with the EU, **Trilateral Cooperation with USAID on Indigenous Knowledge Systems (IKS) Standards Development and Capacity Building. It** seeks to build capacity within IKS industries in South Africa and the rest of the Southern Africa Development Community (SADC) region to enable them to develop industry norms and standards and incorporate innovation in the use and application of traditional medicine.

USAID. We are in partnership with The Southern Africa Innovation Support Programme (SAIS) a development partnership between the Government of Finland represented by the Ministry of Foreign Affairs (MFA) and the Governments of Botswana, Namibia, Mozambique and Zambia.

## We are also in partnership with the Japan International Cooperation Agency cooperation on SATREPS: The Production of Biofuels Using Algal Biomass

South Africa is a Partner of the Global Innovation Fund (GIF) to identify, support and scale innovations that will improve the lives of poor people in South Africa (SA) and the continent. At present the partnership will see co-investment to support Mobile Financial Services (MFS) Africa which provides cross-border mobile money wallet integration across Africa by creating a hub model that connects multiple mobile money platform.

We are also part of the STI multi-stakeholder forum in the UN, we have learnt a lot in this forum. We replicating the lessons learnt at a national level with the hope to expanding to the regional level. We however call upon strengthening the continental and regional cooperation towards implementing the SDGs. We will continue working with the UN system and other partners in realizing this agenda.