

Address by Professor Ameenah Gurib-Fakim, former President of Mauritius, on the occasion of the Thabo Mbeki Foundation's 10th International Women's Day Public Dialogue: March 10, 2019 at Turffontein, Johannesburg.

President Thabo Mbeki

Excellencies

Distinguished guests,

Ladies and Gentlemen:

Good morning,

It is a pleasure to be back in South Africa, and a privilege to be addressing this audience.

Every time I visit South Africa, I am reminded of how it occupies a unique position in the African imagination and ethos.

South Africa's political transition – from a reviled apartheid state to a beacon of democracy – is a remarkable story and a continuing source of inspiration for all Africans and the world.

As South Africa's evolution shows, the path to democracy can be rocky but at such times it is reassuring to recall how South Africans have demonstrated that truth and reconciliation can go hand in hand, and how some of the deepest scars of the past can be erased.

Through the generosity of spirit, South Africans have shown how adversity and racial division can be overcome with compassion, determination and empathy allowing for greater fulfilment of the human potential.

The discovery of Homo Naledi in the Rising Star caves – not far from this venue has added a completely new dimension to our understanding of our own origins and evolution while once again underscoring the centrality of South Africa in human affairs. This honour and privilege is enhanced as this lecture is being organized with UNISA, one of Africa's oldest and respected institutions of higher learning.

I would like to thank the Thabo Mbeki Foundation and Mrs. Mbeki for the opportunity to join you all on International Women's Day and to share my reflections on why it is critical to mobilize science and technology and innovation (STI) in addressing the welfare of women, tackling Africa's development deficits and providing opportunities to millions of Africans seeking pathways out of poverty through improved livelihoods and halting environmental degradation on the continent.

Friends: In September 2015, the UN General Assembly declared February 11th as the International Day of Women and Girls in Science, coinciding with the adoption of the Sustainable Development Goals, also known as Agenda 2030.

The SDGs are built on a strong foundation of science, technology and innovation (STI) with a consistent call for gender equality throughout. The standalone goal on gender equality is

bold and clear and should serve as a guidepost in our collective efforts to achieve gender equality in all spheres of human activity and societal advancement.

The SDGs are an opportunity to commit to a new mindset — one that disrupts inertia, questions the status quo and discards old prejudices while introducing new ideas that are big, creative, achievable and sustainable. We note also that the global education gender gap has seen impressive declines around the world: in Sub-Saharan Africa between 2004 and 2014, 94% of the education gender gap was closed.

In my country, Mauritius, a big catalyst for progress was triggered when free education began to be provided in 1976.

Today, we meet at a consequential time in Africa's evolution. Across the spectrum of societal leadership — public, business, academia and civil society — we need to recognize the crucial importance of science, technology and innovation, and commit ourselves to the cause of excellence in science and technology for sustainable development.

Ladies and Gentlemen,

According to the World Bank, economic growth in Sub-Saharan Africa fell to 1.6 per cent in 2016, the lowest level in over two decades.

Fortunately, regional growth is expected to accelerate to 3.4% in 2019, predicated on diminished policy uncertainty and improved investment in large economies together with continued robust growth in non-resource intensive countries.

We know the effects of low growth — development challenges are amplified, education suffers, public investments in health, nutrition, water and sanitation are hit, and poor people get pushed deeper into poverty. Seen against the backdrop of these priorities, we know the STI agenda gets short shrift in policymaking discussions and public investments.

This is where we have to decide and prioritize, keeping in view the overarching goal which is to end poverty and boost shared prosperity. How can this be achieved? There are in my mind three ways.

First, is to grow economies — we need equitable, sustainable economic growth that is inclusive.

Second, we need to foster resilience against climate change, resilience against pandemics, resilience against the adverse economic and social impacts of immigration, and focus on building resilience for individuals, which includes social protection and safety nets.

Third, we need to boost investments in people. We now understand much more clearly that health, food security and education are far more significant for economic growth than we had ever appreciated.

And in the middle of all of this is the issue of technology. What is the role of technology and how it can be marshalled to help us move forward on all three fronts?

Ladies and Gentlemen,

According to the Karolinska Institute, by 2050, the continent's population is projected to double and reach two billion.

Channelling the tremendous reservoir of human capital to productive sectors and sustainable use of natural resources will not only offer unrivalled economic and social opportunities, but also mobilize youth to the urgent task of national and regional development.

This is where tapping Africa's vast human, scientific and innovation potential will require vision, sound policies, and investment, backed by keen implementation capacity.

Africa also needs to promote a culture of innovation to keep her population in good health. We need to bring about Africa's institutional transformation and that culture can only be driven by an empowered African youth.

In the agriculture and food sectors alone and where women play a disproportionately large role, we will need a renaissance in education and training and for marshalling the benefits of innovative science to tackle the problems faced by African farmers.

In the context of the fourth industrial revolution, with rapid growth in artificial intelligence, robotics, nanotechnology, biotechnology, genetic engineering, and big data analytics, it's clear that Africa needs to do more not to be left behind.

Data is the new oil.

Ladies and Gentlemen,

The continent right now has about 14 million students in higher education, or 6.4% of global higher education enrolments. Less than 1/3 are enrolled in science and technology, engineering and mathematics fields. We are literally in a race against time.

Youth are Africa's most important sovereign wealth. Their aspirations for a better life will depend on the actions we take today.

The situation is especially more disadvantaged for girls and women in these fields.

We are all aware that the rate of progress on gender equality and women's empowerment directly impacts progress on all the Sustainable

Development Goals.

Policy makers have long known that there's a leaky pipeline for girls and women as they progress from primary to secondary, university training and eventually in their careers.

Clearly, to move faster and with greater gender equality, Africa must include and provide greater opportunities for women, especially women scientists, and accelerate the enrolment of girls in science, technology, engineering and mathematics.

Based on current trajectories, existing interventions will not suffice to achieve the SDGs by 2030. Take some of the following examples: The first target of SDG 4 is to ensure that by 2030, all girls and boys complete free, equitable and quality primary and secondary education.

They are already growing up in a technology-driven era one dominated by the most dramatic shifts in innovations in science and technology that have ever been witnessed on earth. It is, therefore, our responsibility to prepare them with requisite skills for a future that has already arrived. Ladies and Gentlemen,

Basing ourselves on existing trends, the world will be at least 50 years late in achieving its global education commitments.

We are not faring better with goal 5 for gender parity. It is estimated that it will be 50 years before there is parity in politics at the parliamentary levels and 170 years before women worldwide earn as much as men.

Are we prepared to wait this long? We cannot be apologists for the status quo.

The failure to act can disproportionately affect women. One such example is Energy access that can better illustrate this point:

The second industrial revolution was driven by electricity but for the 1.1 billion people worldwide who still lack access to electricity, it could as well have never happened.

When electricity is available, women-led households have disproportionately low rates of grid connections.

Deployment of innovative decentralized renewable energy technologies and business models at scale could address this failure and enable us to achieve universal energy access by 2030, ahead of existing trends.

Across developing countries, Ladies and Gentlemen, women are typically the primary household energy managers.

Close to their customers, women entrepreneurs have the potential to drive innovative decentralized renewable energy business models. They are uniquely placed to identify women's energy access needs as end-users and entrepreneurs; develop innovative solutions to meet these needs; create distribution and service networks in rural areas; lower customer acquisition and servicing costs, and reduce credit repayment risks.

Increasing representation of women in the renewable energy sector could both make energy innovation work for women and accelerate efforts to SDGs.

Leveraging women as change agents for innovation is one of the most powerful and underleveraged solutions to deliver transformations at scale, break the cycle of negative development trends and achieve the SDGs by 2030.

Ladies and Gentlemen,

Throughout history, S&T has been instrumental in improving the human condition. That role will not diminish. It is our responsibility to wrest this momentum, craft a positive, hopeful narrative and bend it for social purpose.

For Sub-Saharan Africa to catch up, it will have to increase its current 0.41% share of GDP devoted to STI, by a whopping 400%, if it is to catch up with the 1.7% global average.

SSA with 12% of the global population only accounts for less than 1% of the world's research output.

So how we can better support science, technology and innovation in the future. We know that making innovation works for women is key.

Many barriers create and sustain the gender gap in innovation and technology, including under-representation of women as STEM professionals, innovators and entrepreneurs; perceived high risk/low reward profile of investing in innovations for women and girls; limited awareness of the market potential of gender-responsive innovations; lack of dedicated methodologies and tools for gender-responsive innovation; and adverse social norms.

Governments must be a facilitator in the adoption of policies conducive to the development of science, technology and innovations so that those talented young women scientists can be inspired and recognized very early.

African countries must also support better national and regional innovation policies along with the appropriate share of GDP going into science, technology and innovations.

Regional blocks such as SADC, COMESA for example, must promote regional cooperation in science, technology, and innovations, establish more regional centres of excellence and innovation hubs, and facilitate researcher mobility and joint research and development activities across regions.

Africa must not miss out on the opportunities offered by the Fourth Industrial Revolution.

Ladies and Gentlemen,

The African continent has had a record of sustained economic growth that should have been accompanied by a reduction in poverty and inequality, and increased opportunities for shared prosperity. Yet in some parts of the continent this is still not the case. The set of Sustainable Development Goals are the most sweeping, ambitious program ever undertaken by a global organization. We know that STI can help accelerate our journey to achieving the SDGs.

Their very name – sustainable development goals – points to a limitation inherent in them: To reach them we are going to have to use resources that are more carefully deployed than before, in ways that are more effective than ever before. Leadership and stewardship will be key.

I believe now is the time to rededicate ourselves to achieving these goals by 2030. Because sustainable development takes time, we cannot afford to fail yet another generation. Our actions must be guided by the 'fierce urgency of now'.

We cannot abdicate our responsibilities, nor shirk from our commitment to excellence.

As Africans, we also need to become producers and not just consumers of knowledge and we should capitalize on the momentum that is being gained at the global level while recognizing that all actions are local.

Africans must be active and not passive in generating ideas. We must become activists and not pacifists for generating Africa-centric development solutions.

I have painted a broad canvas so to conclude let me take recourse to the writings of Rabindranath Tagore, India's famous literary giant, poet and Nobel laureate who described the quest for a promised land in his magisterial poem "Gitanjali":

Where the mind is held without fear and the head is held high; Where knowledge is free; Where the world has not been broken into fragments by narrow domestic walls; Where words come from the depth of truth;

Where tireless striving stretches its arms toward perfection;

Where the clear stream of reason has not lost its way into the desert sand of dead habit; Where the mind is led ... into ever-widening thought and action into that heaven of freedom ... let my country awake.

With these words, I would like to thank you for the opportunity of sharing my thoughts on why science and technology and innovation matter for securing sustainable development on the African continent that benefits all Africans.

Thank You.