



*Speech by*

*Her Excellency Mrs Ameenah Gurib-Fakim,*

*GCSK, CSK, PhD., DSc*

*President of the Republic*

*on the occasion of the*

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*Sixty Years and Beyond Contributing to Development*

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*Excellencies,*

*Ladies and Gentlemen,*

**It is such a pleasure and a great honour to be here at the IAEA and to address this forum on the occasion of the 60<sup>th</sup> anniversary celebration of this institution.**

**I would like at the outset to extend my sincere and deep appreciation to the Director General of the IAEA, Mr Yukiya Amano for his kind invitation and to the warm hospitality extended to me and to my delegation since our arrival in this magnificent city of Vienna.**

**I would also like to recognize Dr. Shaukat Abdul Razak, scientist, friend and his colleagues for their support.**

*Ladies and Gentlemen,*

**I am aware of the very important work that is being carried out by the IAEA in making peaceful nuclear science and technology available to improve human wellbeing and prosperity.**

**As a scientist, I feel deeply honoured to be part of this meeting today as it marks a very important milestone for the IAEA. We are collectively charting the way forward for mobilizing science, technology and innovation through the use of nuclear technology for sustainable development.**

**The Republic of Mauritius has ratified several of IAEA conventions and our scientists and engineers have benefited directly, since 1974, from several technical programs in the fields of human health, agriculture, food security, energy, waste management and water resources. A total of over 500 Mauritian scientists and fellows have benefitted from capacity building with a peak in the field of food and agriculture.**

**Among our other priorities are nuclear medicine services for cancer treatment, the monitoring of coal ash disposal and landfill solid waste disposal on ground water as well as air quality using nuclear techniques and nuclear related techniques. We have also sustained the suppression of the Dengue fever, Zika as well as Chikungunya vectors (*Aedes albopictus*) in many areas around the country and we are consolidating capacity building on the risk factors for non-communicable diseases using stable isotope techniques.**

**STI including nuclear technologies are helping countries reduce poverty and hunger, improve energy supply, treat diseases and respond to climate change – and much more. The best-known peaceful application of nuclear technology remains nuclear power, which through strengthened safety, can be a valuable source of energy and help mitigate the impact of climate change.**

**Unfortunately, many developing countries including those on the continent still lack the scientific capacity to enjoy the fruits that these technologies bring. Yet, to alleviate poverty and reduce income inequalities, Africa needs to move to high-productive sectors for industrial upgrading and technological innovation.**

**In September 2015, as part of its agenda for the next 15 years, the UN has adopted a set of sustainable goals. They are the most sweeping, ambitious program ever undertaken by a global organization but the main challenge will be in transforming them into actions that will touch the lives of those who need them most – the poorest on the continent.**

**It is perhaps the first time that world leaders recognized the importance of science and technology for development.**

**STI will continue to contribute to increased agricultural productivity, competitiveness and sustainability as well as food and nutritional security. STI will increase job creation in a context of skill deficits and where 370 million young people are expected to enter the job market within the next 15 years.**

**Recognizing the critical role that the IAEA has been playing, several LDC countries are joining the organization and 26 of 35 LDC's member states of the IAEA are from Africa.**

*Excellencies,*

*Ladies and Gentlemen,*

**STI are important levers of economic growth and job creation for our youth. I am therefore committed to using my pulpit to advocate for greater investment and for mobilizing stronger support for R&D. I remain convinced that the social and economic transformation of the continent will only happen when Africans are healthy and are fully equipped with the right skills, knowledge and competencies that will enable them to formulate and implement African solutions to Africa's challenge.**

**It is a fact that higher education in SSA must have a larger focus on STEM as the latter must be placed at the front and centre of our development effort. And with good reason.**

**Agriculture is another area that should remain at the heart of the technological transformation of Africa as the continent is home to over half of the world's total arable land, some 500 million acres. In the absence of a flourishing agricultural sector, the majority of Africans will be excluded from the rising tide of prosperity.**

**In this sector, Mauritius benefits from IAEA technical cooperation and has focused on the setting up of an African training hub against fruit flies, which cause major economic losses to farmers.**

**As a member state to AFRA (Africa Regional Cooperative Agreement for Research, Development and Training to Nuclear Science and Technology) since 1990, Mauritius has, under the AFRA, acquired significant expertise in the field of sterile insect techniques, nuclear medicine and mutation breeding for improved crops.**

**Annually, scientists from many African countries are trained in Mauritius. Insects are mass-reared in special facilities, irradiated and released in the field at weekly intervals, with the ultimate goal of significantly reducing their population and at the same time saving farmers millions of euros worth of damaged crops.**

**Advanced technology, including biotechnology increases yields, prevent damage from insects and pests and transform our agricultural products. Nuclear techniques can complement these efforts as they have already been used to produce new varieties of rice for example and that can thrive in difficult conditions.**

**This infrastructure also supports the control of mosquitoes, vector of transmission of the Zika virus, Chikungunya and the Dengue fever.**

**Soil erosion, environmental pollution tracking, water supplies management as well as irradiation of medical devices are all applications of nuclear techniques that we often take for granted.**

**Therefore boosting investments in Science, Technology and Innovation is no longer an option. It is only through science and its corollary, research and development, that we will be able to nurture the vast African human capital and create a pool of scientists well-equipped to take on the multi-faceted challenges that continue to beset our Continent.**

**I remain confident that in our partnership with the IAEA and through the peaceful applications of nuclear science and technology, we should be able to achieving 13 of the 17 goals and include poverty, hunger, human health, clean water, affordable and clean energy as well as climate change.**

**However, excellent science comes with a price tag. This is where the amount and scale of investment matter. International consortia, interdisciplinary partnership as well collaboration with the private sector will empower Africa to take advantage of her strengths and unfolding opportunities.**

**We remain hopeful that strategies for achieving sustainable development will increasingly be linked to the CPA and dovetail with the 2063 agenda of the African Union.**

**Regional and local partnerships will help institutions pool their limited resources and achieve economies of scale, allowing them to join laboratories, set common standards for R & D and, more importantly, share knowledge and expertise.**

**We must be mindful however that our reflections must increasingly focus on the inter-linkages between technology and the economy as Innovation pushes ahead at warp speed.**

**The emergence of countries like India, Brazil, China is going to further enhance South-South collaboration and partnership.**

**This South-South learning and sharing initiative is, I am sure, going to be a rich source of knowledge and will help build the scientific capabilities in African institutions, which in turn depends on the quality of our higher education.**



**While collaboration will inevitably help improve the quality, relevance and depth of scientific education, there is no doubt that the finality of this effort will be judged on their contribution to the economic transformation through increasing linkage with the private sector.**

**Last but not least, the issue of equal access cannot be overlooked any more. This brings me to a topic that is close to my heart: Women. Women are dramatically under-represented in most Science and Technology-related courses and professions. By some estimates, the economic loss in developing countries from the education gap between girls and boys could be as high as \$90 billion a year—almost as much as the infrastructure gap for the whole of Sub-Saharan Africa.**

**The bottom line is clear: invest in women. It has a great rate of return—economically and socially for the future. It is also the smart thing to do.**

**So in conclusion, I will cite the President of MIT who rightly said and I quote:**

***“To reverse the trend, and to compete in an intensely globalized world, we need to take a big leap forward, fueled by innovation — and we need an innovation system that can deliver new manufacturing technologies and processes to get us there.”*** (Unquote)

**I remain confident that the IAEA will continue to help us on the African continent, mobilize cutting edge knowledge and forge partnership anchored in the common good for the benefit of all and more importantly help us become the voice of change.**

**I thank you for your attention.**