

**1st Africa STI Ministerial Conference
Nairobi, Kenya, April 1-3, 2012**

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April 1st, 2012

On behalf of ADEA I am delighted for both professional and personal reasons to have this opportunity to make brief remarks at this Forum on Science, Technology and Innovation. This is a subject very close to my heart, having started my career as a physical chemistry teacher at universities in Ireland and Zambia. Also in my former incarnation as SM at the World Bank I am proud to have supported a number of successful HE, Science and Technology projects in a number of African countries including one with my colleague, Dr. Lidia Brito of UNESCO, when she was the Minister Higher Education in Mozambique.

It is indeed sad to note that decades after independence Africa continues to be marginalized with regard to its contribution to and benefits from global trade. According to the AfDB, Africa contributes a mere 3% to global trade. Our countries are predominantly producers of raw materials; oil, agriculture and mineral commodities. In Africa, the private sector, a key driver of economic activity and trade, remains relatively small with the exception of SA. Although this is improving Africa attracts only 2.2 % of FDI compared to 17.2% for Asia (UNCTAD, 2007).

40% of Africa's working population is made up of youth, but 60% of these are under-employed, unemployed or unemployable. This state of affairs is partly attributable to the horrendous mismatch between our education and training systems and the world of work. None of us should have any illusions that this massive youth unemployment is a time bomb waiting to explode. Idle youths are also fertile ground for renegades like Kony in Uganda.

The exponential expansion has regrettably been traded off for quality and relevancy. At the school level, the teaching and learning of math, science and language -- the foundations of critical thinking, problem solving and communication skills -- is often very poor.

At tertiary level expansion in enrollments has generally been in liberal arts as opposed to the scientific, engineering and technological disciplines. In contrast over 50% of students in Asian tertiary education are enrolled in scientific disciplines. While the global trend is to invest heavily in STI Africa spends less than 0.9% of its GDP on R and D. Since the Nobel prizes for Chemistry, Physics and Medicine/Physiology were instituted in 1901 there have only been four African Lauretes, three South Africans and one Egyptian. This is hardly surprising, given that only a handful of countries have honored the commitment to allocate 1% of budgets to scientific research. As a consequence, Africa's share of research output in publications is a mere 1.6%.

Some of these developmental challenges confronting the continent took center stage during ADEA's Triennale launched in Ouagadougou, Burkina Faso, last February. The Conference also recognized that Africa has certain comparative advantage on which it could rely to claim the 21st century for its people. Africa is the most youthful continent on earth; it has 60% of world's unutilized agricultural land, abundant mineral resources, is rich in biodiversity and rich in indigenous knowledge, values and culture.

The meeting recommended a fundamental paradigm shift in education and training to engender sustainable development. Absent of such a radical approach it was deemed unlikely that Africa can produce the highly qualified and competent human resources needed to generate knowledge and innovations. The meeting benefited from a delegation of over 60 South Korean experts who devoted a whole day to show how a poor country with no natural resources had used education and training, science, technology and innovation to propel it to one of the ten most advanced economies in the world within the space of 40 years. As the Koreans constantly reminded us most countries in Africa are in fact starting from a stronger base than they did in the early 1960s.

Similarly, the rise of Singapore from a dirty mosquito infested swamp to one of the most developed economies in the world serves to illustrate that what is needed if Africa is to leap frog and catch up with the developed countries. Visionary leadership, sound policies underpinned by solid evidence, sheer hard work and the right values can overcome any adversity. If we are serious about development we need to answer some tough questions. Do our leaders have a vision? Are African countries pursuing the right developmental policies? Are our priorities right? Are we putting our money where our mouths are?

In the last decade there have been at least 5 Ministerial Conferences on STI with lofty resolutions. It is my sincere hope that this meeting will not suffer the same fate as its predecessors. The takeaway here is that it is time that we, Africans, need to move away from lofty conference resolutions to implementation, implementation, implementation.