



THE REPUBLIC OF UGANDA

**MINISTRY OF EDUCATION AND SPORTS**

**REMARKS BY**

**HON. GABRIEL OPIO  
MINISTER OF STATE FOR HIGHER EDUCATION**

**AT THE**

**OPENING OF PRE-CHOGM SYMPOSIUM  
ON SCIENCE AND TECHNOLOGY**

**HELD AT**

**MBARARA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY**

**14<sup>TH</sup> SEPTEMBER, 2007**

**SPEECH BY HON. GABRIEL OPIO, MINISTER OF STATE FOR  
HIGHER EDUCATION AT THE OPENING OF PRE-CHOGM  
SYMPOSIUM ON SCIENCE AND TECHNOLOGY, MBARARA  
UNIVERSITY OF SCIENCE AND TECHNOLOGY, 14<sup>TH</sup>  
SEPTEMBER 2007**

Honourable Ministers;

Honourable Members of Parliament;

Director of the Commonwealth Foundation;

Director of the British Council in Kampala;

Executive Secretary of the Uganda National Council of Science  
and Technology;

Representative of the Royal Society of Chemistry;

Science and Technology Advisor to the Association of Commonwealth

Vice Chancellors;

Chairman of the Symposium Organising Committee;

Distinguished participants;

Ladies and Gentlemen.

It gives me great honour to officiate at the opening of the pre-CHOGM symposium on Science and Technology. I am told this also marks the opening event of Uganda's first National Science Week.

**The symposium.**

I am happy to note that this symposium is not an academic conference for the presentation of scientific research results. The

theme of this year's Commonwealth Heads' of Government Meeting is **'Transforming Commonwealth Societies to achieve political, economic and human development'**.

Drawing from the CHOGM theme, this symposium provides a forum for discussion and debate between the broad array of stakeholders in the Science and Technology field, on the ways in which science and technology can and does transform societies and deliver on the development agenda. It places particular emphasis on the need for greater engagement between institutions of higher education and local industry to better address the needs of the market. The disarticulation between the needs of society on the one hand, and the provision of knowledge and skilled human resources on the other hand, must be addressed.

You should therefore come up with a strong and clear message about the centrality of science and technology to society and to development, to be delivered to the Commonwealth Heads of Governments and to urge continued investment and reform.

This symposium is therefore an important event for Uganda and the sub-region within the framework of a series of significant workshops

and meetings, which are being held under the auspices of the Commonwealth Peoples' Forum in the run-up to this year's CHOGM in November 2007. At the same time, the symposium represents the launch of the first ever Ugandan National Science Week, spearheaded by the Uganda Council for Science and Technology, under the sponsorship of the World Bank's Millennium Science Initiative. The importance of science and technology for socio-economic transformation of any country cannot therefore be over emphasised.

A nation's ability to address its challenges, to solve its problems, and to initiate and sustain economic growth, thereby transforming society, depends in no small measure on its indigenous capabilities in science, technology, and innovation. Scientific and technical capabilities determine the ability to provide clean water, good health care, adequate infrastructure, safe food, and to find solutions to the new challenges of urbanization and climate change. They reduce poverty by contributing to economic development and job creation, they improve nutrition through increased agricultural productivity, and they reduce disease by developing vaccines<sup>1</sup>.

Capacity in science, technology and innovation is therefore fundamental in successfully addressing the challenges of the

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<sup>1</sup> Juma, C., and Yee-Cheong, L. (2005). Innovation: applying knowledge in development. UN Millennium Project, Task Force on Science Technology and Innovation. EarthScan.

Millennium Development Goals. The eight goals, which have the political backing of all United Nations member states, have become the international standard of reference for measuring and tracking improvements in the human condition in developing countries.

Scientific skills and knowledge enable countries to find their own solutions to their own problems, and bring about step-changes in areas from health, water supply, sanitation and energy to the new challenges of urbanization and climate change.

Implementing and monitoring the Millennium Development Goals will require greater science and technology capacity in Africa. Improved food security requires more and better agricultural research; science education requires better-trained teachers; the development of alternative energy sources and better land-use systems requires trained environmental scientists. Improvements in immunizations and nutrition and addressing issues like malaria, TB and HIV/AIDS, requires both more and better-trained health workers and a functioning health infrastructure.

Universities and institutions of higher and further education are central to the processes of the generation, dissemination and transfer of scientific knowledge, and the provision of skilled human resources

to promote science, technology and innovation. For this reason universities are central to a nation's development.

Institutions of higher education have a duty to address the social and economic needs of the community in which they are located, while recognising that in order to remain competitive they must operate in the global knowledge economy.

Universities must listen to the needs of the market and respond by generating locally relevant knowledge and technologies. They must work closely with industry and the private sectors to encourage innovation, to boost trade, and stimulate the economy.

Universities are therefore increasingly coming to be seen as key components of societal transformation and of Africa's renaissance. Yet the tertiary education system is in a state of crisis. The emphasis in Africa in recent years has rightly been on the need for primary education. Yet, an unfortunate side effect of this has been the neglect of secondary and tertiary education from which we produce the doctors, engineers, nurses, teachers, research scientists, police officers, lawyers and government workers of tomorrow. Africa's universities ought to be the breeding ground for the skilled

individuals whom the continent needs. There is a particular shortage in the science skills that are fundamental to addressing Africa's problems<sup>2</sup>.

Specific action for strengthening science, engineering and technology capacity is an imperative for Africa. Putting the necessary infrastructure in place requires resources, and those resources cannot be made available without substantial and sustained economic growth. Economic growth in turn won't happen without unleashing the energy and dynamism of the private sector; and neither local nor foreign investors will be attracted to invest without transparent and accountable systems.

The international community is helping in the delivery of the development agenda through mobilizing resources, and through ~~the~~ ~~the~~ 'north-south' partnerships. But we ourselves must also be proactive and continue the reform of higher education through the modernisation of curricula; through building south-south partnerships between institutions of higher education, between the public and private sectors, with civil society and with industry; through recruiting diverse and entrepreneurial individuals, we must promote investment in knowledge generation and innovation, and in realising peoples'

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<sup>2</sup> Report of the Commission for Africa, *Our Common Interest*, 2005.

potential to build capacity and thereby address social and economic challenges that have the potential to transform society.

### **The political will: What has the government done?**

The government is implementing UPE and USE and equipping laboratories, libraries and other facilities for teaching science. The overall student enrolment in science and technology-related disciplines increased from 19,042 (17.9%) in 2004 to 28,852 (23.3%) in 2005. In universities the number of students taking science and technology rose from 9,771 (15.3%) in 2004 to 15,527 (20%) in 2005. This increased student enrolment in science and technology is partly a response to the Ministry of Education's affirmative funding policy, and partly due to students' growing realisation that science and technology disciplines offer more career choices and prospects especially in the growing ICT sub-sector. A country needs a minimum of 40-50% registration in relevant areas of science and technology and a gross enrolment ratio of at least 40% in order to economically take off and participate in the global knowledge based economy.

Government intervention of sponsoring students studying subjects key to economic development has contributed to this minimal positive

development. Government will continue with the affirmative policy for science and technology until the two areas balance at 50% each.

Government will invest more in science and technology by promoting public-private sector partnership and incentives through universities to work with the private sector.

The government has created a positive political climate, enabling environment for Science and technology by encouraging innovations such as Presidential innovation award, Promotion of quality and rewarding excellence, Strengthening the capacity of the Uganda Council for Science and Technology, via the World Bank's Millennium Science Initiative are but a few examples of government commitment to promote science and technology.

### **Conclusions:**

In conclusion, I want to thank the organizers of this symposium, and in particular Mbarara University of Science and Technology, our hosts, the Ugandan National Council for Science and Technology, The

UK's Government Office of Science and Innovation, The Commonwealth Foundation, The British Council in Kampala, the UK's Royal Society of Chemistry and the Association of Commonwealth Universities. We thank all of these organisations and recognize the contributions they are making to the promotion of science and technology in Uganda and in the region.

**Official opening:**

It is now my pleasure and honour to formally declare the pre-CHOGM Science and Technology symposium, and Uganda's first National Science Week, open.

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**FOR GOD AND MY COUNTRY**

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**Ministry of Education and Sports  
Embassy House  
KAMPALA, UGANDA**

**14<sup>TH</sup> September 2007**