



Joint science academies' statement: Science and technology for African development

◆◆◆ *Science, technology and innovation are familiar issues to the G8. In 2000 in Okinawa, G8 leaders established a task force to address the global digital divide, and at the 2003 summit in Evian, G8 leaders endorsed an action plan for science and technology in sustainable development. There is a clear continuing need for these important initiatives.*

We would like to stress, more generally, the fundamental importance of science, technology and innovation in tackling a wide range of problems facing Africa and other developing regions. The goal of securing a sustained improvement in the living standards of nations is highly complex and should be informed by scientists along with economists, social scientists and other experts in the field of development. At the heart of this endeavour, alongside issues of governance, security and trade, lies the capacity of nations to engage with global science and technology.

We, the national science academies of the G8 nations and the Network of African Science Academies, therefore call on world leaders, including those meeting at the Gleneagles G8 Summit in July 2005, to implement the following recommendations without delay. For our part, we also commit ourselves to working with appropriate partners towards these urgent goals.

- Recognise that science, technology and innovation underpin success and sustainability in all aspects of international development in Africa, including poverty alleviation and economic growth as well as in areas such as health and agriculture.

African countries must be able to develop, adapt and exploit scientific and technological solutions appropriate to their specific needs, otherwise they risk becoming ever more dependent on advice and assistance from the developed world.

- Recognise that investment in a country's own science capabilities, along with development of merit-based processes and institutions, are essential to the successful use of science, technology and innovation in Africa, and are fundamental to sound policy-making, good governance and industrial development.

African countries need to have in place appropriate mechanisms and infrastructure for training and exploitation of knowledge. This will enable them to make meaningful evidence-based policy, in order adequately to address local needs and participate in the international community on science and technology issues.

- Recognise that for innovation, growth and policy-making in Africa, it is fundamental to promote and develop an environment that encourages knowledge to be produced, communicated and applied to a nation's needs.

Sustainable national structures and strategies are needed to provide and maintain a source of well-trained, knowledgeable people, requiring attention at all levels of education from primary to tertiary.

- Help revitalise African universities and support the development of centres of excellence in science, engineering and technology, including African institutes of technology.

The Commission for Africa report in March 2005, for example, stressed the need for investment in higher education and centres of excellence, particularly in science and technology.



- Explicitly build development of science, technology and innovation capacity into international assistance programmes, including those for specific development sectors, and ensure that these initiatives are African-led and sensitive to social and cultural diversity.

Isolated investment in science and technology is not enough – capacity development initiatives should be integrated into programmes in specific sectors. A health programme, for example, should also seek to develop local expertise and resource to enable locals to continue to address the issues long after the specific programme has ended.

- Encourage the transfer and sharing of scientific, technological and innovation

excellence between the developed and developing worlds, as well as among developing world nations.

It is critical to ensure appropriate networks are in place to enable all nations to share their experiences and best practice.

- Identify explicit funds for science, technology and innovation capacity building in Africa. Without adequate funding, nothing will change.
- Continue to keep the development of science, technology and innovation capacity on the G8 agenda in forthcoming years.

Regular updates at annual Summits will help to maintain the momentum for change.

Without embedding science, technology and innovation in development we fear that ambitions for Africa will fail.



Network of African Science Academies¹, Africa



Royal Society of Canada, Canada



Académie des Sciences, France



Deutsche Akademie der Naturforscher Leopoldina, Germany



Accademia dei Lincei, Italy



Science Council of Japan, Japan



Russian Academy of Sciences, Russia



Royal Society, United Kingdom



National Academies of Science, United States of America

¹Participating members of the Network of African Science Academies (NASAC) include the African Academy of Sciences, Cameroon Academy of Sciences, Ghana Academy of Arts and Sciences, Kenya National Academy of Sciences, Académie Nationale Malgache, Nigerian Academy of Sciences, Académie des Sciences et Techniques du Sénégal, Uganda National Academy of Sciences, Academy of Science of South Africa.

