

## DINNER/DISCUSSION SUMMARY

### North-South Capacity Building – how can the developed nations support the developing world to build science capacity?

Held at The Royal Society on Wednesday 12<sup>th</sup> May, 2004

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**In the Chair: The Rt Hon the Lord Jenkin of Roding**  
Chairman, The Foundation for Science and Technology

**Speakers: The Rt Hon Hilary Benn MP**  
Secretary of State for International Development, DfID  
**Professor Silas Lwakabamba**  
Rector, Kigali Institute of Science, Technology and Management, Rwanda  
**Sir David King KB ScD FRS**  
Chief Scientific Adviser to the UK Government and Head, Office of Science and Technology, DTI

In his talk the Secretary of State focussed on how the Department for International Development used its budget to reduce world poverty by helping to build science and technology capacity in developing countries. In discussion it was suggested that more could be achieved if, in addition, donor countries used their domestic spending on research and development to help developing countries. Benefits for the third world might be one of the criteria used in judging domestic research projects. In the UK, however, that would mean a change in policy. The Government's mainstream research programme was specifically directed toward the interests of the UK. Many projects were funded overseas, but it was not current policy to have regard to benefits for other countries.

Spending on aid to developing countries posed the problem of who should determine priorities and targets. The aim should be to support leadership and help the recipients help themselves. Donors were bound to have some views on how aid funds should be spent, but if the donors tried to set targets that implied that they knew the answers.

One speaker recalled how Professor Abdus Salam, the founder of the International Centre for Theoretical Physics (ICTP), in Trieste, had explained how it was no use going into "us and them" mode and trying to tell people in developing countries

how to do science. The key was to boost indigenous science and deal with the local culture. Development meant different things in Ruanda, Argentina and Vietnam. The way to help was to get local people to identify the problems and decide what their development path should be, helping to equip them to become independent scientists who didn't just listen but had something to contribute. Another participant stressed the need to combine capacity building in science with the promotion of legal, political and policy capacity, to help governments and other institutions make choices.

Who should developing countries work with? One answer was each other, in "south-south" collaboration. Professor Lwakabamba's Kigali Institute of Science, Technology and Management, for example, worked with many different institutions, some of them in Africa. They nevertheless found that had to go further afield to tap particular expertise, for example getting labour market studies done by German or Indian consultants.

One speaker recalled that the major advance in the prevention of malaria had been the development of mosquito nets impregnated with insecticide. The pioneering work had been done by expatriate experts based in Uganda using intelligence to tackle the problem. It was not realistic, however, to look to the third world to develop a vaccine. In the speaker's view it was not enough

just to educate scientists in developing countries to fix problems for themselves: north and south were in it together.

Co-operation between donors was seen as a major challenge. Traditionally Governments wanted to be able to identify just what they had done to help other countries, but this was not necessarily helpful to the recipients of aid. Dealing with a multiplicity of donors was a real burden for a local administration with limited resources. The donors should work together.

One successful model for north-south collaboration had been developed by the Royal Society with the aim of building links with South Africa following the collapse of apartheid. Five projects in South Africa were funded at relatively modest cost, linked with five project leaders in the UK. Postgraduate students rather than postdoctoral researchers were supported because the latter were in short supply in South Africa. Activity was galvanised in local laboratories and young scientists had their eyes opened to opportunities.

The programme was said not to have led to any brain-drain. There could, however, certainly be conflicts of interest. Scientists from developing countries needed to go to established centres to complete their training, and there was a market for their services in the host countries, yet the home country needed them to go back and make their contribution. The problem did not just concern research: health care in the UK was heavily dependent on doctors and nurses from abroad. There were a number of reasons why individuals chose to work overseas, and they did not only concern money. Skilled people from developing countries would cite such factors as better opportunities for professional development and better scope for making use of their skills in the host country. Doctors might be reluctant to return to practise at home if no medicines were available, and individual choices had to be recognised.

One contributor to the discussion wondered how to keep the focus on developing human capital for the long term and stop politicians being seduced by prestige high-tech projects. When the Kigali institute was being set up it had looked at the needs of communities and concentrated on appropriate technologies to serve them. They used simple engineering, for instance to develop a hammer mill for grinding maize, and promoted a maintenance culture so that machines did not

simply break down and lie idle. This work had proved very popular, and politicians were seeing its usefulness.

Another speaker supported this approach but argued that there was no one solution. Bodies like the Kigali Institute were certainly needed, but the Indian Institutes of Technology were competing at top international level.

Attention was drawn to the last word in the title of Professor Lwakabamba's Institute: management. Science and technology had to be applied in order to add value. Another speaker called for greater priority for the promotion of sexual health in developing countries in view of its influence on population control. Girls who went to school had children later in life and had fewer children, who grew up healthier.

How could the case for science be made, in the face of pressure to use resources to deal with chronic poverty worldwide? There was competition between the claims of basic education and nutrition on the one hand and higher education and science on the other. One answer given was that the return on science was better than any other investment, and even more so in the case of those scientists who applied their minds to the practical problems of developing countries. It was necessary to persuade politicians to focus on the longer term and capture the interest of the public.

Jeff Gill

The Secretary of State's speech and the presentations given by Sir David King and Professor Silas Lwakabamba can be found on the Foundation's web site – [www.foundation.org.uk](http://www.foundation.org.uk).

**DFID Press Release**

[www.dfid.gov.uk/News/PressReleases/files/pr13may\\_rs.html](http://www.dfid.gov.uk/News/PressReleases/files/pr13may_rs.html)

**DFID Consultation Document**

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