

Science and technology for development



The Commonwealth's work in science and technology has focused on a range of initiatives to support sustainable development and the achievement of the Millennium Development Goals.

During the period under review, the Commonwealth Secretariat's Science and Technology Division, serving as the secretariat of the Commonwealth Science Council (CSC), provided services to the CSC's 37 member countries in the following programme areas:

- biodiversity and genetic resources;
- water and mineral resources;
- knowledge networking;
- chemical research and environmental needs;
- public understanding of science, engineering and technology; and
- the Commonwealth Action Programme for the Digital Divide.

Biodiversity and genetic resources

Biological resources are basic and vital natural capital on which most Commonwealth developing countries depend for their survival, cultural development and socio-economic growth. The CSC's activities under this programme have been mostly in technical capacity-building through training workshops, provision of scientific and technical advice and co-operation, and collaboration through related biodiversity and environmental programmes and organisations.

The CSC has worked in the conservation of biodiversity, bio-prospecting, and marketing and benefit-sharing arrangements for biological resources. It organised a multi-stakeholder consultation meeting on these issues in Limbe, Cameroon. Twenty-eight herbalists, scientists and policy-makers from Cameroon, The Gambia, Ghana and Nigeria identified problems that hinder the generation of income from biodiversity and traditional knowledge in their respective countries. The Association of Commonwealth Traditional Medicine Practitioners for West Africa was established under the Limbe Declaration, with national chapters in these four countries. Subsequently a field trip to India to study its traditional medicine sector was arranged for Ghanaian and Nigerian traditional medicine practitioners, in association with the Council of Scientific and Industrial Research, India.

Water and mineral resources

The sustainable development of water and mineral resources is a high priority for many developing countries. Assisting member countries in building their capacity to develop these important natural resources has been a key focus of CSC work. Following a 2000 workshop organised in collaboration with the Brace Centre for Water Resources Management, Canada, CSC has continued its work on implementing water resources management. It has focused on water scarcity and water poverty, on reducing want and eliminating waste. The CSC and an international group of partners have developed the Water Poverty Index, to help policy-makers and planners to tackle and assess the fundamental link between poverty and lack of access to water.

Knowledge networking

The CSC has played an active role in forming networks to share ideas, information and expertise on various areas of scientific knowledge. The networks that it has built include the Commonwealth Knowledge Network; the Caribbean Biodiversity Capacity-Building Network; the Association of Commonwealth Traditional Medicine Practitioners for West Africa; the Global Knowledge Network on Bio-active Natural Substances; the Caribbean Mangrove Network; and the network on arsenic pollution of groundwater in Bangladesh and West Bengal, India, set up in 1998.

Chemical research and environmental needs

This programme to manage environmental pollution in the Commonwealth has included development of a proposal on arsenic pollution; the establishment of the Commonwealth Sri Lanka Centre for Chemical Residue Analysis; and a workshop on the monitoring and analysis of toxic chemicals and biological toxins in food and water.

Above:

A CSC training workshop on building interactive science exhibits in Botswana

Opposite:

Interactive exhibits encourage children to learn more about science and technology

Public understanding of science, engineering and technology

In partnership with Technquest, a British interactive science centre, the CSC has implemented the CommQuest programme to assist member countries in using informal science education to promote public understanding of science, engineering and technology.

Commonwealth Action Programme for the Digital Divide

The Commonwealth Action Programme for the Digital Divide, with funding from the CFTC, was initiated by the Secretariat, through co-ordination meetings with a wide range of partners. The Secretariat subsequently conducted surveys for the establishment of telecentres in two countries, and participated in the Second Meeting of the Preparatory Committee for the World Summit on the Information Society held in Geneva. The Action Programme has enabled the Secretariat to work with other Commonwealth organisations such as the Commonwealth Telecommunications Organisation, the Commonwealth Business Council, the Commonwealth Broadcasting Association, the Commonwealth of Learning, COMNET-IT and others. It also launched the website on Commonwealth digital opportunities (www.commonwealthdigitalopportunities.com).

Innovation and foresighting

A fair was organised in Polokwane, South Africa, in 2002 on grassroots innovation to promote the transformation of inventive ideas into marketable products for the rural sector. A report on the Commonwealth Innovation Network submitted to the CSC at its 2003 meeting in Johannesburg, South Africa, highlighted the Network's primary goal of promoting innovations at the grassroots. In addition, it underlined the benefits of increasing positive interaction between formal and informal science and between developed and developing country scientific work.

Following a foresighting workshop in Pretoria, South Africa, in June 2002, a training manual to train the trainers and country scoping papers for the African and Caribbean regions have been prepared.

Establishment of regional enabling institutions

The CSC has played a catalytic role in the establishment of regional enabling institutions to assist member countries in



addressing specialist issues. These institutions include the Tata Energy Research Institute, Europe; the Sustainable Trade and Innovation Centre; and the four regional centres of the Small Island Water Information Network in the Caribbean (Jamaica), Indian Ocean (Mauritius), Mediterranean (Cyprus) and South Pacific (Fiji Islands). The CSC established the Earthquake Hazard Centre at the Victoria University in Wellington, New Zealand, as the node of the Commonwealth Network for Earthquake Resistant Construction.

Travel grants and fellowships

Capacity-building schemes have included supporting scientists' and technologists' travel to international conferences. Through its dynamic travel grants and fellowships programme, the CSC has encouraged technology transfer, with Commonwealth scientists spending time in scientific institutions in other member countries. In the reporting period, around 120 travel grants and 10 fellowships were awarded each year. The value of a fellowship is £2,000 and a travel grant up to £1,000.

Renewal plan for CSC

At its meeting in Johannesburg in June 2003, the Commonwealth Science Council mandated its executive committee to develop a renewal plan, in response to recommendations of the Commonwealth Intergovernmental Committee to Review the Mandates of Commonwealth Organisations, for consideration by Heads of Government at their 2003 summit in Abuja, Nigeria. It was anticipated that this renewal plan would be considered first by the Executive Committee of the Commonwealth Secretariat's Board of Governors in September 2003, and thereafter by the CHOGM Committee of the Whole in November 2003.