

Committee have concluded an agreement with the Grantham Institute for Climate Change at Imperial College, London, whereby the Institute will support a series of fellows dedicated to working either with the committee or with POST directly. Two Grantham Institute fellows have so far participated; Dr Greg Offer, who worked with the committee, and Alex Dunnett, who worked with POST on Renewable Heating and Cooling.

Special House of Commons Health Committee Fellowship

Lisa Hinton, from the University of Oxford, a fellow supported by Medical Research Council, began working with the House of Commons Health Select Committee on its inquiry on Commissioning.

Conventional Fellows

Richard Gunn, Imperial College London, Engineering & Physical Sciences Research Council Fellowship

Sarah Hards, York University, Economic & Social Research Council Fellowship

Sharon Lin, City University, National Endowment for Science, Technology and the Arts Fellowship

Helen Parker, Cambridge University, Medical Research Council Fellowship

Rebecca Ross, Oxford University, British Ecological Society Fellowship

Interns

Adam Freeman Pask, a Master's degree in Science Communication student at Imperial College London, joined POST for a 3 week internship to work on podcasting.

Alice Blachford, an Oxford University undergraduate, worked during autumn at POST, particularly on preparing material for POST's special post-election publication, Science in the New Parliament.

INTERNATIONAL ACTIVITIES

The main activity during the reporting period was POST's hosting of the 2009 annual conference of the European Parliamentary Technology Assessment network, with a two-day conference in early November, on the theme Images of the Future, held in the Attlee Suite. The conference dinner was sponsored by the Science and Technology Facilities Council and held at the Old Library, Queen Mary, University of London, after a special visit to the newly-opened Centre of the Cell.

The conference was attended, among others, by a record number of parliamentarians from European parliaments (including the overall President of the Catalan Parliament, Spain) and, totally unprecedentedly in its 19 years of occurrence, by the Chairs of both the US House of Representatives' Science and Technology Committee and of the same committee at the Korean Parliament.

Other significant outcomes during the event were the acceptance of membership of the new technology assessment unit of the Swedish Parliament and an approach for associate membership from the Science and Engineering assessment units of the US Government Accountability Office.

In mid-November 2009 the Director was invited by the Science Division of UNESCO to make a keynote presentation at the World Science Forum in Budapest on parliamentary technology assessment.

A remarkable development in the period has been the three requests in as many months that POST has received originating either from the Chinese Embassy in London, or directly from agencies in China, to make presentations on its work to delegations of visiting experts and politicians from across China. These delegations have numbered between 15 and 25. POST has had a steady stream of Chinese missions over the past decade but never of such a size.

POST African Parliaments Programme

Capacity building activities continue in Uganda with the emphasis now being on encouraging activities that can be driven from within the country. POST and INASP supported a workshop on "finding and using scientific and technical information" for parliamentary staff in Kampala in November 2009, organised largely by the staff themselves. This was a follow up to the workshop on information literacy organised by Dr Newman (and part funded by POST) in August 2009.

POST continues to fund the Ugandan National Academy of Sciences to deliver a programme of networking activities between parliament and the scientific community (including MP-scientist pairing).

POST is co-ordinating links with other Westminster-based organisations working with African parliaments, such as the Commonwealth Parliamentary Association, to identify synergies and limit duplication.

WITH SUCH MINERAL WEALTH, WHY IS TANZANIA NOT RICHER?

Martin Caton MP
Vice Chair, All-Party
Parliamentary Group for Earth
Sciences

Dr David Hargreaves (Director, Fairtrade Gemstones) and Liv Carroll (Senior Geologist, Wardell Armstrong) addressed parliamentarians and mining geologists, mining engineers and gemstone mine owners, many

having Tanzanian mining experience, with representatives from the oil, gas, and coal industries and jewellers and gemmologists. The geography and geology of the country were described together with the

political and financial systems, including mineral wealth from gold, nickel, tin, copper, uranium, coal; and gemstones, especially gem quality diamond, ruby, sapphire, emerald, garnet and the blue-coloured tanzanite,



which is only found in Tanzania.

Why is this country, like most African states still so poor, with a long history of failing development, even though it has potential for hard currency exports, initially of high value minerals such as gold and gemstones, followed by exploitation of bulk minerals, including iron ore, coal, copper and nickel, although historical, cultural and political influences are barriers to economic enhancement? Tanzania, a former British colony, is twice the size of Spain, with a population of 40 million growing at 2% per annum with more than 40% under 15 years old. More than 80% of Tanzania's population is rural, with only 4% of the land cultivated. Agriculture is the economic mainstay, providing more than 60% of GDP (GDP per capita is approximately US\$1500) and 80% of employment. The Government aims for a 10% annual contribution from the mining sector to GDP by 2025. Giving up agricultural land and an established way of life for mining is not an acceptable alternative for many.

High value to weight ratio commodities, such as gold and gemstones, are attractive to both

large- and small-scale miners, which is critical in a country with poor infrastructure. Hargreaves mapped the distribution of gemstone occurrences which enable artisanal miners to recover stones that generate portable cash and support for a second tier of traders. Tanzanite was named by Tiffany and Co after the country and the only locality where this gemstone was discovered in 1967 near Mt Kilimanjaro. It is not possible to predict when this will be exhausted, which has increased interest in tanzanite as a finite product. Tanzanite, when found in the rough is brownish, but is transformed with heat treatment to a bright violet-blue. It is a good marketing tool that raises awareness of Tanzania's mineral wealth, though gemmologists claim that in spite of its exceptional colour the gemstone is easily scratched.

TanzaniteOne Ltd operates one of the four sections of the outcrop (Block C, at Merelani 70 km southeast of Arusha) and is in partnership with Tiffany & Co, New York to market the stones and ensure stable prices. Other sections are operated by artisanal miners resulting in a volatile market, with over 30,000 artisanal miners working

the tanzanite mining area in 1989. Over-supply in 1997 was followed in 1998 by heavy rains flooding artisanal shafts and killing hundreds of workers, resulting in extreme shortage in 1998. Prices have remained relatively high since that time, and TanzaniteOne and others have now established a regulated market.

Exploration for gold commenced in central and northern Tanzania in the late 1980s, and accelerated with change in government incentives that were incorporated into the 1998 Mining Code. Annual gold production is around 50 tonnes (1.6 million ounces), with over 65% from just five major gold mines. Artisanal mining of gold is common, with thousands of miners working in the Lake Victoria Goldfields. Dissatisfaction with the exploitation of national resources by the Canadian mining company Barrick at the North Mara mine led to mine invasions and destruction of heavy equipment. This generated criticism of the 1998 Mining Code, especially the 3% royalty which was too generous to the company and should be raised. The World Bank mining review 1990 was the precursor

of the current Tanzania Mining Code. Mining offers a kick start to the economy by inward investment, employment and taxation of the mined product. There are many countries that wish to attract similar investment, and creating a mining code offering a competitive environment for foreign direct investment is of primary importance.

The gemstone tanzanite is a good 'hook' with which to raise awareness of the country and its mineral wealth. Although working in Tanzania is expensive, improved infrastructure (from roads to government administration and taxation) will improve the investment outlook and may attract small to medium size companies that are conspicuously absent today and ultimately improve the wealth of the country.

I thank Cally Oldershaw, Group Administrative Secretary for organising the meeting and preparing this article and Dr David Hargreaves, Liv Carroll and Michael Forrest. See www.esef.org.uk for further information about the All-Party Parliamentary Group for Earth Sciences. The full article can be read on www.scienceinparliament.org.uk

LETTERS TO THE EDITOR

Dear Sir,

British Indian Ocean Territory

Professor Charles Sheppard (*British Indian Ocean Territory* 66/4) makes a strong case for enhancing conservation efforts in the Chagos archipelago which our organisation fully supports. However, Professor Sheppard appears intent on excluding native Chagossians from conservation initiatives by claiming that involving people in husbanding their habitats has been a failure. This fits conveniently with the British Government's refusal to countenance resettlement of the outer islands, but it does not sit comfortably with the overall evidence of the importance of community participation in conserving natural resources.

It is in recognition of her empirical work on the management of common access natural resources (particularly *Governing the Commons*, Cambridge 1990) that Elinor Ostrom has recently been awarded the Nobel Prize in Economics. Her work stresses not only the necessity of active community participation but also describes the cases where management by users has been more effective than government regulation.

On coral marine environments specifically, the United Nations Environment Programme study (*People and Reefs*, 2004) describes a number of case studies in successful community engagement in marine protected areas. Nearer to home, there have been successful community-based habitat regeneration and site preservation activities in Rodrigues Island as well as successful