

bioFocus

Mark Downs reports on Science policy in Government



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Sound science really must underpin public policy. The Government has been quick to reassure on this point but the proof of the pudding is in the eating: their attachment to evidence-based policy has yet to be truly challenged. But the early signs are indeed encouraging. Clear statements on pseudoscience and homoeopathy support the Government's desire for evidence-based policy and the network of Chief Scientists in all Government departments, apart from the Treasury, provides a strong route to embedding science within the policy development process. The Council on Science and Technology, staffed by external experts and chaired by the Chief Scientist, provides an important advisory forum for the Prime Minister. This, together with the increasing willingness to use independent expert advisers in times of crisis, can surely only help to create a more open environment and improve trust.

Civil servants sometimes get bad press. But, like any other professional body, the reality is that there is a range of personalities and capabilities. Those working in science policy are no different, although my own experience is that they are by and large very able and committed public servants. Yet their role is often underestimated. The truth is that officials working in science policy are absolutely critical to the UK science agenda. The roles are often diverse and challenging and the issues dealt with can have major implications for the economy, health care, the environment, food supply and the ethical framework in which we all operate. Ministers and Governments come and go but the "corporate memory" is retained by officials and the advice they offer differs little between Governments of varying hue. It is the use to which the information is put through political imperative which changes.

Against this backdrop, any significant reduction in staffing within central Government would be a real concern. If the numbers of civil servants with science backgrounds or science policy portfolios are significantly or disproportionately reduced, however unintentionally, the ability of Governments to deliver not only on the science agenda but on the broader growth and innovation agenda will be severely restricted. With this in mind, the Society of Biology wrote to the Chief Scientific Adviser and

Head of the Profession in the Civil Service, Sir John Beddington, to ensure senior officials and ministers take account of this as restructuring proceeds. He has committed to ensuring this concern is not lost amongst the rush to change and has positively welcomed continuing dialogue to help inform the policy agenda.

The Fukushima earthquake in Japan with its terrible impact on human life and the environment is sadly one of the first opportunities in 2011 to see how well scientific advice fits into Government. On the surface it appears to have been effective. Despite the rapidly changing and poor information that emerged over the first few hours and days of this tragedy, the advice from Government remained clear and informed by expert opinion. This has not always been the case and a successful response in one area of policy is no guarantee of equal success in another. Reviews of the response to pandemic flu certainly suggest that it could have been improved. It is an unfortunate fact that bad advice takes much longer to dissipate its negative effects, while news stories of positive outcomes are often hardly noticed. The learned societies can surely play a very positive role in ensuring that the Government has access to the best qualified and most reliable experts available in any particular field. But the scientists who help Government must not only have strong scientific credentials, they must have equally strong communication capabilities. They must be able to explain to non-experts the critical issues in a way they understand and feel comfortable acting upon. This may be 'motherhood and apple pie' but it is so easy, and so damaging, to get it wrong. It is critical at a time of emergency but similarly important as part of day-to-day policy development, and indeed the ability to respond to emergencies depends critically upon the pre-existence of networks of trust. There are a lot of 'black swans' issues and events to anticipate and pre-empt.

Critical, high-profile ethical issues such as gene therapy, embryonic stem cells and economic restrictions on the availability of drugs are just a few examples of the medical-based applications of biology where it is essential that officials in Government are able to understand the detail of the science and, together with the experts, communicate effectively to ministers and the media. The same is of course true for food security and production processes, antibiotic resistance, climate change, biodiversity and micro-biodiversity, green technology, waste management or any of a host of issues facing society where biology plays a role, either as a problem or solution. The Society of Biology both independently and through our members is keen to facilitate greater public engagement with all areas of biology and to help facilitate dialogue between policymakers and scientists. During 2011 we will continue to reply to Government and parliamentary consultations; exploring partnering the Cambridge Centre for Science Policy to support exchanges and secondments between policy officials and practising scientists; working with the Royal Society of Chemistry and Institute of Physics to run joint events in Westminster and the devolved administrations, and we are seeking to engage parliamentarians through the party conference process and beyond. The opportunities are endless and this is a modest start. But if we all contribute it is certain that we can make a difference.



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