

In July 2001, over 1500 scientists from over 100 countries met in Amsterdam for a conference that was to draw attention to the reality of global change – the myriad ways in which human actions are transforming the Earth. The declaration that was signed under the auspices of this conference proclaimed, among other things, the need for a new system of global environmental science to address anthropogenic perturbations of the Earth system. It was recognised that this would require integrating “across disciplines, environment and development issues and the natural and social sciences”.

On the back of the conference, the International Council of Science’s (ICSU) four international global-change research programmes set up the Earth System Science Partnership to achieve greater coordination. The partnership heralded a new era of closer collaboration and led to the setting up of four joint projects, such as the Global Carbon Project. In addition, the four programmes routinely hold joint conferences and workshops, and co-sponsor core projects. We have made substantial progress, but after almost a decade since the Amsterdam declaration was signed, our research communities have not fully succeeded in transcending the boundaries of disciplines and organisations.

The value of focused, disciplinary research for understanding the Earth system is beyond dispute. But some research communities resist collaborative efforts to tackle issues that naturally cut across disciplines. Others are hampered by lack of resources and by unwieldy management structures at the international level. The current structure for funding global-change research is not conducive to



integrative research, and at the university level, research still tends to follow departmental lines. The result of all of this is a lack of communication between different disciplines. As Elinor Ostrom says in an interview on page 8, “A major challenge for such programmes is to develop a common language that crosses disciplines.”

IGBP, along with its partner programmes, is keen to collaborate with individuals and organisations to confront this challenge. An important step in this direction on our part is our second synthesis (see back cover of this issue): each of the topics constituting the synthesis requires interaction and knowledge sharing, not only among the different scientific disciplines, but also among scientists, policymakers and other stakeholders around the world. Integrative research and the science-policy interface is also the central theme of a major conference in London to be held in 2012, which will be sponsored by the four global-environmental-change research programmes and their Earth System Science Partnership.

Another way that IGBP is engaging a diverse community of stakeholders is by providing a forum – the *Global Change* magazine – for discussing the issues that cut across disciplinary boundaries. Indeed, the themes addressed in the current issue are as diverse as governance, emissions scenarios and climate scepticism.

Feedback on our December 2009 issue of the magazine has been overwhelmingly positive and has motivated us to keep highlighting themes of interest to a broad readership involved in global-change research. We hope that you find this issue interesting and informative. ■

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