

## Plenary closure Midterm Assessment 2012 – Panel discussion

### Preview of End Results: Reflections from an international perspective

At the Midterm Assessment 2012 research leaders, international reviewers, researchers and PhD's from the Knowledge for Climate community discussed the work so far in three rounds of parallel sessions. The Assessment focused on informing the scientific community and relevant stakeholders on the current state of the programme and optimizing (end) results based on 'A Preview of End Results'. In particular, the review aimed to provide recommendations for scientific progress, societal relevance, knowledge dissemination and valorisation.

During the plenary closure of the Midterm Assessment, prof. Pier Vellinga asked a number of international scientists to share their impressions of the Knowledge for Climate research, based on their review of the themes and hotspots and their experiences of the day. Some interesting statements and conclusions of the conference were brought before the spotlight by the reviewers:

- Prof. Simin Davoudi, Newcastle University, United Kingdom
  - Prof. Martin Parry, Imperial College London, United Kingdom
  - Prof. Hans von Storch, Institute for Coastal Research, Germany
  - Prof. Zbigniew Kundzewicz, Polish Academy of Sciences, Poland
  - Prof. Colin Green, Middlesex University, United Kingdom
  - Prof. dr. Kristine Kern, University of Potsdam and Leibniz Institute for Regional Development and Structural Planning, Germany
- *Simin Davoudi* stated that the Netherlands is becoming a world leader in climate change adaptation research and in adaptation itself, especially in cities such as Rotterdam. The research programme Knowledge for Climate shows the Dutch government's determination to invest in adaptation knowledge and reinforces the Dutch scientific communities' position in the international debate. Innovation in the programme Knowledge for Climate is shown in the way multi-disciplinary groups come together and the fact that serious attempts are made towards the co-production of knowledge. Co-production of knowledge is difficult and challenges the traditional role of science and knowledge creation. The arena of co-production is best applied in the hotspots where cities are actively engaged and research is actively engaged in the policy concerns of the practitioners. The science-policy interface is challenging because it challenges policy-makers to ask 'the right questions' so that researchers can offer 'the right answers'. Expanding the range of stakeholders to the wider civil society can benefit the programme as these stakeholders will remain, as opposed to the limited policy cycle in governmental bodies. The focus should therefore be on an evidence-informed society instead of evidence-based policy. Moreover, the appointment of knowledge brokers was mentioned to be a good idea for the internationalization and positioning of the programme's created knowledge.
- *Martin Parry* reflected on the programme by stating that the programme aims at a high degree of integration and the fact that it looks at the sectors and hotspots within the country, which can be extremely rewarding. In terms of the contribution to international science, the focus is sensibly on

delivering knowledge for use by Dutch planners, politicians and policy-makers. Questions were raised, however, regarding the implementation of the scientific results and the instigation of an implementation programme that will follow this programme to keep alive useful knowledge. Moreover, concerns regarding the way the programme is set-up were raised. The emphasis on PhD research requires that professors deliver together with their PhD's to counteract the uncertainties of PhD research. Moreover, be clear about what midterm corrections need to be made, embed them into the programme, and think about integration across the consortia.

- *Hans von Storch* lauded the programme for its bundling of different scientific cultures, with different stakeholder perspectives and its experimental approach in delivering regional climate service. However, little cutting edge natural science results are expected of this programme and what is missing is on-going local future change. If the climate continues to change in the way it does now, do we in a couple of hundred years end up where the scenarios are? It is always easy to talk about the future because the future can't be falsified within the next few years. The challenge is to talk about the future as a continuation of the present. Falsification is missing in the current debate. A suggestion of optimization of the process was to mimic the IPCC in making a report on the consensus and dissensus about climate change and climate impact, for the region of the Netherlands.
- *Zbigniew Kundzewicz* reflected on the need for the publication of high-impact papers regarding the innovations of co-creation and co-founding. In terms of improving the applicability of the knowledge created, more than fifty percent of the scientific work has been used in practice. That is a major achievement already, but how will the second tranche of the programme do? The expectation of a vigorous bilateral communication between the consortia and between the consortia and the hotspots has not been met. This link must be strengthened in the coming months. Moreover, theme six is likely to deliver projections quite late in 2013.
- *Colin Green* reflected on the inter- and transdisciplinary way of exerting science and the inherent uncertainty of the future. How to do this kind of research and what are the skills required for this type of work? Uncertainty in climate change and research keeps coming up, but we need to be clear about what it is meant with it. We have to realise that we don't know the future. We need to change our minds towards the impact of uncertainty and we need to realise that uncertainty will always exist. In terms of innovation, we need more successful failures in order to learn from innovations. What is knowledge? Politicians want to make somebody else to make the decisions for them, science is not supposed to do so. There seems to be an assumption that different disciplines are working on different bits of the same jigsaw; are they? We all have different perspectives, so we need to think about how we deal with these uncertainties. Policy-makers want others to make the decision for them. However, policy-makers were elected to make decisions, scientists are there to inform policy-makers, not to make policy decisions.
- *Christine Kern* reflected on the need to integrate mitigation and adaptation. Climate change policy is framed differently in different countries. The Netherlands, for example, focuses on water management and climate adaptation and less on mitigation. But when it comes to policies, we

need both topics to be discussed. Cutting edge research in this research program could be accomplished by focusing more on researching the science/policy interface in a more systematic way.

In summary, recommendations from this international panel for the 'Knowledge for Climate' research programme were to:

- Think about ways to implement the knowledge created after this knowledge programme. An implementation programme should follow this research programme to keep useful knowledge alive.
- Alleviate the inherent weaknesses of PhD research. The heavy focus on PhD driven research in the programme creates weaknesses in the knowledge created and its prospects for implementation.
- Focus on integration of themes in the programme. Especially Theme 6 (Climate Projections) needs to link up strongly. Moreover, results of the programme should be put into practice sooner, do not wait for new KNMI scenario's in 2013.
- Think about the abilities to falsify results or, in other words, how do we make sure or correct for errors? The challenge is to talk about the future as a continuation of the present.
- Create a synthesis and a 'mini IPCC report' (English) about the programme.
- Publish more high impact papers about knowledge co-creation.
- Focus on learning of failures.
- Focus more on the systematic researching of the science-policy interface.