

Symposium Governance of Adaptation

date: 31 October 2014

location: Paushuize, Utrecht

The audience is welcomed by Peter Driessen, scientific director Knowledge for Climate. This meeting is organised to celebrate Heleen Mees' promotion to Dr. She successfully defended her thesis in the morning. There are two guests from abroad, Jörg Knieling and Andrew Jordan, who receive a special welcome.

Climate Adaptation Governance - Reflections from the German KLIMZUG Research Initiative

Jörg Knieling works at the Hafencity University in Hamburg. His department focusses on the built environment. Governance in the climate change arena is a topic that crosses boundaries of sectors, levels and borders. This is one of the aspects that makes the issue complex. The diversity of stakeholders doesn't make it easier. Stakeholders are not used to thinking long term effects and long term planning. So since climate change is far reaching in time, it is difficult to fit in the politicians' minds. Uncertainty about the future changes and impacts is difficult to handle.

Knieling sees governance in climate change adaptation as containing all possible forms of intentional and collective regulation related to climate change adaptation. Governance arrangements can consist of various forms: . Hierarchy – formal, Market – economic, Interaction of actors, Self control.

Klimzug started in 2008 and will end this year. It works in seven model regions. The research is transdisciplinary, geared at achieving transformation and at implementation of ideas by its partners. Goals of KLimzug were to quantify effects of climate change, develop techniques and methods, evaluate costs and effectiveness and to facilitate dialogue. Klimzug made a choice for a network approach: collaboration and joint fact finding. However, in reality transparency is not always as it should be and the influence stakeholders have, is not clearly defined; obligations are missing. Sometimes it was difficult to motivate the actors. There are institutional limits which hamper participation.

Hamburg is protected by a dike system. It is situated 80 km from the North Sea, but through the Elbe Hamburg is heavily influenced by tidal movements and storms. Therefore areas in Hamburg are prone to flooding. Also some villages in the neighbourhood suffer from flooding. Fields of research are: estuary management, urban/regional development and cultural landscapes.

Research questions cover the following themes:

- Formal instruments:
 - o Direct regulations and binding effects, eg. should we allow building at the waterfront, prone to flooding?
 - o How do we get the results of the application of informal instruments in formal legislation?
- Informal instruments:
 - o Long term perspective
 - o Enable participation, eg. workshops are important to get politicians closer to the research process

- But: stakeholders are often not legitimized and their time frame is limited
- How are transformative measures/actions translated in strategic actions?
- Economic instruments:
 - Direct financial support
 - Fees and tradable certificates to change behaviour
- Institutional aspects: responsibilities – who takes the lead?

Knieling summarizes some of the conclusions of Klimzug. When Klimzug started it was dominated by an engineering approach. The programme showed that with other aspects included, solutions can be found that are much cheaper than building only dikes. Climate adaptation requires smart governance. A multi-level perspective and an inter- and trans-disciplinary approach is important in finding adaptation solutions. Also a reflexive and participatory governance arrangement is preferable, especially to draw in politicians. And drawing in politicians is crucial for them to understand that there are many other types of solutions in the adaptation field.

There are still many questions left, such as how to arrive at a different mix of modes of regulation? How to model these forms of government to develop such mix?

Klimzug brought climate adaptation on the political agenda. Politicians' involvement was difficult, but the municipality administration collaborated enthusiastically. There is a lot of awareness now and the topic is included in regional and local plans.

Climate adaptation in the Rotterdam region – a practitioners story

After Jorg Knieling the floor was given to Lissy Nijhuis, policy advisor of the city of Rotterdam. Rotterdam first made an adaptation strategy for the city. Consequently an adaptation strategy was made for the region around Rotterdam, containing 15 communities, 1,2 million people with a safety level of 1/10.000 yrs. The challenges can be summed up as rising sea levels causes problems especially for the un-embanked areas; heat will increase; precipitation changes and drought might occur more often. The ambition to make an adaptation strategy for the region was inspired by the fact that a safe image is crucial for the development of the Rotterdam region and that climate change offers opportunities. "We have got some time, but in 30 years everything might be rebuilt, so use these opportunities now".

Rotterdam felt obliged to help the municipalities to develop the strategy and to share its knowledge with the region. Moreover, joining forces has many advantages, since the local authorities often only have one person dealing with climate change, energy and all environmental issues.

The steps taken to develop a strategy:

- Maps were made; especially the heat maps made a huge impression and therefore the issue got the attention it needed;
- Show examples, eg. green space. Even if the effects of climate change are moderate, green space is always beneficial for the city. Examples: parking garage with water storage on top, canal with side walks which can be flooded in times of extreme precipitation;
- Connect to science;
- Show the front runners.

In the beginning half of the participants didn't show up in workshops, so the organising team emphasised the positive side of adaptation. That helped.

At first the participants wanted one strategy, but since the region is so diverse, a choice was made to

develop building blocks, consisting of practical guidelines and advice, such as connect to other topics, link to existing maintenance cycles, find new partners, take the initiative but avoid to always get the responsibility, cherish the things that go well and focus on robustness and flexibility. And finally: we need delta works, but also small scale solutions, technology and nature based solutions and behavioural changes.

What were the critical success factors in this process? In the first place there has to be one key actor that keeps the process running, but the challenge is to create a collective ownership. Secondly link science to practice. A pitfall here is different time scales by scientists, who need time for their research and practitioners, who want the results straight away. Finally political willingness is important. The bench mark is not London or Hamburg, but your neighbour village; 'if they have a stress test done, we should do it as well'. Competition plays a role: if Amsterdam does something, Rotterdam cannot fall behind.

The Governance of Climate Policy Innovation: The INOGO Network of Excellence

Andrew Jordan from the Tyndall Centre tells the audience something about INOGO, a new programme aimed at getting more innovations out of existing research. That is necessary, because we desperately need innovations on the mitigation and adaptation side if the temperature rises far above the 2°C and that is what Jordan expects.

The science is sufficiently understood, but the sticky point resides in the governance part of mitigation as well as adaptation. The new reality is that it has to come from bottom-up. New governance arrangements are emerging at other levels and scales. There are even transnational examples, spanning different countries and stakeholders. National legislation increases over time as does the number of adaptation strategies. Over a period of 2005 to 2010 the increase of adaptation strategies reached a 635%. We see a more a multi-level and polycentric system of governance.

INOGO wants to make impact here. Locus and focus of the programme:

- Invention of new things: sources of truly novel inventions
- Diffusion of new things: how do inventions become more widely spread? Patterns
- Impactful interventions: *ex post* analysis to evaluate what effects (if any) are generated

This division of innovation leads people to think differently about innovation, they start seeing innovation from different perspectives.

Key questions INOGO wants to study:

Table 1

Three perspectives on innovation (own composition).

Perspective on innovation	Key terms
Invention	Exploration, novelty, experimentation, tinkering, discovery, recombination, new to the world
Diffusion	Learning, transfer, adoption, exploitation, new to a particular jurisdiction or agent
Effects	Impacts, outcomes, substantial or radical change, disruption

A study has been undertaken to measure the impact of mitigation innovations. It is not easy to do such a study, because many measures were taken that were not meant to reduce CO2 emissions as such even if they did have an effect.. For adaptation research on impacts has not yet been done.

INOGOV will run from 2014 to 2018 and has a total budget of 700.000 euro. Not a huge amount, but no in depth research will be done; it is meant for networking (meetings, fellowships, summer schools, dissemination) and getting more out of existing research. The main goal is to explore Europe's potential for innovation in the climate governance domain. This implies a need to explore the scope for states, working together with non-state actors, to stimulate and steer social action through engaging in innovative forms of policy.

Activities each year will change depending on changes in science and politics. Hopefully in the end INOGOV can feed into the 6-th IPCC report chapter 15.

Reflections

Katrien Termeer reflects on what has been presented. Her question relating to policy innovations is: what is the idea underlying the diffusion model? This model has been criticized a lot, especially because it seems to contain a sequence: first innovation, then dissemination, then evaluation.

Secondly she refers to the well-known book 'Bringing the state back in'. From the presentations you could conclude that the state is reviving. Also it seems that stories of classical governance science can be applied again or theories on politics and power and strategic planning, or the classical theory of agenda setting. Termeer thinks that we need a mix of classic government theory and more modern governance models to understand the current governance field.

Her last remark is about Jordans' remark on Knowledge for Climate. In the beginning of his talk he referred to it as a programme, at the end as a network. Termeer encourages Knowledge for Climate to continue as a network and as such to join INOGOV.

Dave Huitema is the second to reflect. He finds that the most interesting issue is the relation between policy and science. Do the results come at the right time? This question refers to the mismatch between science and practice. What does this question mean? Will practice now withdraw from working together with science?

Another issue is: how can implementation of adaptation strategies be guaranteed? One of the success factors mentioned by Lissy Nijhuis is luck. How can we study such factors for implementation?

A third issue concerns the difference between transformation and innovation. What is the difference? Do we really need a transformation? Can't we just do it a little bit smarter?

Then Huitema's last remarks:

- Don't call something climate adaptation policy, since it might make it more difficult to mainstream into other policy domains;
- 'take the initiative, but not the responsibility', is what Lissy Nijhuis suggests. We should get deeper into that. Normally, when you take the initiative, you are stuck with the responsibility.

Response

There is time for a short response to the reflections. Andrew Jordan responds to Termeer's remark about the diffusion model. There is a lot of material on diffusion in all kind of sectors, especially in the US. What is missing is research on where innovations come from.

On 'the government is back' Jordan remarks that the state never went away. People nowadays seems to turn away from the state, but in practice the state is there and very important for innovations.

On the issue of 'transformation or innovations' there are different views. Jörg Knieling thinks transformation is needed, eg. in the water domain. Living with water is a transformation in thinking, that is not 'just do it a bit smarter'. Others think that you achieve a lot without changing the infrastructure (transformation) but by adding innovations, eg. in closing water cycles.

Finally there is some dispute on 'taking the initiative, but not the responsibility'. Nijhuis argues that if you take the initiative you use some of your responsibilities, eg. to pick up the phone to organize a meeting. In such meeting you can divide responsibilities over various actors. People are afraid to pick up the phone, because they might get extra responsibilities. Heleen Mees disagrees. She thinks you have to be clear about responsibilities in terms of who does what in order to get adaptation action off the ground. You need to differentiate with different tasks, because the municipality could be responsible for bringing people together and for the facilitation, but not necessarily for the development of the strategy or the implementation of adaptation actions.

The discussion is ended by a closing word from Heleen Mees. After that the drinks are waiting.