THE CHANGING ROLE OF EXPERTS IN NATURE CONSERVATION:

The case of the Drentsche Aa area

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Problem definition

In nature conservation policy in the Netherlands, during the last decade, governance has created the setting for a new role for nature conservation experts in the policy process. For decades before, expert knowledge was used in nature conservation policy as experts were asked by policy makers to give advice on matters on which they were considered to be knowledgeable. Vice versa nature conservation science was also political as it was shaped by political preferences and considerations to protect certain species, certain types of nature. Striking examples, in which ecological expertise has played a very important role in policy, are the programme for nature management with its target packages and the nature target type framework (Turnhout, 2003).

During the last decade, the role of experts seems to have changed. There is now increasing citizen awareness and involvement in most Dutch political issues. Policy makers can no longer ignore the opinions of the people interested in and affected by the implementation of nature policy (Van der Poll & Glasmeier, 1997; Van der Windt et.al, 1997). 'Governance' in the form of a multi level and multi stakeholder negotiation processes is thought to reduce conflict and provide a broad social basis of public support (Aarts, 1998). On the one hand, experts seem to have become now often just another stakeholder among the number of private and public stakeholders that influence the outcome of the policy process (Hisschemöller et al., 2001; Turnhout, 2003). On the other hand, the value of 'scientific' knowledge seems to be put into perspective, firstly, because other types of knowledge, such as local knowledge, are increasingly valued (Engel & Salomon, 1997;) and secondly, because scientists produce contradictory knowledge about specific issues (Vermunt et al., 2003).

Several authors (Hisschemöller et al., 2001; Turnhout, 2003) show that the role of experts is contingent on the context. This means that the roles of science and expertise can be expected to differ in different governance arrangements. It can be hypothesised that a shift from 'government' to 'governance' may have implications

for the role of experts. It can further be hypothesized that the roles of science and expertise in new governance processes will be different from the roles in the old style, expert-informed policy process.

Given the diversity of governance arrangements, as has been identified in Dutch nature conservation, and the potential implications of these arrangements for the roles of experts and expertise, the following will serve as a central research question:

How can the role of experts and expertise – in Dutch nature conservation – be understood given the diversity of governance arrangements?

- *Which governance arrangements can be distinguished in the past and now?*
- *What is the role of experts and expertise in these different governance arrangements?*
- *Does the perception with regard to who is considered an expert and what is considered expertise differ in these different governance arrangements?*

Theoretical perspective

In this paper takes a social constructivist perspective and uses concepts from Science and Technology Studies, Policy Sciences and Communication Studies.

Governance

Over the past thirty years, nations individually and collectively have created new legal and policy frameworks governing natural resource use and protection as well as conservation of environmental qualities, including biodiversity (Shannon, 2002). These new frameworks have in common a new set of elements that emerged as a new mode of governance, namely multi stakeholder negotiation, inter-sectoral co-ordination, multi level coordination, adaptive and iterative policy making, and accountable expertise (EC White Paper on European Governance: MCPFE Approach to National Forest Programmes in Europe).

Governance has increasingly received attention as a research object from many different disciplines (Van Kersbergen & van Waarden, 2001). The main emphasis in research on governance has been on identifying and describing the shift in policy coordination and the mix of co-ordination types. So far no attention has been paid to the changing role of experts and expertise.

Policy process

With the new modes of governance, the conceptualisation of the policy process has changed as well. Policy models used to comprise a rational procedure by which a problem was put on the agenda, policy was developed, implemented and evalu-

ated. First, the problem was formulated by experts; then, the chosen policy option was implemented in society; a third stage defined the evalution; and so on.

While this can be a useful way of ordering and structuring it ignores the complex and iterative and context dependent nature of policy processes. Instead of consisting out of different phases, the policy process is now thought to consist out of a series of feedback actions or recursive loops[1] that concern both society and experts and not just one or the other (Appelstrand, 2002). With the changed conceptualisation of the policy process, the conceptualisation of the role of experts and expertise in policy making has also changed.

Boundary workers

Traditionally, science and policy were conceptualised as different domains or cultures. This implied that the use of knowledge in policy became a matter of bridging a gap or solving communication problems. The role of experts was formalised in the work of advisors who had a specific (key) position in the political processes. Their advice legitimised policy arguments. Science and technology studies problematised the boundary between science and non science (including policy) and argued that the boundaries of science are not based on any essential criteria but are better understood as the outcomes of strategic negotiations (Gieryn, 1995).

With the new modes of governance, the legitimization of policy arguments has changed. In addition to scientific 'soundness', policy arguments should also be accepted by the stakeholders that are affected by its implementation. Instead of separate processes of production and use, authors have conceptualised this situation as a dynamic science policy interface where stakeholders from different domains are involved in interactive co production processes (Jasanoff, 1990; Hoppe, 2002; Halffman, 2003).

Methodology

This article is a case study (Yin, 1984) of an area that is an example of a situation in which nature conservation experts experienced a shift from 'government' to 'governance'. Based on earlier research, a choice was made to study the changing role of expert in the Drentsche Aa area. The Drentsche Aa is the name of a system of small streams that originate on the plateau's of glacial and eolian sands in the Province of Drenthe, in the North of the Netherlands. Together they constitute one of the last relatively unspoilt river systems on the North German Plain. From a point of view of landscape, natural beauty, and biodiversity, the area is considered unique. The Drentsche Aa has a long history of conflict among the multiple stakeholders in the area. It represents a protected area with a history of competing

[1] E.g. formulation, implementation and evaluation insistently feed back and forth on each other (Deleon, 1999).

claims between multiple stakeholders of which several have been exclused from the decision making process in the past. Now, it is managed by a deliberately constituted platform for resource use negotiation which includes all stakeholders.

At the field level, 20 in depth interviews were carried out with stakeholders directly involved in nature conservation policy process. Semi-structured interviews were held with respondents that had been selected by means of the snowball method. The interviews focussed on the perception of interviewees regarding their view of experts, the type of expertise and professional versus laymen's involvement. Although an interview guide was prepared, the interviews were flexible, following issues that are raised by respondents. In total, 11 interviews were tape-recorded and typed out with the permission of interviewees. The respondents answers were triangulated with information found in policy documents and archive material.

Social relevance

In a densely populated and prosperous country such as the Netherlands, nature is continuously experiencing the pressure of human activities. However in such a setting, nature has many economic, ecological, social and cultural values. Nature needs to be conserved in a setting where different societal actors with different views and interests are jointly taking the responsibility for its conservation. In such a setting, the distinction between experts and non-experts is disappearing as the role of experts in changing. In addition to this, there are different conceptions of nature among experts based on different kinds of expertise. With so little consensus it remains unknown how nature conservation is finally negotiated.

At the same time, nature is considered to be a critical factor for success of sustainable development by the Ministry of Agriculture, Nature and Food Quality (see Ruiter et al., 2003). The policy documents talk about issues of public participation such as transition, policy change, institutional change and increased awareness of consumers and producers but for many people it remains unclear how nature conservation science and expertise really fits into this. Therefore ministry calls for an in depth analysis of the consequences of this shift from government to governance for biodiversity and nature policy. The proposed project will be relevant for social issues by producing usable knowledge about the changed role of experts and expertise in nature policy.

Contribution to policy making

This article takes notice of the literature on practices of participative, interactive and deliberative policy making. The article distinguishes itself by searching for instances of practices that can shed light on the actual role of experts in multi stakeholder negotiation processes. In two ways it is a considerable innovation as compared to other research on experts so far.

First of all, it is innovative to shift from an analysis of the political role of experts in the 'content' of policy making or an analysis of the role of experts as facilitators in participative processes to an analysis of how the role of experts in the policy process and outcome might be linked to the improvement of the policy process. To my knowledge, no other work has described, for example, what role nature conservation experts play in multi stakeholder negotiation processes.

Second of all, it is innovative to analyse the role of experts, expertise and expert knowledge from a governance perspective, using the recent insights concerning experts, expertise and expert knowledge. As compared to work of other authors on experts and expertise (Wynne, 1996; Hoppe, 2002) the proposed research can be expected to lead to new insights.

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References

Aarts, N. (1998), Een *kwestie van natuur. Een studie naar de aard en het verloop van communicatie over natuur en natuurbeleid.* Doctoral Thesis. Wageningen University: Wageningen, the Netherlands.

Appelstrand, M. (2002), Participation and societal values: the challenge for lawmakers and policy practitioners. *Forest policy and economics* Vol. 4, pp 281-290

Deleon, P. (1999), The stages approach to the policy process: What has it done? Where is it going? In: Sabatier, P.A. (ed.) *Theories of the policy process*. Colorado: Westview Press

Engel, P.G.H. & M.L. Salomon (1997), *Facilitating innovation for development: A RAAKS resource box*. Royal Tropical Institute: Amsterdam, the Netherlands.

Gieryn, T.F. (1995), 'Boundaries of science'. In: Jasanoff, S., G.E. Markle, J.C. Petersen & T. Pinch (eds.): *Handbook of science and technology studies*. Thousand Oaks, London, New Delhi, Sage publications.

Halffman, W. (2003), *The boundaries of regulatory science: eco/tocicology and the regulation of aquatic hazards of chemicals in the US, England and the Netherlands*. PhD thesis: University of Amsterdam.

Hisschemöller, M., R. Hoppe, P. Groenewegen & C. Midden (2001), 'Knowledge use and political choice in Dutch environmental policy: a problem structuring perspective on real life experiments in extended peer review'. In: Hisschemöller, M., R. Hoppe, W.N. Dunn & J.R. Ravetz (eds.): *Knowledge, power and participation in environmental policy analysis and risk assessment.* New Brunswick: Transaction Publishers.

Hoppe, R. (2002), *Rethinking the puzzles of the science-policy nexus: boundary traffic, boundary work and the mutual transgression between STS and Policy Studies.* Paper prepared for the EASST 2002 Conference, 'Responsibility under Uncertainty', York 31 July – 3 August.

Jasanoff, S. (1990), *The fifth branch, science advisers as policymakers.* Boston: Harvard university press.

Ruiter, A.M. (1993), Biodiversiteit anders bekeken: verslag van een workshop op 16 augustus 2002. *Rapport EC-LNV*, nr 2003/196. Ede: EC-LNV.

Scheer, S.H. (1996), *Communication between irrigation engineers and farmers. The case of project design in North Senegal*. Wageningen: Doctoral Thesis Wageningen University, the Netherlands.

Shannon, M. A. (2002), Understanding collaboration as deliberative communication, organisational form and emergent institution. In: Gislerund, O. & I. Neven (eds.): *National Forest Programmes in a European Context*. EFI Proceedings No. 44.

Turnhout, E. (2003), *Ecological indicators in Dutch nature conservation. Science and policy intertwined in the classification and evaluation of nature*. Amsterdam: Vrije Universiteit.

Van der Poll, N.E. & A. Glasmeier (1997), *Natuurontwikkeling: waarom en hoe? Platform wetenschap en ethiek. Verslag van een debat*. Rathenau instituut: Den Haag, the Netherlands.

Van der Windt, H.J., J.A.A. Swart & R. Rabbinge (1997), De wortels en dilemma's van natuurontwikkeling. In: N.E. Van de Poll & A. Glasmeier. *Natuurontwikkeling: waarom en hoe? Platform wetenschap en ethiek. Verslag van een debat*. Rathenau instituut: Den Haag, the Netherlands.

Vermunt, B., N. Aarts & C. Van Woerkum (2003), *Gebieden der wijzen deel 2. Een analysekader voor onderzoek naar leren en innoveren in netwerken.* Wageningen: Wageningen Universiteit.

Wynne, B. (1996), Misunderstood misunderstandings: social identities and public uptake of science. In: Irwin, A. and B. Wynne (eds.): *Misunderstanding Science? The public reconstruction of science and technology.* University Press: Cambridge, pp 19-46.

Yin, R.K. (1984), *Case Study Research: Design and Methods*. Sage: Berverly Hills, United States.