



## SCENES

### Water Scenarios for Europe and for Neighbouring States

Instrument: Integrated Project

Thematic priority: Global change and ecosystems

D5.11

### Synthesis of the evaluation of the participatory process

Due date of deliverable: [30.10.2010](#)

Actual submission date: [22.12.2010](#)

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission	
RE	Restricted to a group specified by the consortium (including the Commission	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Start date of project: 1.11.2006  
months

Duration: 48

Finnish Environment Institute  
version 1

Revision

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## D5.11. Synthesis of the evaluation of the participatory process

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## Introduction

Participatory scenario processes has been run in the SCENES project by 9 pilot area panels, an intermediate level panel in the Eastern Baltic Region and a Pan-European level panel (PEP). During the whole project we have followed, recorded and evaluated the participatory scenario-making processes. In this synthesis report we draw together lessons learned for the engagement of public in the production of knowledge for water management. We have organised the report as four 'policy messages', which are:

**POLICY MESSAGE 1. SCENES Water scenarios call for critical attention to public participation**

The SCENES water scenarios developed at Pan-European, Regional and Pilot Area levels forcefully highlight the necessity to develop participatory practices in water management. Participation and issues related to awareness-raising were given a lot of emphasis in all of the four different water scenarios across the pilot, regional and Pan European scales. The SCENES scenarios highlight the problems encountered in participation today. In many countries, the participation within WFD has been organized according to the minimum standards. Active involvement of citizens needs a reorientation from both sides of administration and the public.

**POLICY MESSAGE 2. Public concerns need to be given special attention when enhancing participation in water management**

In water management there is a clear need to develop such knowledge production practices that can help in articulating the various unique entanglements people and specific economic sectors have with water in order to find targeted meaningful actions. The SCENES scenario-making assisted panelists to articulate how water status is entangled with particular socio-economic structure of the region and how their future trajectories may be developing. In this very respect the panelists managed to articulate public concerns the current institutions and policies are unable to address. According to the SCENES water scenarios, if WFD cannot touch upon these critical entanglements, the policy will have no possibilities in reaching its targets.

POLICY MESSAGE 3. Assisting the articulation of public concerns requires special care and methodologies

The experiences gained from the SCENES scenario-making suggest that if knowledge production practices want to assist in the articulation of public concerns, it requires special methodologies and devotion. SCENES scenario-making offered one particular kind of platform for articulating public concerns, but there was a latent tension in seeing scenario-making as either *informing* or *forming* the social choices for water governance. The epistemic principle of informing guided many of the methodological choices made during the scenario-making; whereas, commitment to issue formation characterized the way in which many of the panelists worked with the SCENES scenarios. The elaboration of public concerns was left half away. The SCENES is not alone to face this tension. From science a more sincere take on public concerns would require acknowledgement of other kind of ontologies and development of methodologies for capturing and articulating those. From policy this would, respectively, require reflexivity towards politics exercised in various phases of policy cycle and attentiveness to the public concerns as they may become articulated along the way.

POLICY MESSAGE 4. Devotion to public concerns calls for the extension of concerned parties

In SCENES, the workshop organizers succeeded in attracting usual water management actors that consisted of public environmental officials, researchers and NGOS. This shows that participation even in research-oriented processes like SCENES is broadening. However, engaging particular economic actors such as industry, energy and tourism was found difficult. There is a clear need to improve the inclusiveness of participation in water management. Only by participation of "the affected public" research and management processes can assist in articulating the critical entanglements people and specific economic sectors have with water and in finding targeted meaningful actions.

## POLICY MESSAGE I

### SCENES Water scenarios call for critical attention to public participation

The SCENES water scenarios developed at Pan-European, Regional and Pilot Area levels forcefully highlight the necessity to enhance and develop public participation within water management. Participation and issues related to awareness-raising were given a lot of emphasis in all of the four different scenarios developed by the various pilot, regional and Pan European panels (Kämäri 2010). In this respect, participation can be seen as a robust action, which emphasizes its relevance in the actions taken in near future (vanVliet 2010). For example, in the enrichment of the water scenarios between Pan-European and regional levels the following issues related to participation were raised (Kok et al. 2010):

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Examples of participation	
Sustainability Eventually	Start grassroots movements Promote water saving with stakeholder involvement and rewards Environmental democracy Broad discussion on sustainable strategy Natural resource governance in light of subsidiary principle
Policy Rules	Involve private sector in water resource management Public participation in adaptive experiments and improvement of irrigation technology Improvement of management and governance Education of water specialists and active public involvement
Economy First	Public-private partnerships start to emerge Involvement of stakeholders New governance Adaptation measures driven by stakeholders Self-government
Fortress Europe	Transparent model of governance of other water sources Build capacity with stakeholders

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## Involving stakeholders in changes

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Also the policy messages collected from the various Pilot Areas emphasize the need to develop current participatory practices within water management. For example, the following policy messages were put forward from the Pilot Areas (Cherrier & Farmer 2010):

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Implementation of stakeholders' involvement should be addressed (participatory processes)

There is a need to invest more in participation

Participatory decision-making must be bolstered by learning-by-doing and the WFD falls short in this regard.

Participation builds capacity on all sides

The emphasis has, rightly, been in involving stakeholders in decision making. However, for some stakeholders, unpleasant decisions may need to be made and these need to develop with them

Our attempts at regional scale participatory scenario building were impeded by the lack of willingness from stakeholders to participate as they saw no practical outputs and legal basis for use of the developed scenarios

There is a need for a shift in social values in the sense of encouraging social action when policies fail, to attain water quantity and quality objectives.

There is not enough communication and coordination of stakeholders activities in integrated way looking for Water for Food, People and Nature with wide participation of national and regional stakeholders

To set up an institutional arrangements for better and efficient cooperation in the management and planning between all parties involved

There is no system of the fast introduction of new innovative methods for public involving and awareness rising

A big effort is being done by the river basin managers to develop a unique basin management plan, as demanded by the WFD. However, stakeholders consider parts of the basins independent systems, with different problems and not interconnected.

Participatory process developed within the SCENES project served at improving the relationships between different interests in the basin.

Participatory processes such as SCENES workshops are appreciated by SH for the opportunity to improve their professional networks.

Improve water governance in agriculture (includes participation)

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The issues raised in the scenarios and as policy messages highlight the problems encountered in participation today. The participation within WFD has in many cases organized according to the minimum standards (see e.g. deStefano 2010). Active involvement of citizens and/or stakeholders has been far from easy: it would need a reorientation from both administration and public. Currently, for example, the methodologies and information used in water management have been more attainable and meaningful to water experts than for the other stakeholders. Also in many of the EU neighbouring states public participation in relation to water management is only taking its first steps. In these cases, e.g. in the Crimean panel in Ukraine, the issue of transparency was given a lot of attention.

Despite these reported problems, the SCENES water scenarios lay high hopes on participation. Especially in the *Sustainability 1<sup>st</sup>* scenarios public participation – and awareness-building – is envisaged to bring about a whole range of societal changes and to secure the sustainable use of water resources. For example, the *Sustainability eventually* scenario developed by the Pan European panel and the *Sustainability 1<sup>st</sup>* scenario developed by the Narew River Basin Panel rely on wide grassroots activism and its ability to guide the development on a sustainable track. How realistic these articulated hopes are? How, in practice, the public participation procedures should be developed in order to overcome the problems of today and to become more meaningful and effective. The scenarios as such, unfortunately, do not offer many answers to these questions. We, however, suggest that analyzing the SCENES scenario-making process itself can offer us some insights. SCENES scenario-making as such has been experimentation with participatory knowledge production methods.

## POLICY MESSAGE II

### Public concerns need to be given special attention when enhancing participation in water management

SCENES participatory scenario-making methods were designed to facilitate collaborative elaboration of how future socio-economic development may affect the use and management of water resources. In the scenarios very heterogeneous issues related to water are brought to the fore (Kämäri 2010; vanVliet 2010; Kok et al. 2010). The issues vary from detailed water management issues to broad societal, economic, cultural and psychological issues. What is striking is the vigor by which issues related to social, economic and cultural development are brought to the fore.

This became clear in all of the SCENES Pilot panels, which gathered either South or North or tried to solve problems related either to water quality or scarcity. For example, in the Northern Pilot Areas, in Narew River Basin and in Lake Peipsi, the outcome of the participatory scenario-making process was that reaching a good ecological status, as proposed by the WFD, would require a better understanding of regional socio-economic development and tools to combat it. In the Narew River the good ecological status as defined by the WFD was seen attainable, but it would require a functioning planning and legislative system to keep the regional economic development on a sustainable track. In Lake Peipsi reaching the good ecological status was seen to require such a halt in socio-economic development, that it was not seen plausible in all parts of the lake. In the South, in Guadiana River Basin in Spain, similarly, the future status of water was seen to be tightly coupled with the future trajectories of rural and agricultural development. In the Italian Candellaro River Basin one of the conclusions of the scenario-making was that implementation of WFD needs to be more flexible and adaptable in order to tackle the varying socio-economic and environmental contexts.

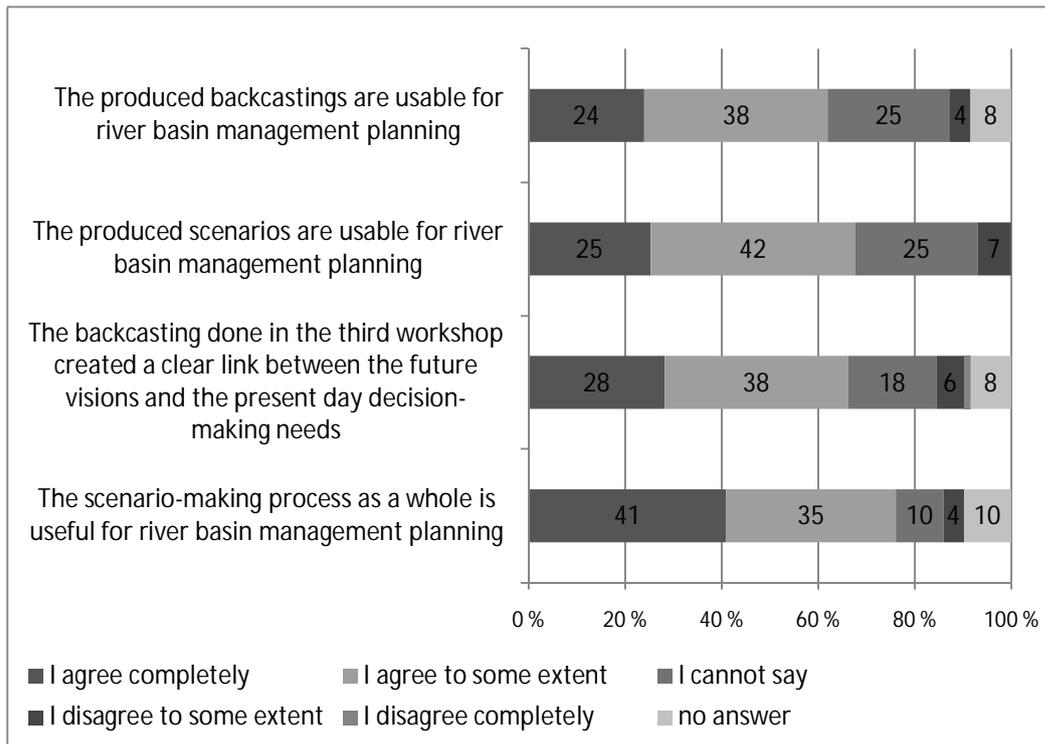
In their scenarios the panellists articulate how water status is entangled with particular socio-economic structure of the region and how their future trajectories may be developing. These entanglements stem from different – and often incommensurable - socio-material being in the world. The scenario-making has assisted panellists in bringing forward these socio-material relations and entanglements, finding relations between them and articulating them as public concerns the current institutions and policies are unable to address.

These results are highly relevant for implementation of the WFD, as emphasised also by the participants themselves (Figure 1). According to the experiences

gained from the implementation of WFD, the current policy practices have had troubled time in capturing the complex and non-linear entanglements human actions and water systems hold in specific settings, despite the river basin approach advocated by the policy (Valve 2011). According to the SCENES water scenarios, if WFD cannot touch upon these critical entanglements, the policy will have no possibilities in reaching its targets.

Marres (2007) has argued that at its best public engagement in relation to science and technology can assist articulating issues as public concerns the responsible institutions are unable to address. She argues that this kind of pragmatist orientation can help us to understand better why and how precisely dedication to issue formation is crucial for democracy. Public engagement should help actors in bringing forward their concerns and engagements with environment, finding relations between the different concerns and articulating them as public concerns. If the latter is achieved, policy-relevant knowledge is accumulated. Definition of public concerns and organisation of affected publics are practical achievements of issue articulation and should be approached as such.

In water management there is a clear need to develop such knowledge production practices that can help in articulating the various unique entanglements people and specific economic sectors have with water in order to find targeted meaningful actions. Production of this kind of knowledge requires a move from pre-defined problems and issues to contextualized participatory arrangements, where the articulation of public concerns is given emphasis. The ways how knowledge is produced and presented need to elucidate the inherent pluralism of "water management issues" contrary to attempts to unify them under one system or hierarchy. This is not to say that things have to be left open without conclusions, but the pluralism needs to be elucidated so that the eventual closures – the decisions – that have to be drawn are well-informed and robust.



Note, The 1<sup>st</sup>, 3<sup>rd</sup> and 4<sup>th</sup> statement consists of feedback from the 3<sup>rd</sup> SCENES scenario workshops held the Eastern Baltic region, Narew River Basin (for question 1), Lake Peipsi, Lower River Don, Crimean Peninsula, River Candellaro. Total n= 82. The 2<sup>nd</sup> statement consists of feedback from the 2<sup>nd</sup> SCENES scenario workshop held in the Eastern Baltic region, Narew River Basin, Lake Peipsi, Crimean Peninsula, Danube Delta and River Candelaro. Total n=99

Figure 1. Participant feedback on the usability of the scenarios

## POLICY MESSAGE III

### Assisting the articulation of public concerns requires special care and methodologies

The experiences gained from the SCENES scenario-making suggest that if knowledge production practices want to assist in the articulation of public concerns, it requires special methodologies and devotion.

SCENES scenario-making offered one particular kind of platform for articulating public concerns. In SCENES a mixture of quantitative and qualitative methods were used. All of the panels were given the same GEO-4 scenarios (UNEP 2007) to start their work. These scenarios concentrated in capturing general societal development where either solidarity or self-interest prevails and where either the global or regional dimension in development is emphasised, namely *Sustainability 1<sup>st</sup>*, *Markets 1<sup>st</sup>*, *Policy 1<sup>st</sup>* and *Security 1<sup>st</sup>*. Each of the panels was to explore how the status (i.e. quantity or quality) of water would develop in these scenarios when applied to their particular context. In the first step the panels were to think of the problems of present and develop Fuzzy Cognitive Maps (FCMs) describing the functioning of the present system. In the second step future visions were developed. This step aimed at elaborating how the various trajectories of socio-economic development may affect water status. The visions were developed in forms of collages of pictures and narrative storylines. The GEO-4 scenarios served as a starting point. In the third step the storylines were reviewed, enriched and transformed into FCMs. The panelists were offered information from the other panels; quantitative modeling results were also shown. In the fourth step the focus was moved to policy actions needed to reach the desired end-point. The panelists were told to shift the time perspective from future to present, i.e. to do a backcasting. In order to identify policy actions, the panelists were asked to think 1) what are the main factors that need to have changed in order to reach the envisioned endpoint; 2) who are the responsible sectors/actors; and 3) what are the main obstacles and opportunities along the way.

According to the feedback gained from the SCENES panelists, participating in the SCENES scenario-making has helped the participants to build more comprehensive picture on the complex dynamics related to management of water resources, and its temporal fluctuations (Figure 2). Scenario-making process has also increased understanding of different views related to this problematic. Many participants raised the systematic and problem solving approach exercised in SCENES interesting and enlightening. During scenario-

making new relations between ecological social and economic issues were found and articulated. This is a major achievement.

SCENES scenario-making engaged in the articulation of public concerns, but the elaboration of critical entanglements was left half way. Using the global explorative GEO-4 scenarios as a starting point helped in bringing in the socio-economic considerations to discussion more prominently; whilst, at the same time, set a powerful frame for the coming deliberations. The objective of the SCENES scenario-making was to contextualize the global scenarios for particular settings and in this manner identify uncertainties related to various scenarios as well as robust policy actions that apply to all scenarios. In its search for comparability SCENES made an ontological assumption that there are meaningful relationships between the global water scenarios and river basin level developments. From this perspective developments on different levels are just variations of one overarching trajectory.

According to the comparative analysis, the panelists found thinking in global explorative scenarios challenging. The global reasoning was not self evidently seen to capture the critical entanglements in their regional development. The panelists also tended to approach scenarios as something to either long or fear for – something from where to look solutions to their current problems. For example, the *Sustainability 1<sup>st</sup>* and *Policy 1<sup>st</sup>* scenarios were worked most thoroughly by the various panels. These were the scenarios the panelists could motivate and engage to. The articulation of public concerns, thus clearly characterized the way in which panelists worked with the scenarios. In many cases they were creative enough to reformulate the global GEO-4 scenarios so that their concerns could be articulated by them. In many cases the concerns, however, remained hidden in the many details of the scenarios.

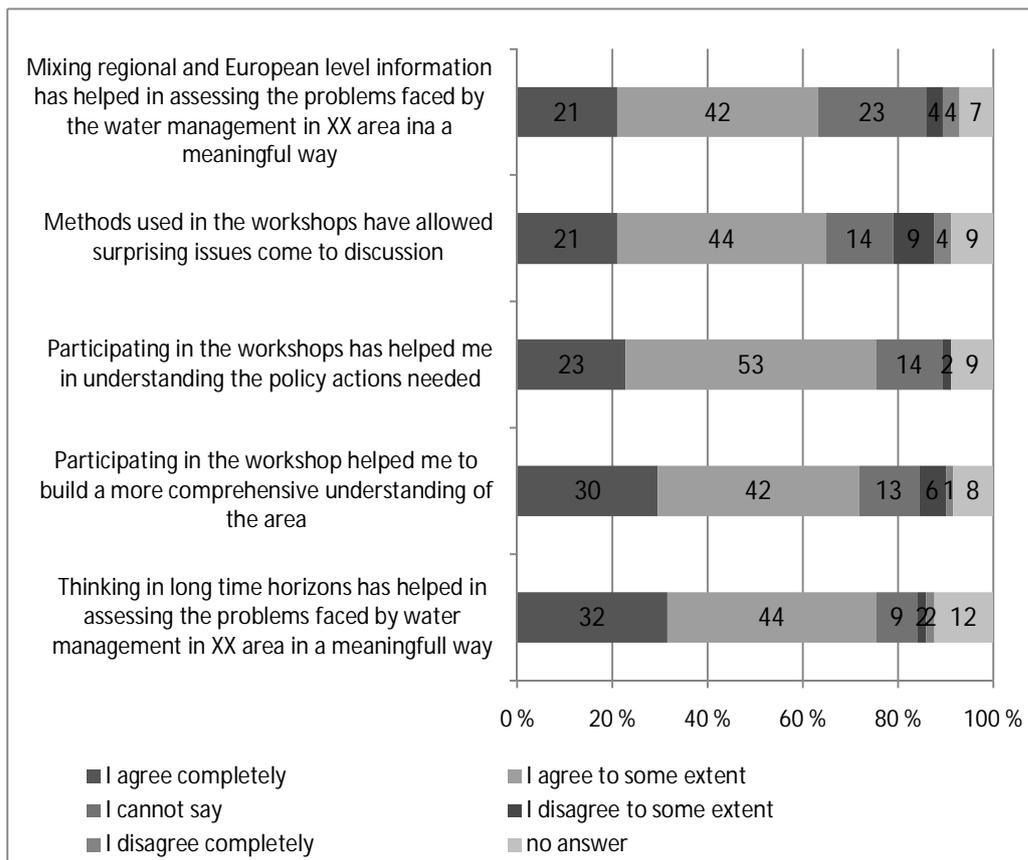
According to the comparative analysis, also the use of FCM, narrative storylines and backcasting method created different kinds of settings for deliberation. In SCENES the use of FCM was chosen to help relating heterogeneous elements of the water systems and further to enhance combining qualitative and quantitative information and to communicate between different scales. The participants gave rather positive feedback on the use of FCM. FCM stimulated focused discussion on the systemic relations and contested issues. FCM, however, stipulates to describe one water system with clear boundaries. When used as a method for a group work, it enforces the different entanglements with water to be described as one (Giordano et al. 2005; Mouratiadou ja Moran 2007), although there may be major disagreements on its functioning. Strong emphasis on causalities (Hobbs et al. 2002; Giordano et al. 2005) makes it also hard to describe non-linear developments and emerging factors and relations. Furthermore, the

method cannot handle temporal dimensions although trajectories recognized by the panels may evolve in different time scales (Hobbs et al. 2002; Aquilar 2005).

The making of narrative storylines allowed these kinds of issues to be taken into consideration. Narrative storyline allowed out-of box thinking. According to the feedback, this step in the scenario-making process helped the panelists to forget their current disagreements and daily worries. It was easier agree on how particular vision develops than on what are the causes of particular problems of today or how they should be solved. In this respect the explorative scenario-making showed its strength in supporting deliberation. Backcasting and identification of policy actions was an important step in the articulation of public concerns. The backcasting exercise allowed the panelists to consider policy actions in a systematic manner, compare them and articulate them as strategies for future. According to the feedback this step was found as the most rewarding in the whole scenario-making exercise.

These methodological choices made in the SCENES set relatively tight boundaries for the context specific scenarios to emerge. In SCENES there was a latent tension in seeing scenario-making as either *informing* or *forming* the social choices for water governance, to use a distinction proposed by Stirling (2008). The epistemic principle of informing guided many of the methodological choices made during the scenario-making. Attempts towards issue formation and articulation of public concerns, on the other hand, characterized the way in which many of the panelists worked with the SCENES scenarios. The epistemological choices made during the process and commitment towards issue formation did not give full support to one another. The elaboration of socio-economic trajectories and their entanglements with water was left half way.

The SCENES is not alone to face this tension. A more sincere take on issue formation and articulation of public concerns challenges the traditional divide between science and politics in environmental policy in such a manner that tensions are evident. From science a more sincere take on public concerns would require acknowledgement of other kind of ontologies and development of methodologies for capturing and articulating those. From policy this would, respectively, require reflexivity towards politics exercised in various phases of policy cycle and attentiveness to public concerns as they may become articulated along the way (see also Kaljonen 2011).



Note, The figure consists of feedback from the 3<sup>rd</sup> scenario workshops held in the Eastern Baltic region, Narew River Basin, Lake Peipsi, Lower River Don, Crimean Peninsula and River Candellaro. Total n= 82

Figure2. Participant feedback on the scenario-making process

## POLICY MESSAGE IV

### Devotion to public concerns calls for extension of concerned parties

In SCENES panels the scope of participants varied from Pilot Area to Pilot Area. The scope of pressing issues in various pilot areas attracted different actors to be invited and get involved in the scenario-making. Also the tradition of participation in water management varied considerably between the pilot areas.

In SCENES, the workshop organizers succeeded in attracting usual water management actors, but had difficulties in engaging particular economic actors, such as industry, energy and tourism, in the panels (see for summary Table 3 and for examples Figures 3 and 4). Public administration from various policy levels was well represented in the panels as well as agriculture through various public and interest organizations. Due to the focus on sustainable water management, the environmental sector was also well represented by various public, private and civil institutions. The material fact of a European research project resulted with a large proportion of researchers in the panels (in our table they are counted under civil society).

The SCENES panels, with particular water centered representation, drafted particular kind of scenarios. The SCENES scenario-making was designed to build a comprehensive understanding of the ways in which socio-economic and water issues may develop in future and what actions are needed to combat the arising problems. In SCENES water scenarios, the *Sustainability 1<sup>st</sup>* and *Policy 1<sup>st</sup>* got most attention and were worked most thoroughly by the various panels (see also vanVliet 2010). In many panels the Sustainability scenarios were also regarded as the most preferred ones. The panelists, however, reported problems when developing the *Markets 1<sup>st</sup>* scenario or, for example, the trajectories for agricultural development, energy or tourism within the sustainability scenarios. The panelists identified the development in these economic sectors decisive for the water status; whilst at the same time, they had hard times in elaborating them in detail. The representatives from the private sector were largely missing from the panels or only represented by a few. The SCENES scenario-making exercise did not help them to get their public concerns articulated.

If we are to get a hold on the varying public concerns related to the water management, our understanding of the concerned parties needs to be rethought and broadened. We need to listen to the affected public more carefully. The notion of affected public was introduced already by pragmatist Dewey (1927). For him "the public consists of all those who are affected by the indirect

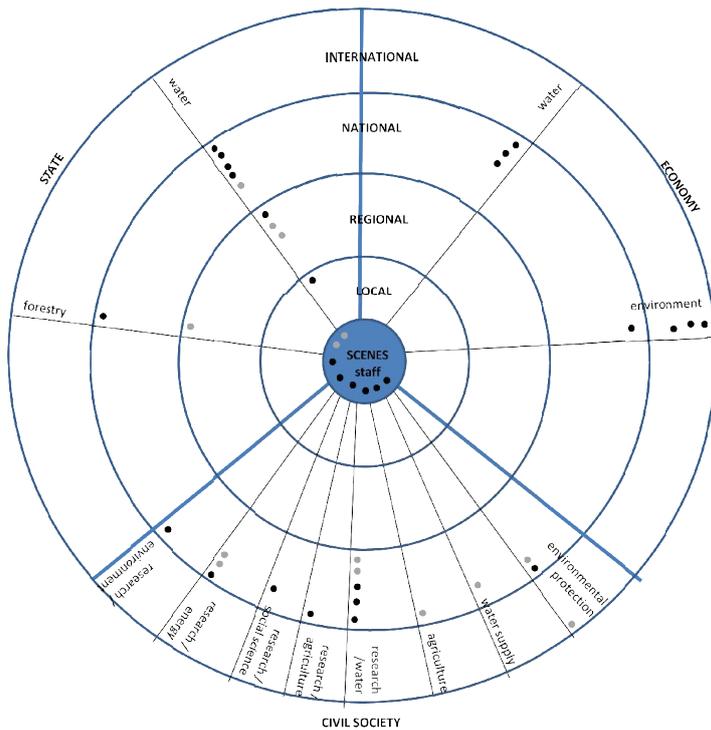
consequences of transactions, to such an extent that it is deemed necessary to have those consequences systematically cared for." (Dewey 1991(1927): 15). As pointed out in Policy message III, earlier, at its best the production of policy-relevant knowledge can assist in bringing up these indirect consequences and helping to articulate them as public concerns. This means that, if we wish to broaden the scope of participation towards "affected parties" in water management; we need to, at the same time, broaden our understanding of the issues and problems at stake.

This requires sensitivity to complex webs of impacts and openness to think out of the box of existing institutions. It also requires that the processes will not become closed shops, but inclusiveness is maintained. Inclusiveness and transparency is essential also because participation of "the affected public" brings together various entanglements to river basin. Participatory processes when they aim further than just consultation deliberately seek ways of articulating the different concerns and relation between them. When this is achieved, new ways of understanding and managing water may emerge, which in turn can broaden the scope of "affected public".

Table 3. Sectors and policy levels represented at least once in the three panel meetings.

Panel	N:o of sectors represented			N:o of policy levels represented		
	Civil society	Economy	State	Civil society	Economy	State
Eastern Baltic	4	2	2	2	2	3
Narew	4	2	4	2	2	2
Peipsi	3	2	3	3	1	2
Candellaro	4	2	3	4	2	1
Guadiana	5	2	3	4	2	3
Seyhan	6	1	3	3	1	3
Lower Don	4	4	3	3	2	3

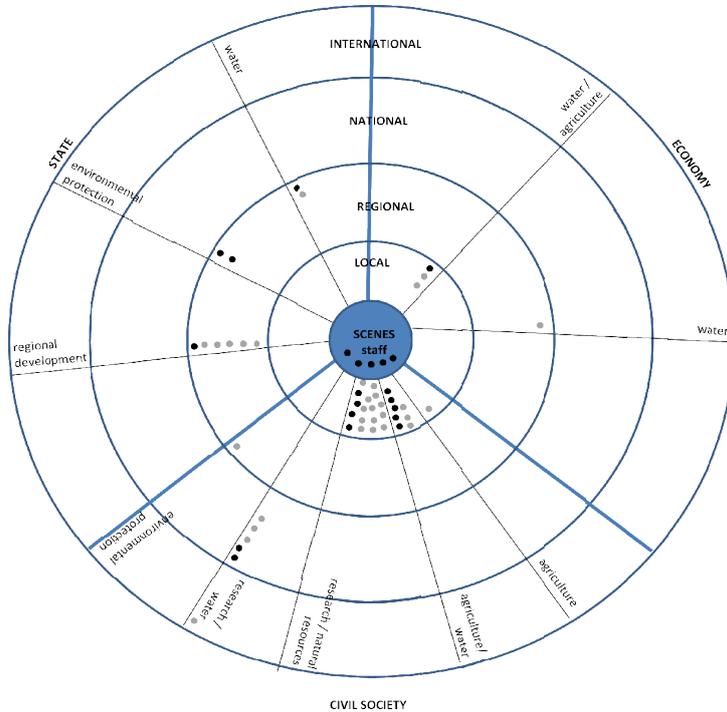
Note, In this table each participant is counted to represent only one sector/level, although in reality they may overlap.



■ has participated to one SCENES workshop; ● has participated to two or three SCENES workshops

Note, the shape of the chart is applied from Healey et al. (2003:130)

Figure 3. Scope of participants in the Eastern Baltic Region panel



■ has participated to one SCENES workshop; ● has participated to two or three SCENES workshops

Note, the shape of the chart is applied from Healey et al. (2003:130)

Figure 4. Scope of participants in the Candellaro River Basin panel

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