

# **SYNTHESIS REPORT ON MID-TERM PROGRESS WITH STAKEHOLDER PROCESSES IN CASE STUDIES**

**Report of the NeWater project -  
New Approaches to Adaptive Water Management under Uncertainty**

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## Policy Summary

This report deals with current state of stakeholder processes within case studies. It focuses mainly on one specificity of the NeWater project: participatory research, which means involving stakeholders in the research itself.

Stakeholders in NW are understood as those that are interested in the research or affected by it (especially in the case of applied research) and that might affect it as well. or both.

The main questions the report answers are:

- What are the objectives to involve stakeholders in the various sites
- Who are the stakeholders and how is their interaction with NeWater structured?
- How does stakeholder participation work in practice in the sites?
- What is the impact of stakeholder involvement?
- Which difficulties have been encountered in involving stakeholders?

In terms of lessons learned the report gives the following recommendations:

- Use participatory research to demonstrate participatory approaches, especially where participatory water management is not or only little known.
- Adapt the participatory approach to the local context: interest of stakeholders, acquaintance with and acceptance of the various participatory methods, the discussed topic, the level of controversy, resources available etc.
- The tracing of how the participatory work has been done is recommended as it provides the opportunity to inform newly incoming stakeholders, also to create transparency to the general public, and of course allows also science to proceed.

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# 1 Stakeholder processes in NeWater

This report deals with current state of stakeholder processes within case studies. It focuses mainly on one specificity of the NeWater project: participatory research.

Besides working on participation within adaptive water management processes, NeWater project has also an aim of fulfilling participatory research, which means involving stakeholders in the research itself.

This is a rather original way of doing research. Three consequences of this choice have to be made clear now:

- It is assumed at the scale of the project that involvement of stakeholder in the research would improve the achievement of the project's goal, which is the study of transition towards adaptive water management. However performing participatory research should not become a goal by itself, and should be calibrated to the objective of the project at the scale of each case study, suiting the local context.
- Since it is explorative, and a priori contingent to the local context of case studies, no common framework for doing this research was to be provided. However support could be provided by WP 3.1 upon requirement of case studies.
- An activity of monitoring, evaluation and comparison of this participatory research is the counterpart of this openness of approach. This report, together with the suite of interim stakeholder reports made up by all case studies, are part of this activity.

The material used to make up this report is made of the interim reports completed by each case study, plus discussions among case studies during a Workshop in Montpellier in June 2007, meant to reach some alignment (or at least some common understanding) in the description and analysis of stakeholder processes in the various case studies. Most of this synthesis is thus based on self assessment by NW teams of the actual involvement of stakeholders.

This synthesis report is made of the comparison of each CS report on the following items:

- Actual objective in the involvement of stakeholders in the research process
- participants in the participatory research process (and structure of the participation network)
- implementation of the participation (including artefacts handled to support this participation)
- impact of the involvement of stakeholders in the progress of the case study
- difficulties encountered in implementing participatory research

Then we discuss some methodological consequences for leading participatory research.

We have chosen not to mention the case studies concerned for each method. The purpose of this synthesis report is rather to show the diversity hidden behind the label "participatory research". There has not been any alignment on methodologies prior to the implementation of the stakeholder processes. Only common culture has come through a one week training session in April 2005. Therefore the terms as well as the choices in the presentation of stakeholder activities are not all consistent from one CS to another. All the material can however be traced back into the set of CS report upon demand.

Some points of vocabulary used in this report:

- NW team represents the whole group of researchers from NeWater working within a case study



- If it is necessary to distinguish within this category, CS team represents the team in charge of leading the work in a case study, while WP team(s) represent the team(s) coming with a specific thematic issue cross-cutting the case studies.

## 2 Objectives in involving stakeholders

Contractually, research priorities had to be set up through consulting stakeholders. All CS have thus organized questionnaires and / or workshops to get input in setting the agenda. However they were constrained by the availability of workforce among NW WP teams possibly dedicated to a given case study.

A first separation among CS is related to the existence of participative water management processes beside NeWater: participation is in any case a mean to progress on the research, but it is also in some cases an object of the research. In these cases, the purpose was first to fit this on-going participatory process. NW team was also interested in working on this participatory process per se, or in profiting not to double this kind of activity, in which the same stakeholders would have been involved. When it is a matter of studying/supporting on going participatory process, there is of course an expectation from the NW team, that there is an autonomous attempt from the stakeholders to lead such a participatory process.

Most frequent objective is to collect information or gain new knowledge. Stakeholders are supposed to get information which might be difficult to grasp. It is a way to narrow down uncertainties. Several categories of pieces of knowledge are gathered:

- knowledge on the system at stake, including various kinds of data: structure, processes, flows...
- knowledge on the decision making process of stakeholders as well other water users when they are not directly considered,
- knowledge on the relation of stakeholders with specific tools

Although, this kind of objective may seem attributing a passive role to stakeholders, they may play a crucial role to elicit, analyse and describe the structure and behaviour of their human environmental system.

Another category of objective encountered aims at an effect on the social system constituted by stakeholders. In some cases there is a clear will to light a starter of participatory processes. This happens through enable social learning among participants, setting up a framework for dialogue, or even trying to stimulate organization of some water users. This is also associated with capacity building towards adaptive management or raise awareness of stakeholders in specific issues to be dealt with when speaking of IWRM.

At an upper level in expected pro-activity of stakeholders, involvement of stakeholders is also meant to create scenarios and new insights on the dynamics of water management. This is also found in:

- joint decision on kinds of tools to be developed
- involvement in model building
- validation of knowledge gathered by stakeholders
- choice of specific area to focus on
- choice of participatory protocol

Close to classical research and expertise processes, there is also the process of providing simulation results to stakeholders, for example so that they might use them in the



implementation of WFD. However this might fall in a participation category, provided the results are given **upon request**. This issue of fitting a demand is key in the interaction with stakeholders.

### 3 Participants in the participatory research

#### 3.1 Size of groups

Groups involved are generally of various size along the project progress.

Some activities are not located in the basin but in the place of NW WP teams. This means that only a few key stakeholders may participate.

Few information is given on selection of actors. Initial group is generally constituted either upon a stakeholder analysis and/or previous networks of members of NW team. Evolution of the group is quite rare. However groups have been open to co-option of new stakeholders by other stakeholders already in. In one case, the NW team has sought for new stakeholder to compensate for the defection of members of the initial group and have chosen them in order to have good relays towards a broader public.

#### 3.2 Types of participants

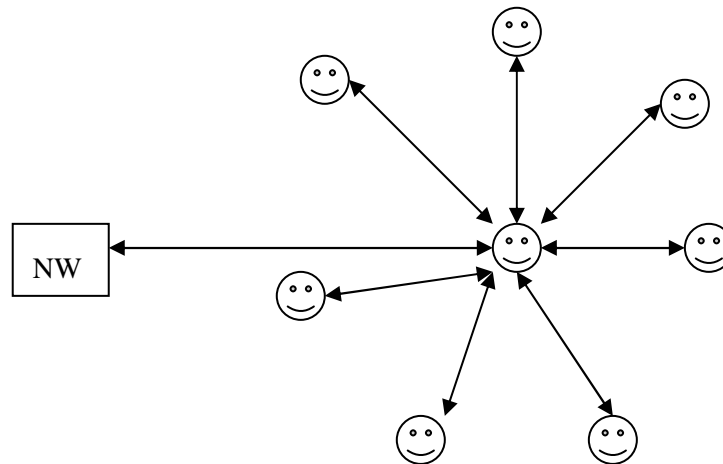
Participants are generally at high level

Case study	Type of main participants
Amu Darya	NGOs, administration, practitioners
Elbe	administrations, NGOs, representatives of farmer groups and other industries, “water professionals”, experts, lay citizens,
Guadiana	Administration, Representatives of farmers and environmental groups, individuals & institutions active in the field, teachers, farmers
Nile	
Orange	experts, administration
Rhine/Nieder Rhein	national and regional authorities, river authorities, water companies, experts
Rhine/ Wupper	regional & local authorities, NGOs, representatives of water users groups, water companies, lobby involved in land management
Rhine / Kromme Rijn	Government (water board, province, municipalities), interest groups (farmers, nature), citizens
Tisza	Administration (Ministry, water boards), experts, NGOs, practitioners, scientists



Interestingly a few cases have tried to go over the classical target groups. From an adaptive management point of view, it is interesting for it creates “a climate for change” in management attitudes.

### 3.3 Structure of the interaction



**Figure 1: network with a preferred partner stakeholder**

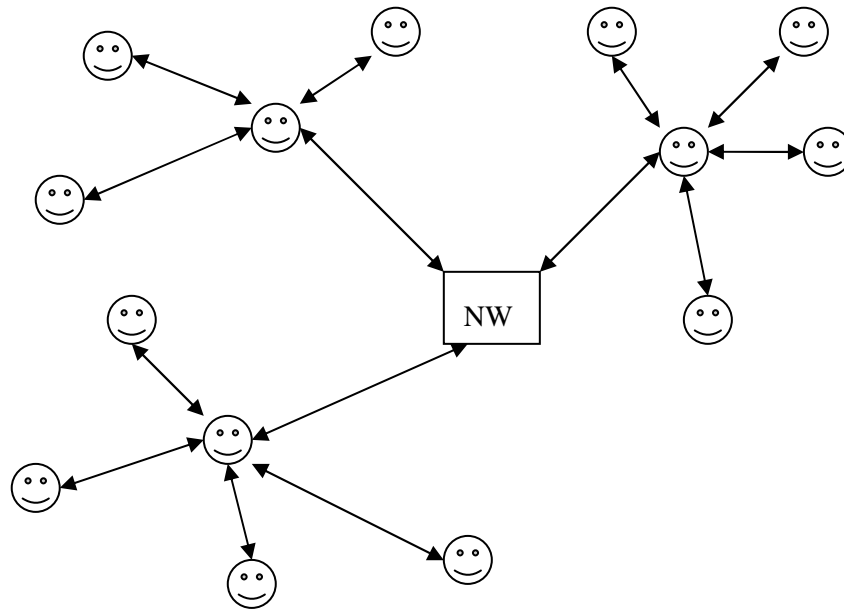
Figure 1 above corresponds to the first kind of architecture which is met. NeWater team has one main partner from the river basin which is holding all the relations with other stakeholders. In that case it is important to be aware on the nature of the relation among this main partner and other stakeholders. Otherwise these last relations are not double arrows while they are thought to be, this might mean a stakeholder ends in blocking the process because it is not involved enough.

Two reasons support for that kind of organisation: there is already some participation processes existing beside NeWater on water management, and it is an object of research for NeWater researchers. Practically it ends up with the definition of a specific formal agreement between NW team and this main stakeholder partner.

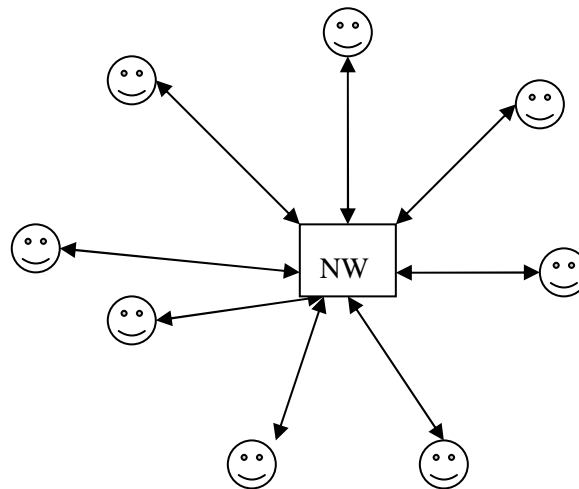
One could imagine another reason for this kind of structure of relationship: there is no participatory process pre-existing and stakeholders are difficult to mobilize. In that case the research team might work with a privileged stakeholder who is in charge of relaying the participatory process towards others. We don't find it among the NW case studies. At least when there is no participatory process and access to stakeholders is difficult, the NW team is relying upon several intermediate partners, as in figure 2 below. These relay partners are considered either as stakeholder or as “local case study team”. They act as interfaces or interpreters.

Practically it ends up in the definition of core groups, constituted by NW team, local CS team and a few key stakeholders.





**Figure 2: network with relay stakeholders**



**Figure 3: network with NeWater team at the centre of all interactions**

Finally, a third main type is the star archetype, as in figure 3. The NeWater team is organizing the participatory process directly. In that case it is more piloting as well. This happens when there is no already existing participatory process but NeWater team is in situation through its legitimacy and its previous relations to mobilize stakeholders to be involved in the research. This does not prevent from the existence of some key stakeholders have more active role in the participatory process. In these case studies, CS teams have a legitimacy built on previous relations with stakeholders, scientific or personal. With this architecture the issue of the relations among the stakeholders is important to be known. The



absence of arrows does not mean there are no relations among them. A side effect of the participatory research process is then to reinforce relations among stakeholders and pave the way for a participatory process on water management. Some stakeholders did appreciate the possibility of interacting on water management issue, within the “neutral” frame provided by NeWater.

We have thus three types of structures of interactions. Arrows representing the interactions have been all set as double sided. In practice, there are various levels of involvement, as explained in the next section. No symmetry among the relation from NW team to stakeholder and vice versa should be meant from these diagrams.

## 4 Implementation of the participation in practice

### 4.1 Level of empowerment

Level of empowerment is quite low. It increases from restricted consultation to larger more active involvement when going from CS without any tradition of stakeholder involvement to CS where such tradition is already well established. It is also increasing while reducing the breadth of public involved. The more stakeholders are at a decision making level or high in a scale of expertise, the more they are actively involved in the research process: for choice of other stakeholders (as relay), or joint definition of tools to be designed, joint building of models. This fits with the identification of key stakeholders (might be limited to only one institution), which constitutes, although not formally, kinds of steering committee.

In any case, active involvement is still featuring an asymmetry between NW teams and stakeholders. NW team is framing the process through organisation, procedural choices or facilitation of the participatory process. Active roles are sometimes not much more than consultation, since it is limited to proposal of scenarios, or items to be taken in account. The further process for choice, selection, adaptation is not transparent, and is probably much more in the hands of NW teams. This might be justified by the difficulty of making converging a participatory process, or by the requirement of specific skills and expertise for this integration, which is more likely to be on the NW team’s side. As an example, this is the case for integration of propositions in a joint model building activity.

One concern to assess this level of empowerment is that many settings of interaction quoted might refer to any level of involvement according to the way they are facilitated. When duration of various activities during a workshop for example, this entails qualifying more the process.

### 4.2 Artefacts used

Several categories of artefacts were used.

Jointly produced artefacts	
Kind of artefact	Objective in interactive use
Vensim model	Simulation of shared system
Graphical toolkit	
questionnaires	grasping information (on the system) focus the discussion, deal with sensitive issue (written)



	get feedbacks on collective sessions elicit individual view on the system
Decision tree	validation of machine learning
PPT presentation	explaining the approach focus the debate present research results
game	elicit knowledge
map	support in cognitive mapping support communication
handout	
fact sheet	
educational poster	highlight main issues, disseminate towards stakeholders
Belief networks	joint planning
Publication (in local language)	provide feedback and get reactions check for confidential elements
Modelling results	WFD implementation
cognitive mapping	document a discussion help stakeholder to structure their thought elicit stakeholders perspectives
website	to disseminate questionnaire
<b>Externally produced artefacts</b>	
map	support in cognitive mapping support communication
diary	collect information
climate scenarios	to launch discussion on them
non NW reports	
<b>Material devices for facilitation</b>	
Beamer	
flipchart	trace the meetings outcomes support communication
cards	support communication
<b>Methods for participation</b>	
headline exercise	scenario discussion
KnETs	Knowledge elicitation (on decision processes)
voice recording	minutes writing



scenario analysis	discussion of options
break out group	lead to more active discussions among heterogeneous people
field workshop	joint work on integrated assessment
group model building	develop a simulation & gaming tool of the basin
focus group	work around models and KnETs
interview	
Meeting or WS settings	initial presentation of project
repeated working group	update the agenda
Email	
telephone conf	

We can see from this table that there is large diversity in artefacts used, as well as on methodologies and less on physical supports. Moreover use of a given artefact is varying from one CS to another. For example cognitive mapping is used sometimes during the interaction, or is prepared before upon previous interviews in order to serve as a basis for discussion.

## **5 Impact of stakeholders involvement**

### **5.1 Dynamics of case studies**

While starting with a rather broad agenda, most CS have had to focus and select a few issues. This initial agenda is rather considered either as a direction or as a basket of possible activities in which selection is expected.

There has also been a decrease in the actual size of the participatory process when specific objectives had been specified. Except a few incorporations of more stakeholders, the trend is rather towards downsizing the ambition of participatory processes.

In one case only, there has been some enlargement of the participatory process.

### **5.2 Part explained by stakeholder processes**

Few, except some dramatic changes. Most changes reported are due to internal reasons (lack of money, coordination between NW teams, availability of human resources or changes in these)

This is connected to the low level of empowerment of stakeholders reported above. Structure of the interaction does not pave the way for stakeholders to be directly influencing the process. However the process might go through the threshold of their acceptance and this ends up in a dead end and provokes a dramatic change, such as change in sub basin.

However, in a few cases stakeholder process brought changes in the process, rather on the process organisation (choice of new stakeholders to involve for example, meeting format) very rarely on the content, except in some cases, discussion about the relevance of



developing a new hydrological model or on prioritizing the research issues. Organization issues on the stakeholders side have had less impacts than on the NeWater side, but still some. The will of one key stakeholder to be involved at a lesser level has led one CS to enlarge the full number of stakeholders participating.

Content might also be impacted by the availability means (time or money) required from the stakeholders.

Selection of issues while reframing the agenda due to limitation of means in time & money (always more than expected in first stage), have involved either stakeholders, according to initial prioritization, or the NW team, according to pragmatic concerns on which WP team was ready to come at one specific time.

Time step of stakeholders are to be taken in account. The more stakeholders are actively involved, the more they might impose their own pace, delaying for example the possibility for a workshop to take place. This might raise problems for research based on contract, when funding has also its own pace. Contractualisation with all partners of the participatory process is difficult to imagine, for several reasons:

- it requires to know all the potential participants prior to the project, limiting thus the adaptivity of the process.
- It assumes a high level of empowerment from stakeholders which might not be suitable to the local social context. Even with mid level of empowerment, down to consultation, stakeholders' rhythm might impact on the research pace, and there is no reason to ask for a contract at these levels.
- It leads to select a structure of relationship limited to a few direct connections from NW team towards high level stakeholders, assumed to be able to engage in such contract.
- It would make the management of the project even heavier.

In a few case, influence of some specific stakeholders might be important and take the form of further funding associated to a selection within planned NW activity.

## **6 Difficulties encountered and factors to be taken in account**

Reports from case studies provide several points of view on the practice of participatory research. This ends up in some recommendations for that way of performing research.

A first need is fitting the current agenda of stakeholders, as well as the specific questions they have. There is a double reason behind that. First time is a very scarce resource by most stakeholders. Even if they are good willing, when the issue of a specific meeting, working session or a question to fill is coming up, it is most likely they will participate actively if they are interested. Second, the quality of the participation and the relevance of their inputs in the process are increasing with the fitness of the issue at stake with their current concern. If questions or topic of discussions fit what they have in mind at the time of the interview or the meeting, they will use this in their inputs.

Related to this first concern, an interesting way has been taken by several case studies. The establishment of specific contracts with a few key stakeholders help to commit them in the activities of the project, even though it does not prevent from the appearance of some delays.

A second one deals with language issue. This is a major concern, and even more complicated in basin where several languages are spoken. No specific recipe are proposed on that point except having some members of the NW team speaking the same language as stakeholders, and providing translation facilities when several languages are spoken on the basin.



Partly related to the language concern, there is the issue of trust between researchers and stakeholders. This is an important aspect of the progress in case studies, which argue to get in the process researchers who have a good network in the case study.

Finally, one initial fear of the project was with stakeholder fatigue. It looks like it is not so much occurring, for example if we take an indicator on erosion in participation, which is often encountered in participatory processes. This risk has been well managed, with a management of relation with stakeholders well differentiated for each specific task: all stakeholders are not involved at each time, and the whole group is large enough to find a subgroup relevant for a given task. And, an important requirement to keep the dynamics alive is a major input of energy from the NW team!

## **7 Methodological discussion**

### **7.1 Characterizing participatory processes**

Structure A & B (as described in section 3) are rather organizing a participatory process at two levels, while case studies with the structure C are more homogeneous.

### **7.2 Benefits from participatory research**

Participatory research looks like a good starter for participatory water management in context where it is unknown. In these case studies, NW teams have assessed that they are generating social learning, more awareness on mutual viewpoints among stakeholders. This creates conditions which might be useful for the stakeholders start then a participatory process by their own. They have learned to work together, in a safe and neutral context provided by NW team. Since research has no direct operational outcomes (even though they are dealing with concrete issues, stakeholders are not committed in applying the results since the beginning of the process), they are more keen on discussing together, with less strategic ideas.

For some stakeholders it is however also a way to get information from other stakeholders revealed. This is actually a dangerous outcome, because it might increase asymmetry of information.

### **7.3 Leading participatory research**

A first lesson of these 2 years of participatory research within NeWater is: adapt to the context. As stated by Miettinen & Verkkunen, participatory processes are highly contingent (Miettinen & Virkkunen, 2005). Skills and abilities of stakeholders to be involved in a research process will vary from one group to another. The diversity of tools and methods available have to be used to provide the opportunity for an equal investment of all categories of stakeholders, within the limits of their willingness to be taken in.

Side effect of contingency is that it makes necessary implementation of a reflexive approach. This is true for research as well as for any other process. Policy making is particularly concerned because the judgement of adequation of what is done with rules and objectives is internalised. This is what is proposed for example in the case local food chain by DuPuis, in order to track the interdependencies of stakes (DuPuis & Goodman, 2005).

Reflexivity and tracking the process should also be part of a participatory process. This is not totally new, since scientists in applied sciences are used to present their field and their object. Some disciplines, such as experimental sciences or ethnography, have developed a tradition of keeping track of their work within logbooks. But this should go further with a minimum



of a predefined format, thought as revisable at a larger scale as the CS itself. Use of external viewpoint on this tracking is also an option to be considered. Some tools are experimented in case studies, such creating cognitive maps, to document a meeting activity.

Organizing reflexivity is not only an issue of tracing in order to provide the means for an ex post assessment of adaptive activities. It is also an issue of organising the transparency when the activity is performed. A mean to empower further stakeholders, or at least to prevent from raising deception among them (which would disqualify any participatory research), is to make explicit what is done with the inputs provided by stakeholders in interactive settings. This has been done for some activities within NW case studies and has proved successful.

Co-design is probably the maximum level which might be reached, due to the necessity of mixing competencies which are not equally shared. Even though there is involvement of stakeholders, this still a research activity which require specific skills and knowledge which are more to be found on the researchers' side, such as modelling techniques, academic expertise... Two kinds of constraints are preventing from reaching a further level:

- availability of workforce within the research teams,
- contractual constraints related to the funding of the research, which is largely defined prior the start of the research.

## References:

- DuPuis, E. M., & Goodman, D. (2005). Should we go "home" to eat? toward a reflexive politics of localism. *Journal of Rural Studies*, 21 (3), 359-371.
- Miettinen, R., & Virkkunen, J. (2005). Epistemic objects, Artefacts and Organizational Change. *Organization*, 12(3), 437-456.