



NeWater

D 3.1.4 CASE-STUDY BASED MANUAL ON CONDUCTING AND EVALUATING PARTICIPATORY ACTION RESEARCH

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New Approaches to Adaptive Water Management under Uncertainty**

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Olivier Barreteau¹, Yorck von Korff²

1. Cemagref, France

2. Lisode, France

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Policy Summary

Participatory Research is becoming increasingly popular, although not really defined on what it is and what it is not. This manual assumes that its readers have already made the choice of engaging in a participatory research, it then provides some procedural hints, meant to guide in the implementation and the evaluation of the participatory research, but also to strengthen the progressive building of this still blur methodological field.

With this manual we describe upon the basis of our experience in two EU Integrated Projects, NeWater and AquaStress, what are the choices which have to be made prior and during the implementation of a participatory research to pave the way for its assessment by participants, researchers and external reviewers. We don't provide any prescriptive way in what are the options to be chosen in order to implement a "good" participatory research. Instead, we argue that these choices are highly contingent. We make procedural recommendations relative to them, among those:

- clarifying ex ante the choices so that would be participants get some sense on what they are engaging in. This clarification comes along with three dimensions: information flows, dynamics of information flow patterns along the process, setting of interaction among participants;
- keeping track during the implementation, so that an adequate and precise procedural learning can be made. A direct use during the implementation of this tracking is to facilitate immediate debriefings, in order to clarify the interpretation and value of knowledge acquired during interactive sessions;

From this we describe three dimensions which have to be taken in account for the evaluation: context, process, outcomes. It is important to embrace these three dimensions because a key feature of these participatory research processes is their capacity to be adaptive to inputs from participants and the evolution of context in which they take place.

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1 Introduction

Many guidance, manuals or handbooks are already available to explain how to perform and analyse participation. This manual is based on a work which has tested them within 15 case studies across 2 EU integrated projects all over the world, NeWater and AquaStress¹. For the sake of consistency of this manual, we'll come through the same topics as previously existing documents. However from the experience of these case studies we add two important parts, in which we believe there are new insights important for the practitioners:

- prior explanation of participatory research,
- ex post evaluation of participatory research.

We represent an overall participatory research process according to the diagram of figure 1.

In this figure we assume that initial discussion among researchers and at least some stakeholders have already taken place, framing towards an initial research question (which might be broad) and suitability of heading towards participatory research. Many reasons might exist to go for a participatory research process, such as further transfer of research outcomes towards better fitness of research to the field reality or better access to tacit information laying in stakeholders' practice. We consider that the discussion of this choice of a participatory research rather a more traditional way of doing research is beyond the scope of this manual. We assume that readers have already made this choice.

The first stage is the preparation of the participatory research process (PRP). This includes making a plan of how it should be conducted: who should be involved, which level of involvement, setting of the interaction, etc. Key element of this first stage is to make explicit this plan and inform would be participants about it, so that they can accept (or refuse) to get involved with sufficient information and will not feel cheated afterwards. This is developed in section 2. It might lead to several revisions of the plan until the set of participants fits in number the purpose of the PRP, and features a diversity suitable to represent the population concerned by the issues of the PRP.

The second stage is the implementation of this PRP. This includes a monitoring of this implementation which might lead to a necessity of an update of the PRP, and thus heading back to previous stage in case of discrepancy between the PRP and the context in which it is taking place. This stage is developed in section 3. The evolution of knowledge of participants and researchers due to the PRP itself is considered as being a part of the context.

Finally, monitoring might lead to the assessment that the updated objectives have been reached or that there is no reason to pursue the PRP further due to the evolution of the context and the PRP itself. There is then a need to evaluate the whole process and share this with the participants. This stage is developed in section 4. The sharing of this evaluation is important since participants of the past PRP might be called to be participants in a future one.

¹ AquaStress is an Integrated project of the 6th FP from the EU (Contract N°: 511231), which has been paired with NeWater upon the recommendation of the evaluators, due to common topics.

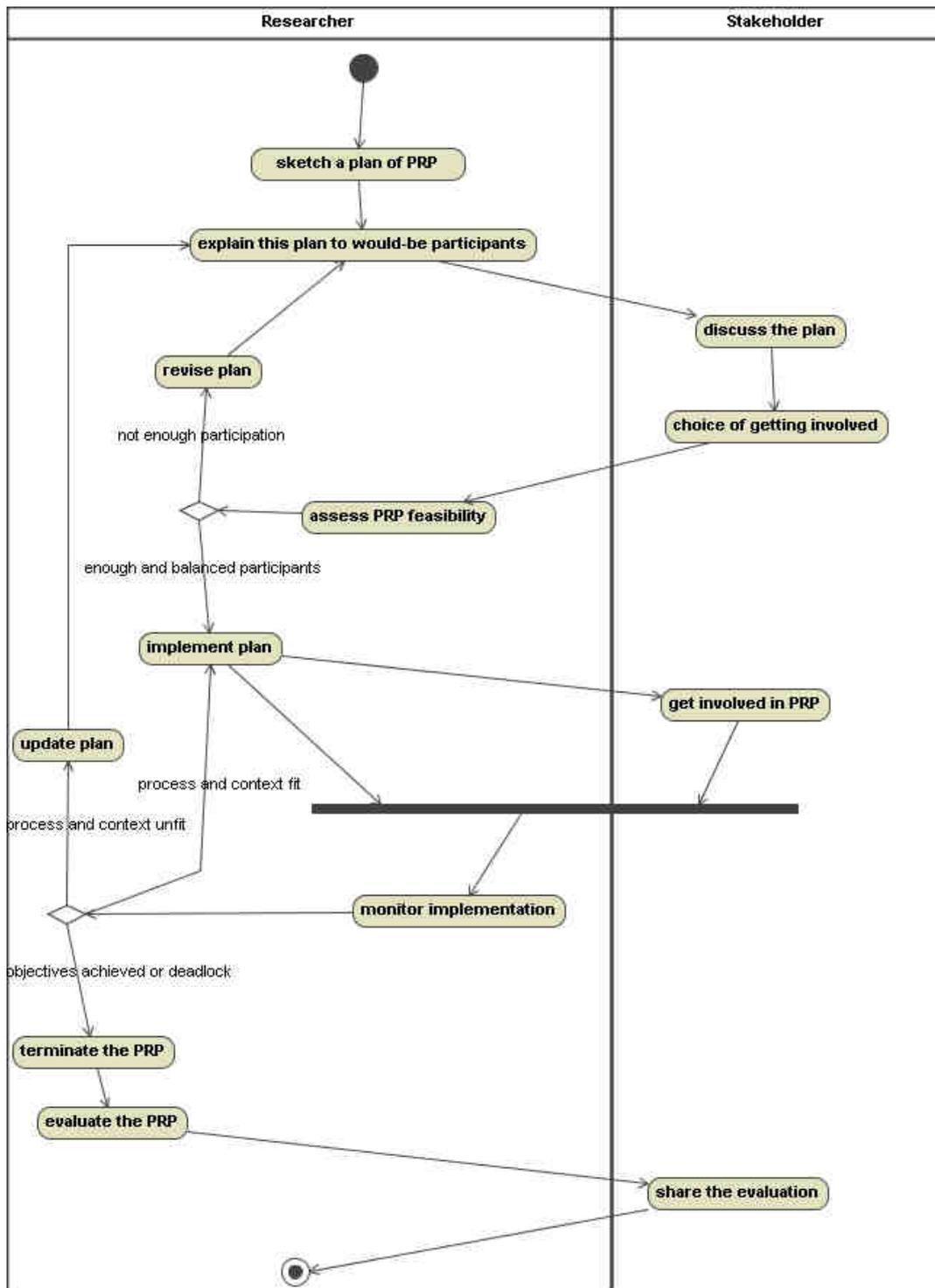


Figure 1: dynamic representation of general organisation of a participatory research process

2 Prior to the implementation of participatory research

Several case studies have pointed out issues of fatigue of stakeholders, or observed a progressive downsizing of the participation rate from participants. Even though evaluations of participants are rather good on average, we think that procedural quality of participatory



research might still be improved if some procedural rules are respected: these improvements are expected in three dimensions:

- for research itself, through inducing a more trustful involvement of participants who join the process with more suitable expectations,
- for participants, who are more deeply respected, with an explicit possibility of withdrawing and an increased feeling of control
- for the whole participatory research practitioners community: we consider willingness to participate from stakeholders as a common-pool resource of this community, which decrease when participants are badly informed.

We propose a procedural improvement based on a thorough explanation of the participatory research process prior to its implementation. This is mainly supposed to prevent disappointment of participants and to entail their understanding of the differences among the large diversity of possible implementations. From a conceptual analysis upon the examples of the case studies of both projects (Barreteau et al. 2009), we have proposed three facets of this explanation:

- control over flow of information,
- timing of events
- interaction setting among participants.

Main assumption of this framework is to consider participatory research as flow of information within a socio-technical network of actors (Researchers, Policy makers, stakeholders) and scientific artefacts (mainly models).

2.1 Control over flow of information

Diversity of implementation of participation according to so-called levels of participation are well known since pioneering work of Arnstein (1969), who described a scale going from mere information up to co-decision. This scale fits participatory decision. As far as participatory action research is concerned, this scale has to be opened because it is featuring other categories of participants and other types of involvement than decision. Researchers have obviously a specific role within the socio-technical network of participatory research. They interact with stakeholders and policy makers, giving them some roles in the research process itself, from mere informants to co-researchers. Researchers bring also non human participants which are very important in the research process seen as a knowledge gathering, production and transfer process: models. Along with Actor Network Theory (Latour 2005), we consider them explicitly, in the realm of science together with researchers, because they can often be used independently of their designers and they are information processors. Models constitute a repository of part of the knowledge of their designers at the time of their design. Being used later on by other participants, they are interpreted according to the current cognitive filters of these ones. Models are thus boundary objects (Star and Griesemer 1989) in these networks. By model we mean any representation of a system that is stable enough to serve as the basis for a discussion about the system it represents. This might take many forms, such as mathematical equations, computer code, diagrams, games, or any combination of these. Figure 2 below describes the socio-technical network and the set of possible interactions. Each node is potentially filtering and transforming the information received.

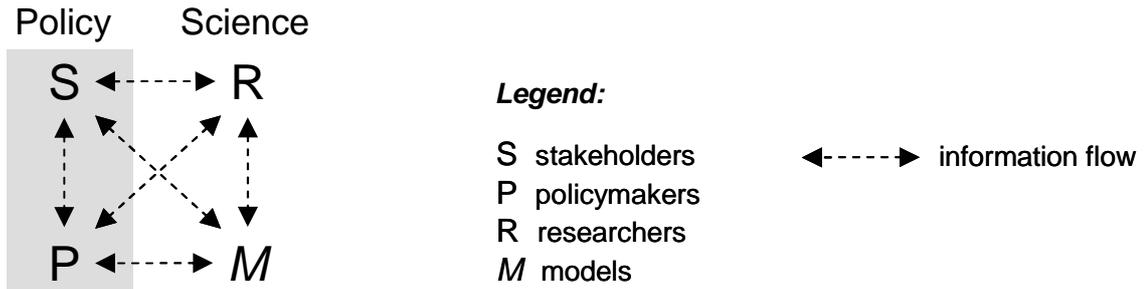


Figure 2: representation of flows at the science-policy interface

Coming to this situation with at least three groups of actors is already adding complexity to the traditional scale. Interaction in the research process is mainly information transfer, information about self, pieces of knowledge already held, or outcomes of the transformation of information received in new knowledge. As an example let's consider a PRP about the transition towards an adaptive management of a wetland. Participants are farmers, environment protection officials (such as wildlife refuge managers), city planners, and researchers. Farmers can provide information about:

- their needs in water availability at a given time of the year,
- their knowledge about the speed of flow decline during a drought period
- the consequences of the extension of built area from city planners when it is matched with their own needs.

Disclosing such information, mainly for stakeholders, is risky because even if it is happening in the interaction with Researchers it might reach other stakeholders or researchers in the flow of the process. A second dimension to the level of involvement in research should be added which is the control over the flow of information. In our example of wetland adaptive management, when farmers transmit information about their needs in water availability, they may want to know who will receive this information. From their strategic point of view, it is not the same to give this information to researchers if they aggregate it then at a broad scale in a model, and farmers have then their say before this model can be made available to policy makers, or to give it to researchers who will put it straight in a model and make it directly available to policy makers. With the first way, farmers have more control over the flow of information than in the latter.

Prior to the implementation of any interactive stage of a participatory research process, it is needed to make explicit the expected pattern of flows among participants. This should be described as a level of involvement in the research process, and as a level of control over the information flow process. Such clarification *ex ante* is supposed to prevent participants from feeling cheated afterwards, and it increases their participation in the follow up of the process or in other future participatory research. According to our stance of considering models as part of the network, this includes the clarification of the role of models within the flow of information, at least before they are used: for participants it is important to know whether their interactions will go through the mediation or filtering of models, or be direct.

2.2 Timing of events

With second dimension, we switch to a dynamic point of view on the model detailed in previous section, considering the possibility of changing the information flow pattern as well



as the mode of control over information flows along the process. This dimension aims at uncovering the actual distribution of framing along the various stages of a participatory research process. The dimension explored here aims at making explicit the evolution of control over the process to potential participants, through tracking the flow of information. Since this dimension is dealing with long term issue, it might be revised along the process, in the same way. Modality of revisions should also be made explicit.

In the preliminary stages, when the research question is elaborated, stakeholders have the opportunity to play a part in setting the agenda. They may shed light on issues that are important to them, as well as taking care that issues that are too sensitive for their context are left alone. This is the stage of problem structuring which is identified as a key stage in all participatory processes (Daniell et al. 2006). Even if the agenda developed with stakeholder involvement might further evolve, its initialization generates a strong irreversibility in the process. This includes irreversibility related to data collection, participant selection, and to a lesser extent, simulation scenarios related to the agenda which can be costly; either directly or through the necessity of re-programming the model used, if one exists.

In some usual stages in a participatory research process², such as model designing, participants may enjoy contributing to scientific progress or developing their own representation and uncovering assumptions. Conceptual model design constitutes a landmark in the process. It is the crystallization of viewpoints that serves as a reference for further stages. Validation is a stage where stakeholders will have the opportunity to check the effectiveness of a computer model in correctly representing behaviors and processes of interest, as well as on its adequacy to deal with their questions. Discussion of results may also constitute a framing phase, according to the purpose of the discussion. If dimensions of discussion are to be defined and model is open to be modified, there could be some space made for participants to (re-) orientate the modeling process. Otherwise, if the discussion of results aims to choose from a few scenarios for example, the choice is very narrow and might be manipulated by people leading it, researchers in most cases of participatory research.

In other usual stages of a research process, the influence of stakeholder involvement on the overall process is less important. When data collection, or calibration and verification for a computer model are to involve participants, stakeholders tend to take the role of informants. Their involvement is framed by the format of information which is expected, and on the parts of the model which are to be calibrated. If the process is open to modification in these frames, the level of participation might be higher, but still with a limited scope. A stage dedicated to the implementation of a model provides another possible means of empowering participants. The common purpose of involving stakeholders in this technical activity is rather to raise their literacy in and knowledge of this stage, as well as to raise the probability of their deep knowledge of the model: they will know better the assumptions. For a model which has the format of a game it is usually technically feasible: stakeholders can not only participate in making the game, but they can also choose the wording or provide drawings to explain their representations. The simulation stage basically provides information to stakeholders on sets of model results. This is a technical stage (running the simulation) which is related to a number of strategic choices (design of scenarios and indicators to track the simulation progress).

² There are many proposals of description of a research process in stages. This manual is not specific to any of those. We develop this section with the most common ones.



2.3 Interaction setting among participants

The third dimension gets deeper in the mechanics of the short time scale. It deals with the interactive setting for each situation of interaction. Beyond the open forum, many formats can take place. Making this explicit entails participants to know with whom they will be in situation to interact with and how the participatory process will deal with the complexity of society (Eversole 2003).

This is important because it might influence:

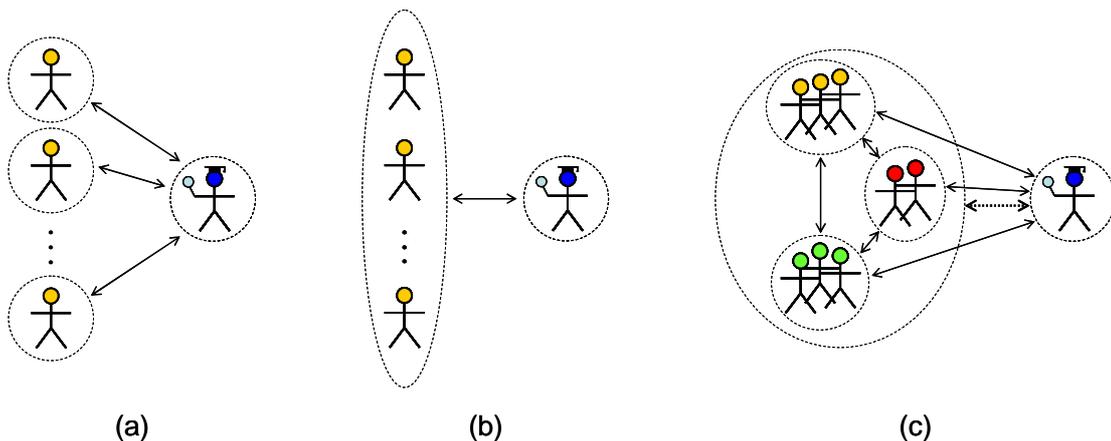
- the ease of participants;
- the outcomes (and then the knowledge produced) of the research process.

If participants are aware of a setting in which they will face co-presence with other groups they don't want to talk with prior to the interactive event, they may ever refuse to take part or at least the surprise will not add to the inconvenience of the situation. On the other hand, this mixing might also be expected by some participants who understand participation as a way to learn from others. If they do not find this learning, they might also be disappointed.

As pointed out by several authors, the structure of interaction co-determines the potential social learning (Pahl-Wostl and Hare 2004, Daalen and Bots 2006, Pahl-Wostl et al. 2008). The more diverse and unusual the interactions that take place in the participatory process, the more participants will learn and build new knowledge during the interactions.

Van Daalen and Bots (2008) distinguish three ways in which stakeholders can be involved in a participatory modeling exercise, which we extrapolate to participatory research, as depicted schematically in Figure XX below:

- stakeholders are involved individually;
- stakeholders are involved as a group that is considered to be homogeneous by the researcher;
- and stakeholders are involved as a heterogeneous group, meaning that the participants have divergent, and possibly conflicting, interests and problem perceptions, and that the participatory process is organized with sub-groups in order to deal with this heterogeneity.



Researchers organizing a participatory process face a gap between an aim of fostering emergence of new ideas through mixing heterogeneous participants and the necessity to deal with bias, inhibition and frustrations which might be fostered by heterogeneous settings. This dimension is important to make explicit because if realization does not fit expectations on that way it can generate disappointment (“we thought we would meet farmers from other areas”), a feeling of being trapped (such as “*how dare they ask us these questions while X is*”).



here!”), as well as disappointing outcomes in terms of social learning (such as “OK, we got the chance to explain our point of view to X, but there was no feedback and discussion”).

3 During the implementation of PR

Even though implementation of PRP is supposed to be adaptive, including occurrence of updates and revision, it is still possible to specify guidance for the implementation different of those prior to the implementation. We consider in this section participation while being made, whereas previous section has considered participation as it is announced and explained how it would take place. Guidance and recommendations about this participation in action are more common than those dealing with ex ante and evaluation. Reader interesting in specific issue of how to implement participation might refer to this literature, such as the HarmoniCop handbook, or Delli Proscoli and Creighton (1983) and Beierle and Cayford (2002) among others. We develop in this section the actions to be undertaken to keep the participants in the process, assuming ex ante recommendations have been undertaken and that evaluation of the process is at stake and should be prepared.

3.1 General organisation and tracking

Main recommendation for the implementation of PR is probably to organize monitoring and keeping track of the process, through a specific setting. This is important to:

- Inform debate on adaptation of the process along its implementation,
- Organize the reflexivity which is recommended in the literature over participatory processes,
- Perform further evaluation of the process, respecting its participatory approach,
- Provide the basis for a comparison by participants with the process as it was planned and announced, as well as with further processes to which they might be invited to participate.

Both NeWater and AquaStress project have tried to set up such tracking protocols. However it came up that it was difficult for teams in charge of leading the participatory processes to fill these: too much a burden, without any vision on what it could bring to the process. We held two feedback sessions and dealt with reporting produced by the teams.

This leads to the following suggestions to set up this tracking. They have not all been directly tested in these projects, but partially in other participatory research project (such as French funded ADD-ComMod) and builds upon the difficulties encountered in NeWater and the solutions found to get around them. The main driver has been to find solutions with light involvement which might feed back into the further stages of the process.

Various forms of tracking might be proposed, according to the participants in the projects and their own constraints. Even though the choice should be made ex ante, this is not supposed to be determined for the whole process and can evolve as all the approach. These various forms are:

- Logbook, diary or blog of the process, within a predefined format. This format should include at least an open section in order to get the informal feelings. Other useful entries to monitor the participation process include the name of active participants and their role(s) in a specific event and evolution of questions and viewpoints. All participants should be able to contribute to this logbook, with possibility of private sections. This form is the most demanding in time, and it is potentially biased by an unbalanced participation in the logbook from all participants. However, if all



participants can commit to contribute it is the richer one to monitor the process. The time scale of filling is open. It might be on a regular basis such as the week, or on an event basis;

- Logbook (as above) reduced to the contribution of leading participants (those who organize the participatory process). There is an obvious loss regarding the previous form but is often more realistic on who will be able to allocate time for this tracking activity. It gives only one view but the bias is explicit, while it might also exist in the previous form without being explicit;
- Internal feedback sessions. This is typically what a steering committee should do. On a regular basis, discuss what happened in the process, what should be taken out of that, and what should be the further stages. This provides little view on the long pace of the process and does not keep information on the events but rather on the reasons for updates in organisation;
- External feedback sessions. This involves external participants and is easy for a case study which is paired with other in a same project shell, as it's been the case for NeWater. We conducted twice such feedback sessions, when external participants help leading participants of a specific participatory research process to look back at their process and define further stages. External participants act as psychoanalyst in that form, which lead to explore also events and not only organisational patterns. Several techniques are available. We used gaming simulation of further stages to give the possibility of testing them to the case study leaders. These sessions can be held as workshops, when each case study leader is presenting its case study and then become external participants to the others. These workshops were quite rich, but would be more difficult to organise with other participants. It is also time consuming and can't happen with a high frequency;
- Reporting. This is a rather classical way, and should be the minimal tracking. Each participatory event leads to a report, which should be shared by the participants and open to their corrections. This can lead to some reflexivity due to the writing format, but is often weak in providing ex post explanation of the changes in trajectory.
- Publication. In case of a set of parallel comparable PRPs, such as in a same project shell, participation in a special issue of a refereed journal is usually a good incentive for researchers to track what happens and to write it down. For that, there is a need for a common general frame for each paper, which should not constrain research topics however. There is then a later work on finding out common themes and drawing results from the overall work that was achieved in order to wrap up the whole issue. This provides high quality information about what happened, but should be completed with more classical reporting. The condition of having comparable case studies is key.

3.2 Settings

Section 2.3 dealt with interactive settings of events at a fine grain time scale, which should be announced in advance so that participants do not show up with wrong expectations. Here we deal with the overall organisation of the process, and mainly with the management of relations among the research group which is usually leading the participatory process.

A first setting features a principal interaction among the research group and one stakeholder who acts as an intermediary towards other stakeholders. This kind of setting suits a situation when the research team is not leading the participatory research process but is one participant, hired by a stakeholder who is leading a rather centralized participatory process. This kind of setting might also be useful, but to be used cautiously, when stakeholders are



difficult to attract. The intermediary stakeholder acts then as a broker between the research team and other stakeholders. The research team loses then a lot of control over the process and on its fairness among stakeholders.

A second setting derived from the previous ones features a limited number of privileged relations with a few stakeholders, who act as intermediary towards second order ones. This institutes two categories of stakeholders, and might reinforce implicitly some inequities in a society. The research team conducting a participatory research with this setting should be aware of these inequities. However it is often a practical way to implement participatory research for it entails reaching some stakeholders difficult to reach without the relays constituted by “first circle” participants.

A third setting features a star like network, with the research team at the centre. All the relations are handled by the research team. This setting provides more control over the process to the research team and does not lead to privilege one stakeholder over another, at least among those who are involved in the process. Research team who engage in this setting should pay attention to leave some opportunity to interactions among stakeholders regarding procedural aspects, for a common drawback is missing inputs from participants due to over-framing by researchers.

3.3 Update and revision of the process

This issue has already been mentioned in section 3.1. We just want to remind here about the necessity of making the procedural aspects open to revision along its implementation. Involvement of stakeholders might lead them to ask for updates, or the research outcomes might lead to revise to adapt as well.

3.4 Debriefings and on the spot evaluations

Finally a key element in the implementation is debriefing or on spot evaluation at the end of each participatory event. This practice is already recommended for any participatory process. This allows the tension which might occur during an event to come down. If some participants have gone further their own thoughts or further than what they wanted to give, they get also the opportunity to retract or even disqualify the process. This security door at the end of the event makes it easier for the participants to take an exploratory stance, and make the process tackle issues more thoroughly.

This joins the well known technique of debriefing used in simulation and gaming. As far as participatory research is concerned, with this kind of event, but also with others, the debriefing entails also agreeing on which new knowledge the group has come up with.

4 Evaluation

Finally participatory research processes should also be evaluated, as any other research processes, but not with the same means as we want to argue here. Classical ways of evaluation based on comparison of objectives and results do not fit these processes because they don't make the room for surprises that one might expect from a participatory process. Existence of surprises is not either a good criterion, since it is not necessary either. Therefore we propose here an evaluation according to three dimensions: context, process, outcomes. For each of these dimensions we explain below what is expected from their evaluation and how it can be done.



4.1 Evaluation of context

Even though many others do not find evidence of direct influence of context in the outputs of participatory process, this is framing what might happen and also providing the network for the dissemination after its completion.

“It has to be recognized that if the stakes are too high, the alternatives too limited, or antagonisms too engrained, public involvement is unlikely to resolve the problem ... An evaluator who considers public involvement a failure because it cannot cope with a situation like this, does a great disservice. Even voting, the most universally accepted method of citizen participation, was incapable of resolving the issue of slavery in America. Yet we continue to accept the general validity of voting as a method of conflict resolution.” (Delli Priscoli and Creighton 1983, 429)

In other words: Context often does not matter so much but in specific situations it might explain a lot. Therefore, it has to be systematically studied in each case.

How to measure context systematically? As mentioned before, no real agreement on criteria exists, and certainly no tested measurement instrument. What exists however, is a catalogue of potentially important criteria summarized in the table below, on the basis of the work of (Beierle and Konisky 2000) and our experience in NeWater and AquaStress projects, and the suspicion that they might all become important for the success of a participatory process under specific circumstances (von Korff 2006).

Name of factor	Hypothesis – The following context factors will help the process to be successful
Atmosphere	The quality of relationships between participants is good
Conflicts of interest	There is little pre-existing conflict between goals
Attitude towards lead agency	The attitude of participants towards the lead agency of the process are positive
Interest in issue	Participants care about solving the problem
Confidence in process	Participants are confident that the selected process will help resolve the problem
Number of problems	There are only a few problems to be addressed
Scientific understanding	The technical problems of the problem are well understood [though this can also happen during the process]
Shared jurisdiction	Jurisdiction over the problem is not shared or contested by different states or countries [or agencies]
Geographic complexity	The problem area is a small city or rural area rather than a large metropolis

To proceed in practice, it will be necessary for the evaluator to gain a good understanding of the context by systematically interviewing those involved in the process – sponsors and stakeholders – about the given context criteria.



4.2 Evaluation of process

Arguments given for evaluating the process are:

- An effective process is a goal in itself. Delli Priscoli and Creighton (1983, 423), for example, argue: “The idea that public involvement is an all-inclusive self-evident and democratic faith that has found expression from Pericles to J.S. Mill ... An evaluation that fails to come to grips with the fact that public involvement is at least in part an act of faith in the values of democracy, will do an injustice to our democratic ideology.”
- Quality processes are likely to produce quality results. Rowe and Frewer (2004, 520) formulate carefully: “... it would seem more likely that decision makers will ignore the recommendations of an exercise ... if they perceive it to have been poorly run (e.g., with unrepresentative participants), than if they perceive it to have been well run...”
- It is quicker, easier, and therefore more practical to evaluate processes. To again quote Rowe/ Frewer (2004, 520): “[Outcomes] may be difficult to ascertain in a timely manner, and outcomes may to some extent also be due to other variables, such as the occurrence of simultaneous events or externally mediated pressures influencing policy processes ... “

Table below describes the nine criteria for an effective process proposed by Frewer et al. (2001)

Name of criterion	Description
Resource Accessibility	Participants should have access to the appropriate resources to enable them to successfully fulfil their brief
Task Definition	The nature and scope of the participation task should be clearly defined
Structured Decision Making	The participation exercise should use/ provide appropriate mechanisms for structuring and displaying the decision making
Cost Effectiveness	The procedure should in some sense be cost effective from the point of view of the sponsors
Representativeness	The participants in the exercise should comprise a broadly representative sample of the affected population
Independence	The participation process should be conducted in an independent (unbiased) way
Early Involvement	The participants should be involved as early as possible in the process, as soon as value judgements become salient/relevant
Influence	The output of the procedure should have a genuine impact on policy
Transparency	The process should be transparent so that the relevant population can see what is going on and how decisions are being made

From an operational point of view, Frewer et al. have also turned the criteria into three measurement instruments – a long and a short questionnaire and a checklist – called “the toolkit”. These instruments have been subject to reliability and validity tests (details are given in Rowe, Marsh and Frewer 2001). The toolkit is freely available and will be proposed in Section V as one essential element for evaluation of participatory processes in AS and NW. Beside the question of process effectiveness that can be assessed with the toolkit, it will be necessary to get some more background information on processes (who are participants, what kind of events took place etc.). This information can be obtained by relying on already developed questions from the baseline and also the Stakeholder Involvement Protocol.



4.3 Evaluation of outcomes

Delli Priscoli and Creighton (1983) warn that “many citizens will not consider public involvement to be effective unless they ‘win’ on the substantive issue. Efforts to evaluate ... must take into account that a program might be ‘perfect’ from a process standpoint, but still fails to impress citizens who did not accept the outcome of the process.” And Schuett, Selin and Carr (2001, 590) report that “All respondents [to questionnaires after participatory sessions] were outcome-oriented with a desire for some specific achievement to occur from the collaborative initiative.”

There is no set of agreed questions or an operationalized and validated toolkit for assessing the outcome of participatory processes. Following other authors, we recommend a partnership process between the researchers and the participants (Syme and Sadler 1994), an agreement on goals and objectives (Rosener 1978), and to make explicit the goals and assumptions about the linkages and activities necessary for the accomplishment of goals (Lynn and Busenberg 1995). This includes the definition of valid indicators of program success, as well as valid and reliable methods of data collection and effective methods for data presentation (Lynn and Busenberg 1995).

5 Conclusion

This manual on conducting and evaluating participatory action research identifies three main stages, relatively to the timing of interactions between stakeholders and policy makers: prior, during and after the implementation of a participatory action research. Key lessons are that:

- there is a need to clarify to participants how the process will be (and may evolve) before getting them involved;
- various settings are possible, but their choice is not neutral. Implementation needs a cautious tracking in order to learn from these experiences;
- ex post evaluation of a PRP should tackle equally context, process, and outcomes.

Our purpose with this manual is not to be prescriptive in a sense: “that is how a PRP should be conducted and evaluated”, with a set of rules to be followed. We want rather to make clear that, at each stage there are several choices to be made, and that these stages depend on the context of the PRP itself: existing relations among participants, cognitive frames of participants, and stakes relative to the water systems, as well as their intensity. Our only prescription, is that these choices have to be made transparent: who is making them, what is the choice, how it is implemented. This is the only way to provide means for evaluation and raise a true learning on these experiences.

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