

Shifting Troubles: Decision-Making versus Implementation in Participatory Watershed Governance

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ABSTRACT

We explore the implementation of the European Water Framework Directive from the point of view of institutional economics, focusing on participation in the introduction of management plans. The design of participatory processes is linked with decision-making and implementation costs through an analytical model. The model is subsequently applied to qualitative evidence from four different empirical cases. The analysis reveals similarities between widely heterogeneous cases: process design choices seem generally to economize on decision-making costs. The paper discusses the implications of these findings for policy implementation and future research. Copyright © 2013 John Wiley & Sons, Ltd and ERP Environment

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Introduction

THE AIM OF THE EUROPEAN WATER FRAMEWORK DIRECTIVE (EC, 2000) IS TO ACHIEVE A GOOD ECOLOGICAL STATUS FOR all European water bodies. The directive introduces many novelties in water governance, among them participation (Article 14).

The directive encourages the ‘active involvement of all interested parties’ in the overall implementation of the directive and for the drafting of management plans. The wording chosen by the European regulator leaves room for broad interpretation. The aim of this paper is *not* to investigate likely causes and rationales for such ambiguity. We focus instead on its most straightforward implication: that the provision at stake is likely to be implemented in very different ways.

Different interpretations of the directive’s participation provisions certainly have implications in terms of power relationships among the involved actors as well as in terms of legal compliance. While legal and political scholars may be interested respectively in the binding nature of such a provision and in its implications for power issues, we move from the perspective of institutional economics, the study of how individuals design collective arrangements for provisioning purposes. Our goal is to link diversity in participation to questions of allocation, and specifically to the element of costs.

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For institutional economists, management plans redistribute entitlements and obligations among multiple actors characterized by their common, albeit different, relationship with a particular watershed ecosystem. To the extent that a good ecological status can be equally achieved by different distributions of entitlements and obligations, a degree of freedom emerges concerning the choice of arrangement at stake. This raises the question of whether the degree of freedom in interpreting our participation provision has effects on the corresponding management plans: do different ways of organizing the active involvement of all interested parties systematically affect the distribution of entitlements and obligations within the management plans at stake?

Matters of space preclude us from addressing a question of this broadness. Here, we address an individual element of it: whether specific typologies of costs can be linked to specific choices concerning the design of given participatory processes. Provided that certain process designs restrict the range of the management plans that can be achieved, do certain, process-related costs 'force' specific process designs?

We approach such question through an analytical model based on the concepts of inclusion and closure (Renn, 2008). We subsequently formulate hypotheses on the likely effects of different design choices on decision-making and implementation costs, relying on transaction cost economics as does Williamson (1999, 2000). We then extend the analysis to four selected empirical cases, each one portraying a participatory process in watershed governance with a different design.

In spite of the cases' heterogeneity, a general tendency emerges across all cases: all processes seem designed to reduce decision-making costs. Our analytical model foresees a trade-off between decision-making costs and implementation costs, so that reducing the first is bound to increase the second. Indeed, implementation costs seem to be at the heart of each case's controversial aspects. This supports the validity of our model, but also raises questions on the logic behind process design.

The paper is structured as follows. The following section reviews the relevant institutional economics literature. The next section lays down the analytical model. The fourth section introduces the different cases. The fifth section provides an analysis. Finally, the last two sections respectively discuss the findings and draw some conclusions at a more abstract and general level, providing suggestions for future research.

Insights from the Literature

Institutional change is the central concept we shall use for capturing the introduction of management plans. Institutions are understood as the collectively defined range of options for individual action (Bromley, 2006). Given this take on institutions, institutional change represents the crafting and re-crafting of institutions: a process among individuals characterized by multiple rationalities (Vatn, 2005a, 2005b), trying to work out 'what is best' (Bromley, 2006) and thus reshape individual opportunity sets (North, 1991), by designing rules and conventions (Crawford and Ostrom, 1995) in a situation where both facts and values are not yet fully settled (Funtowicz and Ravetz, 1993).

After providing a working definition of institutions, we need to locate management plans in a compatible institutional perspective. Management plans draw the line between a plurality of economic activities in a watershed: they reallocate property and use rights and thus determine which combination of economic activities will take place in a given watershed. The introduction of a management plan represents a process of institutional change: it alters existing relationships in a given area previously governed by different arrangements. Decisions concerning the introduction of a management plan are thus decisions among alternative arrangements for the socio-economic structure of the area.

Economists conceptualize institutional change in two fundamentally distinct ways. On one hand, rational-choice theorists rely on the concept of Paretian efficiency in order to characterize institutional arrangements. Simply put: affected parties are assumed to be able to bargain new arrangements every time new information allows for mutually beneficial changes in the status quo. Institutions change if it is efficient to do so: that is, if redistributing certain, specific rights provide an advantage to some actor which is bigger than the simultaneous disadvantage it produces to others. This perspective is arguably the most popular and widespread within the profession (North, 1991; Williamson, 2000; Ostrom, 2007).

On the other hand, alternative accounts move away from rational-choice considerations and seek to establish consistency with the experimental findings of the last two decades. To cut a long story short, the kinds of assumption needed in order to buttress efficiency-based concepts of institutional change have been largely refuted by laboratory experiments. Economic efficiency reasoning tells us what institutions would look like if individuals were made in a certain way. Experimental economics has shown that *individuals are not made like that* (Ostrom *et al.*, 1992; Ostrom, 1998; Bowles and Gintis, 2000), and that *thinking so about them* does not prove helpful to understand institutions (Gneezy and Rustichini, 2000; Fehr and Fischbacher, 2002).

Looking for an alternative to rational-choice accounts, a good entry point is the concept of rationality. Under this header, economists have discussed at length the way individuals and groups link facts and values to individual and collective choices (Arrow, 1986; Simon, 1959, 1986). Philosophers have made sufficiently clear the point that, for environmental decision purposes, values are disputed and facts ambiguous (Funtowicz and Ravetz, 1993, 1994). Institutions embody specific values, translated into collectively sanctioned prescriptions based on certain understandings of specific facts (Vatn, 2005a, 2005b). Against this background, institutional change takes place by means of a collective re-discussion of the values and facts underlying a specific arrangement (Bromley, 2006, 2008).

Simplifying, we take from the above that individuals hold certain things true (facts) and certain other things desirable (values). Based on this, they will endorse or oppose certain institutional arrangements. Assuming that neither facts nor values are generally shared within a given social context, we achieve an intriguing perspective. To the extent that a number of individuals within a social context has to agree on a specific arrangement, the diversity of facts and values they hold determines their ability to find a satisfactory arrangement.

The rational-choice theorist may at this point counterargue that compromises are always possible and, hence, shared solutions. If an affected party is not (yet) satisfied with a given arrangement (specifically, the management plan), he or she can always improve the situation via bargain. This is true, but requires the prior agreement that (1) status quo entitlements and obligations apply and that (2) the proposed means of bargain (e.g. money) are suitable means of expressing preferences and quantifying marginal substitution rates for all affected parties. Agreements of this kind are not a given in environmental matters (Bromley, 2006; Funtowicz and Ravetz, 1994; Vatn, 2005a).

How to deal with diversity of facts and values is the core question for process design. Before we can turn to this, we need to establish a link between facts and values among participants and the decision output that they achieve. Modern institutional economists do so by relying on deliberation: they focus on the exchange of facts and values across individuals through discussion. The line of reasoning is the following: (1) mutually beneficial arrangements may not exist for whatever initial set of facts and values, but (2) interaction may reshape these facts and values until a mutually beneficial arrangement becomes possible.

Understanding institutions and institutional change becomes thus a matter of understanding the collective effects of arguments and debates on those individual facts and values determining the individual support of a certain arrangement. Process design determines which arguments and debates can take place, on which topics, by which means, to which audience, from which speaker and so on. It thus clearly plays an enabling role for institutional change.

We can now move one step closer to the European Water Framework Directive and to the type of participation setting it foresees. If we apply the above to the definition of management plans, we envision a social context encompassing diverse socio-economic groups. Concerning facts and values, we can assume a degree of group-internal homogeneity, opposed to a certain heterogeneity across groups – a rather commonsensical assumption. From here, participatory decision-making means that a certain sub-set of individuals, bearing a certain relationship to the groups making up the social context, meets and discusses alternative management plans, so as to collectively identify a decision output bearing a certain degree of endorsement.

Scholars stress that participation can be organized in different ways for different purposes (Rowe and Frewer, 2005; Wittmer *et al.*, 2006; Renn, 2008). With or without reference to the plurality of participatory approaches, the literature generally explores its effectiveness in terms of conflict resolution and in terms of promoting environmentally friendly arrangements (Rowe and Frewer, 2004; Rauschmayer and Wittmer, 2006; Newig and Fritsch, 2009) as well as its compatibility with given theories of democracy (Arnstein, 1969; Bulkeley and Mol, 2003; Rosenberg, 2007). Remaining firmly anchored to the perspective on institutional economics, though, our interest is a different one: whether and how different approaches to participation perform as functional fora for institutional change.

The literature sees institutions as the product of collective 'conversations', settling the relevant and acknowledged facts and values for socially sanctioned arrangements. Participation describes the many ways a plurality of individuals can provide a framework for this very same purpose. Yet, in a world of finite resources, participation processes are conducive of institutional change only to the extent that sufficient resources are available for such processes to run. Hence, it is certainly in order to explore how different designs relate to these resources. For this, we turn to transaction cost economics.

Transaction cost economics has emerged from industrial organization (Williamson, 1985), and was later extended to the realms of public choice (Williamson, 1999) and natural resource management (Birner and Wittmer, 2004). Transaction cost economics deals with the way groups and organizations structure themselves so as to economize on the way they go about their daily business. This translates into choices between alternative governance arrangements aiming at reducing the day-to-day costs of carrying out particular activities. We can rephrase the above in terms of a structured choice towards the 'smoothest' way to do things: if costs are foregone opportunities (Buchanan, 1969), 'smooth' arrangements are those that allow for a certain activity to be performed with the least overall set-up effort.

We can further characterize the effort connected with governance arrangements. Birner and Wittmer (2004) distinguish production costs from governance costs. Production costs pertain to those resources that are lost and/or transformed into something else as a direct product of a given activity. Governance costs, in turn, are further subdivided in decision-making costs and implementation costs. They pertain to the resources forgone for those activities that constitute a pre-requisite for production: (1) gathering and processing information so as to decide on production and (2) overseeing it, so as to guarantee that production conforms to decision-making.

Birner and Wittmer (2004) provide an abundant series of applications to environmental matters. We therefore invite the interested reader to refer to Birner and Wittmer (2004) directly for further clarifications and focus instead on how their contribution applies here. We deal with the European Water Framework Directive. Here, production costs describe the costs of materially realizing a good ecological status in given watersheds, encompassing actual remediation and maintenance costs as well as foregone revenues from dismissed or resized economic activities. Governance costs, instead, encompass those efforts made in order to take the corresponding decisions and ensure their compliance.

Whatever institutional arrangement emerges from a management plan, it will entail production and governance costs: it will foresee specific interventions, specific procedures handling uncertainties, specific monitoring and verification activities etc. If we broaden our focus from the arrangement itself to the whole process of participatorily defining a management plan, we incur additional governance costs connected to the specific decision-making and implementation process. These costs clearly depend on the design of the process. The following section will formulate a few hypotheses on how process design may affect governance costs.

The Analytical Model: Linking Process Design and Governance Costs

Management plans are understood as the product of a conversation among a plurality of actors concerning the best combination of economic activities in a given watershed, to be achieved by redistributing entitlements and obligations over those environmental resources that the watershed provides. Against this background, Article 14 of the European Water Framework Directive produces changes in the way different socio-economic actors take part in this conversation. In order to capture these changes, we refer to the concepts of inclusion and closure as of Renn (2008).

Setting the unit of analysis to a given decision process, inclusion and closure characterize the process's design. They respectively correspond to the questions 'who participates in the decision?' and 'when do we have a decision?'. In these terms, the inclusion variable captures the criterion selecting 'participants': it establishes a specific link between the outside world and the participants. Closure, instead, pertains to the set of criteria structuring the choice between the arrangements different participants endorse. It establishes a requirement of homogeneity among participants concerning their endorsement of a decision output.

As choice requires plurality, which in turn requires diversity, it is understood that a certain diversity exists within the social context at hand concerning possible alternative decision outputs. We can then make a step from a static to

a dynamic analysis by allowing 'social interaction' to affect such diversity. Simply put: facts and values held by participants, determining their different positions on the decision at stake, may vary as a product of the arguments to which they are exposed within a decision process.

Given the above, closure conditions such as majority voting, unanimity, tolerated consent and the like all characterize a certain threshold in the diversity of positions participants may hold. Under realistic assumptions, this threshold must be crossed for a decision to be produced. Hence, inclusion and closure effectively determine the diversity of facts and values entering the process and determining a decision output.

Let us explore the implications. We portray a socio-economic context encompassing individuals holding group-wise homogeneous facts and values. Across groups, the same facts and values are assumed heterogeneous. For each group, 'participants' within a participatory process 'carry' these facts and values into the definition of a new management plan by advocating for particular decision outputs. If diversity among these positions is such that the closure condition is not satisfied from the very outset of the process, participants need to advocate specific facts and values until a certain bundle thereof is sufficiently shared. When this happens, they must have moved away from those facts and values they initially shared with their group of reference, and on which their status of 'participants' possibly relies (via inclusion).

Let us assume that the exchange of arguments is able to let participants meet the closure condition. For the management plan to be endorsed in the broader social context as well, *something similar* must happen with the various social groups. As postulated above, under realistic assumptions, ex ante values and beliefs across social groups (equal to the positions participants held at the beginning of the process) are too diverse for closure to take place. Furthermore, we deal now with individuals who have not experienced the same process as participants have gone through. This is crucial: it leads us to assume that those individuals external to the decision process will not directly endorse the management plan participants have agreed upon after lengthy discussions.

Let us now establish a link with costs by means of two very simple and straightforward hypotheses. First, we consider decision-making costs as those efforts dedicated to bridging diversity of positions among participants. The higher the diversity, the higher the decision-making costs that will occur. Second, we can look at implementation costs as a function of diversity between participants 'after closure' (embedded in the management plan as a decision output) and the social context of reference. From this point of view, the higher the decision-making costs, the higher the implementation costs. The more the participants have to 'move', the more discussion is necessary. The greater the discussion, the more costly the decision-making and the more demanding the implementation of the output, all else being equal.

Figure 1 shows a decision output as a product of the participants' facts and values, processed via the communication that they are allowed to entertain among themselves, with an eye on the groups of reference to which they may be variously connected.

The model in Figure 1 encompasses various loops: most important for us are the 'internal loop' among participants and the 'external loop' between the different groups in the social context, the participants, the output and its expected consequences. The presence of these loops reveals the transaction cost dimension of the analytical model: the longer participants are 'stuck' in the internal loop, the higher the decision-making costs; the stronger the opposition within the different social groups, the higher the implementation costs.

Figure 1 shows us the role of inclusion and closure in determining such mechanisms. As we intend to investigate the link between process design choices and governance costs, we need to formulate hypotheses on the effects different inclusion and closure concepts may have, given a certain degree of diversity in the positions of participants and groups.

Figure 1 also shows us the role of communication between participants and the broader social context. This is a process design choice: processes may or may not foresee official communication channels, may or may not allow participants to disclose certain information and may or may not require a certain degree of isolation between participants and the groups from which they came (e.g. retreats, prohibition to communicate by phone or e-mail during meetings, discussions behind closed doors, confidentiality clauses etc.).

Diversity of facts and values has been so far the micro-analytical element putting these mechanisms into motion. How would different inclusion, closure, and communication concepts affect the way a process achieves a decision output starting from a plurality of participants not agreeing on the relevant facts and values?

Inclusion channels the diversity of facts and values from the broader social context into the decision-making process. It is safe to expect that, all else being equal, a broader inclusion concept increases decision-making costs.

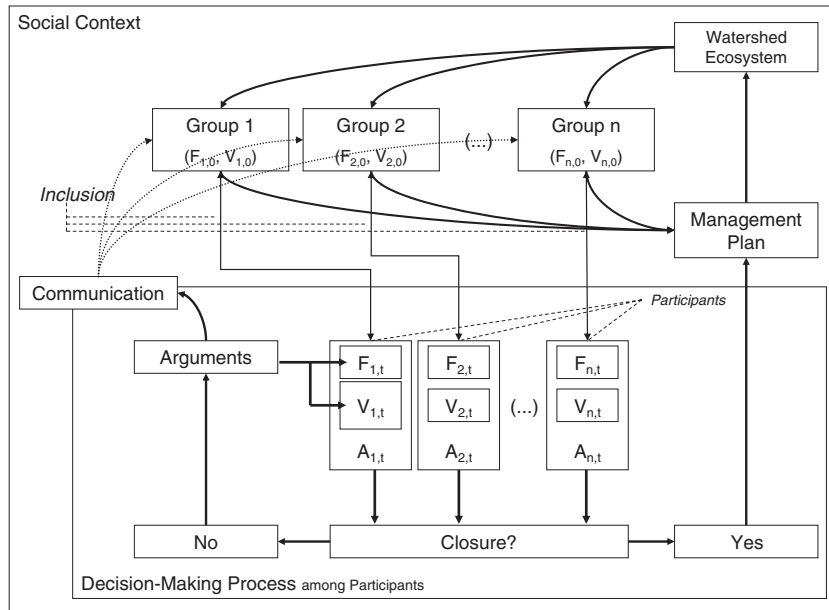


Figure 1. Analytical model of a deliberative process producing institutional change. $F_{1,t}$, $F_{2,t}$, $F_{n,t}$, $V_{1,t}$, $V_{2,t}$ and $V_{n,t}$ represent respectively the facts and values of the first, second and n th participants at time t

Symmetrically, decreasing the inclusiveness of a process can be safely expected to reduce decision-making costs. A less inclusive process design has the consequence of leaving a number of positions out of the discussion, increasing the likelihood that the decision output will not find the endorsement of those groups being left out. We would hence expect that reducing the inclusiveness of a process makes decision-making less costly, but increases implementation efforts.

Closure requires diversity of positions among participants to decrease for a decision to be made. Different closure concepts (e.g. majority vote versus unanimity) produce decisions with different degrees of endorsement by participants. We can expect looser closure to decrease decision-making costs. Fewer participants need to 'move' under a looser closure condition (majority vote) compared with a more stringent one (unanimity). This increases the number of participants (hence groups in the broader social context) not recognizing themselves in the decision output. We can hence expect implementation costs to be higher under a looser closure condition than otherwise, all else being equal.

Both inclusion and closure envision trade-offs between decision-making and implementation costs. Both trade-offs are an effect of the difference between what happens among participants and what happens in the broader social context from which participants come. The communication happening between participants and the outside world is therefore a crucial variable. We capture it by means of three hypotheses: isolation, outward conditioning and inward conditioning.

Under isolation, participants and the groups from which they come (and for which they speak) have no actual ties: the participant is free to 'move' based on what he or she experiences during the process, while he or she also has no way of 'talking back' to the group of origin. Let us take this situation as a baseline. In this case, reducing inclusiveness lowers decision-making costs, as expected. To the extent to which participants need to 'move' for closure to take place, the positions they will hold at the end of the process are bound to differ from those of their groups of origin, causing a certain degree of implementation cost, which is likely to be higher for lower inclusion and looser closure as described above.

Outward conditioning foresees instead participants relatively free to 'move' so as to achieve closure. Participants in this situation have the ability to communicate with the groups to which they relate, and bring them to 'moving along', 'exporting' acceptance and thus lowering implementation costs. Charisma, credibility, reputation, eloquence and media exposure all support this hypothesis. In this case, restricting inclusion for the sake of decision-making

costs additionally raises implementation costs by preventing outward conditioning. Similarly, a looser closure condition, saving on decision-making costs, raises implementation, since it decreases the number of participants endorsing the decision output and actively promoting it 'back home'.

By contrast, inward conditioning describes a situation where participants are unable to 'move' in light of stringent ties to their groups of origin. Such ties may take different forms: examples are mandate issues, hierarchical relationships and representation. We deal with participants who can 'talk' but cannot 'listen'. Here, restricting inclusion may drastically reduce decision-making costs. It is even possible to imagine situations where, facing the inability of some participants to 'move', restricting inclusion may be the only way for closure to be achieved, parallel to loosening closure itself.

Does this lead to an increase in implementation costs? The degree of opposition versus acceptance is at the origin of implementation costs. Here, it seems in-built in the positions held across the social context, irrespective of what happens among participants. The trade-off between decision-making costs and implementation costs revolves around the question of whether including the inward conditioned participant, increasing decision-making costs, also affects later implementation efforts, and if so how. Missing the ability to move, the very nature of 'participant' is pushed to the limit: at best, the inward conditioned participant can provide information concerning what his or her group would or would not endorse, with no possibility to change it.

Assuming a realistic scenario, where participants have to 'move' in order to achieve closure, the presence of participants not moving can reduce implementation costs in two ways: by attracting the decision output towards their positions, and by allowing a better informed design of implementation activities within the overall arrangement produced. Similarly, giving the presence of participants that cannot move, loosening closure obviously reduces decision-making cost. For our purposes, this raises the question of whether loosening closure simultaneously raises implementation costs.

It is commonsensical that both the attraction effect and the information effect depend on the amount of discussion that has taken place within the process. Reducing closure lowers the degree of discussion needed to achieve a decision output. For a constant level of inclusion, in the presence of inward conditioning a loosened closure does therefore reduce decision-making costs. It lowers the ability of the process to reduce implementation costs, though.

With the last remark, we achieve a homogeneous picture across the different communication alternatives: both restricting inclusion and loosening closure lead to an increase of implementation costs. This happens *in general* because of the different facts and values held within the 'inner loop' and the 'outer loop' as for the isolation scenario. Outward conditioning and inward conditioning foresee *additional* mechanisms counterbalancing the difference between inner and outer loops. While the former allows for convergence between what happens in the process and the opinions held outside of it, the latter introduces some sort of friction, reducing the range of possible decision outputs. In both cases, design choices reducing decision-making costs end up producing additional implementation costs.

Let us now wrap up the above. By applying institutional economics to participatory decision-making processes, we were able to formulate hypotheses on the link between process design and specific, governance-related typologies of costs: decision-making costs and implementation costs. Hence, we are now able to capture different process designs and formulate expectations on the cost dimensions these designs are likely to produce.

Our starting point was the implementation of the European Water Framework Directive and the ambiguous formulation of the directive's participation provisions. We can now apply our analytical model and attempt to gauge general, governance-related insights from a set of heterogeneous participation cases. We do so in the following section.

Materials: Four Cases of Participatory Water Governance

The cases presented below constitute a sub-set of the empirics collected within the GoverNat project, a Research and Training Network funded by the European Commission's Sixth Framework Programme between 2006 and 2010. GoverNat addressed the link between participation and multi-level governance of water and biodiversity. The

project aimed at a medium-*N* study focusing on cases of participation in water and biodiversity governance across Europe. Cases were approached through the application of an analytical framework (Rauschmayer and Wittmer, 2006).

This paper draws on a sub-set of those materials: the cases presented herewith are located in Germany and were approached between 2008 and 2010 as desk studies. Further analyses based on the whole bundle of case studies can be found in Renn *et al.* (2010) and Wesselink and Paavola (2008).

Matters of space preclude a thorough exploration of each of the four cases we are about to present. For the remainder of this section, we shall therefore introduce the cases by means of brief narratives, sketching both the context in which each process is located and the qualitative observations supporting hypotheses of high implementation costs.

For all cases, we provide an overview of the observed process design dimensions (inclusion, closure and communication). This will be done in tabular form below, directly followed by an analysis of the link between the observed implementation costs and the decision-making costs implied by the different process designs. Detailed descriptions of the different process designs can instead be retrieved through the GoverNat project or by contacting the author.

Panke 2015

The first of the four cases concerns a participation pilot project in Berlin. The project was initiated by the Berlin State Administration in view of the upcoming deadlines for the implementation of the European Water Framework Directive. The project deals with the renaturation of the Panke, a river crossing the border between the State of Berlin and the State of Brandenburg. It is interesting that, in order to achieve the necessary coordination, platforms were established on both sides, albeit based on different concepts.

While certain platforms were successful, other platforms failed, raising the question of whether the different process designs could account for this. In particular, specific environmental objectives on the (downstream) Berlin side had to be lowered in order to be compatible with those aimed at by the (upstream) Brandenburg side. Furthermore, according to our records, officials on the Brandenburg side expect conflicts with landowners to escalate the moment the planned measures are realized. We see both aspects as indicative of additional implementation costs linked to uncoordinated decision-making.

Werra Round Table

The second case deals with the salinity problem in the Werra/Weser river basin. Salt extraction is an important socio-economic activity in the context at hand. However, the current authorization regime for the activity's waste disposal channels is questionably compatible with the achievement of a good ecological status. A round table has been organized in order to identify a new arrangement. It gathers a plurality of public and private actors across the five federal states involved.

The process scored a great political success. However, it failed on a substantial basis: actors did gather a vast majority in support of a specific arrangement, but failed to convince the key actors implementing the necessary measures. The output of the process remains a dead letter for the time being. This reveals a source of implementation costs directly linked to the decision-making process: realizing the arrangement that was produced at the round table without the approval of these specific key actors would be met with such a strong opposition from their side that it appears simply unfeasible.

Leipzig Water Tourism

The third case is centred on water tourism in Leipzig. The city's surroundings were left badly damaged by the former GDR coal extraction and chemical industry. With the purpose of restoring these areas, a coordination platform across municipalities was established shortly after reunification. The platform currently pursues an integrated water tourism concept, whose realization may however prove detrimental to the last nature protection areas left in the region.

While the work of this platform has achieved important results in the past, dissatisfaction has emerged concerning the way the water tourism project is being implemented. This is puzzling given the open structure of the platform, and raises the question of whether one should expect opposition during the upcoming implementation phases. As a matter of fact, our records report that a strong opposition is actually there but cannot be turned into deeds because of a lack of means. If this were not the case, the water tourism project as it currently stands would face high opposition and thus implementation costs, without the participation process being able to prevent it.

Living Sprotte

The fourth case deals with a pilot project for the participatory implementation of the Water Framework Directive in the Sprotte river basin in Thuringia. The river has been severely engineered under past GDR management. As a follow-up on prior landscape planning projects in the same area, the Living Sprotte represents an integrated plan to completely remove river fragmentation and restore the river's ecology. Different coordination fora have been established for several aspects of the project, while communication has played a crucial role.

The project is certainly a success story, but while some interventions went well others were met with resistance and had to be abandoned. This observation reveals high implementation costs connected with missing acceptance: realizing specific measures against the will of the stakeholders appeared so difficult that these measures had to be cancelled.

Analysis

Building on these short narratives and on the qualitative evidence of significant implementation costs, we can now try to reconstruct the different process designs in terms of choices about inclusion, closure and communication. This is done in Table 1.

Table 1 shows that decision processes were set up so as to keep decision-making costs low. Inclusion and closure trigger complementary mechanisms that induce a certain degree of convergence among participants. Given, then, a particular communication scenario, this convergence is linked to the degree of acceptance/opposition with which the decision output will be confronted during implementation.

What we see in Table 1 is that, for these cases, inclusion and closure hardly require any efforts from the participants to come to shared positions: informal, loose inclusion is widespread, while closure seldom requires any degree of convergence from the participants. Concerning communication, we deal mostly with either isolation or

| | Inclusion | Closure | Communication |
|--|--------------------------|-----------------------|------------------------|
| Panke 2015 (multiple platforms) | | | |
| - officials – Berlin residents | open, informal | informal | isolation |
| - officials – Brandenburg residents | open, formal | technical judgement | isolation |
| - interstate officials | open, informal | informal | outward conditioning |
| Werra Round Table | formal, widely inclusive | formal, majority vote | isolation/inward cond. |
| Leipzig Water Tourism (multiple platforms) | | | |
| - low profile platforms | open, informal | no closure aimed | isolation |
| - high profile platforms | closed, informal | no closure aimed | outward conditioning |
| Living Sprotte (multiple platforms) | | | |
| - Sprotte management | closed, formal | informal | outward conditioning |
| - Sprotte council | closed, formal | informal | outward conditioning |

Table 1. Inclusion, closure and communication for the different cases

outward conditioning, which are also indicative of lower decision-making costs. Notably, inward conditioning is only observed for the Werra case.

Decisions could hence be taken and new arrangements could be defined without the need from the side of the participants to re-discuss their respective positions – keeping, on the other hand, decision-making costs low. If that is the case, the facts and values participants hold at the end of the process will not be too different from the ones they used to hold at the outset of the process. These same facts and values should still be held outside the process, in the different social groups from which participants came.

The above leaves us with two options: either (1) the conflicts inherent in the different management plans were ‘nothing serious’ and a few meetings were enough to identify options everybody can at least live with, or (2) conflicts were real, but process design made sure that options could be chosen by convincing just a few (mainly due to loose closure), reflecting different facts and values than those held in the broader social context, and leading to opposition. The latter, more realistic case makes up for high implementation costs, as we indeed observed in the cases portrayed above.

What makes the above interesting is that here additional implementation costs emerge as a product of evident economizing on decision-making costs. From this perspective, we can talk of a trade-off between the two typologies of costs and of an implicit cost-shifting from one to the other. Furthermore, outward conditioning reveals itself as a recurring characteristic of the processes addressed. Coupled with a rather loose and ‘smooth’ decision-making, it provides a picture of participatory processes as communication exercises rather than as joint liberations.

Participation does not seem to be about truly deciding together. Instead, it seems to be about raising attention and visibility for ready-made arrangements, decided elsewhere and embodying facts and values that, given the contained decision-making costs, did not experience any collaborative review. Let us now move on and discuss likely causes and implications of these findings.

Discussion

With the above, we have offered a perspective that links governance costs to the design of participatory processes. We have explored this perspective in the context of the participatory implementation of the European Water Framework Directive, where, according to Article 14, management plans should be drafted with the ‘early and active involvement’ of all affected stakeholders. The theoretical inquiry points out a trade-off between decision-making costs and implementation costs. It also grants a crucial role to the dimension of communication in determining the strength of this link.

Subsequently, a brief exploration of empirical materials from different case studies has supported, albeit qualitatively, the prediction of our analytical model. The empirical records seem to suggest that actual participation grants little space to collaborative decision-making and, if at all, attempts to create acceptance via communication towards the outside. Participation seems to go one way rather than two ways.

At this point, it is very important to be careful with generalizations. The analysis of the empirical records is, so far, tentative. Space is not available for a thorough exploration, case by case, of the link between what actually happened in each case and to what extent this can be attributed to the participation design. Quantifications and experimental simulations of the actual decision-making and implementation costs are also out of reach. We are certainly still far away from causation – if at all, we observe an interesting correlation. Further research could try to quantify decision-making and implementation costs and add robustness to the correlation we seem to observe here.

Furthermore, we have few elements in our hands to ascertain whether there was any awareness, among those who designed the different processes, of the trade-offs we envision here. It is most difficult to say whether there was any awareness at all of what we here call ‘design choices’. Scenarios of this kind can be easily imagined. Just take those public officials in charge of the participatory implementation of the Water Framework Directive and put them on a tight budget, with severe time constraints.

In a scenario of this kind, it is hard to imagine that they would carefully balance inclusion, closure and communication so as to ensure convergence at present and the highest acceptance later on. It is hard to imagine

them investing in the process, taking high decision-making costs into account. They are more likely to stick to business-as-usual-practices, ‘muddle through’ the whole process and gather experience for future reference.

Our findings are consistent with some of the experiences made so far with the participatory side of the European Water Framework Directive (Kampa *et al.*, 2009). Most of all, it tells us that participation, set up under tight budgets, is not likely to keep up with the promise of smoother implementation processes. The communication efforts around it may possibly convey a few messages, but they are not likely to significantly alter the facts and values held within the different social groups at play. This is so because, given low decision-making costs, no thorough articulation and collective re-discussion of these facts and values are going to take place by design.

The analysis above shows indeed that there are good, conceptual reasons to consider participation while introducing management plans – provided high decision-making costs are involved, though. The actual application of participation seems instead to involve a very different kind of reasoning, far away from deciding collaboratively the direction in which to jointly steer a socio-ecological system. By keeping decision-making costs low by design, participation seems here to be more about informing than about deciding. The toil and trouble of deciding together is apparently shifted to later implementation stages.

Conclusions

This paper elaborates on the participatory dimension of the European Water Framework Directive. The analysis has addressed the process of participatorily drafting management plans. Based on institutional economics, it focused on the diversity of facts and values entering a decision-making process. An analytical model was produced, focusing on three core dimensions: inclusion, closure and communication. Based on their combination, we could structure expectations concerning decision-making costs and implementation costs. We then proceeded to compare these expectations with the designs and processes of four actual case studies in Germany.

A general tendency has emerged across all cases: all processes seem designed to reduce decision-making costs. Based on our analytical model, we would then expect implementation costs to rise. Indeed, increased implementation costs seem to be at the heart of each case’s controversial aspects. The comparison between analytical findings and empirical observations was made at a very qualitative level. It must therefore be taken with caution. Nonetheless, empirical materials seem to support the insights of our analytical model.

Both materials and predictions seem to tell us that participation is hardly understood as a chance for stakeholders to decide together in which direction to steer the socio-ecological system where they all live and operate. Room for the extensive, collective decision-making that this implies does not seem to be given. Process design economizes on decision-making costs instead. Participation, approached this way, arguably shifts efforts to later implementation phases – in spite of what both academics and the European Regulator may have meant by it.

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