

Module 10: Designing Participatory Decision Strategies

Felix Rauschmayer

Abstract Human-wildlife conflicts are necessarily linked to stakeholders. Resolving these conflicts requires multilateral interaction. Participatory developed decisions promise to have a better information base, include all actors with relevant knowledge and implementation power, be based on mutual trust and understanding and, finally, reduce overall costs. This chapter gives some general guidelines on what to consider for participatory processes in human-wildlife conflicts in order to live up to some of these promises. While the minimum approach consists of characterizing the conflict and of informing the stakeholders, the advanced approach eventually consists of employing a fully fledged participatory method.

1 Rationale and Objectives

Human-wildlife conflicts are by nature conflicts between different stakeholders (Conley and Moote 2003; Schusler and Decker 2003). Assessing whether participatory processes are useful for decision-making is particularly valuable when observing the following changes: a shift from species conservation to species management, the emergence of new actors in the conflict, or the escalation of the conflict due to environmental change or changing human and/or animal behavior.

Participatory processes (see Box 1) can lead to a better inclusion and processing of information. They can create or support positive social dynamics between

F. Rauschmayer (✉)
Department of Environmental Politics,
UFZ—Helmholtz Centre for Environmental Research,
Permoserstraße 15, 04318 Leipzig, Germany
e-mail: felix.rauschmayer@ufz.de

stakeholders and public administration, create decision options such as new or adapted policy instruments with higher legitimacy and, thus, with higher acceptance. Finally, they can lead to options with lower costs. In biodiversity conflicts, participation will mainly be played on the stakeholder level and not involve the general public.

Whereas mere disposal of credible information might be enough in low-intensity conflicts about facts, highly elaborate and costly processes may be the adequate means to deal with high-intensity conflicts about values and interests. The results of discourse analysis (module 6) will indicate the intensity of the conflict.

Box 1 Participatory Processes

“Numerous participatory processes have been designed, implemented, and analyzed in various contexts. In the field of environment and sustainable development, they are manifold. They include: focus groups, citizens’ juries, consensus conferences, cooperative discourse, dialogue groups, stakeholders’ workshops, participatory expert workshops, reflection forums, deliberative interviews, voluntary agreements, eco-audits, policy simulation exercises, deliberative foresights, concerted environmental management, mediation, regulatory negotiation, consultative forums, deliberative conflict resolution processes, environmental negotiations, etc.” (van den Hove 2006, p. 11)

Most of the legal and institutional settings will have been analyzed in previous steps of analysis (modules 4 and 5). Negotiation-oriented processes aiming at decision-making are in the centre of this module. Analyses of different participatory methods and processes can be found in the literature (e.g., Renn et al. 1995; Dietz and Stern 2008).

This module aims at selecting a method appropriate to the specific case according to the main characteristics of the situation. The initial conflict characterization in module 1 has been redefined during the further analysis of the conflict (modules 2–6). In severe conflicts, data collection and scientific work will have to be embedded in a participatory process in order to achieve a general acceptance of the data. Therefore, particular attention should be paid to information management: Whereas scientific knowledge often is the first base of reconciliation action plans, local knowledge frequently does not find its way into the decision processes on action plans. This one-sidedness, apart from substantial shortcomings, can have severe implications on the legitimacy of the plan and, hence, on its implementation.

Designing participatory decision strategies always involves the cooperation with government agencies and may include new policy instruments; a close cooperation with module 9 (policy instruments) is therefore indicated. Close cooperation with modules 7 and 8 about ecological mitigation of the conflict and population modeling will enrich the quality of the discussion as well.

2 Methods and Approaches

Before really conducting the participatory decision process, one has to understand the conflict to select an appropriate method, and to identify the appropriate social organization or person for leading the process. One should therefore differentiate between the following steps when deciding about the participatory process to undertake:

1. Characterizing the conflict
 2. Selecting the method
 3. Leading the process
 4. Conducting the process
- (1) The conflict characterization mainly builds on the information obtained in the stakeholder analysis (module 6): it is the judgment of the stakeholders, which provides the necessary information on the type of conflict. One can roughly differentiate between conflicts on facts, on interests, and on values. In praxis, though, elements of all three categories are often intermingled. Furthermore, conflicts can be dormant, slowly evolving, or erupting. The institutional analysis (modules 4 and 5) provides information on existing and potential ways of conducting participatory processes. The importance of the conflict for society is another criterion for choosing the proper intensity of the participatory process. Attention must be paid to differentiate between different spatial and political levels of a conflict: local, regional, national, or supra-national. Each level usually evokes different attitudes of the stakeholder, has different institutional settings, and the human-wildlife conflict at hand has different relative importance. All this information is then brought together in order to define the situational requirements for a participatory method (Table 1).
- (1) Conflicts mainly caused by differences of belief in facts ask for better information management; (2) conflicts caused by the exclusion of one or several stakeholder groups demand an improved legitimacy of processes and decisions for their resolution; (3) ongoing conflicts with changing ecological and socio-economic behaviors require enhanced social dynamics; finally (4) costs of the decisions, the process, and of decision failures will play a role in all conflicts. Using analytical methods allowing for the simultaneous evaluation of different options along clearly outlined decision criteria, such as the methods of multi-criteria analysis (Salminen et al. 1998; Bouyssou et al. 2000; Stirling 2001), should help in most cases (NRC 1999).
- (2) The aim of this step is to select a participatory process appropriate to the conflict situation. The categories described in step (1) (Table 1) can be used to evaluate different participatory methods (for an overview see Box 2; Rauschmayer and Wittmer 2006). These evaluations help the analyst to select the most appropriate method. They are based on the translation of the results of the discourse analysis into a conflict characterization. Participatory methods can only be evaluated in a standardized version and have to be adapted to the specifics of the situation. In practice, the deployment of the selected method also largely depends on the skills of the moderator. Selecting the appropriate process is thus dependent on the

Table 1 Evaluation criteria for participatory processes

Metacriteria	Criteria
Information management	Integrating different types of information Coping with uncertainty Coping with complexity
Legitimacy	Legal compatibility Inclusion/representation Transparency of rules and assumptions to insiders and outsiders Accountability
Social dynamics	Changing behavior, changing perspectives/learning Agency/empowerment Respect/relationship Facilitation of convergence or illustration of diversity
Costs	Cost-effectiveness Costs of the method Decision failure costs

Source: Wittmer et al. (2006)

conflict characterization, builds on the institutional setting and demands from the analyst to specifically consider the possibilities and willingness of the authorities. Traditions of participation, legal options for participation, and factual openness to participation, especially of the administration, play an important role in selecting suitable participatory methods. Traditions and legal possibilities of participation differ between countries, between policy fields, and between policy levels. It has been shown that the commitment of the authorities to really consider the results of a participatory process is a key element to its success.

- (3) It must be decided who leads the process, but often it is not even clear, which is the relevant organization for authorizing the request for a biodiversity reconciliation action plan. Usually, scientists have no mandate to initiate or to conduct a participatory process, and they may be perceived as partial or incompetent. Often, the authorities are dominated either by the users or by the protectors of nature. In many countries, though, legal or semi-legal participatory bodies already exist, which may or may not use external facilitators to conduct the process. Having external facilitators conducting the process improves impartiality and, therefore, legitimacy. Their external perspective can help to include new or currently excluded stakeholders (with their knowledge, interests, and values) in the process. At first sight, external facilitators raise the costs of the process, but through a potentially shorter process considering a fuller range of options, they can contribute to lower process and follow-up costs. Most often, a conflict has already been acknowledged, and activities started to resolve it. Adapting one's own participatory process to the existing calendar of events and to the policy cycle improves the chances of having enough participation and of influencing policy by the process results.



Fig. 1 Scientists demonstrating the involvement of stakeholders in a participatory process. *Photo: Norma Neuheiser*

(4) The first step in conducting participatory decision processes is to identify its participants. Further steps may include elements of decision analysis, i.e. to elaborate clear decision options, to identify the criteria relevant to the decision, and to evaluate the options, which then leads to the discussion of the final recommendation. The selection of participants depends on the prior existence of participatory bodies, on the authorities responsible for and involved in the process, and, of course, on the diversity of the stakeholders, which becomes apparent through the discourse analysis (module 6). It might be difficult to introduce new stakeholders into an already existing participatory body for the creation of a reconciliation action plan. One should consider whether their participation could be channeled in a different way than through their direct and full participation (Fig. 1).

Different options, partly coming from module 9 and all using information from modules 1–8, are developed further and decided upon according to the agreed criteria. There are several benefits of making options, criteria, and the formal decision procedure transparent. The decision process should make sure, firstly, that the considered options cover the whole range of possibilities and, secondly, that the criteria cover the whole range of values and interests of people concerned. Together with a clear and comprehensive evaluation of the options, completeness and clarity will increase the legitimacy of the process and of the decisions made. The options will be elaborated based on the results of natural and social analyses while considering improved or newly emerging policy options (module 9), new mitigation techniques (module 7), and the result of population viability analysis (module 8). At the same time, the results of these other modules will provide the foundation for the evaluations. The first ideas on the relevant decision criteria will stem from the discourse analysis (module 6).

3 Recommendations: Selecting the Appropriate Approach

Following the four steps outlined above, the characterization (step 1) constitutes the minimum approach. Giving advice to the authorities on how to conduct an appropriate participatory process can be considered as the standard approach. The appropriate way of conducting participatory processes, and of advising authorities in the standard approach, depends on the financial and institutional possibilities and on the intensity of the conflict. Simple participatory methods require only little money and effort (for example an embedment in existing well-functioning institutional settings), while highly elaborated methods ask for highly skilled facilitators, profound elaboration of decision options, and a balanced consideration of stakeholders, administration, and the public (compare Webler 1995; Renn 1999; Dietz and Stern 2008).

3.1 Minimum Requirement: Conflict Characterization and Information

The characterization of the conflict is the basis for deciding whether to undertake a participatory process. It indicates type, severity, and intensity of the conflict. It mainly builds on the screening phase (module 1), enriched by stakeholder and discourse analysis (module 6), the institutional setting (modules 4 and 5) and on first ideas of potential policy options (modules 1–9). Stakeholders should be informed and perhaps educated about the main conflict characteristics in an appropriate form.

3.2 Standard: Process Selection and Advice

If the characterization of the conflict indicates a need for a participatory decision process, the conflict manager should select appropriate methods (see Box 2) and check whether those can be embedded in the existing institutional setting, such as stakeholder *fora* or advisory councils. The resulting advice is meant to enrich and complement the existing setting in order to help relevant authorities and further stakeholders to identify better ways of making joint decisions.

3.3 Advanced: Conducting a Process

If there is a window of opportunity for a new and specific participatory process as identified in the standard approach, i.e.

- if the authorities are committed to the process,
- if the relevant stakeholders are willing to participate,
- if a selected facilitator is judged neutral by all participants,
- if there is enough time, and
- if there are enough finances for the selected method,

then such a process can be conducted. Box 2 gives a short example of how to conduct such a process.

Box 2 Participatory Decision Process in the Portuguese Sado Estuary Nature Reserve (see Santos-Reis et al. 2012)

In the Sado Estuary Nature Reserve a participatory process for the development of policy instruments was undertaken within the FRAP project in order to reconcile the conflict between otter conservation and fish farming. Assessment showed that a growing conflict between the fish-farmers and the nature reserve administration was motivated by opposing interests and a communication gap, without instruments in place to address it.

Rui Santos and colleagues initiated a participatory conflict reconciliation process, combining the use of formal participation techniques—consultation workshops—with an informal approach of information gathering and building of trust, based on individual meetings. This has resulted in the development of a collaborative decision option, involving fish-farmers, the reserve administration and the municipality. A first result of this agreement is the development of a fish certification scheme, promoting an ecologically sustainable production and the sector's economic competitiveness.

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