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Evaluating Governance and Participatory Processes in Natura 2000: Lessons Learned and Guidance for Future Prospects

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Evaluating Governance and Participatory Processes in Natura 2000: Lessons Learned and Guidance for Future Prospects

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In recent years, participatory approaches have been incorporated in decision-making processes as a way to strengthen the bonds between diverse areas of knowledge and social actors in natural resources management and environmental governance. Despite the favourable context, this paradigm shift is still in an early stage within the development of the Natura 2000 in the European Union, the largest network of protected areas in the world. To enhance the full scope of participatory approaches in this context, this article: (i) briefly reviews the role of participatory approaches in environmental governance, (ii) develops a common framework to evaluate such participatory processes in protected area management, (iii) applies this framework to a real case study, and (iv) based on the lessons learned, provides guidance to improve the future governance of Natura 2000 sites.

Keywords: Environmental governance, evaluation, participatory process, Natura 2000, Europe

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1 Introduction

In environmental decision-making the focus has shifted from the search for optimal solutions to the quality of the decision-making process, and from top-down technocratic approaches to inclusive approaches that account for diverse societal perspectives (Funtowicz and Ravetz, 1990; O'Connor *et al.*, 1996). As a consequence, participatory processes for sustainable natural resource management and environmental governance have been in the centre of many contemporary studies (Webler *et al.*, 2001; Webler *et al.*, 2004; Abelson and Gauvin, 2006; Dougill *et al.*, 2006; Wittmer *et al.*, 2006; Reed, 2008; Rodela and Udovč, 2008; Stoll-Kleemann and Welp, 2008; Bergseng and Vatn, 2009; Rauschmayer, Paavola, *et al.* (2009); Booth and Halseth, 2011; Parés, 2011; Schultz *et al.*, 2011).

This perspective, acknowledges the prominent role that social actors, especially those in the local community, should play in the governance of natural resources (Frank and Müller, 2003; Pröbstl, 2003; Kasemir *et al.*, 2003; Dougill *et al.*, 2006; Rodela and Udovč, 2008; Stoll-Kleemann and Welp, 2008; Bergseng and Vatn, 2009; Wallner and Wiesmann, 2009; Schultz *et al.*, 2011). The emergence of participatory appraisals within UNESCO World Heritage sites (Wallner and Wiesmann, 2009), biosphere reserves (Schliep and Stoll-Kleemann, 2010), national parks (Dougill *et al.*, 2006; Rodela and Udovč, 2008), and forest conservation programmes (Frank and Müller, 2003) are examples of a shift towards deliberative appraisals in the context of nature conservation.

Participatory approaches (Fiorino, 1990; Laird, 1993; Webler *et al.*, 1995) have been identified as key elements for developing innovative frameworks for environmental governance¹ (Lafferty, 2004; McCauley, 2008; Parés, 2011). Deliberative processes that include a broad array of social actors (Bloomfield *et al.*, 2001) can boost the legitimacy and effectiveness of governance solutions (Stirling, 2006) while creating learning opportunities that go beyond predefined individual interests (Garmendia and Stagl, 2010). Moreover, this collective learning process is seen as an essential prerequisite for constructing a shared understanding and new capacities for joint actions within decision-making processes (Parson and Clark, 1995; Schusler *et al.*, 2003; Folke *et al.*, 2005; Pahl-Wostl *et al.*, 2007; Brugnach *et al.*, 2008). Evidence suggests that processes which include interaction and co-operation among social actors can result in better management solutions than formal hierarchical planning processes which prevent this type of participation (Beunen and de Vries, 2011).

Nevertheless, the mere inclusion of social actors in a participatory process does not ensure *per se* advances in environmental governance (Rauschmayer, Paavola *et al.*, 2009). For instance, the outcomes of participatory approaches have been questioned for rising conflicts in protected areas (Wilshusen *et al.*, 2002). The outcomes of these approaches have also led to discussions about the limitations of civil society's capacity to influence the political options under discussion (Booth and Halseth, 2011).

Therefore, to ensure that a participatory process actually improves environmental governance, the process must be evaluated systematically and its outcomes assessed critically (Garmendia and Stagl, 2010; Rauschmayer, Berghöfer *et al.*, 2009; Webler *et al.*, 2001; Webler and Tuler 2006). Moreover, the participatory process must be grounded in the best

¹ Environmental governance is defined in this article as the collection of institutions (formal and informal), processes, behaviours, and organisational models, through which social organisations, interest groups, and citizens express their interests, mediate their conflicts and exercise their rights and duties.

available knowledge from current theoretical debates in areas such sociology, political science, or philosophy, and enriched with empirical evidence coming from actual experiences.

In this article, we first explore the role of participatory approaches in the governance of the Natura 2000 (N2000) network. Next we present a common framework to map the full scope of such participatory approaches. We then briefly describe a case study of a participatory process which has been evaluated and the procedures used for the data collection and present the results of the evaluation. Finally, we discuss the results and recommend guidance to enhance the future governance of N2000 sites.

2 Governance and participatory processes in Natura 2000

The European Union (EU) regulatory framework integrates participatory processes in governance. For instance, the EU white paper for governance states that public participation, together with transparency, accountability, effectiveness, and consistency in decision-making are the main pillars for good governance (European Commission, 2001). With respect to environmental matters, the Aarhus Convention also acknowledges the public's right to access information, to participate in decision-making, and to access justice.

N2000 entails a multilevel governance process in the EU and illustrates in all its complexity the main challenges that are embedded in implementing the above-mentioned commitments (Weber and Christophersen, 2002; Paavola, 2004; Gibbs *et al.*, 2007; McCauley, 2008; Beunen *et al.*, 2009; Paavola *et al.*, 2009; Rauschmayer, Paavola *et al.*, 2009; Dimitrakopoulos *et al.*, 2010; Beunen and De Vries, 2011; Fock, 2011).

N2000 is the largest protected areas network in the world and its governance involves various European institutions at multiple levels, from local to international, with a broad array of social actors. These actors include: national, regional, and local governments; non-governmental organisations (NGOs); environmental associations; and private owners and business lobbies. The aim of this network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. The N2000 network is comprised of Sites of Community Importance (SCI) designated by member states under the Habitats Directive (92/43/EEC), and also incorporates Special Protection Areas (SPA) designated under the Birds Directive (79/409/ECC). According to the European N2000 Barometer, the N2000 network currently includes 22,529 SCI (719,015 km²) and 5,315 SPA sites (593,486 km²), covering around 18% of the EU land area (European Commission, 2011).

All state members of the EU are obligated to implement Habitats and Birds Directives and national governments are responsible for the management of the network in their territory. Different member states have implemented the directives in different ways (see e.g. Beunen *et al.*, 2009), but many have delegated the management responsibility to regional and local authorities.

Subject to the Habitats Directive, N2000 sites were chosen exclusively on the basis of ecological criteria, according to the technical information available. The first phase of the N2000 process declared SCI on the basis of guidance from the directive (annex I and annex II). The second phase was a six-year period in which an appropriate management and action plan was to be developed. After adoption of the management and action plan, each SCI would become Special Areas of Conservation (SAC).

Participation in N2000 can occur during all phases: when planning sites to protect, when drafting the regulation and management plans, when developing the sites, or when assessing any or all of the phases mentioned. The EU encourages the involvement of social actors in N2000 management (European Commission, 2000, 2005); however, because management depends on the initiative of national governments, the governments are the ones that decide how to integrate any participation.

From a governance perspective, the Habitats Directive relies on a top-down vision (Paavola *et al.*, 2009) and, although the EU intends to involve social actors in N2000 management, it failed to inform the public about its goals and their implications (see Paavola, 2004). Even though article 6 of the Habitats Directive emphasises the need to ensure that future management is both ecologically and economically sustainable (European Commission, 2000), socio-economic criteria have yet to be included in the selection of the sites. Socio-economic criteria are important since, other than some strict nature reserves, most lands in N2000 are expected to remain privately owned.

In this context, local communities and diverse social actors have often opposed the establishment of the N2000 network. One of the most notable cases of resistance to the establishment of the N2000 network has been undertaken by the forestry lobby (Weber and Christophersen, 2002), which opposed the network from its inception. Their main objections were the lack of involvement of forest land owners in decision-making processes in general (Krott *et al.*, 2000), and in the site selections, in particular (Frank and Müller, 2003), and the lack of funding for landowner compensation. Those who support the N2000 network have also clashed with other interests such as farming (Visser *et al.*, 2007) or maritime development (Gibbs *et al.*, 2007). In addition, the effectiveness of the network has been limited by numerous conflicts that arose during the 1990s in France, Finland, and United Kingdom (Paavola, 2004). These conflicts often resulted in court actions, which have delayed the establishment of the network (Paavola *et al.*, 2009). As a result of these difficulties, there are increasing demands to change current processes that prevent the involvement of civil society (Lafferty, McCauley, 2008), inhibit the effectiveness of participatory processes (Lafferty, 2004; McCauley, 2008; Clark and Clarke, 2011), and impede distributional and procedural justice (Paavola, 2004).

3 Common framework for evaluating participatory approaches in Natura 2000

To achieve the full potential of participatory approaches in environmental governance, the quality of such deliberative appraisals (benefits, limits and risks) must be assessed from a critical perspective (Reed, 2008; Garmendia and Stagl, 2010). To evaluate participatory approaches in the context of N2000 we constructed a common framework using the following steps. First, we reviewed literature covering two main areas: (a) assessments of the impacts of public participation (*outcome oriented*) (Webler *et al.* 1995; Webler *et al.* 2004; Abelson and Gauvin, 2006), and (b) examinations of the criteria used to evaluate decision-aid methods based on participation (*process oriented*) (Stirling, 2006; Wittmer *et al.* 2006, Rauschmayer, Berghöfer *et al.*, 2009, Garmendia and Stagl, 2010). Then, based on our literature review, we identified the key evaluation criteria used to assess the scope of participatory approaches. Finally, relying on these evaluation criteria, we built a set of statements to be tested empirically in real case studies.

3.1 Evaluation Criterion 1: Information quality

This criterion relates to how well the process supports social actors in acquiring and structuring information and knowledge (Webler *et al.*, 2004; Webler and Tuler, 2006; Wittmer *et al.*, 2006; Rauschmayer, Berghöfer *et al.*, 2009). Natural resources and environmental issues are complex, and environmental, economic, social and institutional issues interact over time, often in unpredictable ways (Paavola and Adger, 2005; Rammel *et al.*, 2007). To respond to this complexity and uncertainty, an effective participatory process must integrate diverse scientific disciplines and different types of knowledge (Funtowicz and Ravetz, 1990; Stoll-Kleemann and Welp, 2008). The latter is essential to inform and reinforce deliberations by social actors (Webler and Tuler 2006; Reed, 2008), even though the role played by local knowledge in an ever-changing world can be also questioned (du Toit *et al.*, 2004).

Table 1. Statements for Evaluation Criteria 1: Information quality

Statements
S1: The information has been presented in a clear and understandable way.
S2: The information can be managed and discussed easily.
S3: The information is based on credible and sound sources.

3.2 Evaluation Criterion 2: Legitimacy

Legitimacy is related to the ability to integrate the interests and needs of all social actors while ensuring equal participation in the process (Webler *et al.*, 2004; Webler and Tuler, 2006; Wittmer *et al.*, 2006; Rauschmayer, Berghöfer *et al.*, 2009). The active and equitable inclusion of a broad range of social actors has the potential to create shared goals and reinforce the legitimacy of decisions. Nevertheless, mere participation does not guarantee the legitimacy of the process. Other factors such as availability of time and resources, potential misrepresentations or dealing with strategic behaviours, have to be addressed (Rodela and Udovč, 2008; Stoll-Kleemann and Welp, 2008; Schultz *et al.*, 2011). Our definition of this criterion is similar to that of fairness, as used by Webler *et al.* (1995, 2001). In this case, to assess the legitimacy of the process, we evaluate how the involvement of social actors is facilitated, that is, the extent to which participation is introduced and the degree to which the real interests and needs of social actors are included within the deliberative process.

Table 2. Statements for Evaluation Criteria 2: Legitimacy

Statements
S4: All the people involved who have interests in the area have been able to take part in the process.
S5: All participants have had equal access to information.
S6: Mutual respect among participants has been encouraged.
S7: All participants have been able to express their ideas and opinions on equal terms.
S8: All participants have contributed to the open debate on the different options.

3.3 Evaluation Criterion 3: Social dynamics

This criterion is meant to assess the impact of the process in shaping the relationships among the relevant actors. The process must facilitate learning and mutual trust (Webler *et al.* 1995; Webler *et al.*, 2004; Webler and Tuler, 2006; Wittmer *et al.*, 2006; Reed, 2008; Rauschmayer, Berghöfer *et al.*, 2009; Garmendia and Stagl, 2010) and allow participants to defend their views, thus encouraging constructive discussions. For this purpose, the focus must be on opportunities to communicate and argue rather than on seeking consensus (Van Den Hove, 2006). Social actors need the chance to reflect on the overall diversity of perspectives while redefining their priorities and gaining a better understanding of the position of others. Note that the participation of social actors who defend conflicting interests could also result in negative impacts to biodiversity and environmental protection, if the conflicting perspectives are not properly addressed (e.g. Wilshusen *et al.*, 2002).

Table 3. Statements for Evaluation Criteria 3: Social dynamics

Statements
S9: The participatory process has encouraged learning about the current problems and the opinions of the rest of the participants.
S10: A better ability to justify preferences has been encouraged.
S11: A better understanding of the views and interests of the other parties has been encouraged.
S12: The participants have tried to find solutions which were good for all.
S13: More contact and greater knowledge among citizens and the administration (and vice versa) has been encouraged.

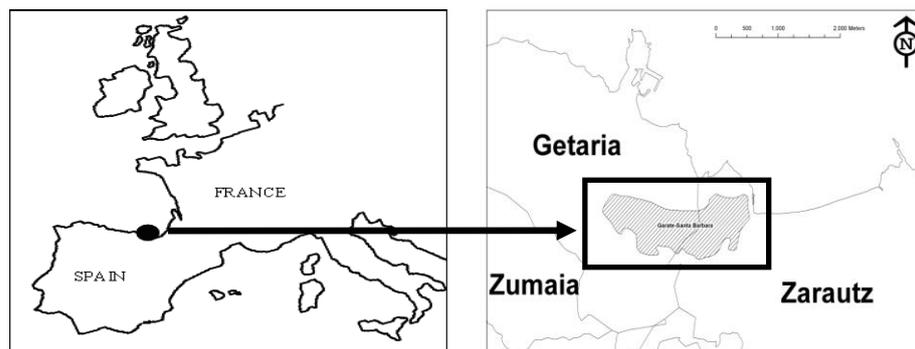
4 Case study: participatory process in Garate-Santa Barbara SCI

4.1 Study area and main environmental characteristics

The study area encompasses the Garate-Santa Barbara (G-SB) SCI within the N2000 network of the Autonomous Community in the Basque Country (CAPV, *Comunidad Autónoma del País Vasco*), northern Spain. The CAPV contains 52 SCI, which represent approximately 20% of the region's land area. These SCI were expected to become SAC by 2013, but this commitment will not be fulfilled because the designation process of many sites has been delayed. To date, no SAC has been declared in the CAPV, even though 25 sites, including G-SB, are undergoing the declaration process.

The G-SB SCI occupies 142 ha in Gipuzkoa province, between the towns of Zarautz and Getaria (Figure 1). This SCI was designated as part of the Atlantic biogeographic region in December 2004 (SCI code: ES2120007) and includes five habitats of community interest. The presence of cork oak (*Quercus suber*) specimens and stands is especially remarkable, as this SCI contains 75% of the total cork oak forests in the entire CAPV.

Figure 1. Location of the G-SB SCI in Gipuzkoa (Basque Country, Spain)



4.2 Multiple uses and socio-ecological conflicts

This case study illustrates the main difficulties faced when dealing with multiple legitimate, but conflicting, interests and values. Production of white wine, grazing, and forestry are the principal rural economic activities in the area and all of the land is privately owned. Besides its economic and environmental value, the G-SB is also an important recreational area for local inhabitants and contains relevant cultural heritage elements.

Because of the multiple, coexisting land uses in the area, there is an underlying conflict in the G-SB SCI, mainly between those interested in vineyards and wine production and those interested in the conservation of the cork oak (Díez *et al.*, 2010). Our case study shows a normative conflict (Bergseng and Vatn, 2009) between those who give priority to the conservation of natural assets and those who defend the development of the local economy above environmental restrictions. Whereas the conservation groups and some of the public administration agencies advocate for the protection of the main natural resources, wine producers pursue the expansion of their vineyards, even though such expansion may be detrimental to cork oak forests because of direct land conflicts, the use of pesticides, and land fragmentation.

4.3 Participatory assessment using the Social Multi-Criteria Evaluation framework

To deal with these conflicts and multiple land uses, the local and regional authorities, together with an interdisciplinary group of researchers, decided to pilot a participatory process in G-SB SCI. The aim was to better understand the potential effects (e.g. environmental, economic, and social) of N2000 site designations in the region and to take decisions on planning and management issues related to the G-SB SCI (Etxano, 2012).

The participatory process was planned to highlight the perceptions and interests of social actors within the Social Multi-Criteria Evaluation framework (SMCE) (Munda, 2004, 2008). The SMCE has been designed to support decision-making processes in complex and uncertain situations (Munda, 2004 and 2008) and has been tested in various fields to integrate diverse types of knowledge and address key conflict areas (Gamboa, 2006; Gamboa and Munda, 2007; Roca *et al.*, 2008; Garmendia *et al.*, 2010; Oikonomou *et al.*, 2011). This framework goes beyond the search for optimal solutions that are often based in artificial consensus, and prioritises compromise solutions where diverse and sometimes irreconcilable perspectives can be acknowledged (Munda, 2004; Van den Hove, 2006). Additionally,

SMCE have demonstrated a great potential to enhance social learning processes among diverse disciplines and actors (Garmendia and Stagl, 2010). Further information regarding the details of the entire SMCE process used in this case study can be found in Etxano (2012) and Etxano *et al.* (2012).

Table 4. Milestones of participatory process

Milestones of participatory process	Short description	Number of participants
Institutional and social analysis	Understand the social actors' positions, interest, and stance in the site.	>20
Presentation of project	Introduce the participation process and its scope to as many actors involved as possible.	15–25
Workshop I: Criteria	Identify the relevant topics and the criteria to assess the SCI.	15
Workshop II: Alternatives	Compare the results from Workshop I. Identify different management alternatives allowed by the current laws.	15
Workshop III: Results	Introduce the results drawn. Receive feedback from participants.	15

The primary milestones of the participatory processes are summarised in Table 4. First, we identified the social actors and conducted thorough interviews with key representatives to obtain the overall institutional picture. This provided a better understanding of the resources, objectives, and positions of the social actors relative to the declaration of the SCI. Participants in the process were selected based on the interests they represented in terms of scale and objectives pursued, and covered a wide range of interests (Table 5). As part of this social and institutional analysis, an open presentation of the project was conducted. All social actors with interests in the SCI were invited to participate and all accepted. The main objective was to explain the scope and impact of the participatory process to be launched.

After social and institutional analysis, and according to SMCE guidelines (Munda, 2008), three deliberative workshops were developed. The first workshop focused on the identification of environmental, economic, and social criteria that should be used to assess the site. The results were presented at the beginning of the second workshop and, after an extensive discussion, participants agreed on a set of evaluation criteria to be applied to G-SB SCI. The second workshop discussed the possible scenarios that the G-SB SCI may face in the near future. After this, the SMCE approach was used to assess management alternatives according to the defined set of criteria and the possible scenarios (Munda, 2008). The management alternatives that resulted from this SMCE exercise were presented and discussed at a third workshop, which also addressed plausible conflicts and areas for compromise solutions.

Table 5. Social actors in G-SB SCI

Social Actors	Scale	Resources	Objectives
Department of Environment and Land Planning. Basque Government.	Regional	Legal, political, cognitive	Cork oaks preservation and recuperate those in danger
Provincial Council of Gipuzkoa	Provincial	Legal, political, public finances	N2000 network management in Gipuzkoa
Town Council of Zarautz	Local	Legal, public finances	Natural resources conservation in G-SB
Town Council of Getaria	Local	Legal, public finances	Natural resources conservation in G-SB
Owners:			
Agricultural lands, mainly vineyards	Local	Political (right to vote), private	Increasing vineyards surface
Farms	Local	property land	Maintenance of farms
Productive forest land	Local	tenure regime	Timber exploitation
Non-productive land	Local		Increase land value
Business Association: Supervising Council of Txakoli's (white wine) guarantee of origin and quality in Getaria	Local, Provincial, Regional	Economic, political	As economic lobby, higher wine production
Agricultural Unions	Local, Regional	Cognitive, demonstrations	Maintenance of agricultural activity and farms
Environmental Associations	Local, Regional	Cognitive, demonstrations	Extend cork oaks all across G-SB
Cultural and Leisure Associations	Local, Regional	Cognitive	Use G-SB as leisure space

4.4 Data collection

Data collection for evaluating the potential of the participatory process conducted in G-SB SCI comprises three main sources: (a) a questionnaire survey, (b) in-depth interviews, and (c) field observations during the deliberative workshops.

4.4.1 Questionnaire survey

We used a questionnaire to collect quantitative data for the case study. Respondents were asked to use a Likert scale (1 to 7, with 1 as the minimum score and 7 as the maximum) to indicate their response to statements S1 through S13 (see Tables 1-3).

This questionnaire was completed by those actors who took part in the participatory process. However, the number of respondents was lower than the number of participants listed in Table 5 because some participants had limited availability and time constraints.

4.4.2 In-depth interviews

Survey results were supplemented with qualitative information obtained by means of semi-structured, in-depth interviews conducted with all the social actors involved in the participatory process. Interviews present the views of the interviewees concerning the participatory process, that is, the perceptions of the social actors.

4.4.3 Field observation

Finally, the survey and interviews were complemented by field observations during the three deliberative workshops. Different roles were played by the research team (participant, observer, and facilitator) during workshops and coordination was necessary for effective data collection. By using this method, we introduced our own perceptions into the field data in

order to reach a more comprehensive view of the process being studied (Patton, 1987). Observation also captured information about the interactions of the social actors, including nonverbal communication.

5 Results

Table 6 presents the quantitative results of the questionnaire survey. Given the small sample size (n=12), these results should be considered with caution and understood as an exploratory attempt to assess the scope of the participatory approaches in the context of N2000. Nevertheless, it should be noted that, to overcome the limitations of evaluating the scope of participatory approaches in quantitative terms (Garmendia and Stagl, 2010), qualitative information sources were included as complementary information sources. The combination of quantitative and qualitative information ensures the consistency of the analysis and the robustness of the results.

Table 6. Questionnaire results

Statements	Mean ^a	Typical deviation ^b	Coefficient ^b of variation
S1. The information has been presented in a clear and understandable way.	5.7	1.1	0.2
S2. The information can be managed and discussed easily.	5.6	1.2	0.2
S3. The information is based on credible and sound sources.	5.8	1.4	0.2
S4. All of the people involved who have interests in the area have been able to take part in the process.	6.1	0.9	0.1
S5. All the participants have had equal access to information.	6.1	1.3	0.2
S6. Mutual respect among participants has been encouraged.	6.3	0.9	0.1
S7. All the participants have been able to express their ideas and opinions on equal terms.	6.1	1.0	0.2
S8. All the participants have contributed to the open debate on the different options.	4.9	1.2	0.2
S9. The participatory process has helped learn about the current problems and the opinions of the rest of the participants.	5.6	1.7	0.3
S10. A better ability to justify preferences has been encouraged.	5.9	0.9	0.2
S11. A better understanding of the views and interests of the other parties has been encouraged.	5.2	1.5	0.3
S12. The participants have tried to find solutions which were good for all.	3.6	1.7	0.5
S13. More contact and greater knowledge among citizens and the administration (and vice versa) has been encouraged.	4.9	1.8	0.4

^a Assessment based on the Likert scale 1 (minimum value) to 7 (maximum value).

^b We consider a low dispersion in a variable and, therefore, that its arithmetic mean is representative, when its coefficient of variation is close to 0 (expressed on a per unit basis representing the typical deviation compared to the arithmetic mean).

Evaluation of Criterion 1: Information quality

The first workshop revealed a significant lack of knowledge among the local population about the objectives, instruments, and process followed to develop the G-SB SCI. Initially, the participants were unaware of the location of the SCI boundaries and even questioned the technical information used by the Basque Government to define them. There was a general ignorance of what the N2000 network entailed and we detected a lack of transparency and communication targeting the local population.

“There is always a hidden reason why the administration makes decisions, but we don’t know it” (participant 7).

This lack of information and sense of uncertainty also caused concerns among the owners and local population. In particular, owners felt threatened by the declaration of the G-SB SCI and had an underlying fear that farming and forestry activities were at risk.

In this regard, the data collected after the workshops by means of the S1–S3 statements, with mean values of 5.7, 5.6, and 5.8, respectively (see Table 6), show that the participatory process provided useful and credible information to participants while integrating local and scientific knowledge. Moreover the low coefficients in the variation of responses (with values near 0) reflect the shared perception of diverse participants. Thus, we could say that the participatory process helped to clarify the potential impacts of alternative management options and their multiple impacts for the local population, reducing the uncertainty that was surrounding the declaration the G-SB SCI.

“Now the owners are aware of what was going on” (participant 10).

Nevertheless, the difficulties of integrating scientific knowledge and local knowledge were apparent during the workshops, and on several occasions this hindered and delayed the deliberative process. The statement of one participant during the first workshop illustrates these difficulties:

“The language used is too technical. Some participants don’t understand or don’t have the level of knowledge required and it’s more difficult as a group than individually” (participant 4).

Some participants recognised that finding a clear language accessible for all social actors was critical to guarantee the transparency of the information and avoid misunderstandings during the subsequent workshops:

“The methodology used ensures all the participants understood the issues. The methodology was also innovative” (participant 9).

5.1 Evaluation of Criterion 2: Legitimacy

The responses to statements S4–S7 also returned high scores (mean values of 6.1, 6.1, 6.3, and 6.1, respectively), while the mean value of statement S8 was lower at 4.9 (see Table 6). Statements S4–S7 are closely related to facilitator skills in encouraging an inclusive and fair participatory environment, while statement S8 reflects the perception of the participants regarding the contributions of others.

With regards to the first element, the workshops helped the participants meet each other and discuss their interests and values with mutual respect, something that had never happened before. The role of the external facilitator, played by the research team, may have helped the social interactions and encouraged counterparts to share different views:

“It’s a pleasure to see so many different people sitting at a table with such a positive attitude. This is unusual in this kind of meetings” (participant 12).

In relation to statement S8, the self-assessment by participants regarding the other social actors’ contributions to the process was less satisfactory, although still positive. Statements made during the interviews tended to summarise these findings as follows:

“The administrations haven’t taken part actively, especially the Basque Government” (participant 3).

“Some participants only had their own interests in mind (for example, the wine producers defending their interests) but they have all expressed their opinions” (participant 11).

5.2 Evaluation of Criterion 3: Social dynamics

The mean values for the responses to statements S9, S10, S11, and S13 ranged from 4.9 to 5.9, while the mean value for the response to statement S12 (3.6) was the lowest of all statements and had the highest level of dispersion (0.5 coefficient of variation). These quantitative results reveal that participation impacted the relationships between the relevant actors, facilitated changes in behaviour, and initiated a learning process. Also, throughout the workshops, we observed that the conflicts between wine producers and conservationists were easing on many issues, as the parties gradually became familiar with all positions. In some cases, despite the apparent conflicts, the positions were not that different (e.g. farmers and environmental associations) and the participatory process contributed to the establishment of a basis for a constructive discussion.

The social dynamics developed throughout the process helped bring the diverse social actors and the administrations closer, mainly at the local level, emphasising the accessibility of the local administration. This produced specific results aimed at seeking solutions that can be applied to the G-SB SCI, as evidenced through the interviews.

The response to statement S12, however, indicates that social actors did not feel valuable contributions were made to seek mutually beneficial solutions. Statements from the interviews summarised common perceptions as follows:

“In the participatory process, there were people who only thought about themselves and didn’t try to understand other points of view” (participant 6).

“We must leave our interests aside and take part in the process, because the result should benefit everyone and this should be the Administration’s responsibility” (participant 3).

During the third workshop, we observed a certain level of unease and disappointment among the participants due to the lack of operational solutions and political decisions. Even though they were aware of the exploratory and non-binding nature of our research project, the participants expected greater response and attention from the decision makers. Two participants stated:

“Both the participants (especially the owners) and the research team have been messed about, because at the end, everything we did at the workshops will come to nothing” (participant 6 and participant 8).

6 Discussion and conclusions

Several important findings emerge from the results of this case study. First, the study illustrates the significance of having well-informed, local communities to foster active citizenship in the deliberative process, a finding supported by other N2000 real-world case studies (Dimitrakopoulos *et al.*, 2010). Information should be widely disseminated and all social actors should be included from the beginning of the planning and decision-making processes (Beunen and de Vries, 2011).

This did not occur in the case of G-SB SCI, giving rise to uncertainty and opposition by some of the social actors; for example, private land owners considered the G-SB SCI a threat to their individual interests and tended to ignore the potential benefits that could be obtained from the protection program.

Second, the case study shows how scientific and local knowledge can be combined in the definition and management of protected areas. It also illustrates the difficulties that can be encountered when attempting to construct a collaborative process among researchers and diverse social actors. The scientific and technical language used by the research team in these discussions had to be clear to avoid misunderstandings and enrich a constructive and fluid discussion. As many other authors have found, this essential element must be addressed to

achieve the full potential of participatory approaches in environmental matters (Wittmer *et al.*, 2006; Reed, 2008).

As noted by Munda (2008) and Garmendia *et al.* (2010), the SMCE framework proved to be a useful methodology for integrating diverse types of knowledge in a transparent way. However, achieving transparency is not an easy task and requires continuous feedback from all parties (social actors and external experts) in order to reframe the issues with the best available knowledge that emerges during the process. Transparency results in a better-informed population that can take a more active role in planning processes.

Third, the overall results suggest that the participatory process can create an open environment in which diverse and sometimes conflicting views and interests can be expressed. However during the case study process, social actors were somewhat suspicious of each other, resulting in mutual mistrust that damaged both the legitimacy and social dynamics criteria. Research teams should be prepared to face this situation and acknowledge the time that is required to construct an environment of trust. Trust is a key concept in environmental governance (Beunen and de Vries, 2011)

To ensure the trust of all participants, an effective participatory approach should acknowledge the diverse inequalities (power, knowledge) present in participatory processes and inherent to our society (Reed, 2008). Actors should be able to express their opinions and interests easily in a free, non-coercive environment. This type of participation will reflect the wishes, possibilities, and expectations of the local community (Rodela and Udovč, 2008) opening up the possibility for the evolution of social knowledge and preferences (Garmendia and Stagl, 2010).

In our case, mistrust stems not only from the actual inequalities in power among the different actors, but also from the fear that participation will not be included as an input towards final decisions. Unfortunately, this is what happened in our study area. To date, the results of the participatory integrated process delivered from the former Department of Environment of the Basque Government have had a limited impact on the planning of the G-SB SCI and the Basque N2000 network sites. Additionally, the political cycle within the Basque Government has not fully supported application of the results in the transition of G-SB to become an SAC, although some of the information has been used as input (Basque Government, 2010). The lessons learned during this pilot study yet to be extended to the rest of N2000 sites in the CAPV, or to be internalised by the Basque administration. The methodological guide for environmental and socio-economic evaluation of N2000 sites in the Basque Country, written as part of this project and a prerequisite for Basque Government financing, also has not been officially published (IHOBE, 2009).

To address these challenges, however, is often beyond the control of the research team and can become a damaging liability. The most immediate result is disappointment, disbelief in public participation, and frustration. Consequently, social actors may no longer wish to take part in new participatory processes. To minimise this risk, the aim and scope of any participatory process must be made clear from the beginning. This is crucial to ensure that the subsequent decision-making process is legitimised and socially accepted, and to avoid false expectations that could undermine the scope of future deliberative appraisals.

In addition, any external factors (e.g. change of political context or legal context) that may prevent these processes from succeeding should be noted as early as possible. Such factors

can undermine the basis of constructive and deliberative discussion and prevent sound environmental governance.

Even so, our case study has produced some unexpected results. The project has been useful locally, where the rapprochement fostered among the local administration (town councils), landowners, and environmental NGOs has promoted the design of new intervention instruments that guarantee the conservation of the natural assets of the G-SB SCI. The process has also reinforced the capacity of the local administration to find effective ways to achieve its environmental goals without undermining other socio-economic interest. As noted by Abelson and Gauvin (2006) and Rauschmayer, Berghöfer, et al. (2009) this illustrates that participation can reinforce the effectiveness of the decision-making processes, at least at the local level. Overall, we can state that the participatory process fostered a better understanding of the multiple and often conflicting interests that coexist in the implementation of N2000 network, and addressed some areas of compromise where conservation goals might be compatible with other economic activities.

The implementation of participatory appraisals in the context of N2000 presents an exceptional opportunity to enhance novel and inclusive ways of environmental governance in Europe. However, further critical research is needed to overcome some of the difficulties addressed in this article and to support the current discussion of environmental governance with empirical evidence coming from real case studies.

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