

Article

Social Sustainability as Social Learning: Insights from Multi-Stakeholder Environmental Governance

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Abstract: Social sustainability has for long been either neglected or downplayed in scientific literature and policy making and it remains an unsettled concept. The present paper critically examines several explanations for the unequal development of the social component of sustainability and suggests that social learning can serve as an insightful anchor for conceptualizing and operationalizing social sustainability. Collaborative governance is used to showcase this approach, specifically, a targeted review of multi-stakeholder schemes in natural resource management, wildlife conservation, and protected area governance. These schemes can exemplify a wide array of commonalities between the fields of social sustainability and social learning and reveal a fruitful cross-fertilization of the two concepts. The paper wishes to make two contributions. First, a specific dialectic between stakeholder collaboration and conflict under power asymmetries will be illustrated, which is characteristic in the operation of many multi-stakeholder governance schemes. Second, the need for scaffolding social learning in such schemes will be demonstrated so that a process-oriented account of social sustainability is attained. The way out offered by the present paper is that the dynamics between collaboration and conflict, properly managed by means of a toolkit with social learning templates for multi-stakeholder environmental governance schemes, may serve as a precondition for innovations sought.

Keywords: environmental governance; multi-stakeholder schemes; power; social learning; social sustainability; stakeholder collaboration; stakeholder conflict; toolkit



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1. Introduction

Social sustainability has for long been underdeveloped in scientific literature and policy making [1–3] and it remains an unsettled concept [4–6]. For over three decades, theoretical and methodological elaborations of the social component of sustainability have been lagging behind those of its environmental and economic counterparts [7]. The neglect or downplay of social sustainability may be attributed to a prevailing content-based, technocratic approach to sustainable development, which prioritizes the reconciliation of environmental and economic concerns. In contrast to technocratic solutions of that kind, which may be considered as readily transferrable from one context to another, the concept of social sustainability is much more context-specific [5]. Social priorities, moreover, often vary among different social actors even within the same local context [6]. Indeed, the context-specificity and shifts of values and priorities challenge the content-based perspective mentioned above for all dimensions of sustainability and not only for the social dimension. Given the fluidity of meanings and practices, what is held as “sustainable” today may not qualify as equally “sustainable” tomorrow [8]. In addition, no compromise between environmental and economic motives can be accomplished in a social vacuum, without being anchored on concrete socio-cultural settings. If the above concerns are warranted, then the least developed dimension of sustainability, i.e., social sustainability, seems to destabilize the fixation and timeliness of the more robustly theorized environmental and economic dimensions of sustainability.

An alternative to the content-based approach to social sustainability is a procedure-based approach [4,9], which rests largely on recognition, participation, and deliberation, and a fair distribution of “goods” and “bads” between stakeholders [10]. This perspective tends to equate social sustainability to environmental justice [11]. A procedural account of social sustainability, which builds on environmental justice but goes beyond, is sketched in the review of Boyer et al. [5] as “place-based, process-oriented sustainability”. This version is distinguished from rival accounts of social sustainability which are defined as enabling or prohibiting factors of environmental and economic dimensions of sustainability, thereby reproducing the subordinate role of social sustainability in the literature. Place-based, process-oriented sustainability posits that sustainability dimensions cannot be grasped as independent of one another; instead, they need to be conceptualized as overlapping, and this can be traced in local contexts. Place-based, process-oriented sustainability is instantiated in inclusionary governance processes, bringing together diverse perspectives, promoting stakeholder dialogue and negotiation, and allowing local actors to assume ownership of these processes [5]. This perspective presents an account of social sustainability institutionalized at the local scale, with a marked affinity for analogous conceptualizations of social sustainability which concentrate on multi-stakeholder governance schemes [1,9]. These maintain a main focus on environmental justice declarations but aim further, primarily, to enable and sustain constructive stakeholder interaction at the local level [4,12].

Framing social sustainability through the lenses of the above perspective brings us to the core features of collaborative multi-partner governance, involving the state and local or regional communities/authorities, as well as actors in the private sector and civil society. Here we encounter the establishment and operation of formal and informal institutions aimed to secure stakeholder constructive engagement for inclusionary decision-making [13]. Stakeholder interaction as a baseline condition is expected to build trust and create a positive feedback loop, where stakeholders who collaborate to achieve shared goals reinforce and broaden their joint action by means of trust building and the consolidation of institutional arrangements. Provided that iterations of joint action bring about desirable change, stakeholder commitment in the process is reinforced. Inversely, when the envisaged objectives are not reached, then motivation for participation is expected to decrease to the point of opting out entirely [13]. These assumptions imply that stakeholder inclusion and engagement per se may not suffice to guarantee any anticipated outcome, highlighting the need for more research in the interplay between governance and social sustainability [12]. The implication of this premise is that a definition of social sustainability, which would largely rely on environmental justice, in terms of recognition and inclusion, would not be enough to outline the effects of stakeholder attendance and investment. What would be decisive for a process-oriented account of social sustainability, as a necessary addition to inclusion, is the integration of the positive autocatalysis presented above in the operation of multi-stakeholder schemes. This would demarcate that iterative cycles of stakeholder collaboration eventuate in adaptability and capacity for learning [2,3].

The main objective of the present paper is to present and justify a version of social sustainability that relies on social learning. Examples from multi-stakeholder environmental governance will be used to elaborate on the commonalities between social sustainability and social learning. In this direction, several types of multi-stakeholder schemes will be critically examined by means of a targeted review. These examples concentrate on natural resource management, wildlife conservation, and protected area governance. The paper wishes to advance the literature by offering two contributions. First, the need for scaffolding social learning in multi-stakeholder governance schemes will be demonstrated so that a process-oriented account of social sustainability is attained. Specific templates will be presented, which can support stakeholder interaction and social learning through multiple cycles of iterations. Second, a dialectic between stakeholder collaboration and conflict under power asymmetries will be illustrated, which is characteristic in the operation of many multi-stakeholder schemes. This dialectic extends theoretically and methodologically

to the clash between the consensual orientation of Habermasian communicative rationality on the one hand, and the perspective of agonistic pluralism [14,15] on the other. Elaboration upon these approaches is indispensable for grasping the rationale and mechanics of social sustainability conceived as social learning. The way out offered by the present paper is that the dynamics between collaboration and conflict, properly managed by means of a toolkit with social learning templates, may serve as a driver for the innovations sought.

2. Commonalities between Social Sustainability and Social Learning

There are a few distinctive features of social learning, which stand out as indispensable for a comprehensive definition of the term. Specifically, social learning is perceived as a process [16–18], centered around multi-stakeholder collaboration [19], which goes beyond consultation or deliberation to also involve concerted action [20,21] monitored through iterations [22,23]. These are necessary conditions for social learning to occur and be reflected in effectively addressing complexity and uncertainty in socio-ecological systems [24,25], trust building among stakeholder groups [26–28], and change in understandings, which needs to diffuse from individuals to social groups [29,30]. In this regard, social learning can be taken to implicitly relate to organizational learning and institutional learning [31]. The iterative character of the process-oriented conceptualization of social learning presents a marked overlap with adaptive management and with choosing an experimental perspective toward decision-making and policy [32]. In addition, the process characteristics of social learning cannot be readily distinguished from its outcomes [18,19,29]. The results of social learning (e.g., dealing with complexity and uncertainty; trust; change in understandings), however, cannot be guaranteed even if all the necessary conditions for social learning are met (i.e., process engaging a constellation of stakeholders in joint action monitored through iterations) [33], meaning that there is no sufficient condition for social learning to be defined ex-ante independent of its context.

Although there has been no thorough examination of the relation between social sustainability and social learning yet, there have been several attempts to link sustainability to social learning, which range from sporadic elaborations either in the sustainability literature or in the social learning literature [29,34,35] to a more consistent intention of integrating social learning in sustainability transitions [36]. Social learning has been proposed as a prerequisite for sustainability [30,37]. Scholars have acknowledged that transformative change is required as proof of both sustainability and social learning [7,38], and this change needs to be displayed not by individual actors, only, but by social groups and institutions, as well [5,29]. Shared, co-created meaning and trust among individuals or social groups have been highlighted as core desiderata for both social sustainability [2,3] and social learning [19,38]. Research in sustainability transitions presents a marked resemblance with social learning studies, especially when illustrating actor diversity as instrumental in confronting complexity and uncertainty [39]. The multi-stakeholder character of learning has been stressed in both transition studies (e.g., niche experiments) and the social learning literature (e.g., multi-stakeholder schemes), where stakeholders are portrayed as addressing issues of mutual interest through negotiation and joint action [36]. This collaboration is said to result in positive feedback loops through amplifying trust building.

The present paper introduces a version of social sustainability that largely overlaps with social learning under the core precondition of institutionalizing stakeholder interaction. This framing builds on a process-based orientation of social sustainability [5] and capitalizes on the commonalities of social sustainability and social learning presented in the previous paragraph (e.g., actor diversity coping with complexity and uncertainty; co-creation and trust; transformative change traceable in social groups and institutions). It also relies on the iterative nature of stakeholder collaboration highlighted for both social sustainability [2,3] and social learning [23,40,41]. The institutionalization of stakeholder interaction in multi-stakeholder governance schemes upgrades their collaboration and joint action, which is not to be viewed as a one-off encounter but needs to be sustained to allow for testing and refining solutions [12,30]. This requirement underlines the link of

social learning to “communities of practice”, which have been defined as communities with members who share a common interest and interact to reflect upon their practices [42,43]. Multi-stakeholder schemes in environmental governance (e.g., natural resource management; wildlife conservation and management; protected area management) is one of the topical areas that can offer a multitude of examples for an institutionalization of social learning through establishing and operating communities of practice [44–46]. Such schemes have been also covered frequently in the field of social sustainability [11,47].

3. Multi-Stakeholder Environmental Governance Schemes

Multi-stakeholder environmental governance schemes have been examined under different names, some of which have been used interchangeably: “deliberation platforms”; “multi-stakeholder platforms”; “multi-stakeholder forums”; “multi-stakeholder partnerships”; “multi-stakeholder initiatives”; “transformative spaces”; “transition arenas”; and “roundtables”. All these terms describe inclusionary schemes with a diversity of actors, operating under an institutionalized framework to structure stakeholder interaction towards decision-making for attaining a shared set of objectives. This usually involves deliberation and joint action in multiple iterations aimed at changing current conditions identified as undesirable or unsustainable. Stakeholder interaction often results in trust building among stakeholders, even if the goals of stakeholder collaboration are not fully achieved. The diversity and overlap in terminology used denotes fluidity in the field and that relevant developments are quite heterogeneous. This section of the manuscript presents a targeted review of multi-stakeholder environmental governance schemes described with the above terminology to examine their basic characteristics, and especially, the challenges identified for their operation. There were several assumptions used for this targeted review (for more details for the review, see Appendix A, Table A1, and Figure A1). First, the heterogeneity and overlap in terminology used would make it extremely difficult if ever possible to undertake a systematic review of that kind. Therefore, a targeted review based on the most common terms used in the relevant literature was conducted. Second, papers were considered only if they reported on multi-stakeholder environmental governance schemes with at least one actor in the public sector, the private sector, and civil society. Third, the review was confined to papers explicitly reporting on place-based stakeholder collaboration to align with the place-based and process-oriented perspective of sustainability outlined for this paper. Fourth, schemes were included only if some core details were reported, for instance, scale of reference (i.e., local, regional, national, or international), participants, frame under which stakeholder interaction unfolded; main objectives pursued; and main challenges identified.

The results of the review are presented in Appendix B, Table A2. Overall, 28 different schemes were detected, reported in 28 papers. There was a representation of several continents, but more than half of the cases were from Europe (Europe: 15 cases; North America: 3 cases; South America: 3 cases; Asia: 5 cases; and Africa: 2 cases). The predominant scale of reference was the regional scale (16 cases) followed by the national scale (9 cases); there were two cases reporting on the local scale and one case on the international scale. There was a wide representation of topics: forests (6 cases); fisheries/watershed/sea (6 cases); food/agriculture (4 cases); waste (1 case); energy transition (1 case); urban transformation (1 case); disaster risk reduction (1 case); large carnivores (4 cases); and protected areas (4 cases). The main challenges identified for these schemes was a primary focus of the targeted review. These referred to: power asymmetries and imbalances among stakeholders within schemes (9 cases); power issues, which were salient in the regional scale and related to the mandate of schemes and their dependence on national competent authorities (8 cases); issues related to specifics of stakeholder interaction, like sustaining the process and stakeholder interest in the long run, planning for multiple iterations, allocating enough time to stakeholder interaction, employing effective planning, monitoring and evaluation methods, and adapting to and properly managing unexpected developments (7 cases); insufficient linkages of schemes at the national scale with local actors (2 cases); and contro-

versy between socio-economic considerations and considerations related to environmental issues/nature (2 cases).

Quite interestingly, in schemes which would be thought to follow the major operational assumptions of Habermasian discursive spaces, concerns related to power featured as the most frequent challenge. These concerns were twofold. First, addressing power asymmetries was in some cases considered as a prerequisite for stakeholders to engage equally in the process [48]. Such attempts to correct power imbalances, however, were not always welcomed by stakeholders. Indeed, there was a case where they caused resistance and tension [49]. Power inequalities were reported to undermine alternative ideas and practices [50], maintain differences between dominant and subjected voices [51,52], impede social learning [53], and endanger the continuation of participatory processes [54]. Power imbalance was highlighted as a problem both horizontally, among stakeholders taking part in a scheme, as well as vertically, in cases pertaining to the regional scale, any time the implementation of decisions was dependent upon competent authorities. This was the second type of concern, where power featured as a problematic condition. In some cases, the objectives of competent authorities were not always clearly voiced or effectively addressed in the open, co-creation processes of multi-stakeholder governance schemes [55]. In other cases, the contribution of authorities was not enough to support the process [56]. Many cases documented a perceived lack of legitimacy of schemes [57] or a lack of a clear mandate and power over key issues [58–61].

Apart from power concerns, the review revealed a second set of challenges related to the characteristics of the process of stakeholder interaction. This category included a diverse set of issues. Specifically, there were reports that participant/stakeholder interest was declining and that the processes followed in multi-stakeholder schemes could not reverse such a decline [62,63]. A somehow related problem referred to the need to institutionalize and support stakeholder interaction as long-term processes [64]. In the same direction, time devoted to stakeholder interaction should be enough to allow for problem-solving to conclude [65]. There were also several challenges highlighted, which were linked to how participants could self-regulate deliberation and joint action during the process so that it remained on fruitful trajectories. For instance, there was a call for planning, monitoring, and evaluation methods, which should be specifically developed to confront complexity, uncertainty, and ambiguity, often encountered in multi-stakeholder environmental governance contexts [66]. Two additional aspects were underlined, which both pertained to unexpected developments during stakeholder interaction in schemes and which stressed the need to effectively manage these unanticipated turns of events. Cheng et al. [67] pictured unexpected events as negative circumstances, to which multi-stakeholder governance should be able to adapt in a timely way and effectively. In an alternative conceptualization, Loorbach and Rotmans [68] illustrated unexpected developments as opportunities to be seized by stakeholders for promoting innovation and change. In that regard, “barriers, obstacles, and surprises” should be harnessed to trigger creativity.

In the following sections, the two main challenges identified in the targeted review of multi-stakeholder environmental governance schemes will be discussed. Specifically, it will be demonstrated how these schemes operate within a dialectic of collaboration and conflict among stakeholders under power imbalances, which has not been thoroughly theorized and investigated in the social learning and social sustainability literature (Section 4: Collaboration, conflict, power). The difference between Habermasian communicative rationality on the one hand, and the perspective of agonistic pluralism on the other will be presented and their implications for multi-stakeholder governance schemes will be critically examined. In addition, a toolkit will be presented with templates for scaffolding stakeholder interaction and social learning (Section 5: A toolkit for social learning). This toolkit will allow the identification of convergences and divergences among stakeholders and possible aspects of tension. It will also enable a structured negotiation between stakeholders in terms of innovation and transformative change sought, by taking into account both the benefits and added value related to this innovation/change as well as costs and unintended

consequences. Finally, the toolkit will support stakeholders to jointly develop scenarios for future action, considering possible resources and investment that can be available.

4. Collaboration, Conflict, Power

Although power has not been a focal issue in the social learning literature [19,69], it has been addressed in the social sustainability discourse in reference to environmental justice. Even in the latter case, however, power issues were often problematized only up to the point where marginalized or disprivileged groups were recognized and allowed to take part in decision-making procedures for allocating benefits and costs between stakeholders. Yet, power implications may be far-reaching within the context of multi-stakeholder environmental governance schemes, which offer an institutionalized venue for long-term interaction between stakeholders. At a first glance, the challenge for powerful social groups would be to accept sharing their power with other groups; for powerless groups, the challenge would be that decisions taken may reproduce or even amplify power inequalities. Beyond these considerations, there are alternative approaches to power, which are based on a much more dialectical conceptualization of stakeholder interaction. Here, interaction is seen as catalyzing bilateral effects and changes for both powerful and powerless actors. For instance, we can find complicated social influence mechanisms where minorities may exert influence over powerful majorities [70]. Developments of this kind influence social actors' intention to participate or opt out of multi-stakeholder schemes, shape their incentive structures during participation and implementation of joint action, and leave their mark on the interplay between stakeholder collaboration and conflict. What is more, complexity is increasing sharply if we consider the communication and consultation of representatives or spokespersons of social actors in multi-stakeholder schemes with their constituencies.

Multi-stakeholder environmental governance schemes would offer an ideal venue for testing the Habermasian approach to deliberate democracy and communicative rationality. Habermasian agents orient themselves towards validity claims in argumentative speech, which set the stage for achieving consensus [71] (p. 277); they need to display a self-critical attitude [72] (p. xxi), where they should be ready to critically review and set aside their initial preferences [73] (p. 449). The core idea behind the Habermasian model is that institutional arrangements would be valid only if all actors affected by their consequences would agree to accept these arrangements in a process of deliberation; the equality and symmetry of participants is a major feature of such deliberation processes in initiating speech acts and reflexive arguments. Specifically, equality and symmetry would foreclose power differences. Impartiality and lack of coercion would then let participants be guided by the power of the better argument towards reasonable outcomes, which would be the only force to be applied in the process. The review of multi-stakeholder environmental governance schemes in the previous section, however, revealed numerous concerns about power asymmetries. Indeed, there were instances where participants were not able to resolve their differences on their own and resorted to alternative dispute resolution [48], taken over by a neutral expert (e.g., environmental mediator), to overcome such a deadlock [74]. The need for alternative dispute resolution techniques as well as the success of these methods, such as environmental mediation, point towards a complex interplay of both reason and power in multi-stakeholder schemes [75]. In the same vein, Habermasian communicative rationality has been criticized for expecting too much from his deliberating agents (e.g., extensive information gathering and processing for arriving at preference rankings; having a transparent access to one's own reasoning; abandoning one's own perspective and reason when encountering a better argument), up to the point that such agents could not be available at all [76].

Power is at the heart of Mouffe's [14] attack on Habermasian deliberative democracy. This debate can inform the dialectic between collaboration and conflict in multi-stakeholder schemes. Mouffe builds on the notion of hegemony initiated by Gramsci [77] and elaborated upon by Laclau and Mouffe [78] to problematize the possibility of rational consensus

eliminating power in Habermasian, symmetrical, discursive spaces. According to her argument, power is indispensable for conceptualizing the social as an open project, impossible to be sutured once and for all. Under such an assumption for an omnipresence of power, social actors engage in antagonistic articulatory practices by selectively attaching free floating signifiers (discursive elements not yet belonging to any discursive formation) to nodal points, which act as privileged signifiers with a central role to partially fix meaning [78]. The success of hegemonic attempts (i.e., those which have already proven their discursive robustness and are propagated by social actors endorsing the status quo) or counter-hegemonic attempts (i.e., those initiated by social actors who aim to challenge the status quo) is an exemplification of power any time they attract other social groups beyond their initiators. According to Mouffe [14], the challenge here cannot be to eliminate power (which is impossible) but to establish institutions where dissent can be voiced. What is more, disagreement should be desirable since it furnishes the alternatives a democratic society would need [79,80]. Mouffe argues that the mission of democratic policies is to transform “antagonism” between “enemies” to be destroyed, to “agonism” between “adversaries” to be respected [81]. The result of this agonistic pluralism is a mixed-game, partly collaborative (e.g., when sharing overarching goals and procedures) and partly conflictual (e.g., when letting rival positions be expressed and tolerating disagreement) [14]. Under the frame of agonistic pluralism, accepting the position of the adversary should not be seen as an outcome depending on reasoning, only, but as a radical process changing one’s identity [14]. Highlighting identity changes for actors in multi-stakeholder schemes may reflect these dynamics of agonistic pluralism [15].

This spirit of agonistic pluralism seems to be indicated by several studies in the social learning and sustainability literature underlining that innovative outcomes are facilitated when not avoiding difference, tension, and conflict but when dealing constructively with them [11,18,36,39,53,82–84]. Constructive conflict is based on facilitation by a competent and neutral expert and its beneficial effects are expected because it fosters reflexive understanding among heterogenous stakeholders [26,44,85]. Beers et al. [30] reported that social learning was found to be favored when proponents of positions or plans interacted with opponents within a pattern which involved a comprehensive elaboration on strong and weak points. Hallgren et al. [86] moved even further and stressed the need to develop standards and procedures, which favor the expression and thorough processing of disagreement, specifically, the origins and causes of disagreement as well as the power differentials harboring conflict. When resorting to communicative norms that impose a forced consensus in a premature manner, disagreement is delayed only to resurface later on during stakeholder interaction [86]. Although expressing disagreement and managing tension and conflict in multi-stakeholder environmental governance schemes will never become an easy task, framing the procedure from the start as consensual subtracts the germane aspects exemplified above. An important note at this point is that we need to speak about “agreement”, rather than “consensus”, as long as “agreement” highlights the contingent, precarious, and context-specific nature of stakeholder convergence. A crucial implication that follows is that if “agreement” has all these attributes, then its reverse, “disagreement”, should also be treated as contingent, precarious, and context-specific.

5. A Toolkit for Social Learning

Two major gaps have been often highlighted in the social learning literature, which are both related to the need for institutionalizing stakeholder interaction through communities of practice [19,87]. First, a lack of reporting how power asymmetries may influence social learning through collaboration and conflict dynamics [88–90]. Second, a lack of a toolkit for operationalizing and documenting social learning [19,89,90]. Most research in the field has reported findings of stakeholders interacting within short-term intervals, which cannot suffice for detecting any transformative change than can qualify as social learning [30,45,85]. Overall, there is an inconsistency in the literature between declarations for social learning on the one hand, and proof delivered for social learning, on the other. Filling the two

gaps identified, in terms of power asymmetries and operationalization/documentation of social learning, would also address the main challenges outlined in the review of multi-stakeholder environmental governance schemes reported in this paper. Such a contribution would also be decisive for meeting core assumptions for social sustainability, namely, letting local stakeholders in multi-stakeholder governance schemes assume ownership of stakeholder interaction [5], provided that they would be capable of sustaining their own constructive interaction in the long run [4,12]. This section of the manuscript is based on recent research using templates for scaffolding social learning [70,91], which can equip a toolkit to address the above gaps.

The proposed toolkit includes three templates to scaffold social learning in order to structure and consolidate stakeholder interaction in the long-term. A Strengths, Weaknesses, Opportunities, and Threats (SWOT) template can be employed for an initial stakeholder analysis depicting ingroup and intergroup aspects which may either facilitate or hinder agreement and/or joint stakeholder action. This is an adapted form of SWOT analysis in comparison to the one which is usually implemented for organizations/firms. In the latter case, there is a distinction between the inner and outer environment of the organization/firm, where strengths and weaknesses refer to inner prospects and barriers, respectively, and opportunities and threats describe prospects and barriers, respectively, set by the outer environment. The adapted form of SWOT analysis takes ingroup aspects for each stakeholder group as the “inner” environment, which may facilitate or hinder stakeholder agreement and joint action (strengths and weaknesses, respectively) (Table 1). Stakeholder interaction is seen as the “outer” environment, where intergroup aspects are crucial for catalyzing agreement and/or joint action positively or negatively (opportunities and threats, respectively). This adapted SWOT analysis can be undertaken using interviews for ingroup aspects and focus group discussions for intergroup aspects [70,91]. Such an approach can be held as analogous to a comprehensive stakeholder analysis but has the added value of examining conflict between stakeholders and power imbalances. Another advantage of using the adapted SWOT analysis in the initial stages of establishing multi-stakeholder schemes is that it provides structure and guidance for stakeholder interaction, as long as stakeholders will build on strengths and opportunities, and, at the same time, address weaknesses and threats.

Table 1. Strengths, Weaknesses, Opportunities, and Threats (SWOT) template ¹.

	Ingroup Aspects	Intergroup Aspects
Aspects which facilitate stakeholder agreement and/or joint action	Strengths	Opportunities
Aspects which hinder stakeholder agreement and/or joint action	Weaknesses	Threats

¹ The template is used for undertaking an adapted version of SWOT analysis; see Hovardas [70] and Hovardas [91] for a detailed description of methods and examples of implementation.

The second template to scaffold social learning is a mixed-motive template, where stakeholders are engaged in a structured negotiation process involving the benefits and added value related to innovation/change as well as the costs and unintended consequences of innovation/change (Table 2). The joint negotiation of benefits and costs is based on a critical reading of win-win solutions, which seem to undermine or ignore the costs and trade-offs related to any proposed option [4,92,93] and which may present major disincentives for stakeholders and refuel power imbalances and conflict. In this regard, collaborative governance does not unfold as a zero-sum game but involves benefits and costs for all engaged actors, which need to be negotiated. Aside from transaction costs, which should be expected [94–98], innovation and change in multi-stakeholder contexts is most often accompanied by unintended and unexpected costs for stakeholders [37,66]. The mixed-motive template offers a scaffold to structure this negotiation process. It can be completed during workshops [70,91] and may necessitate the intervention of an experienced facilitator or even an environmental mediator. Although this input can be quite demanding

in terms of resources and time investment, it is expected to pay back. Specifically, the mixed-motive template can be employed to reframe stakeholder interaction and address possible social traps and deadlocks [99,100]. Even if expert input and intervention will be needed, as in the case of environmental mediation, this can have additional gains for stakeholders in the process, such as building institutional capacity and social capital [101].

Table 2. Mixed-motive template ¹.

	Item 1 (The Mixed-Motive Template Should Be Completed for Specific Items of Focus)	Item 2 (The Mixed-Motive Template Should Be Completed for Specific Items of Focus)
Benefits and added value related to innovation/change	Major incentives for stakeholders to pursue innovation/change related to item 1	Major incentives for stakeholders to pursue innovation/change related to item 2
Costs and unintended consequences related to innovation/change	Major disincentives for stakeholders to sustain innovation/change related to item 1	Major disincentives for stakeholders to sustain innovation/change related to item 2

¹ See Hovardas [70] and Hovardas [91] for a detailed description of methods and examples of implementation.

The third template in the toolkit is one for undertaking participatory scenario development. Here, stakeholders work together to outline the future course of their joint action under varying resources, which may be mobilized. A business-as-usual scenario is first described, which presents a projection of the current conditions in the future (Table 3). In this case, no real change from the current condition will be foreseen and no additional resource will be invested by stakeholders. A small effort scenario follows, which describes a transition beyond the current condition. This is anticipated based on a relatively small/confined amount of resources to be mobilized and invested by stakeholders. Although the small-effort scenario is meant to cater for small-wins only, it still demarcates a clear departure from the current condition, and therefore, it should denote a definite improvement over the business-as-usual scenario. The best-case scenario describes an ideal future, which will be anticipated after an optimal investment of resources. Despite the fact that this scenario cannot be readily attainable, it serves as a guiding frame for prioritizing additional resources to be sought to improve conditions beyond the level brought by the small-effort scenario. The above-mentioned scenarios can be outlined during workshops in plenary sessions or in smaller groups of stakeholders, for instance, when stakeholder members are arranged in thematic groups [70,91]. The template for participatory scenario development serves to steer stakeholder collaboration and to monitor its outcomes. It should be revisited for evaluating stakeholder performance according to what has been foreseen and it should be regularly updated to re-align stakeholder investments, especially when stakeholder interaction involves multiple iterations.

Table 3. Template for participatory scenario development ¹.

	Business-as-Usual Scenario	Small-Effort Scenario	Best-Case Scenario
Item 1 (Scenarios should be formulated for specific items of focus)	Projection of the current conditions in the future for item 1	Transition beyond the current condition for item 1 based on a relatively small/confined set of resources to be invested	Ideal future condition for item 1 based on an optimal investment of resources
Item 2 (Scenarios should be formulated for specific items of focus)	Projection of the current conditions in the future for item 2	Transition beyond the current condition for item 2 based on a relatively small/confined set of resources to be invested	Ideal future condition for item 2 based on an optimal investment of resources

¹ See Hovardas [70] and Hovardas [91] for a detailed description of methods and examples of implementation.

6. Conclusions and Implications for Future Research

Dryzek and Niemeyer [102] distinguished between three types of consensus, which denote convergence on specific alternatives (values, normative consensus; policy impacts, epistemic consensus; policy preferences, preference consensus), and three analogous types of meta-consensus, which signal a recognition of plurality (“recognition of legitimacy of disputed values”, normative meta-consensus; “acceptance of credibility of disputed beliefs”, epistemic meta-consensus; “agreement on the nature of disputed choices”, preference meta-consensus). They argued that deliberation and agonism could be reconciled at the level of meta-consensuses, for instance, when endorsing the legitimacy of the values of others (normative meta-consensus; considered compatible with Habermasian communicative rationality), while sustaining value plurality. They also stressed that normative meta-consensus may be already existent, but it is frequently skewed by offensive acts of partisans targeted at their opponents. Dryzek and Niemeyer [102] highlighted that their perspective on meta-consensus would be consistent with agonistic pluralism accounts, especially, in the transition from “antagonism” to “agonism”. They further underlined that mediation might be instrumental in achieving normative meta-consensus, which then sets the ground for further constructive interaction among stakeholders and conflict resolution. The toolkit presented in this paper can be used to promote normative meta-consensus (e.g., in the SWOT template), epistemic meta-consensus (e.g., in the mixed-motive template), and preference meta-consensus (e.g., in the template for participatory scenario development).

Most literature on the controversy between liberal democrats and pluralists, however, including the approach of Dryzek and Niemeyer [102] exemplified above, has concentrated on the positions with which social actors arrive at a deliberative/communicative process. Under assumptions of both symmetry and equality for liberal democrats as well as difference and plurality for pluralists, the process and outcome of interaction among social actors seems to be examined and theorized within the frame of participants’ initial positions: consensus is largely confined to pre-specified arguments, while agonism pertains to respecting the adversary’s initial position. The identity change involved in the latter case and its implications [15] have not been thoroughly linked to forthcoming stakeholder interaction. Future research needs to focus on the novel knowledge and experiences that can be delivered when stakeholders take up the toolkit with the social learning templates presented in this paper as a scaffold for their joint experimentation. This course of action may allow for a critical transition beyond the confines of both Habermasian discursive spaces and agonistic pluralism. Stakeholder experimentation may eventuate in new power imbalances among stakeholders, surfacing during the process, on top of their prior differences. Such an accumulation of power asymmetries adds to the challenges, which the Habermasian approach cannot accommodate. On the other hand, stakeholder experimentation may deliver novel content available to all [103]. This emerging content, especially when it is appreciated by most if not all stakeholders in the process, questions some core assumptions of agonistic pluralism, especially, its “anything goes” relativism or agnosticism in terms of stakeholder positioning [102].

The social learning templates in the toolkit can be considered “boundary objects”, which have been defined as artefacts (e.g., knowledge syntheses, implementation guidelines, monitoring and adaptive management protocols, databases) [67], which can be co-created and co-managed by stakeholders. Boundary objects can facilitate knowledge sharing [104] and structure stakeholder interaction, aid learning, and translate new knowledge into action [67]. Boundary objects can bridge different social actors and organizations [105,106]. A crucial feature of boundary objects is their interpretative flexibility [67], where different users may be processing information or operating tasks with the same boundary object to arrive at different conclusions. This flexibility allows boundary objects to foster coordination among stakeholders without presupposing a fully-fledged consensus [104]. When reconsidering boundary objects with the distinction made by Dryzek and Niemeyer [102], between their types of consensus and meta-consensus, one can argue that

working with boundary objects can sustain plurality and, at the same time, harbor normative, epistemic, and preference meta-consensus. It goes without saying that rationality is not to be dismissed in such an arrangement as long as it will be decisive for using the toolkit presented in this paper for planning, monitoring, and evaluating purposes. A main strength of the toolkit is that it can be employed as an assessment methodology, which is much needed in the field of social learning [29,39,41]. More work will be needed, in this regard, to showcase the dynamics of collaboration and conflict among stakeholders using the toolkit in multi-stakeholder environmental governance schemes.

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Appendix A. Details of the Targeted Review for the Identification, Screening, Eligibility, Control, and Selection of Records in the SCOPUS and Web of Science Databases

Table A1. Keywords used for the identification of records in the SCOPUS and WEB OF SCIENCE databases and number of records identified ¹.

Keywords Used (Syntax Presented for the SCOPUS Database)	SCOPUS	Web of Science (Records Not Included in SCOPUS)
TITLE-ABS-KEY(deliberation platform) AND TITLE-ABS-KEY(environmental governance)	8	2 (0)
TITLE-ABS-KEY(multi-stakeholder platform) OR TITLE-ABS-KEY(multistakeholder platform) AND TITLE-ABS-KEY (environmental governance)	15	5 (0)
TITLE-ABS-KEY(multi-stakeholder initiative) OR TITLE-ABS-KEY(multistakeholder initiative) AND TITLE-ABS-KEY (environmental governance)	58	27 (1)
TITLE-ABS-KEY(multi-stakeholder forum) OR TITLE-ABS-KEY(multistakeholder forum) AND TITLE-ABS-KEY (environmental governance)	12	5 (0)
TITLE-ABS-KEY(multi-stakeholder partnership) OR TITLE-ABS-KEY(multistakeholder partnership) AND TITLE-ABS-KEY (environmental governance)	48	15 (1)
TITLE-ABS-KEY(transformative space) AND TITLE-ABS-KEY(environmental governance)	27	13 (0)
TITLE-ABS-KEY(transition arena) AND TITLE-ABS-KEY(environmental governance)	29	14 (1)
TITLE-ABS-KEY (large carnivores) AND TITLE-ABS-KEY (governance) OR TITLE-ABS-KEY (stakeholder participation)	36	25 (4)
TITLE(multi-stakeholder) OR KEY(multi-stakeholder) OR TITLE(multistakeholder) OR KEY(multistakeholder) AND TITLE(protected area) OR KEY(protected area) OR TITLE(national park) OR KEY (national park) OR TITLE(biosphere reserve) OR KEY(biosphere reserve)	26	15 (0)
TITLE-ABS-KEY (roundtable) AND TITLE-ABS-KEY (environmental AND governance)	47	37 (4)

¹ All searches were concluded on 31 May 2021.

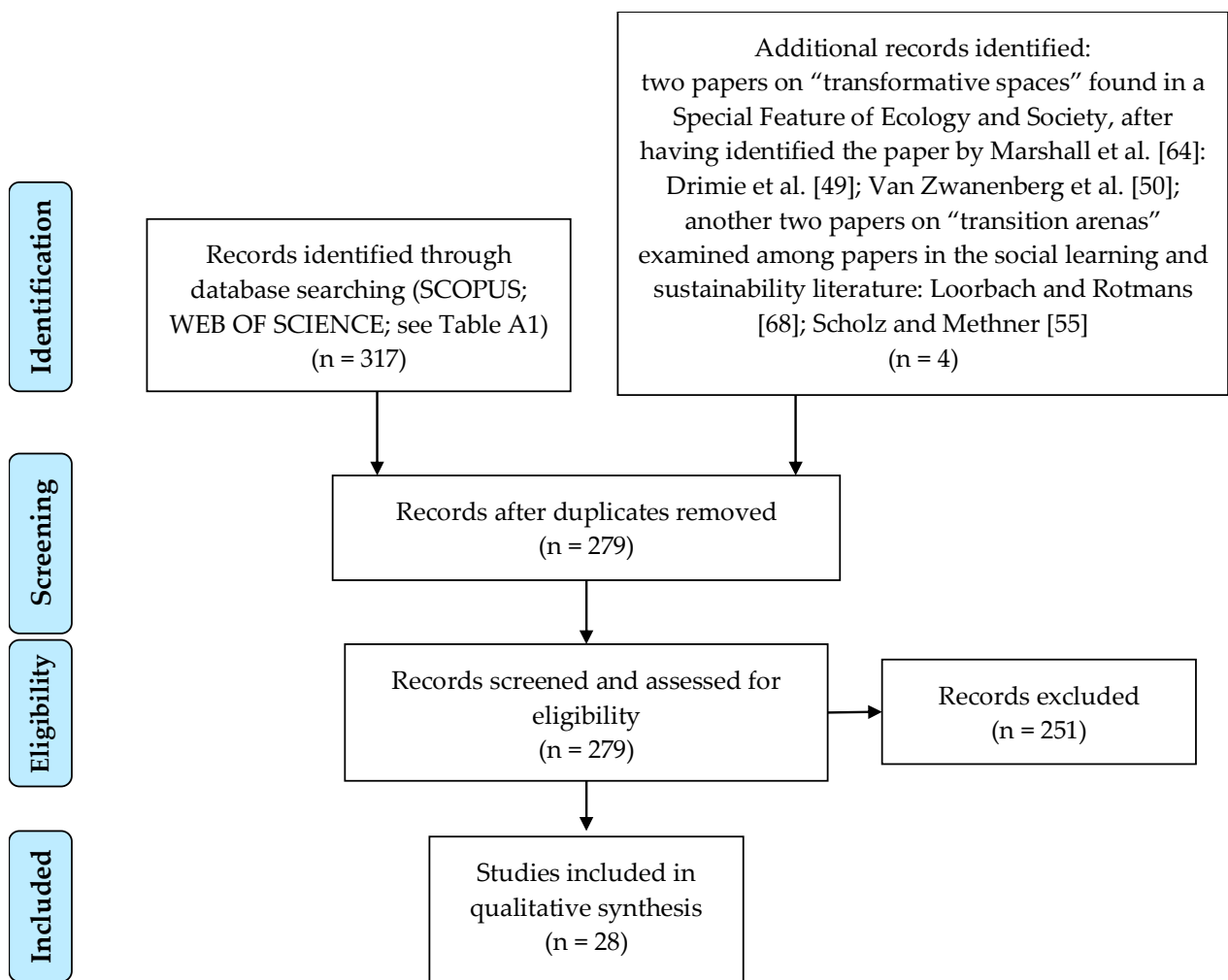


Figure A1. Flow diagram describing the targeted review for the identification, screening, eligibility control, and selection of records in the SCOPUS and WEB OF SCIENCE databases (after Moher et al. [107]).

Appendix B

Table A2. Multi-stakeholder environmental governance schemes identified in the targeted review.

Scheme [Indicative References]	Example (Scale; Time Frame)	Participants	Frame of Stakeholder Collaboration	Main Objectives Pursued	Main Challenges Identified
(1) Deliberation platform [48]	HUMBOLDT-VIADRINA Governance Platform (National: Germany; 2015-ongoing)	Public sector; civil society; business sector; academia; media	Provide a forum to exchange perspectives with stakeholders on energy transition	Foster stakeholder dialogue to strengthen the legitimacy of sustainability solutions for energy transition	Address power asymmetries so that all stakeholders can engage equally in the process ¹
(2) Deliberation platforms [48]	Regional Adaptation Strategies for the German Baltic Sea Coast (RADOST) project (Regional: Baltic Sea, Germany; 2009–2014)	Public administration; civil society; industry; regional research institutes	Initiated within the frame of the part of the KLIMAZUG initiative to develop and test climate adaptation measures	Co-create climate adaptation strategies (coastal protection, energy, seaports)	Address power asymmetries so that all stakeholders can engage equally in the process ¹
(3) Deliberation platform [48]	Well-Being Transformation Wuppertal—An Urban Transition Laboratory for Sustainable Economics (Local: Wuppertal, Germany; 2015–2018)	Local politicians and administrators; civil initiatives; local businesses; urban spatial planners	Joint research project of the Wuppertal Institute and the University of Wuppertal	Co-develop and validate well-being indicators; facilitate transformation by creating informal networks and a competence center	Address power asymmetries so that all stakeholders can engage equally in the process ¹
(4) Deliberation platform [48]	Forum for Fish Protection and Downstream Migration (National: Germany; 2012-ongoing)	Ministerial representatives; nature protection initiatives; energy utilities; fishing industry; shipping sector; researchers	Coordinated by the German Federal Environmental Agency and a steering group	Information exchange and discussion on declining freshwater fish populations; develop a common understanding of and fish protection	Address power asymmetries so that all stakeholders can engage equally in the process ¹
(5) Multi-stakeholder platform [108]	Indonesia National Platform (National: Indonesia; established in 2009)	Government; civil society organizations; academia; international communities; media; private organizations	Platform formation facilitated by the United Nations as “Technical Working Group for Disaster Risk Reduction” within the frame of the project “Safer Communities through Disaster Risk Reduction”	Support stakeholder cooperation in disaster risk reduction	Provide more support for building resilience at the local level
(6) Multi-stakeholder platform [66]	Multi-stakeholder platform (Regional: East Kalimantan, Indonesia; established in 2004)	Local government; NGOs; local communities; companies; local media; research institutions	Established by governmental decree	Manage protection of forests	Need for planning, monitoring, and evaluation methods to deal with complexity, uncertainty, ambiguity
(7) Multi-stakeholder platform [63]	Multi-Stakeholder Platforms on water, food, forests, and landscapes (National: Sweden; established in 2014)	Competent authorities; universities; research institutions; civil society; industry; smallholder organizations; agricultural cooperatives	Facilitated by the Swedish Water House (Stockholm International Water Institute)	Co-production of knowledge; develop competence in natural resource management and sustainable development; development of policy recommendations	Sustain participant interest

Table A2. Cont.

Scheme [Indicative References]	Example (Scale; Time Frame)	Participants	Frame of Stakeholder Collaboration	Main Objectives Pursued	Main Challenges Identified
(8) Multi-stakeholder forum [109]	Indonesian Communication Forum on Community Forestry (National: Indonesia; established in 1997)	Government officials; academics; NGOs; the private sector	Established with the support of the Ford Foundation	Facilitate stakeholder dialogue on community forestry; resolution of conflicts over forestland	Weak links with local community-based organizations
(9) Multi-stakeholder forum [65]	Source Protection Committees (Regional: Ontario, Canada; established in 2006)	Municipal, business and public interests; NGOs; farmers; First Nations; Ontario Ministry of the Environment; Source Protection Authority	Municipally funded watershed-based organizations contracted by the Ontario Ministry of the Environment	Prepare a Source Protection Plan for a specific watershed	Problem-solving processes constrained by time allocated to deliberation
(10) Multi-stakeholder forum [62]	Multi-stakeholder Forum (National: Nepal; established in 2012)	Governmental organizations; civil society organizations; private sector; academia and research organizations; media	Coordinated by the REDD Implementation Centre	Engage stakeholders in the REDD+ process, outreach, and communication	Largely inactive since 2013; declining stakeholder interest
(11) Multi-stakeholder partnership [110]	Wadden Sea Forum (International: Denmark, Germany, the Netherlands; established in 2002)	Regional and local governments; stakeholders from the sectors of agriculture, fisheries, industry and ports, energy, nature conservation, tourism	Set up by Wadden Sea Region WSR decision-makers, politicians, and scientists; the forum has an advisory role with no normative power in decision-making beyond the scheme	Meet the challenges of sustainable development by implementing an Integrated Risk Management Approach	Avoid risks linked to imbalances between socio-economic development and nature conservation
(12) Multi-stakeholder initiative [111]	Atlantic Forest Restoration Pact (Regional: Atlantic Forest, Brazil; established in 2009)	Governmental agencies; private companies; NGOs; research institutions	Managed by a Coordination Council and an Executive Secretariat; operation of Regional Units and Working Groups	Restore 15 million ha of the Brazilian Atlantic Forest by 2050 though promoting biodiversity conservation, generation of jobs and income	Increase economic viability of forest restoration
(13) Transformative space [64]	Peri-urban environmental pollution and food systems (Local: India, Delhi's National Capital Region and Varanasi District in Uttar Pradesh; initiated in 1999)	Local producers/communities; local governments/authorities; civil society; academia/researchers; policy makers	Research and other institutional funding covering three decades (Swedish International Development Cooperation Agency; UK Department for International Development)	Address power asymmetries by empowering poor and pro-poor groups	Initiate and sustain long-term processes
(14) Transformative space [49]	Southern Africa Food Lab (Regional: rural parts of KwaZulu-Natal province, South Africa; established in 2010)	Government; private sector; civil society; academia	Stakeholder collaboration to support smallholder farmers in South Africa	Secure long-term food security; make food systems more diverse and resilient	Attempts to address power imbalances were confronted with resistance and tension
(15) Transformative space [50]	Transformation laboratory (T-lab) based transformative space on agricultural seed markets (National: Argentina; 2015–2017)	Government; public sector; private sector; civil society	In part supported by Transformations to Sustainability Programme funded by the Swedish International Development Cooperation Agency	Outline stakeholder positions about governing seeds; prioritize problems related to seed systems; plan collective experiments	Power inequalities undermine alternative ideas and practices

Table A2. Cont.

Scheme [Indicative References]	Example (Scale; Time Frame)	Participants	Frame of Stakeholder Collaboration	Main Objectives Pursued	Main Challenges Identified
(16) Transition arena [68]	Resource transition (National: Belgium; initiated in 2006)	Government; NGOs; business; science	Initiated, facilitated, and organized by Flemish waste agency OVAM	Refocus waste management from managing waste to waste prevention	Barriers, obstacles, and surprises should be properly managed to stimulate creativity
(17) Transition arena [55]	SmartAgri project (Regional: Western Cape Province, South Africa; 2014–2016)	Governmental departments; municipalities; academia; research institutes; local NGO; agricultural stakeholder groups	Western Cape Climate Change Response Strategy (WCCCRS 2014) and its Implementation Framework (focus area: “Food Security”)	Develop a plan to support the agricultural sector adapt to climate change and reduce greenhouse gas emissions	Controversy between fulfilling the pragmatic need of governmental departments, while, and at the same time, allowing for an open co-creation process
(18) Large carnivore platform [56]	Regional Platforms (Regional—at a European scale: Province of Ávila, Spain; Province of Grosseto, Italy; County of Harghita, Romania; 2018–ongoing)	National, provincial, local administrations; farmers; hunters; landowners; foresters; police; scientists; environmental NGOs; animal welfare organizations	Established under a service contract with the European Commission	Facilitate dialogue among stakeholder groups to co-produce solutions for mitigating conflict related to large carnivores	More direct contribution of competent authorities needed
(19) Large carnivore platform [57,112]	Regional Large Carnivore Committees (Regional: in every county in Sweden with residential large carnivore populations; 2001–2010)	Representatives of municipalities; County Administrative Boards; the police; hunters’ organizations; landowners; nature conservancy; reindeer herding communities	Initiated in a top-down fashion by governmental bodies	Facilitate information exchange and communication between stakeholders; advisory role to regional authorities on management plans	Perceived lack of legitimacy in large carnivore policy not effectively addressed [57]
(20) Large carnivore platform [57,61,113,114]	Swedish Wildlife Management Delegations (Regional: in 21 counties in Sweden; 2010–ongoing)	Representatives of political parties and the Sámi Parliament; forestry; mountain farming; agriculture; reindeer herding; fishery; local business; outdoor recreation; hunting, nature conservation	Replaced Regional Large Carnivore Committees in Sweden to enhance local/regional influence over large carnivore management; formalized mandate conditioned by national authorities	Make decisions on plans and guidelines for wildlife management including minimum flourishing levels of large carnivore species, hunting arrangements and compensation	Legitimacy and mitigation between conflicts of value not effectively addressed [57]; decisions taken at the national level not adopted by authorities at the national level—delegations lacked power over key issues [61]
(21) Large carnivore platform [58,112]	Regional Large Carnivore Committees (Regional, in Finland; established in 1999; most finished their operation by 2010)	Regional, hunting, environment, primary production authorities; police; livestock and dog owners; hunters; nature conservation organizations; scientists	The first funded by the Regional Council of North Karelia (1999); the rest initiated in a bottom-up approach by stakeholders	Shape a shared vision of regional policy goals; advisory role to regional authorities on management plans	The North Carelia Committee did not have a clear mandate [58]; the rest should have provided more support for innovative research [112]
(22) Protected area governance scheme [51,52]	Banff Bow Valley Roundtable (Regional: Alberta, Canada; established in 1995)	Federal, provincial, municipal authorities; academics; tourist sector; cultural organizations; First Nations; environmental NGOs	Established after a report delivered by the Banff-Bow Valley Study Task Force initiated by the Ministry of Canadian Heritage	Manage conflict between overgrowth and development in Banff National Park	Power reflected in ideological struggles among dominant and subjected voices; concern if participants report back to their constituencies

Table A2. Cont.

Scheme [Indicative References]	Example (Scale; Time Frame)	Participants	Frame of Stakeholder Collaboration	Main Objectives Pursued	Main Challenges Identified
(23) Protected area governance scheme [53]	Multi-actor negotiation platform (Regional: Province of Drenthe, the Netherlands; established in 1998)	State Forest Service; Provincial Authorities; City Council of Assen; Water Board Hunze and Aas; farmers' union; drinking water company; tourist industry; nature conservationists	Established by the State Secretary for Agriculture	Prepare and implement a plan for the sustainable multi-functional management of the area; provide financial and other support for selected projects	Unequal power relations among stakeholders impeded social learning
(24) Protected Area governance scheme [54]	Multi-stakeholder participatory process in the Swiss Alps (Regional: Cantons of Berne and Valais, Switzerland; process initiated in 2004 and concluded in 2007)	Public administration; groups from agriculture, tourism, trade, conservation, education, transport	Initiated by the Management Centre UNESCO World Heritage Site Swiss Alps Jungfrau-Aletsch as an activity program for projects to be funded by the Federal Office of the Environment and the Cantons of Berne and Valais	Develop a common vision for sustainable regional development; core groups recommended concrete conservation and developmental projects	Power play endangered the continuation of the participatory processes
(25) Protected area governance scheme [60]	Advisory council at the El Vizcaíno Biosphere Reserve (Regional: Baja California Peninsula, Mexico; 1997-ongoing)	State, federal, municipal institutions; state saltworks; farmers; fishing and tourism cooperatives; private enterprises; environmental NGOs; scientists	Created and funded by Mexico's National Commission on Protected Areas	Promote citizen involvement and more effective management of natural resources	Lack of a well-defined mandate and executive authority did not allow the Council to play a decisive role in the decision-making process
(26) Roundtable [59]	Polish Fisheries Roundtable (National: Poland; established in 2008)	Actors from policy sector; fisheries; environmental NGOs; academics and researchers	Coordinated by a Steering Committee; common vision documented in a Memorandum of Understanding, which outlines rules and procedures for dialogue	Inform decision-making in Polish fisheries; act as a link to the local and international (European) scales	Lack of clear mandate created tension as to how the outcomes of the Roundtable would inform policy-making
(27) Roundtable [59]	Swedish Co-management Initiative (Regional: Lake Vättern, Sweden; initiated in 2004)	Municipal representatives; County Administration Boards; fishers; water-owners; Lake Vättern Society for Water Conservation; scientists	Initiated by the Lake Vättern Society for Water Conservation; supported by the (former) Swedish Board of Fisheries (now "Swedish Board for Marine and Water Management")	Develop a management plan for Lake Vättern	Not backed by a clear mandate, which created confusion and discouraged stakeholders from staying involved; no real influence on fishing regulations
(28) Roundtable [67]	Front Range Roundtable (Regional: Colorado, USA; initiated in 2004)	Federal, state, and county governmental agencies; environmental NGOs; academics and researchers; user groups; trade associations	Established as a joint initiative of governmental and non-governmental organizations; plenary and working groups focusing on community engagement, ecology, economics, and policy	Develop and implement forest management strategies with an overarching aim to address wildfire risk and restore forest conditions that likely prevailed in the late 1800s	The Roundtable struggled to adapt to unanticipated changes, disagreement among participants and departure of key stakeholders; lack of a clear mechanism to translate collaborative decisions into practice

¹ Challenges outlined for all cases studies addressed by Garard et al. (2018).

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