

Article

Environmental Conflicts and Social Innovation on the Balearic Islands (Spain)

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Abstract: New environmental conflicts arise all the time as a consequence of the industrial economy and economic growth. The search for new energy and new materials jeopardizes the margin to promote sustainable development in many local communities. In this paper, we examine a conflict related to hydrocarbons projects in the Balearic Sea (Spain) from the social innovation perspective. This novel approach allows us to focus on how socially innovative responses can be triggered by environmental threats. A set of mixed methods (qualitative analysis and social network analysis) are implemented to study the emergence and development of Alianza Mar Blava in Ibiza–Formentera. This is an initiative that successfully activates new social relations and new collective practices that contribute to transform the environmental conflict. In this study, we highlight the strategic factors that allow the conflict to be transformed as well as other social processes that ultimately promote local sustainable development beyond the conflict.

Keywords: local development; social learning; social capital; territorial governance; ecological distribution conflicts; sustainable development; environmental policy; oil and gas



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1. Introduction

Environmental conflicts are currently multiplying considerably as a result of the capitalist production system placing growing pressure on our planet's biophysical limits [1,2]. The need to search for new materials and energy sources continuously takes extraction frontiers to new territories and is the basis for new socio-environmental conflicts to emerge [2–4]. These conflicts have negative consequences on the natural environment and incur social costs linked with inequalities and a worse quality of life for certain territories and/or population groups. Plenty of examples of conflicts derive from production projects not being linked with the local population's social needs and setting up economic growth against sustainability [5].

The wide range of existing problems, the heterogeneity of the stakeholders that may intervene and high territorial specificity all make finding an objective instrument or criterion to generically deal with any environmental conflict very hard. At the same time, reproducing such conflicts may be a sign of more environmental awareness and the better organization capacity of civil society and/or local communities [6]. Notwithstanding, environmental conflicts can trigger responses from the stakeholders that defend interests, such as those linked with sustainable development goals, and can, therefore, generate positive externalities.

The externalities of environmental conflicts include social innovation (SI) [7]. Public European institutions have stressed the positive role of SI to more effectively meet social needs than existing solutions through new social relations [8]. They also state that “SI is often intrinsically more effective in providing solutions to environmental issues than more traditional top-down policy approaches” [9]. In Latin America, the capacity of environmental conflicts to generate new relations in society, and between humans and nature, is recognized [10]. Nevertheless, very few studies have specifically examined links between environmental conflicts and SI [7,11], especially for conflicts in western European

countries. This article aims to bridge the previously mentioned gap by taking SI as a form of externality of environmental conflicts to help to transform them and to also produce positive effects beyond conflicts. This research work starts by asking these questions:

1. How do SI processes emerge from environmental conflicts?
2. Which factors allow SI to contribute to transform environmental conflicts?
3. To what extent do the SI processes that derive from environmental conflicts promote sustainable territorial development?

The study results are important to inform the stakeholders involved in socio-environmental conflicts, especially civil society organizations, about how to mobilize local (and not local) actors to transform a conflict and to promote long-lasting social reconfigurations. This study sheds light on how public stakeholders and policy-makers can support SIs linked with sustainable local development initiatives.

In the next section (Section 2), environmental conflict and SI concepts are defined and the relations between them revised. In Section 3, the methods and data employed to conduct this research are described. In Section 4, the results for a case study performed on the Balearic Islands (Spain) are presented. A discussion of the results is included in Section 5. Finally, key conclusions and the next steps to be taken are highlighted in Section 6.

2. Theoretical Background

2.1. Socio-Environmental Conflicts

Environmental conflicts represent a topic that has drawn attention from many disciplines. At times, the terms environmental conflict, socio-environmental conflict, ecological conflict or ecological distribution conflict are employed to refer to equivalent phenomena. In other cases, they are notions subject to various appreciations that need to be revised. For example, Sabatini [6] distinguishes between environmental conflicts and socio-environmental conflicts by attributing the former to the negative effects deriving from production activities, which are not easily assumed by those generating them. The author relates the latter to conflicts that are concerned with accessing and controlling environmental resources such as water, land and other raw materials, but do not necessarily imply negative externalities for nature. The complexity of socio-environmental conflicts is determined by not only the difficulty to define resources ownership, but also by asymmetries of power and opposing interests existing among the involved stakeholders [12].

It is, however, rare for environmental conflicts to not include social or political elements. Both environmental conflicts and socio-environmental conflicts are specific forms of social conflict [13], and even forms of political conflict [6], whose content is interpreted as being environmental given the historic, social and cultural context in which the conflict takes place [14]. By applying the socio prefix, we place special emphasis on the social dimension of processes that stem from potential or real threats with negative tangible implications for the natural environment [15].

The Ecological Economics and Political Ecology disciplines have paid particular attention to socio-environmental conflicts. Ecological Economics pays special attention to energy and materials flows related to economic activities [16]. These analyses reveal metabolic processes that are geographically and socially unequal, by means of which environmental inequalities with the capacity to trigger social reactions are also evidenced [3]. Several authors from this field, particularly from Political Ecology, have developed the environmental justice notion to refer to the inequalities in the social distribution of benefits and prejudices that capitalist economic activity generates on the natural environment [17,18]. Accordingly, power relations and the socio-cultural context play a central role insofar as “justice cannot be served by decisions about how to distribute good and bads in contexts where the definitions of those goods and bads is itself unjustly determined” [19].

The above-cited approaches define socio-environmental conflicts as phenomena that occur when local communities and social movements, which are sometimes supported by other external stakeholders, are mobilized against certain production projects or infrastructures, where the environmental impact is a key element of their actions [15]. From the

environmental justice movement, the fact that most of these conflicts affect communities and groups from marginal or disadvantaged populations is underlined [20]. These groups attempt to respond to the threats made by the most powerful agents (governments and/or firms), which try to limit their access to natural resources and reduce the ecosystem services they receive [18].

Nonetheless, not all the socio-environmental conflicts that occur in developed countries are limited to either distribution matters or the powerful versus poor people pairing [21]. Folchi [1] suggests a notion that is more suited to the study of socio-environmental conflicts in developed countries and, thus, better adapts to this research. This author refers to conflicts of environmental content, which are defined as those taking place “as a consequence of a strange agent’s action that alters, or intends to alter, pre-existing relations between a community and its environment; or the opposite, that is, when a community decides to amend its link with the environment and it affects someone else’s interests” [1]. This might prove to be a more suitable approach to address environmental conflicts in Western countries.

The stakeholders that tend to intervene in socio-environmental conflicts can be summarized as three groups [6]: (i) firms, which tend to be responsible for altering any existing human–ecological relations in a given territory; (ii) the local community or its specific groups, which tend/s to be organized to defend its/their interests in relation to a real or potential environmental alteration; (iii) public stakeholders, which tend to have mediation responsibilities or responsibilities of another kind. The way in which these stakeholders interact is linked with the peculiarities of each territory and its institutional environment [6,21]. In fact, the existence of different valuation languages, which are necessary to understand such conflicts in each context, has been acknowledged [15]. Similarly, although the local scale is interesting to promote social responses and transformations from socio-environmental conflicts, these conflicts tend to form part of multiscale and global movements [22].

For example, the most recent studies address socio-environmental conflicts from alternative conservation paradigms [23] and in relation to the Blue Justice notion [24]. They also deal with the implications of these conflicts within the broad debate between circular economy and degrowth [5] or environmental conflicts as sustainability forces [18,25]. Other authors focus on their presence in poorly explored regions, but with considerable extraction-related pressure [26]. The possibilities of new constitutional frameworks to curb socio-environmental conflicts are being explored in Chile [4]. Moreover, new environmental conflicts are being identified in tourism development processes and struggles with extraction/mining industries [27]. Of these studies, very few have investigated socio-environmental conflicts in western European countries, and even fewer have introduced the SI approach.

2.2. Social Innovation

Socio-environmental conflicts are defined as such by the extent to which they come about with a social reaction. When this social reaction includes novel interactions between the involved stakeholders, we can talk about an SI process deriving from a socio-environmental conflict.

Innovation is a social process that stems from human action in a given spatio-temporal context and refers to originality [28]. Using the term SI is still ambiguous and varies according to the field it is applied to. Some studies stress the role played by SI given its product dimension; that is, solving a social need [29]. Others, however, emphasize its process dimension and underline elements linked with social relations, organizational forms or attitudes [30,31]. Some studies also employ a mixed definition, where SI is both a means and an end. One such case is European institutions [8,32].

In territorial development studies, the interest shown in SI is linked mainly with process elements, but does not conceal interest in these processes obtaining outcomes in development terms [31,33–35]. Nonetheless, outcomes may be quite diverse and not

always visible [34]. In fact, one of the main characteristics of SI is that it takes place on intangible elements [31], which makes its analysis more complicated. In this study, we define SI as a *reconfiguration of social relations that leads to new forms of action to meet collective needs and opportunities, whose main outcome is the creation of social value*. With *social value*, we understand, for example, an improvement in the capacity of collective action and of transforming future conflicts, the inclusion of new social groups in decision-making processes, or improvements in social cohesion and sense of belonging [36].

Socially innovative initiatives are triggered by factors that may originate from several territorial scales and trigger a response from stakeholders in a given territory to certain problems or collective ambitions [37]. Conflicts are acknowledged as possible triggering factors [38], but can also be the direct consequence of innovations [39,40]. By means of reflection and negotiation processes, different stakeholders in a territory perform preparatory actions to promote the reconfiguration of social relations [35,41]. Social structures and power relations can facilitate, or otherwise limit, local stakeholders' capacity to participate in negotiation processes [42], but can also motivate reconfigurations when exclusion situations or power imbalances converge [33].

The reconfiguration of social relations is the core of SI and can be conceptualized around three interconnected dimensions: (i) networks (new stakeholders, new roles in an existing network, etc.); (ii) attitudes (new values, new motivations, etc.); (iii) governance mechanisms in the network/territory (new forms of coordination, new structures and organizations, etc.) [37,43]. Only when these reconfigurations are adopted by a critical mass of stakeholders can the innovation process lead to new practices and new forms of action linked with the nature of each initiative. Such practices have immediate and direct effects (outputs) that influence the objective of the process. Additionally, long-term effects (outcomes/impacts) that are less measurable and cannot be strictly linked with the area to which the initiative applies tend to emerge. They include learning processes, such as adapting an idea in other territories (scaling-out) or extending this idea to new areas of action and dealing in-depth within the socio-economic system in the same territory (scaling-up) [44] (see Figure 1).

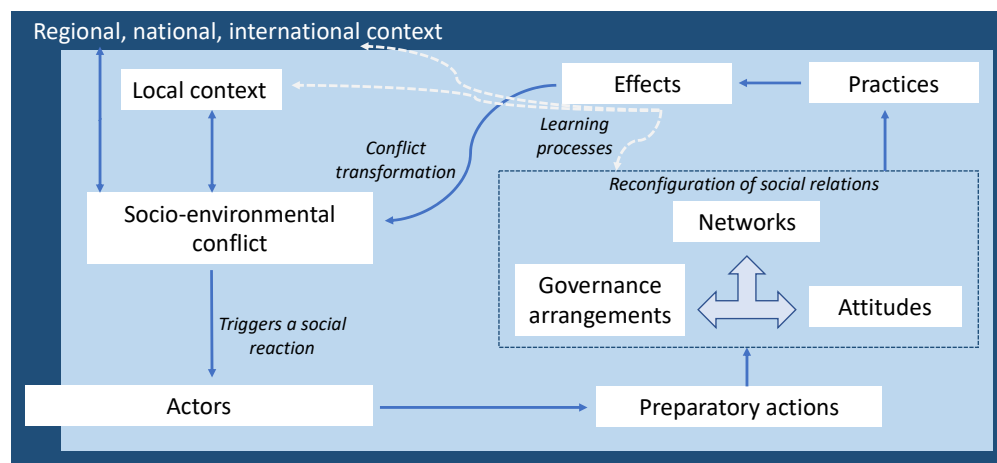


Figure 1. Conceptual model on socio-environmental conflicts and social innovation. Own elaboration.

2.3. Social Innovation and Socio-Environmental Conflicts

Socio-environmental conflicts are a particular example of SI triggers [7,45,46]. The SIs linked with socio-environmental conflicts tend to be described as bottom-up or grassroots innovations [11]. They are original local initiatives that emerge due to public institutions' insufficient capacity and also from the legislation currently in force to deal with environmental problems [6]. During these processes, the local community, particularly civil society, tends to be the main stakeholder to be addressed. The participation of individuals and different organizations in these conflicts leads to creative processes and the application of knowledge that generate innovations, e.g., of a territorial, legal or political-institutional

type [7]. A local population's deep rootedness to, and its knowledge of, the territory allow adapted and flexible solutions for problems to be created [47]. However, local communities usually lack techno-scientific knowledge, which represents a barrier in large-scale environmental conflicts. Some studies demonstrate that counter-expertise networks bringing together local experiential, techno-scientific and legal knowledge can be an alternative to reduce power/knowledge imbalances in environmental conflicts [48]. SI plays a key role in these processes of co-creation of knowledge between different local and non-local actors [49].

Socio-environmental conflicts arouse people's feelings of indignation and injustice, which often turn into shared emotions [50]. Such changes in attitude are the basis for collective actions to be taken against those responsible for the environmental problem [51]. While individuals participate in the conflict, they are exposed to social processes that continuously change their values and beliefs [52]. At the same time, new routines come about that are linked with the practices set up during a conflict (e.g., daily actions that involve occupying a natural space), whose impact on sustainable territorial development can be more powerful than that of environmental laws [50,53].

The capacity to innovatively transform a local population's attitudes and practices during socio-environmental conflicts is associated with the degree of social cohesion, or bonding social capital, in a given community. Some authors consider these conflicts to be an element that measures and alters social cohesion [54]. On the one hand, socio-environmental conflicts show a local society's response or resilience capacity: the greater the existing cohesion, the better the capacity to produce a collective response. On the other hand, conflicts can improve a community's cohesion when actions are successful in innovating in forms of social organization and extending collaborating networks [10,55,56]. However, a conflict can lower the cohesion level in those cases for which desired objectives are not met or very powerful top-down actions come into play [57]. Socio-environmental conflicts can also reflect power relations in a community. Power relations partly determine different stakeholders' responses regardless of them acting or not. At the same time, the conflict itself and the derived SIs can transform power relations and produce new empowerment and disempowerment processes [10,58,59].

Therefore, the relationships, interests and attitudes that support the continuation of socio-environmental conflicts can be transformed through SI processes. Rather than conflict management and conflict resolution, we argue that socio-environmental conflicts require long-term transformation processes in which the personal, structural, relational and cultural aspects of the conflict change at different levels and different times [60]. As stated by Miall [61], "it is possible for conflicts to be transformed as parties shift positions and adopt new goals, new actors emerge and new situations develop allowing for new relationships and changed structures" (p. 7). Examining socio-environmental conflicts from the SI approach allows us to capture novel social and territorial reconfigurations supporting conflict transformation.

3. Methods and Data

This research work follows the case study method [62]. The case was selected from the Environmental Justice Atlas (<https://ejatlas.org>; accessed on 15 April 2022), which includes more than 3600 socio-environmental conflicts of different types all over the world. The most repeated conflicts are those labeled as conflicts brought about by extracting building materials (704 cases) and fossil fuels and climate/energy justice (645 cases). Here, we particularly focus on western European countries and the socio-environmental conflicts related to fossil fuels that trigger some kind of socially innovative response. In Europe, but not Russia, this conflict type concentrates in Germany (11 cases), Spain (10 cases) and the UK (10 cases). In the case of Germany, most of the conflicts concern the exploitation of lignite, which is developed in open-cast mining. This type of mining has serious environmental impacts, but mainly at the local level. In the case of the UK, we identified four conflicts

with large-scale potential impacts linked to oil and gas projects. However, social reaction is rather limited as there are only a few local authorities involved.

We selected a case study in Spain as these are the cases more accessible to the authors. Of the 10 cases identified in Spain, we selected Alianza Mar Blava (<https://www.marblava.org>; accessed on 10 April 2022) (AMB), which is based in mainly Ibiza–Formentera (Balearic Islands) and is linked with the extraction phase of materials (oil prospecting). This is the Spanish case whose involved stakeholders come in the largest number and display the highest heterogeneity. It is the only case that regionally involves stakeholders, and an attempt has been made to replicate it. All this might indicate the presence of SI processes. Examining a successful case of SI in Ibiza–Formentera may be of interest to other affected territories, mainly the Spanish Mediterranean area, and promote new SI initiatives. Thus, the nature of the conflict and its accessibility for the authors justify the selection of AMB for this research.

Mixed methods are the most complete option with which to study SI [63]. The present research work combines qualitative and quantitative techniques by following interaction, multiphase and integration criteria with a combined analysis [64]. Data collection was carried out between October 2017 and February 2018. In a first (qualitative) phase, 21 semi-structured interviews were conducted that lasted 60 min on average. Of these interviews, 16 were conducted with key informants involved in AMB (from the 17 members of the AMB working group; see Table 1). The other five interviews were conducted with actors involved in Alianza por el Agua, a new initiative resulting from a scaling-up process (see Section 4.6). Questions were about the categories presented in the conceptual model presented in Section 2 (see Figure 1): context and problematization, preparatory actions and triggers, stakeholders, social reconfigurations, practices and effects). This first phase informed the second (quantitative) phase about the stakeholders with whom structured interviews were conducted, which also lasted about 60–90 min. In this second phase, we interviewed 14 out of the 16 key informants from the first qualitative phase, all of them members of the AMB working group (see Table 1). It was in this second phase that the project's social network was built with a temporal perspective (we collected data about current and past situations) and when relational attributes were compiled. In all, 35 interviews were conducted to capture the SI process around AMB. Interviews were complemented with participatory observation and by collecting the gray literature from AMB reports and written press articles.

In relation to the qualitative data analysis, a literal transcription of the semi-structured interviews was carried out. All the material was coded using MAXQDA 2018 software [65] by combining deductive and inductive approaches. For the qualitative data, the social network analysis (SNA) method was applied using UCINET v.6 software [66]. This software allows socio-centric networks to be comprised and social network indicators to be calculated, such as the degree of network density, the Jaccard Index (JI), trust levels and frequency of contact among stakeholders. Regarding the indicators employed in the results, it is important to specify that the JI measures the degree of similarity between two sets which, in our case, are the present social network and that before the SI process started. The JI takes a value between 0 and 1. Values close to 1 indicate a higher degree of similarity, while those close to 0 suggest bigger differences and, therefore, more marked changes in the social network between two time points. Quantitative and qualitative data were integrated into the analysis stage, which is particularly important to study the reconfiguration of networks and attitudes. Interview statements were also included as a means of empirical evidence. Statements were translated from Catalan and Spanish into English.

Table 1. Members of the Alianza Mar Blava working group illustrated in the social network analysis. Own elaboration.

Role	Organization	Sector	Qualitative Interview (1st Phase)	SNA Interview (2nd Phase)
Innovator, promoter and facilitator	Ibiza Preservation Fund	Social	Yes	Yes
Promoter	Amics de la Terra (Friends of Earth)	Social	Yes	Yes
Promoter	Fomento del Turismo	Business	Yes	Yes
Promoter	PIMEEF	Business	Yes	Yes
Promoter	Casita Verde	Social	Yes	Yes
Promoter	Amics de la Terra (Friends of Earth)	Social	Yes	Yes
Promoter/Facilitator	Ibiza Island Council	Public	Yes	Yes
Promoter/Facilitator	Santa Eulàlia Local Council	Public	Yes	Yes
Promoter/Facilitator	Sant Josep Local Council	Public	Yes	Yes
Promoter/Facilitator	Ibiza Local Council	Public	Yes	Yes
Promoter/Facilitator	Sant Antoni Local Council	Public	Yes	Yes
Promoter	Fundació Deixalles	Social	Yes	Yes
Promoter	GEN-GOB	Social	Yes	Yes
Follower	CREM	Public	Yes	No
Promoter	Fundació Deixalles-AMB external expert	Social	Yes	Yes
Promoter	Salvia Consulting-AMB external expert	Social	No	No
Promoter	Greenpeace-AMB external expert	Social	Yes	No

4. Results

In this section, we analyze the different elements that define the SI process for the AMB case study. The following were examined: the territorial context and the SI that emerged from the socio-environmental conflict, the involved stakeholders, the different social reconfigurations, the practices carried out and, finally, the broader effect that SI has on the territory.

4.1. Description of the Context and Problem: Oil Prospecting on the Balearic Islands

The emergence of innovative initiatives from the social point of view is partly explained by the territorial context where they are formed. This also occurs with AMB, which appears in the territorial context of the Ibiza and Formentera Islands, also known as *Islas Pitiusas/Pityusis Islands*. These islands form part of the Balearic Islands (Spain), and represent a well-defined integrated area, recognized in, for example, EU LEADER programs (the LEADER program was launched in 1991 as part of the EU's rural development policy as an area-based, integrated and bottom-up method for delivering rural development). The Ibiza Island is the biggest one, with more than 100,000 inhabitants and with 200 inhabitants per km². Formentera has approximately 12,000 inhabitants and more than 100 inhabitants per km². The area around both Ibiza and Formentera is ecologically interesting, with several protected areas of different types, such as Sites of Community Importance, Special Protection Areas, Nature Reserves, among others. This resource acts as the basis of many production activities, of which tourism stands out [67]. For example, in 2019, the hospitality sector there represented almost 40% of employment in Ibiza and close to 50% in Formentera.

AMB, the SI initiative that we herein study, came about in May 2013 as a response to a series of oil prospecting activities in the Mediterranean Sea. Through the Spanish subsidiary Capricorn Spain, the Scottish firm Cairn Energy attempted to seek oil in the Gulf of Valencia area and in the western zone of Ibiza thanks to licenses granted since 2010 by the Spanish government (national scale). This project forms part of a broader set of projects on Spanish coasts led by different international firms from the sector and other new projects that emerged in the years to follow.

Oil prospecting feeds a socio-environmental conflict because it is considered an imminent threat for the marine fauna, fishing and natural landscape of these islands. A

prospecting plan includes a seismic acquisition or acoustic drilling phase, which involves shooting large quantities of compressed air that penetrate sea depths (up to 7000 m) and produce a very high noise level (249–265 dB). The drilling phase is followed by exploring by means of perforation, which is considered the most dangerous phase due to the spillage risk. Among other reasons, injecting air is considered harmful for cetaceans and marine turtles [68,69], and may impact the volume of fishing catches [70]. According to local stakeholders' discourse, these processes may affect the influx of tourists to the islands and, in the hypothetical spillage scenario, may bring most of the economy in the area to a standstill. Although there is an economic dimension in the conflict (potential impact on tourism), most interviewees perceive the phenomenon as an environmental conflict that puts the territory's natural resources at risk. For example, an oil prospecting project would damage some types of species valuable for biodiversity, such as the endemic plant Mediterranean Poseidon or numerous species of odontocetes at risk of extinction. This is particularly emphasized by representatives of environmental organizations and the public sector.

4.2. Preparatory Actions: Turning Problems into Opportunities

The initial local community's reaction to oil prospecting was a weak one. Reverting projects of such magnitude, performed by large companies and allowed to do so by State administration almost unilaterally, was considered practically impossible. Nevertheless, the stakeholders in the area shared one position: they considered it a common risk for the islands' natural environments and their economy, with a defined external enemy (oil companies and State administration). This apparent alignment of stakeholders' interests was important as it was unusual in the territorial context of this study. On both Ibiza and Formentera, social and legal conflicts among the stakeholders in their territory have frequently occurred in spatial planning and environmental protection matters, and mainly among the tourist, real-estate, public and environmentalist sectors.

The key to activate the innovation process was that this unusual fact was detected and highlighted by one local stakeholder: the Ibiza Preservation Fund (IPF). This is an environmental organization of Anglo-Saxon origin that finances projects toward the conservation of the Ibiza and Formentera Islands. Its director and main figure (AMB_01) properly summarizes the exceptional nature of the situation and that the intention is to transform a threat into an opportunity:

"During the first conversations I held with both [cites a very well-known tourist businessman] and City Councils was: nothing can be done, this is already happening... I thought, how can this be possible? Not even when all the economic stakeholders do not want this to be the case, which is usually just the opposite! Normally economic and environmental interests are always the exact opposite here. But at the time I realized that everyone was moving in the same direction [...] People were worried, but there was no project. In the end it was a matter of holding these meetings [...] I could clearly see that to form an alliance, we all had to be in on it. I went to introduce myself to those I didn't know [...] first we started showing a lot of respect, explaining why this made sense [...] we are all going to build it right from scratch [...] not moving with something vertical was most interesting". (AMB_01_ IPF Management)

The preparatory actions included meetings being held between the IPF and stakeholders from different areas, such as environmental practitioners from City Councils, tourist-related firms, environmentalist organizations, etc. During these meetings, efforts were made to encourage and convince stakeholders about the importance of making the most of the opportunity that such an apparently common stance had to activate a collective response to oil prospecting. For preparatory actions, great care was taken to motivate all stakeholders to participate in a possible project that was to be a collective project with no initial leadership of stakeholders other than AMB_01's intermediary role.

The turning point of preparatory actions came about during a meeting, when many representatives from businesses, the public sector and social areas had the chance to check

that this shared stance of rejecting oil prospecting was real. Despite several stakeholders' mistrust owing to the usual social climate in the territory, they were generally convinced that there was sufficient margin for joint work to shut down oil prospecting. It was during this initial meeting when a decision was made to set up an association, AMB, to represent different territorial stakeholders, whose purpose is described below:

“AMB's objective is to definitively stop the research program and subsequent hydrocarbon exploitations promoted by the Scottish oil firm Cairn Energy in the Gulf of Valencia opposite the west coasts of Ibiza and Formentera, and other oil prospecting projects in the western Mediterranean that practically surround the Balearic Islands (specifically, Spectrum Geo Limited in the Balearic Sea and Seabird Exploration in the Gulf of Lion), to preserve the environmental wealth that makes these islands unique, as well as employment, citizen well-being and future generations' rights to enjoy their surroundings in a good conservation state”. [71]

4.3. The Involved Stakeholders

This section deals with the system of stakeholders involved in AMB and their respective interests in both the territory and initiative in question. Knowing the characteristics of the stakeholders' system can help us to identify the main innovations in social relations.

Apart from the stakeholders that were considered “enemies” (central government and oil companies), the range of stakeholders that intervened in this process is very wide. There are two main blocks: internal and external stakeholders. The internal stakeholders more actively participate in how the initiative (AMB) operates and act as its main figures. The external stakeholders sporadically collaborate in certain phases or aspects, are directly affected by the initiative, but are not leading figures or members. Nonetheless, some external stakeholders can play a strategic role.

The internal stakeholders' group can be identified with AMB's working group, which was initially made up of 14 people, a figure that has varied as the process progresses. This group is in charge of managing the alliance's activities by applying frequent follow-up and is formed by a plural set of representatives from business and social organizations and public institutions. AMB_01 (IPF) stands out as a social stakeholder that created the innovation idea, initially drove and financed it, and helps other stakeholders to engage in it. This stakeholder is highly qualified and experienced in territorial development by taking a strategic approach to the islands' development, with important internal and external networks to the territory, and it is willing to shoulder responsibilities in initiatives by shared leaderships. The other social stakeholders come from the environmentalist domain. Local organizations are combined with others integrated into international networks and have different activism profiles. They have driven the initiative from the beginning, take on responsibilities while monitoring the initiative, play a fundamental role in involving citizens, and their knowledge and experience are key for innovation to develop.

The business sector is represented at AMB by two of the most powerful business organizations in the territory. Their leadership in the initiative is recognized by everyone interviewed, as are the individual skills of the people involved. Their interest in AMB is associated with maintaining tourist activity on the islands, which is something that oil prospecting can spoil. They have been strategic about the effect that the initiative can have on the territory's image. For instance, they suggested that the name *Ibiza* or the term *oil* should be avoided in the association's name so that no territorial brand linked with conflicts and hydrocarbons is created.

The internal stakeholders also include local public institutions. Public sector stakeholders' interest combines economic and environmental concerns but places more emphasis on one element or another depending on the administration's “political color”. The initially driving stakeholders, including IPF, promote the inclusion of public technical profiles in working groups, but not political profiles, so that public sector is represented by practitioners. The intention of this decision is to avoid conflicts and political strategies locally. It also

helps the adhesion of those local administrations governed by the same political party that represents the external “enemy” (national government). This measure also helps to create a united local community image against oil prospecting, which reinforces its role against the central administration and oil companies. Local administrations are strategic in funding the initiative and making it sustainable in the long term, and also in some administrative actions that go against the oil projects.

AMB encompasses many external stakeholders, including more than 100 public, social and business organizations from all over Spain, as well as individual citizens, that adhere to the alliance as sympathizers. Nevertheless, here, we stress the strategic role of two external stakeholders: an expert consultancy firm and grassroots social movements. Having set up the local group and all the territorial stakeholders being committed to the initiative, the association opted to technically outsource the conflict’s most complex aspects. Through the IPF networks, support is sought from the stakeholders linked with Greenpeace for being very important stakeholders for introducing specialized external knowledge and several actions, which are explained in Section 4.5.

Finally, grassroots social movements exist and have directly emerged in relation to the conflict. Their refusal to cooperate along with the business sector sets them apart from the association’s working group, but they are included as sympathizers with the association. Their role is an interesting one insofar as they represent the most spirited and fundamental citizen side in organizing protests and demonstrations in the initial stages. They also coordinate their action with AMB representatives by playing a role that complements that of the association with practices which, given their non-institutionalized nature, only they can perform. Nonetheless, after the initiative reaped its first successes, the leading figure of the grassroots social movements has been diluted. The reduction in the social conflict climate and the start of a more bureaucratic work phase and the financial limitations of these movements contributed to the dilution.

4.4. Reconfiguring Social Relations

In this section, we examine the main reconfigurations on three dimensions of social relations: networks, attitudes and governance mechanisms. This analysis represents the core of the SI process activated with the socio-environmental conflict.

4.4.1. Networks

The network set up around the AMB initiative includes many stakeholders that represent the local community’s interests well. All the interviewees agreed on pointing out that this is something novel and successful in Ibiza and Formentera:

“The fact that a series of relevant organizations in the Ibiza society have joint the process is significant for this to become important [. . .] All the well-established stakeholders, society and territory are well-represented”. (AMB_12. Environmental technician of the Ibiza Council)

“I maintain that we have three supports in this alliance: public, private and social. All this generates strength so that C.B [external expert] can lobby in Brussels or Madrid, and can say that all the society in Ibiza does not agree. We are not the typical NGOs [. . .] you have the legitimacy to state that here, on the island, no-one wants this, not even the tourist sector. I think we were clear about this, even the conventional NGOs”. (AMB_01. The IPF Director)

This innovative network implies the creation of new social links. The upper network (a) in Figure 2 shows the links among the most implicated people in AMB before the association was set up. The network at the bottom (b) in Figure 2 updates these links when the initiative is ongoing. The network is formed by 17 people and is based on the people making up the working group when data were collected (Table 1). In all, while the project was underway, 35% of existing links among stakeholders were conceived as the result of

it being set up (red lines in Figure 1). This is also shown in Figure 3, where the segment including relations lasting 3–5 years is the most numerous one with almost 40% of relations.

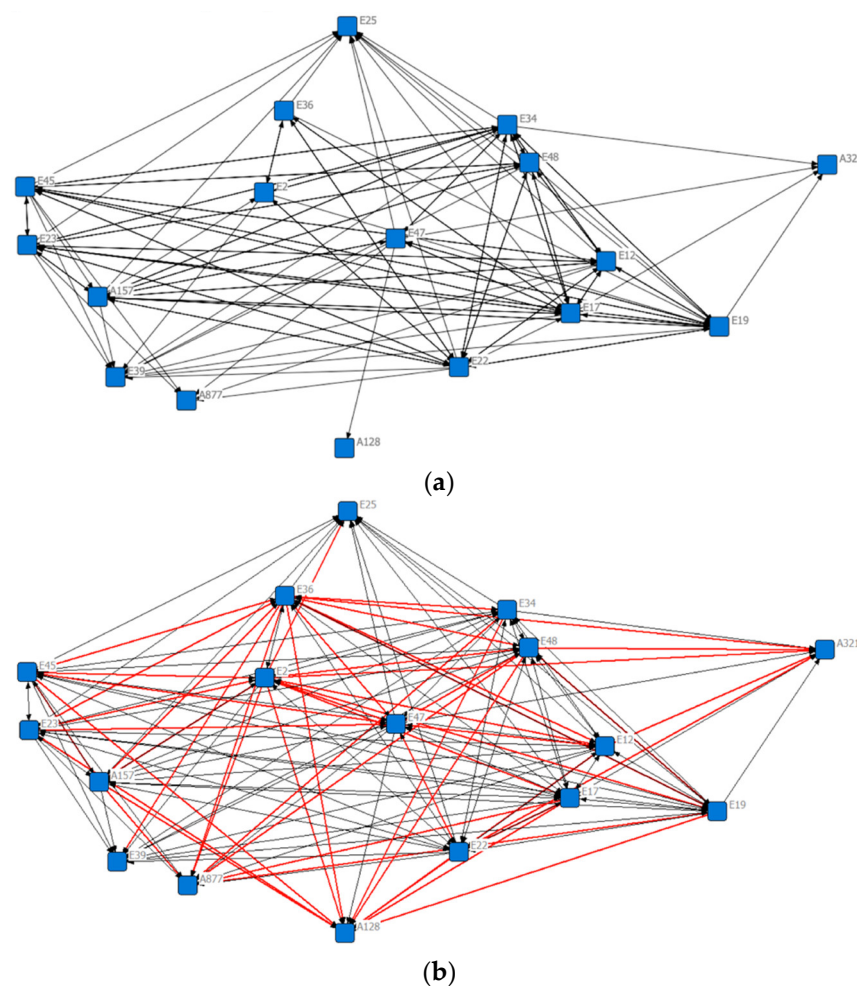


Figure 2. Social network of the main stakeholders involved in Alianza Mar Blava. (a) Social network before the SI process. (b) Social network during the SI process. Symbols in blue represent individuals. Lines in black represent previous relationships. Lines in red illustrate new relationships. Own elaboration.

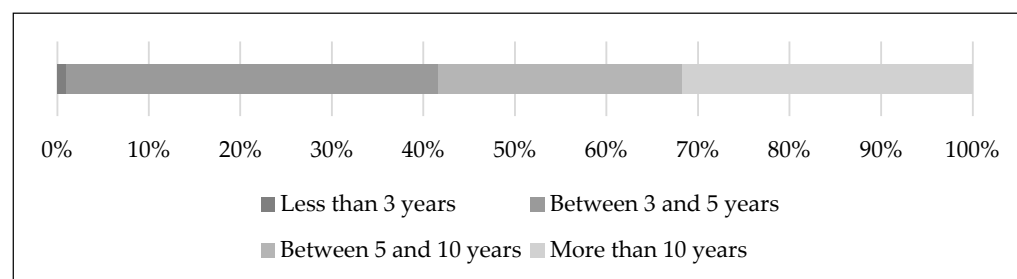


Figure 3. Age of relationships between the key stakeholders involved in Alianza Mar Blava (in percentages). Own elaboration.

Apart from building a novel network that represents the local community, one of the main reconfigurations in AMB has to do with creating networks between stakeholder typologies whose link was previously weak, or even conflictive. Table 2 presents these reconfigurations by means of the JI. The most significant variation in social relations lies between public practitioners and business stakeholders ($J_I = 0.2$). All the project

practitioners specialize in environmental matters and come from local institutions. Before AMB came into being, they had very few opportunities to come into contact with the business stakeholders on the islands, especially with representatives of the most important business organizations. As we can see, setting up the initiative has favored new relations being established among both stakeholder types.

Table 2. Jaccard Index by typology of stakeholder. Own elaboration.

Stakeholders	Business	Public Sector	Environmental
Business	1	0.2	0.563
Public sector	0.2	0.565	0.667
Environmental	0.563	0.667	1
Average	0.587	0.477	0.743

The links between business and environmentalist stakeholders have also been significantly reconfigured and, in this case, almost 50% of relations have been transformed (JI = 0.56). Although this reconfiguration is less significant than in the previous case in quantitative terms, the interviewees generally perceived that the new networks between businesspeople and environmentalists are something singular in the context of both Ibiza and Formentera. As pointed out in Section 4.1, both sectors have traditionally played opposing roles in this territory. AMB have managed to establish new relations and reduce the confrontation climate, which favors transforming the conflict.

4.4.2. Attitudes

Shutting down hydrocarbons projects is a motivation shared by the stakeholders involved in AMB, and they all acknowledge the need for collective actions to fulfill this objective. Creating a sense of community and belonging is the basis of this motivation and is a relevant reconfiguration in the social relations of this territory. This goes beyond the main network of stakeholders because it affects civil society on the whole and is implicit in many of the practices carried out with this initiative (see Section 4.5).

Creating a sense of community is feasible with a socially organized territory and stakeholders with deeply rooted values in it. In our case study, one of the most relevant reconfigurations in attitudes appears in human values. Beyond the link with any specific organization or sector, the stakeholders involved in the innovation process have changed their perspective of human relations with other stakeholders in the territory and have established links that are not only limited to their usual professional role or social position in the local community. Participating in AMB provides an opportunity to establish different personal links and to reinforce social cohesion. This, in turn, positively influences each stakeholder's professional activity and the territory's general efficiency when undertaking projects and overcoming tensions. The testimonies below illustrate both matters:

“[Environmentalists] have removed the very negative label that they placed on businesspeople. Now they are capable of dialoguing with businesspeople on equal terms. We have been able to establish a relation with GEN or Amics de la Terra [. . .] and more peacefully so knowing that they're not judging us; instead we are like companions on a journey [. . .] what we have discovered during the months of work is that one thing is superior to any of us, to any egos that might appear and to any human project. It's called Ibiza. What we have all discovered is how much we love our land [. . .] Now on the street or in any project, I'm delighted to come across companions I have got to know better in AMB. And things come to my mind that they might be interested in supporting or I might mention to them”. (AMB_16. Business representative)

“They [environmentalists] tended to regularly report the Island Council. Now at least they know me, they ring me and we always try to reach an agreement

before having to take legal actions. So, it's now easier for everyone". (AMB_02. Environmental practitioner from the City Hall)

Building personal and human links among stakeholders is indicative of an improvement in the territory's social capital. To corroborate these improvements and to closely look at the substantive dimension of reconfigurations in attitudes, we examined the trust and frequency of contact among the stakeholders in the AMB work group. Daily, weekly and fortnightly contacts comprise high-contact frequency; monthly contacts represent medium-contact frequency; 3-monthly and annual comprise low-contact frequency. Table 3 presents the values for the links that existed before the initiative was set up; that is, the stakeholders that knew one another. They are the only ones for whom we are able to evaluate changes in the trust and frequency of contacts. It also shows how the low and medium trust values lowered, and the high trust values rose, when the initiative was being developed. The low-contact frequency lowered, and the medium-contact frequency increased. Together, 45% of the already existing links increased contact frequency during the innovation process, and 33% increased trust ((a) in Table 4). In all the current links in the working group network, high trust and low-contact frequency predominate ((b) in Table 4). This last piece of information most certainly would show a higher frequency if we had conducted fieldwork in the first phases of the initiative. In our case, interviews were held in an advanced innovation stage when the everyday business of the process was managed by a few stakeholders and, therefore, contacts were less frequent.

Table 3. Existing relationships prior to the SI process (in percentages). Own elaboration.

Levels	Trust (a)	Trust (b)	Change	Frequency of Contact (a)	Frequency of Contact (b)	Change
High	15	14	−1	54	70	16
Medium	33	53	20	20	20	−1
Low	52	33	−19	26	10	−15

(a): Before the SI process; (b): during the SI process; change is calculated in percentage points.

Table 4. Frequency of contact and trust between key stakeholders (in percentages). Own elaboration.

Variation	Frequency of Contact (a)	Trust (a)	Level	Frequency of Contact (b)	Trust (b)
Decrease	5	4	High	3	64
No variation	50	63	Medium	32	27
Increase	45	33	Low	65	9

(a): Existing relationships prior to the SI process; (b): total relationships during the SI process.

A significant part of the reconfigurations of social relations had to do with changes in business stakeholders' attitudes. More powerful business discourse about the territory's sustainability was noted, as was the need to consider economic activities toward natural environmental conservation:

"Sensitivity to the territory has increased over the years. The territory was not a variable that formed part of a business' trading account, but now it is. With all the businesses that I counsel, I make them see that sustainability is more important than any bathroom tiles in their hotel. Because if you don't have a more than 20-year horizon, then what does it matter what you do in your firm today if you have no future? [. . .] If they [businesspeople] were reluctant at some point, now they understand that we, Ibiza... [a long reflexive pause], the more genuinely we are conserved, the better business will be". (AMB_16. Representative of the Regional Ministry of Tourism)

The joint participation of businesspeople and environmentalists in the initiative is an element that contributes to this change in attitude and is acknowledged as being innovative

in the islands' social context. What is more, the environmentalist sector also acknowledges a change in attitude in its perspective to deal with environmental changes on the islands. Both the exceptional situation and nature of the oil prospecting problem and the change in attitude in the business sector are interpreted from the most deeply rooted environmentalist organizations in the territory as an opportunity to work differently alongside the stakeholders to whom they have traditionally opposed. This new environmentalist sector's attitude is not, however, taken by the grassroots social movements, which have made less progress in the territory and whose vision of the conflict partly differs. The testimonies below reflect both aspects:

"We have found that the two managers [from the business sector] are extraordinary and committed people. I even believe that they have been influenced, we have all been influenced [. . .] their environmental discourse is perfect! [. . .] This, for us, has been a transformation". (AMB_13. An Amics de la Terra member)

"These citizens on the platform didn't see it, they were carefree which was quite normal. They were also younger [. . .] those of us from the alliance's NGOs had already had confrontations [. . .] GEN-GOB are experienced in running manifestations to defend the salt pans, etc., but here we have seen that you can achieve different things from other place". (AMB_01. The IPF Director)

4.4.3. Governance Mechanisms

Both the formation of a novel network in AMB and changes in its stakeholders' attitudes come with reconfigurations in the governance of this territory. This initiative gives way to different forms of coordination in the natural environment domain and in transforming the socio-environmental conflict. Creating an ad hoc association (AMB) is one of the most significant facts because this new structure allows other possible reconfigurations to be made in the governance of the stakeholders' network. Of these reconfigurations, moving from a very low coordination level among certain stakeholder groups (e.g., environmentalist and business groups) to true collaboration is worth stressing. This high coordination level is explained by there being a common objective and shared resources (especially work, human capital and networks), and by responsibilities being shared.

Coordination among different stakeholders has undergone significant reconfiguration, particularly between environmental technicians and economic stakeholders, and also between economic and environmentalist stakeholders. At any rate, collaboration in the network is evidenced by the horizontality with which the association is built; that is, by avoiding any stakeholder feeling left out and attempting to represent the local community well. This horizontality is combined with a high degree of local autonomy of both the organization and promoters which means, despite resorting to an external consultancy firm to manage the more specific tasks of the conflict, decision-making processes are never outsourced or delegated.

Further evidence is consensus centrality as a decision-making method. For instance, a decision was made to set up a small working group with three people representing each sector (social, economic and public), two of whom take turns as spokespeople. This allows all interests to be represented and makes those playing leading roles in the organization become visible:

"[. . .] we all reached an agreement that the alliance was not merely a matter of making commitments from voting, but from reaching a consensus [. . .] if any of the three supports vetoed something, it did not go ahead [. . .]". (AMB_12. Environmental technician from the Ibiza Council)

"If someone isn't happy with something, this organization can sort it out alone. Although GEN is in the alliance, it doesn't mean that it cannot carry out a more forceful campaign of its own account. It's still free. However, wearing the alliance's hat and label means that nothing will be done if someone isn't happy with something [. . .] with this common label we can reach a common denominator [

...] I think that it's necessary to be generous for these things to work, and we need to share leadership and visibility". (AMB_01. The IPF Director)

Finally, another governance mechanism that comes over as being innovative in the islands' context is managing public sector stakeholders' participation in the initiative. All those interviewed believe that excluding political stakeholders from working groups is a success factor. The absence of politicians in the decision-making process not only cuts the margin for strategic behaviors, but also enhances the capacity to act against the central administration. Therefore, environmental practitioners help to acquire support from local governments, act as intermediaries between business and environmentalist sectors and, at the same time, form a political shield if possible conflicts emerge between local governments and the national government:

"I, personally, think that if NGOs and the business sector had sat together at a table, it would have been so much more difficult, or even impossible. But with the administration being involved, I believe that it was a link between the two and it played a vital role [...] for me, another very important success for AMB was that politicians never intervened: that was crucial". (AMB_12. Environmental technician from the Ibiza Council)

"[...] it is somewhat paradigmatic because we promote this from a Town Council that is governed by the same party, which has vetoed this law in parliament in Madrid [...] This means that we sometimes find ourselves between the devil and the deep blue sea [...] in the end, it's AMB that faces the consequences, and not the Town Council. You might think that they indirectly finance it, but that's not clearly seen as such because it's more indirect. Besides, Town Councils always say that the practitioner is the responsible of actions, the one who makes the decisions". (AMB_11. Environmental technician from the Town Council)

4.5. Main Practices for Shutting down Oil Projects

The reconfigurations that the social relations in the territory have undergone have permitted different actions or practices to be set up to stop hydrocarbons projects. The initiative has four main action areas: (i) diffusing the conflict; (ii) studies and administrative processes; (iii) lobby; (iv) processing laws.

One of the main practices is to diffuse the conflict by organizing scientific and informative events about hydrocarbons and environmental themes, and many press releases, e.g., there were 50 press releases in 2014 alone [71]. Along with diffusion, some practices are supported by grassroots social movements, and include social events and creative protest campaigns. Organizing diffusion events and press releases involves having to possess knowledge about the conflict. To this end, different types of studies are organized, preferably by external stakeholders, such as contracted consultancy. These studies also serve to follow up the licenses and files granted to various oil companies by the central government. Here, one of the most outstanding practices is the allegations made to Environmental Impact Assessments (EIAs).

Allegations are one of the forms of action that best evidences the magnitude of SI in this territory. The alliance prepared a standard allegation model to place citizen pressure on the ministry in charge of producing the EIA. Almost 130,000 were registered by individuals, of whom 90% were from the Balearic Islands. There were also allegations from administrations, NGOs, business organizations, etc., as well as the AMB's technical allegations document. It is important to stress the role that local administrations played, which amended their conventional procedures and mobilized a large quantity of resources to speed up these allegations being processed. The other stakeholders, as well as grassroots social movements, contributed to diffuse to and gather firms.

Local actions are combined with lobby actions nationally and internationally. The external consultancy company has sufficient knowledge and networks to directly meet with representatives from national ministries, the European Parliament and the European

Commission. These meetings consider the need to attend to the collective claim of society and to, thus, shut down oil prospecting projects. Finally, at AMB, processing laws has been promoted, which prevents hydrocarbons projects from being undertaken in the Mediterranean Sea. One first attempt was to create a Migration Corridor for Cetaceans to avoid projects affecting this corridor. Another more ambitious attempt was to promote exploring, investigating and exploiting hydrocarbons being forbidden in the Mediterranean Sea by means of a national law which was, in this case, the Climate Change and Energy Transition Act.

4.6. Effects: Goals Met and Learning Processes

With the above-cited practices, several effects have been generated, of which some are direct (outputs) and others are more indirect (outcomes). Among the direct effects, we find the first alliance's actions of allegations and protests which, in 2015, managed to stop Cairn Energy being granted four permits. The Services Petroliers Schlumberger Project in the Gulf of Lion was filed away in 2016, as was the Spectrum Geo Limited Project in 2017. Eight other Repsol and Cairn Energy projects were withdrawn as a result of the Migration Corridor of Cetaceans being declared a Protected Marine Area in 2018 [72] and being included in a SPAMI (a Specially Protected Area of Mediterranean Importance). Finally, in May 2021, the Climate Change and Energy Transition Act 7/2021, of 20 May, was passed, which prevents new projects starting, but does not shut down those currently in force. One of the outcomes of this law being passed was that Repsol decided to no longer continue to extract hydrocarbons in Spain [73]. Nowadays, AMB still works toward new legal frameworks that stop all hydrocarbons projects still in force today in the Mediterranean Sea. This is partly included in the Draft Bill of the Law on Protecting the Mediterranean Sea which is regionally promoted and is presently being processed nationally.

Apart from the effects that directly impact transforming the environmental conflict, SI has had indirect effects that influence other areas in the territory, and also beyond it. Here, we mainly stress scaling-up processes. One such example is that AMB has become a cross-sectoral governance mechanism of the marine environment. Among the new objectives incorporated into the alliance, we find promoting more sustainable sailing that is committed to energy transition. Another outstanding scaling-up factor is Alianza por el Agua (<https://www.alianzaaguaibizaformentera.org>; accessed on 5 February 2022) (AxA; Alliance for Water). This initiative aims to deal with problems and challenges in the management and sustainability of the water resources on Ibiza and Formentera.

AxA was conceived in 2015 after AMB's first successes when the same stakeholder that promotes and facilitates this initiative (the IPF) started to perform preparatory actions to create an association of the local stakeholders involved in water management. A similar model to that of AMB was considered; once again, it was an association that well represented the local community: the public sector (Town Councils and island councils), the business sector (representatives of SMEs and tourist firms, and companies linked with water management), the farming sector (cooperatives and agricultural associations, and irrigation communities) and civil society stakeholders (environmentalist organizations, neighborhood associations, among others). Despite replicating the AMB model, the SI component was weaker for AxA for different reasons. On the one hand, the water problem had less urgency and visibility than the hydrocarbons conflict. On the other hand, the alliance includes some local stakeholders which, as several interviewees pointed out, were partly "responsible" for this problem, such as Town Councils or water management companies. This latter circumstance reduced the intensity of reconfigurations in coordination mechanisms. Neither was transforming attitudes about sustainability and water as intense as the AMB case, and it did not take place in all stakeholders in the same way. Consequently, the scope of the practices performed by AxA was less ambitious (awareness-raising campaigns, studies, etc.), and their effects were more limited.

5. Discussion

The AMB case study results lead to a series of ideas about the relation between socio-environmental conflicts and SI. In this section, we discuss the influence of the nature of socio-environmental conflicts on the emergence of SIs. We also point out some strategic elements in SI processes to transform socio-environmental conflicts. Finally, we explain how SI contributes to sustainable territorial development within the framework of such conflicts.

5.1. The Emergence of Social Innovation in Socio-Environmental Conflicts

The research results indicate that the emergence of SIs depends to a great extent on the nature of socio-environmental conflicts. We can define this nature according to environmental problem origin, its urgency and visibility, and its social scope. First of all, AMB constitutes a conflict where external stakeholders to the territory represent the origin of the environmental problem (multinationals and the national government). This helps to align the interests of the local community's stakeholders and a collective bottom-up response to be triggered [11]. A conflict with an external origin helps advantages in innovation being perceived and reduces the possibility of resistance to a common and shared problem. Conversely, problems whose origin is internal to the territory makes this innovative response type difficult [74,75]. The AxA case confirms this thesis.

Secondly, the urgency of hydrocarbons projects is perceived as being somewhat imminent, visible for the local community and having negative impacts on landscape, marine fauna or the economy right from the time the problem starts. Considerable urgency more quickly activates the reconfiguration of networks and once more reduces the possibility of resistance, at least in early stages [57]. Many other environmental problems exist whose visibility or urgency is low and, therefore, the social response is weak [76].

Finally, oil prospecting is considered an environmental problem with a high magnitude for the territory on the whole that affects the plurality of interests defining it (environmental, business and public), and not only a specific group of stakeholders. Here, very important social reconfigurations take place, such as strong collaboration between environmentalists and tourism businesspeople. The direct social scope of the environmental problem in a local community on the whole involves higher stakeholders' diversity and, therefore, makes a socially innovative response more likely to emerge [7]. This, however, is not the case with conflicts in which a specific affected social group and the rest of the population do not perceive the impact with the same intensity [57,77], or when there are winners and losers in the same territory [5].

5.2. Strategic Factors for Social Innovation in Socio-Environmental Conflicts

Apart from the nature of socio-environmental conflicts, other factors exist and contribute to SIs emerging and being developed and, thus, to conflict transformation (Miall, 2004). First of all, the territorial context where the conflict occurs is important [6,21]. Ibiza-Formentera's tourist appeal, which house many second homes, ensures many networks with other national and international territories. All this has relevant implications when obtaining resources and seeking talent. It also explains the existence of some organizations interested in investing in protecting the natural environment. Other socio-environmental conflicts that take place in places with high poverty levels or problems with violence can encounter bigger difficulties in accessing resources for innovation [5].

Of the resources that the study area includes, we stress human and social capital. The fact that stakeholders exist that can identify opportunities from environmental problems and mobilize other stakeholders with common interests is fundamental in such conflicts. In our case, facilitator profiles stand out [78] with communication skills, shared leadership, or even financing capacity. Facilitators are also capable of setting up networks with external stakeholders that contribute strategic resources which the local community lacks. According to our research, international NGOs and environmental consultants' specialized knowledge and capacity to apply political pressure are key. Nonetheless, those stakeholders that promote socially innovative initiatives must maintain the autonomy of the process. To this

end, it does not suffice to reserve external stakeholders' participation in specific actions or well-established stages of innovation. It is also necessary to design governance mechanisms right from the beginning to ensure that the different interests involved are represented, to promote the process' shared leadership and to manage any conflicts that might exist in the stakeholders' network [79].

5.3. Social Innovation Impacts beyond Socio-Environmental Conflicts

The work results demonstrate that beyond the socio-environmental conflict, SI impacts the territory's sustainable development [9,18,25]. This effect on development comes about mostly from two processes: improving social capital and generating learning processes. In line with other studies [10,54–56], the present work evidences that socio-environmental conflicts can lead to a community's social development by improving cohesion. In our case study, however, social cohesion is reinforced mostly thanks to links being established among different stakeholders (bridging social capital). For example, these links involve adopting new languages and shared conceptions on the natural environment [15,54] and the generation of human values [80]. By improving social capital, this community generates new social relations that are less likely to give rise to new conflicts [60].

Promoting sustainable territorial development is also feasible when territorial stakeholders develop the initiative by capitalizing the new opportunities that the SI process offers [81] and beyond the conflict itself. This occurs in AMB by, for example, improving the governance mechanisms in the marine environment and replicating the innovation model in other environmental problems in the territory. Such learning is only possible in a specific social and temporal scene that is opened up by the conflict in question [7]. Thus, some innovations and development initiatives can hardly occur without a context of socio-environmental conflict [55]. However, social learning does not always lead to new innovations as effective or intense such as the original process. The AxA case shows that the replication process is conditioned again by the nature of the socio-environmental conflict, the involved stakeholders, the temporal context and the development trajectory. The SIs deriving from environmental conflicts will not, therefore, ensure the same effectiveness in transforming other conflicts, not even in the same community.

6. Conclusions

Studying socio-environmental conflicts using the social innovation (SI) approach opens up new research possibilities in this field by identifying processes that, apart from helping to transform conflicts, promote sustainable territorial development. This work analyzes in detail the Alianza Mar Blava (AMB) initiative, a case study that successfully activates a socially innovative process with a conflict related to hydrocarbons projects in the Balearic Sea (Spain). The social response to the conflict includes different SI features: (i) building a new network that represents the local community and establishing new links between previously confronted stakeholders; (ii) a new shared vision of the natural environment, and of personal human relationships; (iii) a new discourse about sustainability among business stakeholders; (iv) a new coordination structure for marine environment governance based on cross-sectoral collaboration. These social reconfigurations have allowed different collective practices to be set up, whose direct effect has been to shut down many projects and to transform the conflict.

The main contribution of the study is a better conceptualization of SI emerging from socio-environmental conflicts, and the strategic elements that allow the conflict to be transformed. This research work also helps to improve understanding on how the SI processes that emerge from socio-environmental conflicts can ultimately promote sustainable territorial development. Although our case study involves an environmental conflict that threatens the economic activity of important tourism companies of Ibiza–Formentera, it also reflects an asymmetry of power between the local community and the external actors seeking to carry out oil prospecting projects (national government and oil and gas global companies). Our study sheds light on how SI processes can reconfigure social relations

within local communities and support them to transform conflicts of external origin. This may be helpful for other territories affected by similar environmental conflicts, for instance, those situated around the Spanish Mediterranean area.

The study results support the need to continue exploring SI as a possible externality of socio-environmental conflicts. It is also necessary to adapt this research to different territorial contexts, where conflict transforming and the impact on sustainable development may depend on other factors. It would also be worth discovering the possible indirect negative effects of SI on socio-environmental conflicts, e.g., the exclusion of some social groups or local communities that may be harmed when transferring a conflict from one territory to another. For the particular AMB case, it would be interesting to apply a longitudinal approach and to examine, for instance, the long-term sustainability of the main social reconfigurations, such as the new links between different social groups, and to identify long-term learning processes.

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