



Evaluating the collaborative dynamics of governing Marine Protected Areas

The case of the expansion of the Marine Protected Area of Cabrera,
Mediterranean Sea

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Summary

Marine Protected Areas (MPAs) help protect the world's ocean, but governing them is a challenge, as a lack of community support triggers ecological degradation. Merging government and community-led governance modes to govern MPAs is recognized as the way forward, however, there is a lack of systematic insights into how and in which circumstances collaborative mechanisms can lead to more support for MPAs, and therewith better MPA protection. In the Balearic Islands (Spain) the MPA of Cabrera was created in 1991. To protect further its surrounding and biodiverse ecosystems, in 2015 the expansion of the MPA was initiated. This expansion combined government and community-led approaches in a collaborative governance process.

The value of evaluating the collaborative governance dynamics of this Mediterranean MPA's expansion is that lessons can be drawn particularly on how to realise support for the protection of MPAs. This research aimed to derive lessons by following three steps. Firstly, an evaluation framework was developed based on collaborative governance theory. It included three criteria *principled engagement*, *shared motivation*, and *capacity for joint action* and twelve indicators. Secondly, the evaluative framework was applied to the empirical case of Cabrera, where the indicators were measured and modified following sixteen interviews with MPA actors. Moderate scores predominated in Cabrera's collaborative governance dynamics. Thirdly, a validation process was followed via five individual workshops with water governance experts, who corroborated that the modified evaluation framework was potentially transferable to regional and international MPA settings.

Overall, lessons indicate that evaluating the indicators of *'accountability'* and *'capacity development'* illustrates important cooperative mechanisms in marine environments. These two indicators were not in the initial evaluative framework, but practice suggests that they broaden the context to be explored in collaborative governance processes within MPAs. Additionally, ways of achieving more support for the government and community-led MPAs' expansion processes include creating new shared knowledge in the MPA, establishing clear bi-directional relationships amongst the MPA actors, and leading the process by providing specific directions. Finally, pre-established MPAs that are to be expanded may have vantage points in terms of achieving a fruitful collaborative process as the collaborative mechanisms between actors are already in place from previous endeavours. Hence, exploring these areas further and considering their expansions is promising. In conclusion, it is worth using and improving collaborative governance in MPAs as it offers the right cooperation means to jointly achieve a protected ocean.

Keywords: Marine Protected Area (MPA); collaborative governance dynamics; evaluation framework; Cabrera's MPA expansion.



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1. Introduction

Protecting the ocean is imperative for sustainability in the 21st century. Especially during this decade, the United Nations decade of Ocean Science for Sustainable Development, global, regional and local efforts are being made to pursue initiatives towards a healthier marine system (IOC, 2018). The European Commission strongly supports such endeavours that aspire to protect at least 30% of the ocean by 2030 in Marine Protected Areas (MPAs) – also known as the thirty-by-thirty target (Unger, Neumann & Boteler, 2021). MPAs are a set of rules and regulations prepared by policymakers to govern activities and human behaviours within a specific space. They are important ecosystem management tools (Pomeroy, Mascia, & Pollnac, 2007). MPAs are central in storing carbon, safeguarding biodiversity, building food security, fostering coastal resilience against pollution, protecting communities and coastlines (Brander et al., 2015; Reuchlin-Hugenholtz & McKenzie, 2015; Ramos-Esplá et al., 2004). Spain has 13% of its marine surface protected and it is working towards the 30% goal by the end of the decade (MITECO, 2020).

One of many initiatives to achieve the thirty-by-thirty target has been the expansion of the Cabrera Archipelago Maritime-Terrestrial National Park in the north-western Mediterranean Sea in the Balearic Islands, Spain (Moncloa, 2018). A National Park is one of the six categories of MPAs as explained by the International Union for Conservation of Nature (IUCN). IUCN's categorization from most to least stringent in terms of protection measures includes: i) Strict nature reserves (no resource extraction is allowed); ii) National Park; iii) Natural monument (in these last two areas traditional harvesting and collection for scientific research are allowed); iv) Habitat/species management area; v) Protected landscape/seascape; vi) Protected areas of sustainable use of natural resources (in these last three areas sustainable resource extraction is allowed) (Dudley, 2008; LivingOceans, 2021).

Considering the magnitude of the enlargement of Cabrera's MPAs - from 10,021.00 to 90,800.00 hectares (ha)- ocean resource-users like artisanal, industrial, and recreational fishermen are being affected (Charles & Wilson, 2009; Ostrom, 1995; MITECO, 2019). MPAs' governance cannot overlook the necessities of those social sectors impacted by the establishment of such protection tools. For these reasons, it is well acknowledged by academia and practitioners that coastal governance in general, and MPA governance, in particular, are emerging challenges, as they concern land-sea interfaces, which are by nature complex, interlinked and dynamic (Pittman & Armitage, 2016;



Kooiman, 2008; de la Cruz-Modino & Pascual-Fernandez, 2013; Folke et al., 2005; Chuenpagdee et al., 2020).

Although being crucial mechanisms for protecting the oceans, MPAs' difficulties in terms of governability make them vulnerable (Jentoft, Van Son & Bjørkan, 2007). Difficulties range from the compliance to the regulations of use by fishermen and sailors to the resources needed to control such compliance and the fact that marine areas and resources are of national jurisdiction.

The latter aspect implies that the sovereignty of the territorial sea¹ is of the national government. However, the management of Spanish MPAs is in hands of regional authorities, such as the Balearic government as seen in the case of study (Marilles, 2020). This participation of multiple government agencies complicates communication between the governance actors of the MPA (Lewis et al., 2017). Globally, those emerging difficulties are triggered by a common problem, which is the conflicting situation between marine protection goals with other interests, e.g., economic development, as debated in burgeoning scientific publications (Neumann & Unger, 2019; Unger et al., 2021; Gattuso et al., 2019; Rudolph et al., 2020) and between experts (Neumann, 2020).

Over the last decade emerging literature (Jones, Qiu & De Santo, 2011; Jones et al., 2013a; Gaymer et al., 2014; Hu et al., 2020) suggests that combining government-led and community-led modes of environmental governance is beneficial to alleviate such difficulties. This is because the state control and binding legislation are merged with the empowerment of local people and their involvement in the decision-making. The case of Cabrera's MPA expansion illustrates such a combination of governance modes, as it was initially steered by the Balearic government in August 2015, but it also counted on the involvement of the national government and the insights of the local community in the decision-making process until February 2019 (Christie et al., 2017; MITECO, 2018). Some attempts of integrating these approaches have taken place in the Scott Islands (British Columbia, Canada), Fiji Islands (Fiji), Long Island (Bahamas), Marine Conservation Zones (England) and Motu Motiro Hiva Marine Park (Chile) (Gaymer et al., 2014). According to Gaymer et al. (2014) such integration is dependent on the scale of the MPA, the level of anthropogenic influence, the specific cultural conditions and the conservation objectives. In the Spanish context as far as the consulted academic literature of MPAs is concerned (Burgos & Fernández, 2014; Pascual-Fernández, China-Mederos & de la Cruz-Modino, 2015; Jones, Qiu & De Santo, 2013b) there are no previous attempts of combining

¹ The territorial sea is a maritime delimitation regarded in the United Nations Convention on the Law of the Sea of 1982 as the sovereign territory of the state. It extends up to 12 nautical miles from its baseline (Brisman, 2011).



government and community-led MPAs of the category of National Park, namely with strict conservation objectives. Hence, Cabrera represents early developments in this regard.

Spain stands out for exceeding the coverage threshold (10% of marine protection) committed to the United Nation Convention on Biological Diversity. Its ambition and environmental commitment pursue the new initiative to safeguard the world's ocean (30% of marine protection). Recently, the Spanish Ministry of Ecological Transition claimed that drawing attention to participation processes within marine protected spaces, is key to trigger collaborative developments, which in turn should be evaluated to foster greater quality of conservation (MITECO, 2020).

1.1. Problem description and knowledge gap

The problem defined in this study concerns the lack of community support for MPAs as a result of not having the right kind of collaborative processes, which may be emblematic for support issues in other MPAs, inside and outside Spain, as establishing MPAs is politically controversial in many countries, since it may run counter to vested interests (Lewis et al., 2017; Jentoft et al., 2007). In addition, the problem is exacerbated because as Christie et al. (2003) argue, ecological benefits in MPAs may disappear unless social concerns are appropriately tackled.

The knowledge gap that is being addressed in this thesis revolves around the lack of systematic insights into the evaluation of collaborative mechanisms on the government and community-led MPA's expansion processes. Overall collaboration dynamics between actors while governing MPAs is fundamental as expressed by scholars like Jentoft et al. (2007) who pose that examining MPAs from the analytical entry points of participation, support and (collaboration) dynamics is crucial and underexplored. Jentoft et al. (2007), Hoelting et al. (2013) and Hard et al. (2012) reinforce that further study on collaboration processes in MPAs is still needed. Particularly, a qualitative evaluation of such dynamic processes has not been done in European MPAs yet. To the author's knowledge similar evaluation attempts, borrowing from collaborative governance literature, have only been conducted in Indonesia (see Kossmann, Behagel and Bailey, 2016). Those scholars found that actions like conflict resolution within the MPA network of Nusa Penida ask for multiple social activities. One of the most relevant ones is to build trust amongst actors before imposing rules. Kossmann et al. (2016) examined collaboration across actors of the regional administration, non-governmental organizations, diving centres, artisanal fishermen, seaweed farmers and marine biologists. Conversely, this thesis draws attention to the collaboration process or dynamics, rather than the collaboration actions. Furthermore, it does not delve into 'governance networks' and it examines different relevant actors. Those are the



Spanish national and regional administration, academic institutions, non-governmental organizations and artisanal fishermen. Therefore, despite being a useful source of inspiration, the results of Kossmann et al. (2016) do not apply to this Mediterranean MPA.

Hence, the findings of this thesis may contribute to existing insights into collaboration in MPAs. In particular, if and under which circumstances this might facilitate marine protection in a manner that takes into account the interests of all actors. Meanwhile, the research addresses the knowledge gap regarding the lack of a systematic evaluation approach with the use of criteria and indicators.

1.2. Scientific and societal relevance

Regarding the scientific importance, it is highlighted that those studies on MPAs with dual governance modes -government and community-led- represent early developments according to Gaymer et al. (2014) and Hu et al. (2020). While Jones et al. (2011; 2013a) recommend studying further this combination of governance approaches in MPAs. As Cabrera's MPA is an example of such an emergent dual approach, this thesis adds to that timely theoretical debate on the desirability and suitability of specific governance modes and their likelihood of increasing support for MPAs. Additionally, results expand on existing understandings of collaboration in MPAs (Hoelting et al., 2013; Hard et al., 2012; Jentoft et al., 2007). In other words, the scientific relevance includes the reduction of the knowledge gap concerning the systematic insights into the evaluation of collaboration in MPAs in the European context.

Additionally, this study is relevant in terms of social aspects too. According to the Marine Protection Atlas, only 6.4% of the ocean is in some form of protection (MPA, 2021). In the incoming decade, more MPAs are going to be designed to meet the international 'thirty-by-thirty' target and push forward a system of MPAs globally (Unger et al., 2021). Similar proposals of other MPAs' expansions inside and outside Spain are already on the table (OCEANA, 2017) and some have already materialized, as recently seen in Panamá with Cordillera de Coiba's MPA (Alvarez, 2021). Considering their placement, if they are located in territorial seas like the case of Cabrera, it is safe to assume that more social sectors are going to be affected in the near future. Results of this thesis may assist towards such rising challenges of new and existing MPAs. This is because the research addresses social considerations related to aspects of collective support, which are fundamental to maintain the success of the MPA structure and its respective ecological gains (Voyer, Gladstone & Goodall, 2012; Christie et al., 2003). This in turn is of paramount social relevance to combat the urgent crises of climate change and biodiversity loss, because MPAs play a key role in carbon sequestration, coastal



resilience and food security (Brander et al., 2015; Reuchlin-Hugenholtz & McKenzie, 2015; Ramos-Esplá et al., 2004).

1.3 Research aim and question

This research objective is to contribute to insights and recommendations into collaborative mechanisms in the governance of MPAs by evaluating the collaborative governance processes in the empirical case of Cabrera's MPA expansion. To reach this objective, the study is steered by the research question: *Which lessons on how to realise support for the protection of Marine Protected Areas (MPAs) can be derived from the evaluation of the collaborative governance dynamics of Cabrera's MPA?* Each research step necessary to find answers to it is guided by a corresponding sub-question (SQ) as outlined below:

- *SQ1) Which evaluation criteria and indicators can be derived from collaborative governance literature?*
- *SQ2) How well does Cabrera's MPA expansion score on these criteria and indicators?*
- *SQ3) What degree of transferability do MPA experts assign to the empirical findings of Cabrera?*

The research framework presented below (Figure 1) illustrates the steps taken in this study, which starts by conducting a literature review on collaborative governance theory (Emerson, Nabatchi & Balogh, 2012; Kossmann et al., 2016). Findings of this step are translated into a conceptual framework, and into a framework for evaluation thus answering SQ 1. This framework is applied to the empirical case of Cabrera's MPA. Overall, the findings aid to answer SQ2. Those results are then validated to answer SQ3, which in turn help to develop policy and managerial recommendations for government and community-led MPAs. Those steps facilitate a connection back to the main research question, which focuses on lessons generalizable to other MPAs. Findings may be ideally generalizable in the context of another Maritime-Terrestrial National Park with similar design and management to the one of Cabrera. To the author's knowledge, the potential for replication on a national scale in Spain might take place in the National Parks of Doñana (Andalucía) and Islas Atlánticas (Galicia), as they concern future MPA expansions (OCEANA, 2017). Further specification on the generalization of the findings is presented in chapter 3 section 3.2.



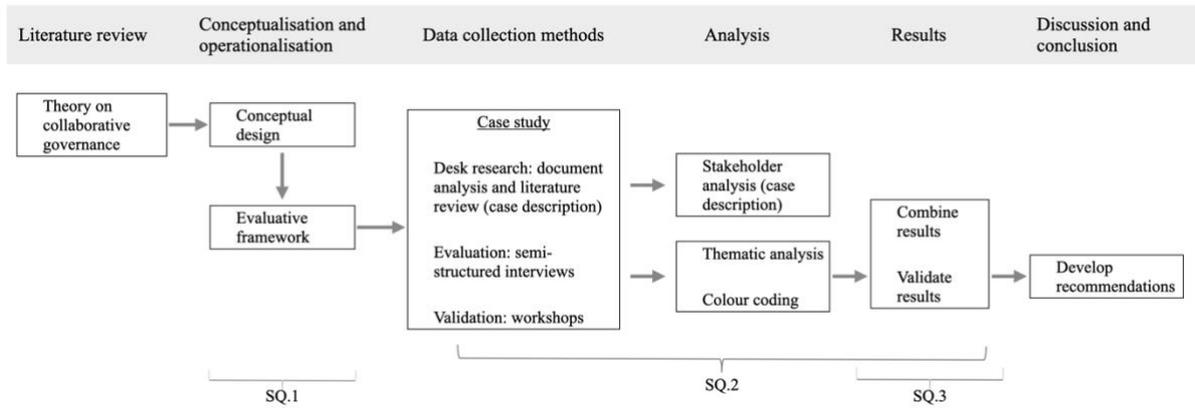


Figure 1. Research framework

1.4 Report outline

In the following chapter ‘Chapter 2. Theoretical background and conceptual design’ the first sub-question is answered. It provides a conceptualization of collaborative governance while it illustrates the criteria and indicators that are derived from literature and are later used in the evaluation. ‘Chapter 3. Methods’ outlines the research strategy as well as the data collection methods and data analysis. ‘Chapter 4. Case study description’ highlights the context of the present evaluation and its unit of analysis, which corresponds to the collaborative governance processes during the expansion of Cabrera’s MPA. Moreover, it describes and analyses the main actors with a stakeholder analysis. ‘Chapter 5. Evaluation results of the collaborative dynamics’ shows the findings of the evaluation and presents the answers to the second and third sub-questions. ‘Chapter 6. Discussion’ highlights the reflection on the research approach, places the findings back in literature, and discusses the implications for future research and practice. This thesis is closed by ‘Chapter 7. Conclusion’ where a final summary of the study is provided, and the main research question is answered.



2. Theoretical background and conceptual design

2.1 Justification of the collaborative governance angle

Over the last four decades, a new strategy of governing called collaborative governance has developed and encompasses “the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres to carry out a public purpose that could not otherwise be accomplished” (Emerson et al., 2012, p.2). According to Ansell and Gash (2008) actors of this type of governance often have a confrontational relationship with one another, but the objective is to transform conflict into cooperation, as the goal of collaborative governance is to jointly achieve desired goals, which could not otherwise be accomplished (individually).

Shedding light on collaborative governance theory is considered suitable in this study for three reasons. Firstly, the empirical case of Cabrera illustrates a public purpose, i.e., the protection of the ocean. Furthermore, a wide range of actors like national and regional administrations, researchers, fishermen and non-profit organizations, have been involved in the MPA dynamics during its design (2015-2019) and management (2019-present) (MITECO, 2018). Besides, it is well acknowledged that including ocean users and scientists in the design process is key, as they possess valuable knowledge for efficient MPAs, whereas policymakers provide and enforce the legal framework for marine conservation (Chuenpagdee et al., 2020; Jones et al., 2013b).

Secondly, collaborative governance theory has its roots in management practices, like MPAs, and has become instrumental to the protection of open spaces (Smith, 2009). Moreover, it can be used to “inform participatory governance and civic engagement” (Emerson et al., 2012, p.3). Hence, by borrowing from this theory, the research put forward here adequately evaluates the collaboration dynamics within Cabrera's MPA and provides valuable lessons to such participatory and civic engaging processes.

Thirdly, when exploring MPAs and community support from a governance perspective, there are many different approaches followed by scholars (some of them explained next) however, to the author's knowledge there are none on how to explore both concepts qualitatively and simultaneously. On the one hand, Hard et al. (2012) explored MPAs' support and how social factors were affecting their success in the Puget Sound area (North-west coast of the United States). They used social surveys to obtain data and then followed correlation (statistical) methods for analysis. Hard et al. (2012)



derived that not only the adequate use of the managerial information but also the consideration of users' viewpoints on the MPA were the two main factors that explained the variance in the perceived collaboration across MPA sites. Building on their study, Hoelting et al. (2013) also made use of correlation methods to evidence that “measures of process legitimacy and stated MPA support [...] vary significantly across interest groups. Commercial fishers displayed the lowest levels of support for the MPAs, while individuals affiliated with conservation organizations stated the highest levels of support” (p.56).

On the other hand, Jentoft et al. (2007) studied MPAs by understanding them as networks and relationships between two systems a ‘governing system’ (made up of institutions) and a ‘system-to-be-governed’ (partly natural, partly social). Jentoft et al. (2007) borrowed from systems theory and utilised a governance matrix to draw on the interactions between both systems. Such interactions evidenced relevant concerns especially on the organizational and institutional issues of MPAs. Proving that MPAs are “what users and stakeholders make of them” and highlighting that “participation of user groups and stakeholders [...] should underpin marine and coastal governance as a value in itself” (Jentoft et al., 2007, p.619).

Hence, although we know reasonably well about social factors like support that affect MPAs' success (Hard et al., 2012; Hoelting et al., 2013) and about the governance dimension of MPAs (Jentoft et al., 2007) based on the consulted information, there are no approaches to highlight the governance dynamics of collaboration within MPAs to realise community support. Therefore, although it is a general framework from the field of public administration, Emerson et al. (2012) created it with a broad spectrum of use, to make it applicable to many disciplines such as wildlife governance in Social-Ecological Systems (SES) as seen in Dressel et al. (2020) and collaborative governance in marine environments (see Avoyan, 2016; Kossmann et al., 2016). Avoyan (2016) uses the framework of Emerson et al. (2012) holistically by drawing on the output, outcome and impacts of it, in the context of governance structures of the Black Sea. Whereas Kossmann et al. (2016), apply the same framework to study an MPA in Indonesia while they investigate how collaboration dynamics in governance can lead to positive or negative outcomes in marine conservation – as previously discussed in chapter 1.

Similarly, this thesis borrows from Emerson et al. (2012) framework too, however, it dives into the collaboration dynamics aspect exclusively. As it is deemed that Cabrera's MPA expansion is too recent (only 2 years old) to adequately study its outcomes and impacts. Moreover, it is interesting to recognize MPAs as social and political processes as highlighted by Jentoft et al. (2007). Consequently, evaluating the collaboration dynamics in detail is considered appropriate and sufficient.



2.2 Relevant theories and approaches

Studying coastal areas through a SES perspective is recommended by many (Pittman & Armitage, 2016; Van Assche et al., 2020; Gaymer et al., 2014; Charles & Wilson, 2009; Pollnac et al., 2010). They pose that such a dual focus on the social and ecological aspect of SES can provide innovative insights to explore seascapes. When exploring MPAs it becomes apparent that these areas of protection strive to maintain healthy marine ecosystems, while simultaneously functioning as social organizations. Therefore, studying MPAs requires that attention is paid not only to the oceanographic components that influence their performance but equally to their socio-economic factors, such as human activities and needs, as well as political factors like administrative and institutional influences and constraints (Charles & Wilson, 2009; Ramos-Esplá et al., 2004). The social aspect of SES is going to be especially emphasised throughout this study because MPAs' success depends heavily upon the support received from scientists, politicians, managers, and civil society (Dehens & Fanning, 2018; Hoelting et al., 2013; Hard et al., 2012). This research considers 'support' as 'community support' and is defined as a group of actions ranging from i) direct involvement or engagement in the processes of designing and managing the MPA, ii) compliance or adoption with suggested behaviours (e.g., restrictions of use) and iii) psychological support and acceptance (Hoelting et al., 2013). Hence, the level of support from various actors will determine if an MPA is successful or not (Dehens & Fanning, 2018). The starting assumption of this thesis is that a 'fruitful' collaborative process as conceptualised by Emerson et al. (2012) - explained next- is conducive to support. The scholars highlight that an iterative cycle of collaborative governance is reinforced or weakened depending on the components and elements of the collaboration dynamics. Based on the premise that the problem definition concerns the lack of support for MPAs as a result of not having the right kind of collaborative processes, this thesis puts forward the assumption that: *If the iterative cycle of collaboration is reinforced (most indicators receive a favourable score), then the support of Cabrera's MPA is strengthened. On the contrary, if the iterative cycle of collaboration is weakened (most indicators receive an unfavourable score), then the support of Cabrera's MPA is undermined.* Thus, the focus is placed on the conditions for realising support for MPAs – to what extent are these conditions in place – and whether the case of Cabrera's MPA is in a virtuous cycle of increasing support, or the opposite, a vicious cycle of losing support.

Considering the above, a good starting point to contextualize the collaborative process is the study of it by explaining what governance consists of. According to Olson (1965) governance involves solving collective action dilemmas, such as those triggered by the use of the sea. Driessen et al. (2012)



and Lemos and Agrawal (2006) pointed out that governance emerges as a concept that acknowledges and addresses the interactions between different type of actors pertaining to the state, civil society, and the private sector. A suitable theory to highlight such interactions is the one of collaborative governance. Collaborative governance has received considerable attention from public administration scholars (e.g., Emerson et al., 2012) and is the subject of a growing body of academic literature in public management, policy studies and democratic theory (Batory & Svensson, 2019). It has also been used in the context of marine governance and its collective efforts towards the protection of marine environments in the Black Sea (Avoyan, 2016) and Indonesia (Kossman et al., 2016).

This thesis is inspired by the integrative framework for collaborative governance of Emerson et al. (2012) built on the works of other theoretical and empirical frameworks like those of Bryson, Crosby and Stone (2006) and Ansell and Gash (2008). Bryson et al. (2006) explored the conditions that are necessary to establish cross-sector collaboration while addressing complex public problems (e.g., industrial or immigration policies). Some of the conditions they found include building leadership, trust, and accountability. Whereas Ansell and Gash (2008) conducted a meta-analytical study to create a contingency model on collaborative governance. They identified not only variables, such as the incentives for stakeholders to participate, but also factors, such as face-to-face dialogue that are crucial for the collaborative governance process. Altogether Emerson et al. (2012) work is based on the compilation of such conditions, factors and variables of many other scholars which conformed the basis of their framework.

Collaborative governance is characterized by a nested structure in which the system's context influences the collaborative governance regime, where collaboration dynamics lead to outputs that give rise to outcomes (Emerson et al., 2012). It suggests causal links between system, dynamics and outcomes which are questionable based on the opinion of scholars like Ostrom (2007) who is more supportive of embracing complexities rather than oversimplifying relations in SES. What separates this thesis from similar endeavours, is that it does not intend to explore relations between nested structures. Instead, the focus is placed exclusively on the process of 'collaboration dynamics or collaborative governance dynamics' between different actors involved in the expansion of Cabrera's MPA. Collaboration dynamics are the overarching cycle of non-linear collaborative processes that are initiated by three components, referred to as criteria in this evaluative research. Those are *principled engagement*, *shared motivation* and *capacity for joint action*, which with their respective elements, explained next in 2.3, reinforce or weaken each other through the iterative cycling (Emerson et al., 2012).



2.3 Evaluation framework

This sub-section discusses the collaboration dynamics in detail. The following conceptual framework (Figure 2), inspired by the collaboration dynamics of Emerson et al. (2012), sets forth the three concepts of *principled engagement*, *shared motivation* and *capacity for joint action* which are the criteria for the evaluation. In turn, each component is made up of four sub-concepts which are regarded as the twelve indicators. These elements constitute the evaluation framework displayed in Table 1 and provide the answer to the first sub-question: *Which evaluation criteria and indicators can be derived from collaborative governance literature?*

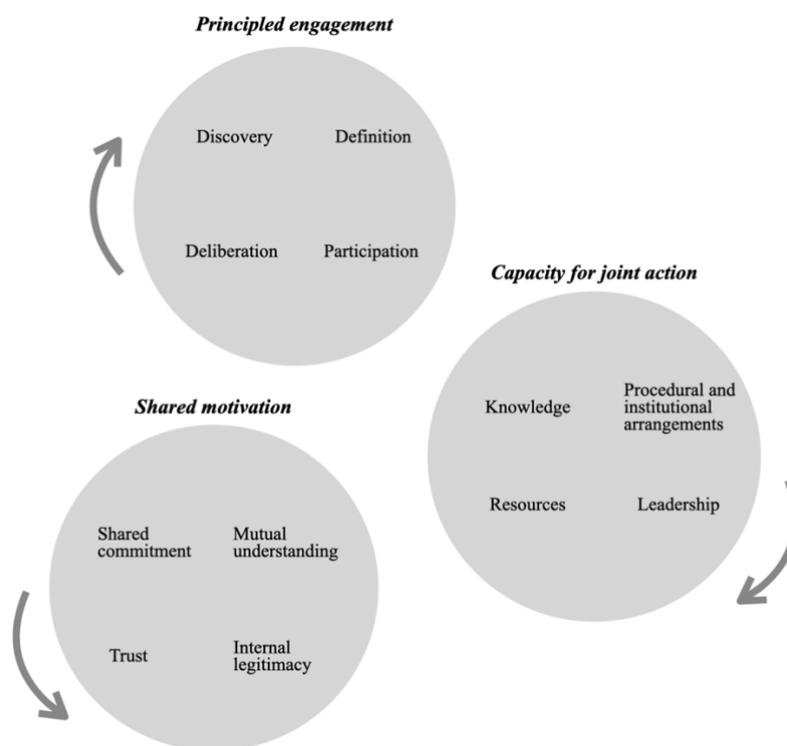


Figure 2. Conceptual framework

The first interacting component of the collaboration dynamics is *principled engagement*. Emerson et al. (2012) explain that they call this concept “principled” because they want to emphasise that such engagement includes “fair and civic discourse, open and inclusive communications, balanced by a representation of interests” (p.11). This component emphasizes the importance of inclusion and diversity in the collaboration process. Thus, it occurs over the years and takes place virtually or face-to-face through the iteration of four process elements which are ‘*discovery*’, ‘*determination*’, ‘*deliberation*’ and ‘*definition*’ (Emerson et al., 2012).



- '*Discovery*' indicates that there are different worldviews in the collaboration process with shared concerns and interests. To set an example, a researcher and a public administration actor may have different social constructions of the ocean, i.e., different worldviews, but they may be interested in establishing a wise agreement for protecting it, i.e., the same concern. It is argued that discovering shared interests is a vital first step to initiate collaboration amongst actors (Emerson et al., 2012).

- '*Determination*' is a process that consists of regular meetings. Emerson et al. (2012) express that setting agendas, assigning work groups and reaching agreements are a repeating element within principled engagement.

- '*Deliberation*' relates to honest communication between actors (e.g., expressing disagreements, answering questions). Roberts (2004) explains that "deliberation is not the aggregation of interests. It requires thoughtful examination of issues, listening to others' perspectives, and coming to a public judgement on what represents the common good" (p.332). Ansell and Gash (2008) argue that deliberation is about seeking mutual gain and that it is the first step to trigger the next component of shared motivation.

- '*Definition*' refers to the clarity and flexibility regarding tasks and expectations. Emerson et al. (2012) claim that the definition process is about agreeing on concepts that collaboration actors use to discuss problems and opportunities. Hence, clarification and being flexible about tasks and expectations is key amongst actors during the initial steps of the collaboration. Ansell and Gash (2008) claim that a clear definition of roles is crucial for collaborative governance.

The second interacting component of the collaborative governance dynamics cycle is *shared motivation*. It underlines the interpersonal and social elements involved in the relationships between actors of a collaborative governance process (Emerson et al., 2012). Kossmann et al. (2016) explain that shared motivation happens over time and is vital for reaching consensus among actors, therefore, "it is a crucial factor in the successful implementation of any MPA" (p.24). Emerson et al. (2012, p.13) define shared motivation as a "self-reinforcing cycle" consisting of four elements '*mutual understanding*', '*shared commitment*', '*trust*', and '*internal legitimacy*'.

- '*Mutual understanding*' refers to the ability to understand and respect others' opinions and interests even when one might not agree (Ansell & Gash, 2008). For instance, there is mutual understanding regarding the complaints of the affected users, such as fishermen, and all actors respect their positions.



- '*Shared commitment*' to the process of collaboration is characterised by creating bonds between actors beyond the organizational/sectoral boundaries that may have separated them previously. Subsequently, actors' continuous engagement takes place as they commit to a shared path. Shared commitment of a wide range of actors is essential to implement collaborative approaches (Emerson et al., 2012; Ansell & Gash, 2008). To achieve a complete shared commitment by all actors, all of them should be equally willing to participate and have a sense of duty in the collaborative process, as pointed out by Thomson and Perry (2006).

- '*Trust*' develops when actors prove to each other that they are reasonable over time. Trust is instrumental though it is difficult to achieve because oftentimes collaboration is initiated by suspicion amongst actors rather than trust (Thomson & Perry, 2006). Actors build trust when they prove that the collective interest is supported and predictable.

- '*Internal legitimacy*' understood as a process or as a source of trusted interaction among actors (Bryson et al., 2006) is characterized by being open and inclusive, namely being representative. Transparency in the collaboration process is fundamental for internal legitimacy too, as the responsible individuals and organizations can be identified (Ansell & Gash, 2008). This allows for monitoring and sanctioning if actors do not comply with the rules of the collaboration. To set an example, if fishermen are involved in the collaborative governance dynamics, they need to report/monitor their fishing captures within the MPA. Otherwise, the process of collaboration might be representative but not transparent, which in turn would imply that it lacks internal legitimacy.

The third interacting component of the collaboration dynamics is the *capacity for joint action*. Emerson et al. (2012) borrow from Saint-Onge and Armstrong's (2004, p.17) definition of capabilities for conducive organizations and view the capacity for joint action as "a collection of cross-functional elements that come together to create the potential for taking effective action" and serve "as a link between strategy and performance" (2004, p.19). This capacity is the basis of "group empowerment" to engage in cooperative activities and "is conceptualized as the combination of four necessary elements '*procedural and institutional arrangements*', '*leadership*', '*knowledge*', and '*resources*'" (Emerson et al., 2012, p.14).

- '*Procedural and institutional arrangements*' include strong legal frameworks and a wide range of process protocols that set clarity concerning actors' roles and relationships (Emerson et al., 2012). In turn, such arrangements can ensure that actors comply with the rules they have agreed on. Coming back to the example of the fishermen, if there is a law that clearly states where in the MPA they can



fish and how much or where it is forbidden, they can be clear about their duties within the collaboration, otherwise, they cannot.

- '*Leadership*' consists of taking initiative and giving direction. Kooiman (2008) points out that if leaders are not strong (i.e., they do not take initiative and do not give directions) joint action is hampered. Emerson et al. (2012) emphasise that different leaders may emerge depending on the stage of the collaboration. E.g., during the design stage of Cabrera's MPA expansion researchers may have been stronger leaders than public administration actors. As most probably oceanographers are more knowledgeable on what directions to give for this design stage, where the establishment of the regulations of use – also known as zoning of the MPA – takes place (Ramos-Esplá et al., 2004; Laffoley, 1995). On the contrary, it may be the case that during the MPA's management stage, stronger leaders are public administration actors.

- '*Knowledge*' is “the currency of collaboration” and it “guides action” (Emerson et al., 2012, p. 16). Therefore, knowledge generated together in collaborative processes is specialized and requires contestation/balancing as well as reassembly of data. Kossmann et al. (2016) point out that awareness-raising and generation of new shared knowledge are key traits of this element.

- '*Resources*' through collaboration, such as staff and funding, are mobilized and shared to reach common objectives amongst actors involved in the collaborative dynamics (Emerson et al., 2012).

Table 1 presents the evaluation framework used in this research with the three criteria, its twelve indicators and their respective description. It facilitates what to check in the empirical findings. The table is adapted from Kossmann et al. (2016) who – as previously mentioned – also draw from the work by Emerson et al. (2012).



Table 1. Evaluation framework before the empirical confrontation

<i>Criteria</i>	<i>Indicators</i>	<i>Description</i>	<i>References</i>
<i>Principled engagement</i>	<i>Discovery</i>	There are different worldviews included with shared concerns/interests	<i>Ansell & Gash, 2008; Kooiman, 2008; Bryson et al., 2006; Thomson & Perry, 2006; Roberts, 2004; Emerson et al., 2012</i>
	<i>Determination</i>	Regular meetings (e.g., for setting agendas) with involved actors take place	
	<i>Deliberation</i>	There is honest communication (e.g., expressing disagreements, answering questions) between actors	
	<i>Definition</i>	There is clarity and flexibility regarding actors' tasks and expectations	
<i>Shared motivation</i>	<i>Mutual understanding</i>	There is a shared perception of the problems triggered by the MPA expansion (e.g., there is understanding of the affected users and their positions by all actors)	
	<i>Shared commitment</i>	Continuous engagement of all actors takes place	
	<i>Trust</i>	The collective interest is supported and predictable (e.g., actors prove to each other that they are reasonable)	
	<i>Internal legitimacy</i>	There is representation and transparency which allow for monitoring and sanctioning during the collaboration process	
<i>Capacity for joint action</i>	<i>Procedural and institutional arrangements</i>	There is clarity concerning actors' roles and relationships	
	<i>Leadership</i>	Initiative is taken and direction is given by actors	
	<i>Knowledge</i>	Awareness is raised and shared knowledge is generated by actors	
	<i>Resources</i>	Resources in terms of staff and funding are mobilized and shared across actors	



3. Methods

3.1 Case study

This research explores an existing bounded system over time, through detailed, in-depth data collection. Moreover, it includes multiple sources of information and reports a case description and themes. Namely, it conducts a single case study strategy (Creswell & Poth, 2016). The focus is placed on the expansion of Cabrera's Archipelago Maritime-Terrestrial National Park, the largest National Park in the Mediterranean. It is deemed that because of the magnitude of the enlargement and its recent establishment, this thesis is timely and relevant. Besides, the case is highly important and remarkable for more reasons. One is that there are many actors involved and affected by the MPA expansion. The MPA of Cabrera offers value beyond leisure and wellbeing, it is key for the development of economic activities such as sailing or diving in the Balearic Islands and it has, in turn, become a tourist attraction that can generate direct benefits for the local economy – e.g., 34.8% of the gross domestic product of the autonomous community comes from tourism activity (MD, 2019). Another reason is that the largest island of the Archipelago, Cabrera will be self-sufficient energetically soon and will be the first island in Balears to meet climate neutrality (Oñate, 2021). Therefore, these early developments in the energy transition might be merged with marine conservation purposes of Cabrera, for instance via the use of clean energy supply for research, control or whale watching vessels. Moreover, this MPA enlargement represents the first time in Spain that a regional government has the exclusive authority to manage territorial waters within a National Park (Herrero, 2020).

A single case study strategy is characterised by qualitative data and research methods, more depth than breadth, intensive data generation and a specific domain, comprising a small number of research units (Verschuren & Doorewaard, 2010). This study tries to achieve depth by working with several data sources relevant to the unit of analysis, which corresponds to the collaborative governance processes during the expansion of Cabrera's MPA. Depth is prioritized over breadth because not only does this thesis search for interviewees' answers, but also it compares and contrasts their viewpoints, which according to Mason (2018), relates to the insider view of a case study that pursues depth. Furthermore, it is deemed appropriate to conduct a single case study, because as expressed by Pollnac et al. (2010) empirical research that links social and ecological aspects of MPAs is dominated by case studies, which are often of single sites. According to Charles and Wilson (2009), “a better understanding of MPAs and human dimensions would be possible through in-depth study and interviewing of individuals and institutions involved” (p.13). Similarly, Nalau, Preston and Maloney



(2015) ask for greater appreciation by researchers for the interactions between local actors and those at higher levels in the context of coastal governance by conducting case studies. This thesis tackles this issue by the conduct of sixteen interviews with several MPA actors as explained next.

3.2 Data collection methods

Figure 3 provides an overview of the three main data collection methods (underlined). Those are desk research, 16 semi-structured interviews and 5 expert workshops.

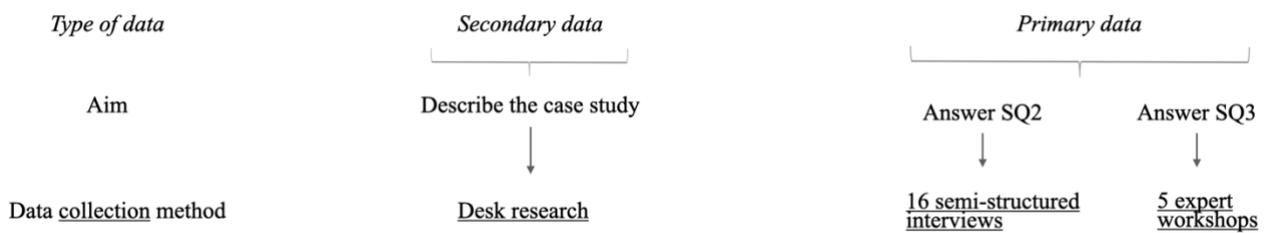


Figure 3. Data collection methods

On the one hand, secondary data was obtained through desk research via the Spanish government websites: ‘BOE < <https://www.boe.es>>’ and ‘Moncloa’ < <https://www.lamoncloa.gob.es>>. The former is the publicly available and official State gazette that issues laws, provisions and acts of compulsory insertion. The latter is the general official website of the presidency of the Spanish government. Legal documents consulted there entail archives and electronic reports related to Cabrera’s MPA expansion. Another legal document was accessed via the bar association of Madrid <otrosi.net> (Herrero, 2020). Moreover, a broad technical report about the MPA expansion has been obtained thanks to the marine research and conservation association ‘Tursiops’, which is based in Mallorca. Additionally, a book was consulted to historically and ecologically describe the case of study (Robledo-Ardila, 2016). Besides, two online press releases about the ecological state of the MPA were consulted via the marine conservation organization website <oceana.org> (OCEANA, 2009; 2021a). Altogether these sources – and two more from the first introductory chapter i.e., MITECO (2018) and Brisman (2011) – enabled the author to contextualise the case as seen in chapter 4.

On the other hand, primary data to answer SQ2 was obtained via sixteen online semi-structured interviews conducted during the third and fourth weeks of April 2021, through ‘Microsoft Teams’ and ‘Zoom’. The interviews’ duration was roughly an hour each. They were anonymous, voluntary and they were recorded as agreed by the interviewees – when the consent form was sent to them (Appendix A). Interviews were conducted in Spanish and Catalan and then translated to English. Table 2 displays



the four categories of interviewees that have been contacted i.e., National Park administration, fisheries administration, academic institutions and non-governmental organizations, with the corresponding actors' positions. Between brackets, it is indicated the number of participants occupying each position (when they are more than one). Their roles during the collaborative governance dynamics of Cabrera's MPA are explained together with the background of the case study in the fourth chapter. The number of interviewees per category is not the same, but they are quite even. The study author decided to stop at sixteen interviewees because by the end of the data collection, few updates on the process were brought up and data saturation was reached in the sense that questions – especially those on the frequency of meetings, the engagement of actors, the representation and transparency, the leadership, the knowledge and the resources – were receiving similar answers by the end of the process (approximately when the last three participants were interviewed). N.b. more interviews with artisanal fishermen would have been conducted, but they were reluctant to participate in the research except for one.

Table 2. Interviewees

<i>Category</i>	<i>Actor</i>
<i>National Park administration (central and regional)</i>	- Former Deputy Director of Autonomous Organism of National Parks; Organismo Autónomo de Parques Nacionales (OAPN) in Spanish
	- Head of Research Service OPAN
	- Director of Cabrera Archipelago National Park
<i>Fisheries administration</i>	- Ex Counsellor of Agriculture and Fisheries Council in the Balearic Government
	- Director of Agriculture and Fisheries in the Balearic Government
	- General Secretary of the Balearic Fishermen Association
<i>Fishermen</i>	- Artisanal fisherman
<i>Academic institutions</i>	- Researchers in the Spanish Institute of Oceanography; Instituto Español de Oceanografía (IEO) in Spanish (2)
	- Researchers in the Spanish National Research Council; Consejo Superior de Investigaciones Científicas (CSIC) in Spanish (2)



<i>International and regional non- governmental organizations (NGOs)</i>	-	Former Director of Oceana in Europe
	-	Research Director of Oceana in Europe
	-	Senior Marine Scientist at Oceana in Europe
	-	Chief scientists in Tursiops Marine Research Association (2)

In addition, primary data to answer SQ3 was collected via five meetings with experts. These workshops were organized individually through Microsoft teams on Thursday 20th May, Friday 21st May and Friday 4th June, 2021. They were not recorded as the aim was to discuss with specialists the transferability of the findings of the study. As these sessions were not anonymous, I asked for experts' permission via e-mail to include their names and information, and they all agreed to mention their personal data as displayed in Table 3. The combination of insider (X. Pastor and D. Hegger) and outsider (A. O. Elferink, M. Erfeling and S. Trevisanut) views on the findings, is believed to have increased the objectivity and hence the quality of the results as well as their external validation; given the fact that experts were familiar with different approaches related to (the study of) water governance and MPAs (Table 3). During all workshops, the main findings were presented, and several questions were raised to guide the discussion (see Appendix C). Last, to ensure further the robustness of the findings, experts' feedback was embedded in the literature when applicable.

Table 3. Participants in the workshops

<i>Name</i>	<i>Background</i>
<i>Dr. Alex G. Oude Elferink</i>	He is the director of the Netherlands Institute for the Law of the Sea. He is an associate professor of International Law of the Sea at Water, Oceans and Sustainability Law, Utrecht University and he is an adjunct professor at K.G Jepsen Centre for the Law of the Sea, University of Tromsø. He has been involved in consultancy work and research on topics like international law and negotiated and adjudicated maritime boundaries.
<i>Mareike Erfeling</i>	She is an advisor for the North Sea at the public organization, Rijkswaterstaat on water governance issues. She has practical experience in the departments of human activities and pressures within the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention).



<i>Xavier Pastor</i>	He is an oceanographer, former founder and director of Greenpeace Spain as well as a former director of Oceana Europe. He has developed and lead conservation activities in MPAs worldwide. However, his direct experience with Cabrera's MPA is the most substantive, as he was involved there since its creation until the present. He was an ex fisheries researcher at IEO, and currently, he provides strategic advice to Marilles Foundation on MPA related issues.
<i>Dr. Seline Trevisanut</i>	She is a professor of International Law and Sustainability at Utrecht Centre for Water, Oceans and Sustainability Law. Seline is also a member of the Scientific Council of the Institut du Droit Économique de la Mer. She taught and conducted research at various institutions, including the Columbia University, the European University Institute, and the University of California, Berkeley.
<i>Dr. Dries Hegger</i>	He is a senior researcher and an assistant professor in Regional Water and Climate Governance at Utrecht University. His research and teaching focus on citizen engagement in regional water and climate governance, and improved science-policy interactions. Dries has experience in water and flood risk governance, knowledge co-creation in regional climate adaptation projects.

3.3 Operationalization of indicators

Interviews were guided by the operationalization of criteria and indicators, as presented in Table 4 below. Based on that table, an interview guide was developed (see Appendix B). Moreover, if new concepts emerged while conducting the empirical research, they were further operationalised and specified, as seen in Table 5 displayed in the results chapter. Answers of participants were written down in Spanish, then they were translated to English to proceed with their analysis using the software NVivo 12, as explained next.



Table 4. Operationalization of the indicators for evaluating the quality of the collaborative dynamics in Cabrera's MPA

Criteria	Indicators	Description	Level
Principled engagement	<i>Discovery</i>	There are different worldviews included with shared concerns/interests	High: There is a diversity of worldviews and shared concerns/interests Moderate: There is a diversity of worldviews but not shared concerns/interests, or vice-versa Low: There is uniformity of worldviews and individual concerns/interests
	<i>Determination</i>	Regular meetings (e.g., for setting agendas) with involved actors take place	High: There are regular meetings with involved actors Moderate: There are irregular meetings with involved actors Low: No meetings take place with involved actors
	<i>Deliberation</i>	There is honest communication (e.g., expressing disagreements, answering questions) between actors	High: There is honest communication between all actors Moderate: There is honest communication between some actors Low: There is no honest communication between actors
	<i>Definition</i>	There is clarity and flexibility regarding actors' tasks and expectations	High: There is clarity and flexibility regarding actors' tasks and expectations Moderate: There is clarity but not flexibility regarding actors' tasks and expectations, or vice-versa Low: There is neither clarity nor flexibility regarding actors' tasks and expectations
Shared motivation	<i>Mutual understanding</i>	There is a shared understanding and respect of others' opinions and interests	High: Actors understand and respect others' opinions and interests Moderate: Actors understand, but do not respect others' opinions and interests, or vice-versa Low: Actors neither understand nor respect others' opinions and interests
	<i>Shared commitment</i>	Continuous engagement of all actors takes place	High: Constant engagement of all actors takes place Moderate: Occasional engagement of all actors takes place Low: Infrequent engagement of all actors takes place



Capacity for joint action	<i>Trust</i>	The collective interest is supported and predictable (e.g., actors prove to each other that they are reasonable)	<p>High: The collective interest is supported and predictable</p> <p>Moderate: The collective interest is supported but not predictable, or vice-versa</p> <p>Low: The collective interest is neither supported nor predictable</p>
	<i>Internal legitimacy</i>	There is representation and transparency which allow for monitoring and sanctioning during the collaboration process	<p>High: The collaboration process is representative and transparent</p> <p>Moderate: The collaboration process representative, but not transparent, or vice-versa</p> <p>Low: The collaboration process is neither representative nor transparent</p>
	<i>Procedural and institutional arrangements</i>	There is clarity concerning actors' roles and relationships	<p>High: There is clarity concerning actors' roles and relationships</p> <p>Moderate: There is clarity concerning actors' roles but not their relationships, or vice-versa</p> <p>Low: There is neither clarity concerning actors' roles nor their relationships</p>
	<i>Leadership</i>	Initiative is taken and direction is given by actors	<p>High: Initiative is taken, and direction is given by actors</p> <p>Moderate: Initiative is taken but the direction is not given by actors, or vice-versa</p> <p>Low: Initiative is not taken, and direction is not given by actors</p>
	<i>Knowledge</i>	Awareness is raised and shared knowledge is generated by actors	<p>High: Awareness is raised, and shared knowledge is generated by actors</p> <p>Moderate: Awareness is raised but shared knowledge is not generated by actors, or vice-versa</p> <p>Low: Awareness is not raised, and shared knowledge is not generated by actors</p>
	<i>Resources</i>	Resources in terms of staff and funding are mobilized and shared across actors	<p>High: Resources in terms of staff and funding are mobilized and shared across actors</p> <p>Moderate: Resources in terms of staff but not funding are mobilized and shared across actors, or vice-versa</p> <p>Low: Resources in terms of staff and funding are neither mobilized nor shared across actors</p>



3.4 Data analysis

Figure 4 presents again what type of data was used, why and how it was collected. It shows their connections with grey linear arrows. Additionally, it displays the two main data analysis methods (in bold). The two dotted black arrows illustrate that the stakeholder analysis (or interest influence matrix) was developed with data from the desk research as well as with data from the sixteen interviews. This matrix was used to structure further the descriptive chapter 4. In contrast, the colour coding and thematic analysis were done to answer SQ 2 in chapter 5 with data obtained during the interviews.

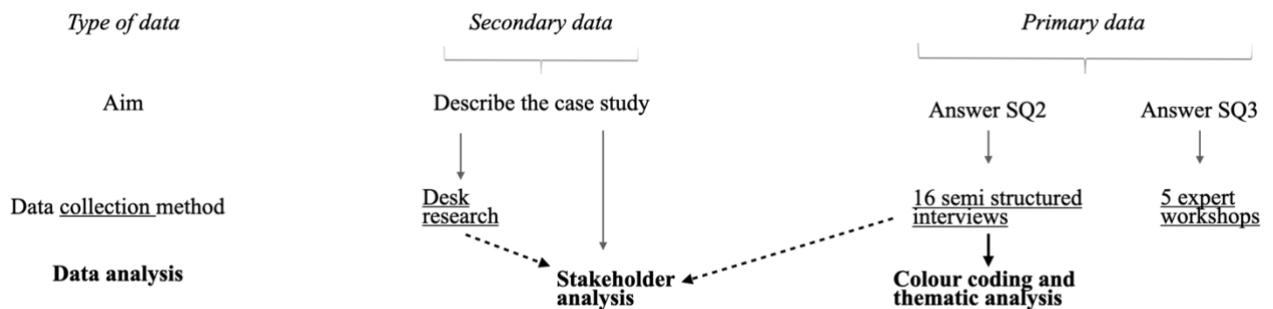


Figure 4. Data analysis

On the one hand, the stakeholder analysis was developed to provide a deeper insight into actors' descriptions. In particular, they were categorized based on an interest-influence matrix. This matrix is beneficial to group stakeholders, i.e., anyone who is affected by the outcome of a process (GM, 2021). In this thesis, these individuals have been referred to as actors, because they are the ones who actively take part in the governance dynamics of the MPA. Therefore, to keep consistency in the terminology used, the word 'actors' is maintained. The term interest relates to the concerns and objectives that each institution/organization has in the MPA and the interest they have in the potential outcomes of the process. Whilst the term influence indicates the degree to which an actor can make or break the project. For example, through legislation, funding, protests or knowledge (GM, 2021). As seen later in section 4.2, these two variables, i.e., interest and influence, are measured on a scale 'high-low'. This is fundamental to identify what kind of engagement strategy is beneficial for each group. For instance, strategies to keep actors satisfied, to actively collaborate with them, to monitor them and to inform them depending on the level of interest and influence they have on the MPA's expansion process (GM, 2021). Overall, this matrix facilitates in distinguishing the actors involved in Cabrera's MPA and it allows for the identification of interactions and sources of conflict and cooperation between them. These, in turn, are valuable to increase the chances of collective support in the MPA and emphasise the need for communication amongst the groups.



On the other hand, colour coding and thematic analysis were conducted to answer SQ2. Once interviews were recorded and transcribed, data were coded through NVivo12, a qualitative data analysis software, and themes were analyzed. The reasons for analysing the data with thematic analysis and colour coding are the following.

Thematic analysis facilitates the understanding of the different dimensions of a phenomenon explained by interviewees. In other words, the complexity of the answers is reduced by looking for themes and patterns across qualitative data (SS, 2021). Themes are the overarching categories of common data across multiple participants. In this thesis themes corresponded with the three criteria and their related twelve indicators of the collaboration dynamics. The main coding approach that was followed was deductive, based on the evaluative framework (Table 1). However, if new categories emerged while processing the data (e.g., themes that did not correspond with the indicators of the framework) then, an inductive approach was undertaken, and new indicators were identified if necessary (see Table 5). Meanwhile, the indicators were coded in three colours to refer to the extent to which they were highly present (green) moderately present (yellow) and poorly present (red), during the collaboration dynamics since the design of the expanded MPA (2015) until present (2021).

The colour code relates to the overarching assessment of all group of actors together, namely, it is the product of comparing and contrasting the viewpoints of the different actor groups. Assessing indicators based on a scoring system is deemed useful not only to answer SQ2, but also to facilitate the drawing of recommendations on how to improve the governance of the MPA in terms of collaborative processes.



4. Case study description

This chapter describes the background of the case study, intending to contextualize the setting where this evaluative research finds itself, namely in the Cabrera Archipelago Maritime-Terrestrial National Park that comprises nineteen islands and islets in the north-west Mediterranean Sea (OCEANA, 2021a). It provides a historical, ecological, social and political perspective in 4.1, while it explains the main actors' roles and their involvement in the governance process of Cabrera's MPA expansion. The section is closed by an interest-influence matrix in 4.2 that facilitates a systematic description of the main actors involved in the MPA's governance dynamics.

4.1 Background of the case

The island of Cabrera, which is the biggest and gives name to the whole archipelago, has known human presence from very early times. There is a castle that was built in the 14th century, which together with old written texts, supports the idea that Cabrera has played a geostrategic role from the byzantine to the medieval epochs (Robledo-Ardila, 2016). With that historical preface, the island was inherited by a family of Mallorca. However, since 1916 with the context of the First World War it was expropriated by the state for security reasons. Since then, the entire archipelago belongs to the Ministry of Defence of Spain and is periodically used as a training military domain (BOE, 1991). Nowadays, the island is the only archipelago that is exclusively inhabited by about twenty individuals – amongst them, there are two militaries, conservation personnel of the National Park such as guards and scientists that conduct fieldwork for monitoring purposes on Cabrera. In addition, the archipelago is visited by thousands of tourists yearly as it is located only twenty kilometres from the south of Palma de Mallorca, in the Balearic Islands.

From an ecological standpoint, terrestrial vegetation in the archipelago is dominated by the Mediterranean scrub and the main fauna living there are endemic lizards and seabirds like the Balearic shearwater. Alternatively, marine vegetation is characterised by seagrass meadows of the endemic species of the Mediterranean Sea, *Posidonia oceanica*. Marine fauna entails i) filtering organisms such as sponges and sea-fans, ii) coral communities, iii) fish species, iv) crustaceans, v) molluscs, vi) echinoderms, vii) reptiles like loggerhead turtles, viii) elasmobranchs like sharks and rays and ix) cetaceans such as bottlenose dolphins and sperm whales (Figures 5 and 6).





Figure 5. Marine fauna i-vi EUO © OCEANA Juan Cuetos



Figure 6. Marine fauna ix © TURSIOPS Marine Research



Regarding social developments, in April 1991 the Maritime-Terrestrial National Park of Cabrera Archipelago was created to protect such fragile and crucial ecosystems from anthropogenic impacts. Some limitations included the introduction of foreign species, the prohibition of activities that affected soil's degradation – such as soil extraction and building infrastructures – as well as the restrictions to limit overfishing. At that time, the MPA consisted of 10,021.00 ha (BOE, 1993). It was managed by the Autonomous Organism of National Parks and the '*patronato*²' which is a governance agent “made up of the public administrations involved, including the affected local entities, the agents that carry out economic activities within the National Park and those institutions, associations and organizations related to the Park or whose aims are consistent with its objectives”. It does not have decision-making power, only advisory (MITECO, 2021a, n.p). Conservation efforts during this period were remarkable, as pointed out by academics, who highlight the benefits of regulating mooring activities in the status *Posidonia oceanica* meadows and subsequently in other species, as such seagrass meadows are home to many groups of animals (Marbà et al., 2002).

To contribute to the European Commission's policies and environmental ambitions for ocean recovery, in August 2015 the Balearic government asked for an expansion of 80,779.00 marine protected hectares within Cabrera's MPA. Namely an enlargement from 10,021.00 to 90,800.00 ha, which was approved in February 2019. Note well that there is not a declaratory law yet, there is still a judicial resolution that has binding nature but does not firmly state official regulations of use, such as those related to navigation aspects (MITECO, 2018; BOE, 2019). This petition was steered by the valuable results of scientific studies, (Herrero, 2020) which showed the ecological importance of the MPA and its surroundings, as amongst other biological traits, it is an important migration corridor for cetaceans. With this enlargement of nine times greater area, the MPA of Cabrera's Archipelago is the second largest³ in the Mediterranean (OCEANA, 2009; 2021a).

² The '*patronato*' is constituted to ensure compliance with the rules established in the interest of National Parks and as a body for the participation of society in them (MITECO, 2021a).

³ The largest MPA is the international Pelagos Sanctuary for Mediterranean marine mammals, extending between North-West Italy, North Sardinia, Monaco and South-East France. It encompasses 8,750,000.00 ha (Notarbartolo-di-Sciara et al., 2008).



Figure 7 shows the cartographic map of the National Park and distinguishes the old area of the MPA in the green polygon. In contrast, it indicates the new expanded MPA in the reddish area.

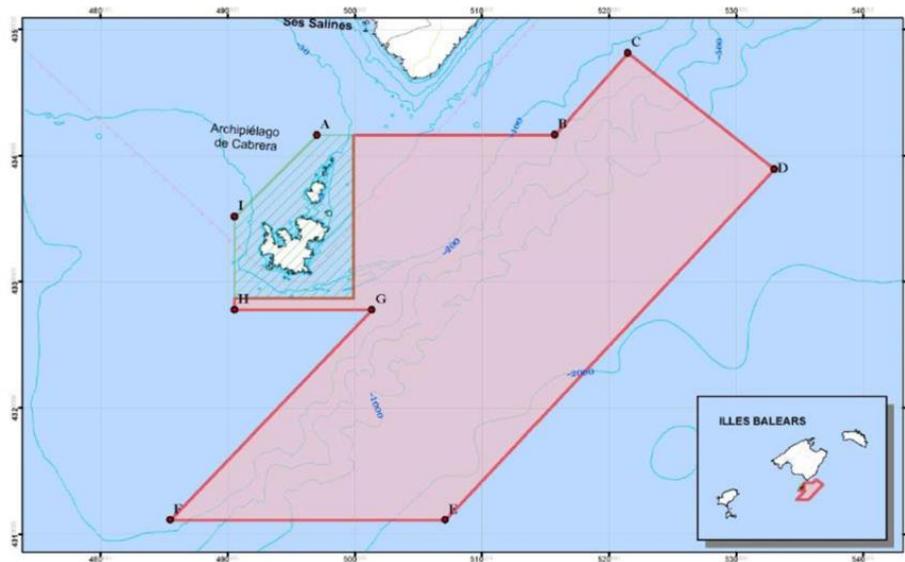


Figure 7. Cartography of Cabrera's MPA (MITECO, 2021b)

During the period, 2015-2019 the design stage of the expanded MPA took place (Figure 8). In particular, what was designed was the proposal of expansion. It is relevant to emphasize that the local community was involved in designing the proposal, namely individuals were included in the decision-making procedures before the official implementation of the expansion in 2019. Hence, it is argued as mentioned in the introduction that there was a combination of government-led and community-led types of governance.

Some forms of involvement during the design stage of Cabrera's MPA included six public participation workshops with i) researchers, ii) conservation organizations, iii) businesses like diving centres⁴, iv) recreational fishermen and v) artisanal and trawling fishermen. The last and sixth workshop included all the above-mentioned participants together and aimed at sharing ideas between actors. All workshops took place in November 2016, lasted two hours each and were steered by the question 'what should be the adequate expansion?'. In total 43 institutions and 116 individuals participated, based on the technical report received from 'Tursiops'.

⁴ However, in that workshop only 4 diving centers participated. They admitted not being affected by the expansion because it encompasses pelagic waters. Diving in such depths cannot take place, thus they are not considered relevant actors in the expanded MPA and its governance dynamics. For this reason, they were not included in the interviews either.



In addition, two years later, between October-December 2018, other public participation processes were organized by the public administration. Those are not explained in detail (see Moncloa, 2018). However, data from the Spanish government website suggests that those processes consisted of receiving written citizen's opinions with new modifications on the expansion of Cabrera's MPA. Some of their claims were "partially incorporated into the text" of the proposal of expansion (Moncloa, 2018, n.p).

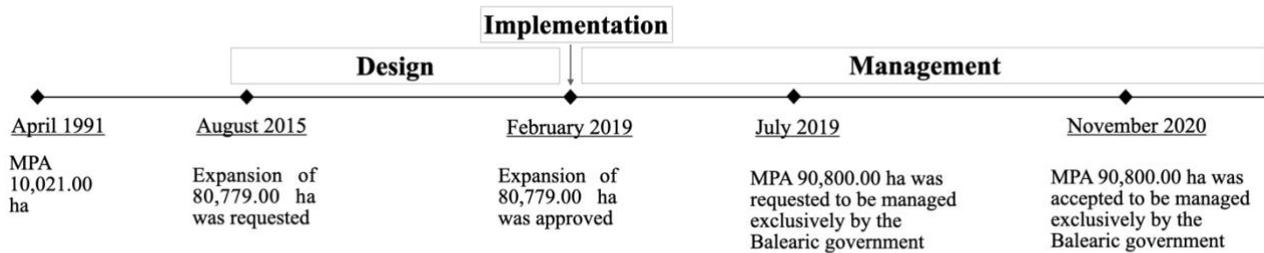


Figure 8. Timeline of Cabrera's MPA (Own source, 2021)

Once the design of the proposal concluded, the implementation of the expanded MPA took place, namely in February 2019 when the proposal was approved by agreement of the Council of Ministers. From that moment until the present Cabrera's MPA is in the management stage.

In terms of political developments, it is important to highlight that in February 2019 the Council of Ministers composed the official document of the expansion (see BOE, 2019) together with the Balearic government, and they both stressed that the MPA should be co-managed, which is a common practice in National Parks. To materialize the co-management, a coordination committee was established by the national and the regional governments. This is because the MPA encompasses not only internal waters but also territorial waters. The former surrounds the coastline, e.g., water within bays, and they are managed by the regional government. However, the latter which extend up to 12 nautical miles from its baseline are the sovereignty of the state. Subsequently, they are managed by the national government (Brisman, 2011). This commission was essential in terms of coordination of resources e.g., staff and funding, as well as control regarding fishing, navigation or surveillance aspects. However, that commission lasted solely until July 2019, when the Balearic government filled an administrative appeal to manage exclusively the internal and territorial waters of the MPA, arguing that a unitary focus would harmonize and facilitate the work on the conservation of the MPA as a whole. In November 2020 the Spanish Court of Justice accepted this appeal. This decision was taken



by the Court based on the fact that National Parks are managed by the autonomous community when the concept of 'ecological continuity' applies to the territory (MITECO, 2021a). This is a legal notion built on an environmental foundation aimed at settling disputes between administrations through the ecological continuity of the protected space in question. In this case, it was deemed that Cabrera's maritime ecosystems met said ecological continuity traits within the territorial ecosystems, (e.g., there was the connectivity of *Posidonia oceanica* meadows within the dunes and beach systems). Hence, the National Park could be recognized with such ecological continuity. Since then, it has been managed by the Balearic government exclusively. These recent modifications are still in the process of being written in the new declaratory law of the expanded MPA (Herrero, 2020).

All in all, since November 2020 the management of Cabrera's MPA relies fully on the Balearic government's decisions. The regional National Park administration is in charge of leading the management of the MPA, and the central National Park administration supports it with tasks like i) the research service by the Autonomous Organism of National Parks, ii) the coast control and the surveillance conducted by the Ministry of Defence and iii) the development of fisheries competencies by the Ministry of Fisheries, Agriculture and Food (Herrero, 2020). Other actors include the civil servants working in the regional fisheries administration, who work as intermediaries between the National Park managers and the fishermen. They manage fisheries-related issues for instance; regulations of use inside the MPA. Academic institutions like IEO and CSIC provide the environmental knowledge to manage the MPA, as well as the international NGO Oceana and the regional association; Tursiops marine research. Further actors involved in the collaboration dynamics are artisanal fishermen, as they are the only resource users without restrictions of use inside the MPA. Industrial (trawling and longline) and recreational fishers, whose activities are highly restricted/forbidden in the MPA are not deemed as key actors in governing Cabrera's MPA because their prospects of using it in the future are almost null – as drafted in the preliminary proposal of fishing in the enlarged MPA (OCEANA, 2021b). Nonetheless, they were included in the design stage of the expansion process, and several interviewees raised points related to them. For this reason, recreational and industrial fishermen are added in the next Figure 9.



4.2 Background of the actors

This chapter is closed by a matrix (Figure 9) that facilitates the systematic description regarding actors' roles and positions and their different levels of interest and influence on the MPA. The matrix was created considering the type of institution that each actor represented (in terms of their interest and influence on Cabrera's MPA) and it was developed after the interviews (interviewees helped to contextualize the interest and influence further). All actors play a key role in the management of the space as they together determine the community support for Cabrera Archipelago Maritime-Terrestrial National Park. As already mentioned, this matrix allows for the identification of interactions and sources of conflict and cooperation between actors involved in the governance dynamics. These, in turn, are valuable to increase the chances of collective support in the MPA and emphasise the need for communication amongst the groups.

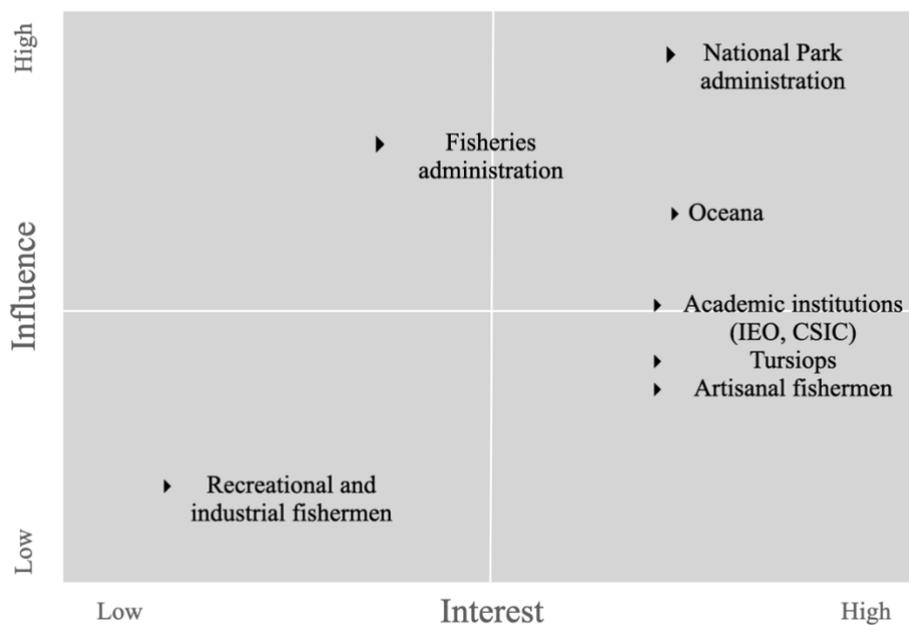


Figure 9. Interest-influence matrix

As can be read in Figure 9, the lower left-hand quadrant of the matrix includes recreational and industrial fishermen. It is deemed that these actors correspond well with the characteristics of the *lowest interest-lowest influence* on the MPA because, as mentioned above, industrial and recreational fishing methods are forbidden in protected spaces due to their detrimental impact on the seafloor and fish biomass. It has been claimed during the interview with the General Secretary of Fishermen Association in Balears that those fishermen are still upset with the expansion process of Cabrera. They claim the economic importance of their sector is neither valued nor understood.



As a consequence of not having the right to fish in the MPA anymore, both their influence and interest are low in the collaborative governance mechanism. In addition, it is relevant to state that most interviewees stressed the fact that longline vessels that go to the 'enlarged Cabrera' are minimum, in fact only one goes fishing there. Regarding the trawling vessels, there are only four affected, two of which exceed the maximum engine power (500 horsepower) established by law, as stressed by several interviewees. Lastly, the recreational fishermen express disagreement (as argued by interviewees) as they have boat charter businesses, and at least seven of them cannot sail anymore for fishing purposes in the MPA. This group is therefore important to monitor to keep track of their fishing activity and their compliance with the regulations of use in the National Park.

Carrying on with the next quadrant of *medium interest-high influence*, it is considered appropriate to locate there the fisheries administration. Those actors have high decision-making power in fisheries ministries. However, they represent the interests of all types of fishermen, which means that they are highly interested in the outcomes of the long-term spillover effect⁵ of the MPA as far as the fishing prospects are concerned. But they need to satisfy the short-term demands of fishermen too, which runs sometimes counter to the long-term conservation interests. Then, their role as intermediaries between fishermen and National Park administration is key for the collaborative governance to reach the common goals – as they argued during the interviews. That is why they are in the medium interest scale, but high influence as seen in Figure 9. Hence, they are relevant actors to keep satisfied.

In contrast, the quadrant of *high interest-medium influence* relates well to the academic institutions IEO and CSIC and the marine research association Tursiops. All these actors have a professional interest in observing the outcomes of the stringently protected MPA. For instance, some of them study sperm whales in the migration corridor of cetaceans. Others highlight the bright prospects for restoring the marine ecosystem with top predators again (e.g., sharks populations need long-term measures and large areas of conservation to get recovered). Alternatively, their influence on the MPA is medium, as they do not influence it through legislation or funding mechanisms, but they do so by expressing their knowledge of the area (via written reports and during meetings) as exposed in the interviews. This, in turn, may contribute significantly to the management of the MPA, therefore they ought to be informed and consulted throughout the governance process.

⁵ Spillover effects is one mechanism by which an MPA influences positively adjacent fisheries, e.g., increment in fish size and populations biomass.



This *high interest-medium influence* quadrant also encompasses artisanal fishermen, as they are benefited from the outcomes of enlarging the MPA. Hence, they have a high interest in it, as argued by the interviewed fisherman. These actors have not only gained economic benefits by eliminating the competition of other fishing techniques (industrial and recreational) but also, they are safeguarding the future of their employment by the sustainable extraction of the fish stocks (which can get exponentially recovered due to the spillover effect and adaptive management approaches). Similarly, they do not influence the governance dynamics significantly, apart from expressing their opinions in the '*patronato*' and sharing their knowledge on the marine resources with other institutions like IEO or CSIC. As they argued during the interviews. Like IEO, CSIC and Tursiops researchers, artisanal fishermen are relevant actors to maintain informed.

Lastly, the highest quadrant of the matrix displayed in the top right of Figure 9, is adequate for the National Park administration and Oceana as they both have the *highest influence-highest interest* in the MPA. On the one hand, it is undeniable that the international NGO Oceana is interested in the outcomes of protecting Cabrera, as this goes according to their mission, which is to protect and restore the oceans on a global scale. Besides, their way of working is through political action, which makes them significantly important as advisory members of the National Park administration. It is important to keep in mind too that enlarging the MPA was a political commitment of the Balearic government. Hence, Oceana plays a fundamental role not only in facilitating the knowledge of the MPA, but also in advising through legal and institutional mechanisms. Thus, it is highly influential in the governance dynamics. On the other hand, the National Park administration is certainly committed to the cause of expanding the MPA, because, by definition, the aim of a National Park is linked to nature conservation purposes. Furthermore, civil servants working there have the highest degree of influence on making the management process work, as confirmed by them and the vast majority of interviewees. They influence the process through legislation, funding and knowledge. Therefore, they are the most important and most influential actors in the governance dynamics of Cabrera's MPA, and they and Oceana are active collaborators/managers during this process.

On a final note, institutions, organizations, and individuals involved in Cabrera's National Park interact with each other despite their varying levels of interest and influence on the MPA. In any relationship, there is power involved. Although power and influence differ, the former forces people to complete a task whereas the latter helps people understand why the task is necessary (McIntosh & Luecke, 2011), both share some authority traits. In the case of Cabrera's MPA expansion process, power relationships were perceived as being well balanced. For instance, the fisheries and National



Park administration did not complain about differences in terms of shaping rules, inside the MPA. A possible reason for that acceptance of the norms (balances of power), might be that there is the National Parks legislation, where it is defined that the specific administration of National Parks, has the most decision-making power, and it should coordinate when appropriate, certain aspects with other administrations, like the fisheries one. Nonetheless, what was noticeable during the interviews was the fact that the expansion process was importantly politicized during its design stage. Most of the actors emphasised that when the central and autonomic political authorities coincided (left-wing parties in both governments), it was when the implementation of the expanded MPA took place, in 2019. Currently, propelling forward the management stage of Cabrera, is on the political agenda of the regional government (left-wing still).

Overall, all actors seen in Figure 9 determine together the collective support for the MPA and strategies consisting of monitoring, keeping satisfied, informing, and actively collaborating/managing, are useful to maintain and foster such support. In the next section, specific collaboration mechanisms between those actors are explored through the thematic analysis.



5. Evaluation results of the collaborative dynamics

This chapter first presents in section 5.1 the analysis of results of interviewees' answers via the thematic analysis and the colour coding approaches. Second, it outlines in section 5.2 the evaluation framework after being confronted with empirics (Table 5). Third, it answers the second sub-question in section 5.3 and shows the main findings (Figure 10). Last, it answers the third sub-question in section 5.4.

5.1 Colour coding and thematic analysis

This section presents the sixteen interviewees' viewpoints on several themes. Those, in turn, are categorized in three criteria, which correspond with the sub-sections (5.1.1 principled engagement; 5.1.2. shared motivation and 5.1.3 capacity for joint action). Every criterion includes its corresponding indicators as indicated in the conceptual framework (Figure 2) and shown next.

As already argued the main coding approach that was undertaken during the interviews was deductive based on the criteria and indicators listed in Table 1. However, if new indicators came along or were modified (re-named, removed, or added) they were included and revised (as seen later in Table 5).

5.1.1 Principled engagement

Principled engagement encompasses collective ways of working between various actors with different interests and values. The goal is to reach common objectives in public or private meetings (Emerson et al., 2012). It includes four indicators: i-iv which are the ones proposed in Table 1 before the empirical confrontation. Nevertheless, to make their meaning more self-explanatory, some of the indicators have been re-named. Those are indicator ii: '*determination*', which now is called '*participation*', and indicator iv. '*definition*' that now is called '*clarity on tasks definition*'.



i. Discovery

Description

There are different worldviews included with shared concerns/interests

Level

High: There is a diversity of worldviews and shared concerns/interests

Actors in the MPA of Cabrera have various worldviews with shared concerns and interests hence, there is a **high** level of 'discovery'. Some of these multiple perspectives are presented next.

Regarding the shared interests, every actor agrees on the fact that the MPA has been expanded to enlarge the network of National Parks because Cabrera is home to 12/13 natural systems within this network. Consequently, this means that there are various interests included, not only for humans but also interests for future generations and wildlife. Actors of the NGO sector seem interested in the expansion of Cabrera because of the contribution that it implies for the international target of 30% of protection of marine areas by 2030. There are only, two civil servants in the Balearic fisheries administration who pointed out that the objectives of the MPA seem to be politically linked with the tourism interests, '*Cabrera has been partly expanded for creating an image of value for the tourism, which will attract more visitors. Hotel managers talked about it with government officers and the expansion was implemented, as they agreed to enlarge the National Park too*'. Although these two actors mentioned this economic interest, they stated that the principal importance of protecting the area was environmental, as it is a '*unique ecosystem in the western Mediterranean that deserves to be preserved for the future generations*' (fisheries officer). In addition, artisanal fishermen believe that they are one of the most interested people in protecting the MPA as they argue '*our future depends on the abundance of fish in the area and its good environmental state*'.

Perspectives on the concerns for the MPA are diverse too. Many highlight the urgent need to update the plan of regulations of use and management of the MPA (in this plan is where the zoning rules are defined), as they express it is expired since 2006 and a new one should have been developed since the year 2012. An actor belonging to Oceana indicates that a challenge is '*how to address fisheries and navigation-related issues between the central and regional administration, as the fisheries control in exterior waters is still a task of the central government and not the autonomous community*'. Along very similar lines two civil servants working in the National Park administration also brought up that



challenge. On a different note, two members from Tursiops and Oceana and a member from the National Park administration speak of climate change as a menacing factor to marine life and to Cabrera's MPA. Besides, two researchers from Tursiops and IEO reflect on the need to convey better the natural values of Cabrera, not only to visitors but also to the local community. The IEO researcher reveals *'I think the Park deserves more appreciation as the unique natural system it is, it is a shame if the visitors just perceive it as another quick attraction of Mallorca and its mass tourism'*. Lastly, an artisanal fisherman points out that the main concern of his sector is the illegal fishing by recreational fishermen.

In sum, there are many different worldviews included in the governance dynamics of Cabrera's expansion process. Besides, actors share interest as well as concerns, as the overarching goal they all pursue is the adequate functioning of the MPA.

ii. Determination – Renamed for participation

<i>Description</i>	<i>Level</i>
Regular meetings with involved actors (e.g., for setting agendas) take place	Moderate. There are irregular meetings with involved actors

It appears that there are numerous participation tools and actions in the MPA, however, the frequency is moderate. Therefore, there is a **moderate** level of *'participation'*. As displayed in the heading above, the name of the indicator is changed from *'determination'* to *'participation'* because it makes it more explicit that what is being measured has to do with participation aspects. This, in turn, makes clearer its distinction with the indicator *'shared commitment'*.

On one side, results show that there are three regular meetings yearly in the MPA's advisory body called *'patronato'*. During the design stage of the MPA's expansion, there were several meetings between central and Balearic administration bodies - as pointed out by both parties. Moreover, all actors have mentioned the participatory workshops organized by Tursiops in 2016. The majority of interviewees, except for the central National Park administration, took part in those workshops and all of them agree on the fact that they were representative and transparent. The fisheries administration adds that *'apart from these workshops, during the period 2016-2018 we organized frequent meetings*



with fishermen, to persuade them about the benefits of expanding the MPA''. Besides, one year before officially publishing the judicial resolution there was a public participation period of three months in 2018 where citizens could expose their proposals with modifications and petitions. During the management stage of the MPA, there is consensus on the fact that *''Cabrera's management has been blocked since July 2019 until November 2020, as the decisions revolved around who were to be the managers of the MPA, instead of how to manage it''*. Nonetheless, most coincide that the reactivation of Cabrera is heading towards a good direction. *''Things seem to be more agile now with the current director of the park''* (Oceana member); *''the workshop organized last April 22nd was a nice way to start a discussion on the regulations of use concerning fishing interests. I think it was very inclusive. There were more than 30 participants from NGOs, academia, central and regional National Park administrations as well as fisheries administration''* (civil servant, OPAN).

iii. Deliberation

Description	Level
There is honest communication (e.g., expressing disagreements, answering questions) between actors	High: There is honest communication between all actors

It is deemed that in Cabrera's MPA expansion process there is significant honest communication between all actors, in other words, there is a **high** level of *'deliberation'*. Not only because communication tools are agreed to be transparent, but also because they enable individuals to express their views without any constraints. Regarding the transparency of the communication mechanisms, for instance, during the workshop organized in 2016, everyone knew what others thought because there was a pooling workshop between all stakeholders and the moderators of the activity reported the decision-making process without putting away information – as they argued during the interviews and evidenced with a broad technical report about the MPA expansion (as expressed in 3.2). Others claim that transparency during the design stage of the MPA was there *''it was known by everyone that expanding Cabrera was in the policy agenda of the Balearic government''* (fisheries administration officer). Nonetheless, there is also the view that it could be further enhanced through more public reports accessible to all citizens (civil servant, OAPN). An artisanal fisherman highlights that *''there is transparency if you ask for what has been discussed in some meetings, but sometimes this*



information does not arrive at others who do not participate in the 'patronato'. The fishing association in my opinion should not lag behind that sort of aspects, as it is who represents us". In terms of speaking up, there is unitary acceptance of the freedom of speech along the MPA's collaboration process. All interviewees agreed on that fact. A member of Oceana who was the former president of the 'patronato' points out that "there is a total representation and individuals express their opinions openly in this advisory body. All types of questions about the MPA are always accepted and answered. Sometimes politicians are cautious in terms of stating certain aspects, because of the position they have in their party. The same happens with some researchers working in academic centres, as they occasionally act conditioned by their institution".

On a similar note, another researcher from Oceana argues that "everyone who wants to share their opinions and disagreements on the MPA can do that though sending comments to the 'patronato', this happens now and also before its enlargement... Contrarily to what happens when new fishing grounds are opened... where no one is included to take joint decisions". All in all, although people can voice up their claims "some actors think that decisions are already taken and therefore they are reluctant to join in some meetings. We need to make ourselves clearer perhaps that we get the ideas during its creation to design managerial decisions together. As evidenced during the workshop of last April 22nd" (National Park officer).

iv. Clarity – Renamed for clarity on tasks definition

<i>Description</i>	<i>Level</i>
There is clarity and flexibility regarding actors' tasks and expectations	Low: There is not clarity nor flexibility regarding actors' tasks and expectations

There is not clarity regarding tasks and expectations, as the plan of regulations of use and management of the MPA is outdated. It is then argued there is a **low** level of 'clarity'. As displayed in the heading above, the name of the indicator is changed for 'clarity on tasks definition'. Moreover, as seen in strikethrough the term 'flexibility' is delated from the indicator's definition because it fits better into the indicator of procedural and institutional arrangements as it relates to the flexibility in terms of relationships between actors to reach arrangements in the MPA. Moreover, when asking about this



indicator in the interviews, participants answered regarding the clarity of tasks and expectations, not regarding their flexibility. N.b. these two terms, - clarity and flexibility- are highly different in meaning and to the author's opinion do not fit appropriately into one unique indicator.

Participants in the interviews, such as the fisheries administration officers, pointed out the challenge of continuing working with the transition measures highlighted in the judicial resolution as they are still waiting for the official declaratory law of the 'expanded Cabrera'. Some others argue that such a lack of clarity could menace adequate management of the MPA since there is "*misinterpretation of norms*" in respect to longline fishing techniques (Oceana researcher and OPAN civil servant). The initial legislation of the MPA banned industrial fishing. However, the judicial resolution established some transition measures where longline fishing was still permitted. "*These inconsistencies need to be solved soon with a new declaratory law*" (National Park officer). Overall, this feeling of lack of clarity is shared by all actors, as they expose again that the plan of regulations of use and management ought to be updated soon to enhance such clarity too. The only interviewee who was clear on his tasks and expectations was the artisanal fisherman who expressed "*our activity has always been clear as it has been accepted inside the MPA before and after its expansion*". Others point out that "*the expansion of the MPA has gone through the quick path, which is the judicial resolution, this is positive in terms of time-saving aspects, but now as the declaratory law is not developed yet, these types of misinterpretations are starting to affect those involved stakeholders*" (civil servant, OAPN).

5.1.2 Shared motivation

Shared motivation underlines the interpersonal relationships between actors of a collaborative governance process (Emerson et al., 2012). Shared motivation is deemed essential in the successful implementation of any MPA as argued by Kossmann et al. (2016). This criterion included four indicators originally (see Table 1). However, after the empirical confrontation the indicator 'trust' was delated, and the new indicator 'accountability' was added as justified below.

i. Mutual understanding

Description

There is a shared understanding and respect of others' opinions and interests

Level

High: Actors understand and respect others' opinions and interests



All actors understand and respect others' opinions and interests, thus there is a **high** level of 'mutual understanding'. Everyone understands the importance of protecting the ocean. The opinions of artisanal fishermen are clear "we want to maintain our jobs, and for that, we all need to comply with conservation measures". Likewise, researchers working in academic institutions and NGOs state that the welfare of the MPA is their main interest. When it comes to the opinions on enforcement, security and monitoring services there is a consensus that those are central issues for the adequate management and compliance to the regulations of use by civil servants, in both National Parks and fisheries administration. Controversial opinions may be the ones on the prevalence of environmental policy over fishing policy which were also brought up in the interviews. However, "we need to acknowledge that prevalence of environmental policies over fishing policies because Cabrera is a National Park and conservation is its main objective" (fisheries administration officer). This illustrates the general understanding of both opinions and interests.

ii. Shared commitment

<i>Description</i>	<i>Level</i>
Continuous engagement of all actors takes place	Moderate: Occasional engagement of all actors takes place

Since 2015 there has been occasional engagement in Cabrera's MPA, thus the level of the indicator 'shared commitment' is **moderate**. There is no denying there is a commitment by all actors in the MPA "Now we are celebrating 30 years of the establishment of the National Park. I think this shows that Balearic society and all actors who work here in Cabrera since its establishment are significantly committed. No one that I've known during these three decades has ever refused to participate in activities related to the Park" (National Park officer). "Everyone who participates in the 'patronato' is highly engaged and dedicated". "It's true that the fishing sector is a bit reluctant to participate, but in general, there is involvement in the Park" (IEO and CSIC researchers). Some believe that the actors were more committed in the design stage (2015-2019) rather than in the management stage (2019-present). Others argue that the management is very recent, "in fact only since November 2020 is when things have started to unfreeze and started propelling forward again. This last year many online meetings have been organized despite the pandemic" (Oceana researcher). Nonetheless, the frequency of these meetings during the last five years is believed to have been occasional. As argued



by a researcher from Tursiops “*communication dynamics are not constant between the National Park administration and us, the rest of the stakeholders. There is bureaucratic chaos that hampers it in my opinion*”. The National Park administration admits it and states that “*we are aware we need to get better at participation and coordination aspects in Cabrera, to make this shared commitment stronger through all actors and more frequent over time*”.

iii. Trust

This indicator measures that the collective interest is supported^{1*} and predictable^{2*} (e.g., actors prove to each other that they are reasonable). However, it has been deleted from the evaluation framework for two reasons. First, because when it was being measured during the interviews, all actors’ answers were very similar to the ones they offered for the next indicator of ‘*internal legitimacy*’. Second, this thesis understands that the term supported^{1*} is an element of ‘*legitimacy*’, which is emphasised in the next indicator already. Similarly, the term predictable^{2*} is inherent in the concept of ‘*transparency*’ as underlined next too. For these reasons, this indicator has been deleted from the evaluation framework.

iv. Internal legitimacy

Description	Level
There is representation and transparency which allow for monitoring and sanctioning during the collaboration process	High: The collaboration process is representative and transparent

The collaboration process during the MPA expansion is representative as well as transparent, hence the level of ‘*internal legitimacy*’ in Cabrera is **high**. On the one hand, experts in MPAs working now in NGOs like Oceana point out that the case of Cabrera is one of the most representative ones they have known. “*Several ministries like the ones of marine and fisheries affairs, and the one of the environment are included in the case of Cabrera. There are also international and regional organizations, central and regional administrations, several fishermen... what is more, amongst fishing associations in Spain fishermen can present their comments and inputs on the issues they want, although they may not fish in the Balearic Islands. The points they raise are then discussed in the Parks’ advisory body, the ‘patronato’. Then, all channels of communication and representation are there! The thing is some people make more use of them than others because their engagement is*



stronger". Another interesting view is the one of an officer in the fisheries administration who expresses that *"even though I do not participate directly in the 'patronato' I feel there is a lot of people who represent my interests; thus, I feel represented too. In case I'd like to, I could join in the meetings as a guest"*.

On the other hand, transparency throughout the process has been there, as argued by many. *"I think there was a lot of transparency between administrations; central and regional (civil servant, OPAN). Others express "sharing information between us and the Park is not a problem, as far as I know, the National Park of Cabrera has always been transparent with written reports, organized events..."* (IEO researcher). Overall, the vast majority of interviewees accepted that transparency was there, as the expansion of the MPA was on the political agenda of the regional government. Furthermore, no one pointed out that information was hidden *"we all know economic, environmental and institutional data on Cabrera... no one hides anything"* (fisheries administration officers).

v. New indicator: accountability

Description

Democratically legitimized bodies are enabled to monitor and evaluate actors' behaviour and can induce them to modify that behaviour according to the regulations of use

Level

Moderate: Democratically legitimized bodies are enabled to monitor and evaluate actors' behaviour but are not able to induce them to modify that behaviour according to the regulations of use

In light of the numerous interviewees who brought up the issues of accountability and holding each other's accountable in the MPA, this new indicator has been added to the evaluation framework. Accountability as defined by Bovens, Schillemans and Goodin (2014) is an enforcement mechanism, the social link between individual decision-makers and social systems. Messner (2009) argues that accountability concerns bridging the gap between expectation and action. In addition, Bovens (2007) points out that accountability legitimizes and controls government actions by linking them to the democratic chain of delegation. As it is a new indicator the rest of the scoring system is presented.



For the level **high:** democratically legitimized bodies are enabled to monitor and evaluate actors' behaviour and can induce them to modify that behaviour according to the regulations of use. For the level **low:** democratically legitimized bodies are not enabled to monitor and evaluate actors' behaviour and are not able to induce them to modify that behaviour according to the regulations of use.

Findings from the interviews showed that democratically legitimized bodies are enabled to monitor and evaluate actors' behaviour; however, they are not able to induce them to modify that behaviour according to the regulations of use (because those regulations are not written yet, and the law enforcement is not developed; it is still a judicial resolution, not a declaratory law). This leads to **moderate** levels of accountability in Cabrera's expansion process. That is an issue that was frequently mentioned throughout the interviews and hence, it is considered important for the MPA and its collaboration mechanisms. For instance, when reporting the number of fish stocks captured in the MPA accountability is central to facilitate the monitoring and control of fishing activities in the area. An artisanal fisherman seems concerned about the scarcity of mechanisms to enforce compliance with the regulations of use by recreational, trawling and longline fishers. *“If control mechanisms such as vigilance in the MPA are not there, illegal fishing will ruin us!”* A similar point was brought up by researchers from Tursiops who explained that they were working with fishermen a couple of years ago to help them digitalize the fishing captures *“that is fundamental to know the state of the MPA while keeping the fishermen accountable”*.

They also pointed out that in the past, the administration was slightly weak in keeping fishermen accountable, as they did not show interest in their fishing reports. Now, this trend has changed, and the artisanal fisherman claimed during the interview that the administration is keen on checking their fish captures more often than before. Nonetheless, there is a consensus that there are no mechanisms that can enforce the social systems (illegal fisherman) with the legal system yet. That needs to be further specified in the new declaratory law as argued by the three National Park administration officers. One of them added that *“effective sanctioning is also a point to keep in mind that is related to the enforcement of the law”*. Meanwhile, according to Messner's (2009) definition of accountability, bridging the gap between expectation and actions is essential. Based on this definition and the responses by some interviewees, accountability in Cabrera is moderate, as what should happen in the future of the MPA is not perceived clearly by some actors *“sometimes there are issues that are managed by some people/institutions, and you do not know why...”* (IEO researcher); *“At this moment we do not know where the management stage of Cabrera is heading towards”* (Tursiops researcher).



5.1.3 Capacity for joint action

Capacity for joint action refers to the sharing of resources and creation of governance arrangements that underlie the way for achieving a common purpose; hence its importance (Emerson et al., 2012). The original evaluation framework included indicators i-iv presented next. Nonetheless, the first indicator is renamed as displayed below and the fifth indicator ‘*capacity development*’ was added after the empirical confrontation.

i. Procedural and institutional arrangements – Renamed for bi-directional relationships

<i>Description</i>	<i>Level</i>
There is clarity and flexibility concerning actors' roles and relationships	Moderate: There is flexibility but not clarity concerning actors' relationships

As explained previously in the indicator ‘*clarity on tasks definition*’ the term flexibility is added and measured in this indicator instead. It fits better because, in the author’s opinion, relationships have traits of flexibility (e.g., Sometimes individuals speak more often with certain stakeholders depending on the interests they have in that period. Or other times new relationships need to be built and this requires changing the procedures/locations etc.). Alternatively, as displayed above in strikethrough, the term ‘roles’ is deleted from this indicator because the indicator ‘*definition*’ already mentions that clarity regarding tasks, which is considered a synonym of roles. Moreover, the indicator’s name of ‘*procedural and institutional arrangements*’ is changed for ‘*bi-directional relationship*’ because what is being measured is the concept of relationships across actors to obtain the procedural and institutional arrangements. Hence, it is an overarching term which for clarity purposes has been set as the name of the indicator.

Findings show that in the case of Cabrera, there is not clarity but there is flexibility concerning actors’ relationships. That is why the level of bi-directional relationships is **moderate**. Most interviewees said there is sharing of knowledge and communication across sectors i.e., there is flexibility in terms of their relationships. For instance, CSIC and IEO researchers pointed out “*sometimes we organize informative talks with fishermen to present how is the state of the marine resources*”. Others highlight there is active communication between Oceana and the National Park



administration “now we are helping them with the first outline of proposals in terms of fishing regulations inside the MPA” (Oceana researcher). Nonetheless, there is a lack of clarity on how to foster such links between actors at multiple levels, as it is not always the case when these relationships are adequately established “If I had known last 22nd April there was a workshop on fishing issues in Cabrera, I would have attended, but there is a gap in how the information flows in the fisheries sector” (artisanal fisherman). On another note, the fisherman also argues “I would like it if there was more interaction across artisanal fishermen and NGOs and academic institutions, I think at the end of the day, we all want the best for Cabrera”. Alternatively, researchers reflect on the interface between policy and science to achieve procedural and institutional arrangements. One IEO researcher points out “I think the link between policy and science is not there, and if there is some, I only see it between Oceana and the Parks’ administration”. What is also interesting is that the National Park direction, as argued before, acknowledges there is room for improvement in terms of making more explicit that there is a joint decision-making infrastructure. This means all actors involved in Cabrera coordinate their interests and there is not a strict centralized way of working along this expansion process. Nonetheless, nowadays there is no clarity in that respect, therefore the indicator scores moderate.

ii. Leadership

<i>Description</i>	<i>Level</i>
The initiative is taken, and the direction is given by actors	Moderate: The initiative is taken, but the direction is not given by actors

In the expansion process of Cabrera's MPA, the initiative is taken, but the direction is not given, as a result, this indicator scores **moderate**. All actors agree on the fact that the leadership on the design stage was taken by Oceana. This NGO carried out several oceanographic campaigns during 2009-2014 and thanks to them, crucial results were obtained which, in turn, boosted the expansion process. Apart from them, the National Park administration took the leading role too, as it became part of the political agenda of Balearic Islands to implement such enlargement.

Nowadays, there is also a general agreement about the clear leadership of the regional National Park and fisheries administrations. However, most believe that they do not give enough directions although they are willing to make things work. A researchers from CSIC highlights “the problem is



that managers/administration officers do not give us specific details for example to keep track of certain species, or to study specific processes that could benefit the MPA". Additionally, one member from Oceana said "the last workshop on April 22nd was our idea, it was just organized to get things to work again and see if we could help to update the plan of regulations of use and management of the MPA soon". This suggests that the administration did not get directly involved in the workshop's organization (i.e., they did not give directions). Despite that fact, they participated in the event.

iii. Knowledge

<i>Description</i>	<i>Level</i>
Awareness is raised and shared knowledge is generated by actors	Moderate: Awareness is raised but shared knowledge is not generated by actors

In terms of knowledge, findings show there are **moderate** levels in Cabrera, as awareness is raised but shared knowledge is not generated. Every interviewee is aware of the fundamental role of knowledge when it comes to managing the MPA "knowledge is crucial if we want to have successful results in Cabrera" (Tursiops researcher). Sharing of knowledge is also present in the collaboration dynamics. As expressed by a National Park officer "fishermen let us know for example if there are dolphins in the area near where they fish, they also share with us where are the most valuable places for fishing and why... this gives us a good overview of the MPA in regard to biodiversity aspects". Others argue that they always share the knowledge they have obtained about Cabrera in their online database (Oceana researchers). In terms of academic institutions, they also share information on the area. However, for reasons of academic publications and time concerns, sometimes results come to light later than desired. What is clear is that new knowledge during the management stage of Cabrera's MPA has not been created deliberately for the expanded National Park. "Maybe for other oceanographic campaigns we've obtained valuable results to know the area better, but it was not the main plan of the campaign to study the MPA" (IEO researcher).

In sum, there is awareness about the importance of knowledge to manage the MPA, but new knowledge on the expanded protected area is not generated (yet). Hence, the indicator scores moderately.



iv. Resources

Description

Resources in terms of staff and funding are mobilized and shared across actors

Level

Low: Resources in terms of staff and funding are neither mobilized nor shared across actors

In Cabrera's MPA interviewees perceived that the resources were grossly insufficient. Thus, they score **low** because neither staff nor funding was mobilized during the expansion process. *“If we had more personnel helping us with different tasks, we'll be faster and the management process for the 90,800.00 ha will be smoother. Now we are working with even fewer people than the ones we were when the MPA was smaller”* (National Park officer). Other sectors like academic institutions coincide on that arguing *“it's impossible to manage such a big MPA with the scarce resources we have”* (CSIC researcher). Yet, as highlighted by a fisheries administration officer, funding is supposed to arrive early to the MPA *“the new green tracking boxes will be installed soon to all artisanal boats in Mallorca, and they will, of course, benefit the National Park to keep track on the fishing activity”*. Hence, there are reasons to believe that efforts to upgrade the scarce and insufficient levels of resources are being made.

v. New indicator: capacity development

Description

The enabling environment (island), organizational (MPA) and individual levels influence each other

Level

High The enabling environment, organizational and individual levels influence each other in a fluid way

It turned out that during the interviews most of the actors pointed to the importance of living on an island and having worked in the National Park since time ago, hence suggesting that they knew each other well and that these capacities facilitated the collaboration during the expansion of the MPA. For this reason the indicator ‘*capacity development*’ has been added to the evaluation framework. *“Capacity development is the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their development objectives over time”* (UNDP, 2009,



p.5). The strength of individuals, organizations and societies depends on and determines the strength of the others. “Capacity development starts from the principle that people are best empowered to realize their full potential when the means of development are sustainable – home-grown, long-term, and generated and managed collectively by those who stand to benefit” (UNDP, 2009, p.5).

As it is a newly added indicator the rest of the scoring system is presented. For the level **moderate**: the enabling environment, organizational and individual levels influence each other slightly. For the level **low**: the enabling environment, organizational and individual levels do not influence each other.

This indicator - ‘*capacity development*’ - is then included in the evaluation framework and it scores **high**. Most actors referred to the ease in which they could contact each other if they needed to. “*Mallorca is an island, we know each other for years, if we want to talk about something related to Cabrera, we can communicate with each other easily no matter where we work at*” (fisheries administration officer). Along similar lines, others underline the time aspect and its importance to make the process more fruitful in terms of collaboration. “*Since the creation of the National Park, we’ve been almost the same actors all these 30 years. This facilitates our way of working and collaborating, managing the expanded MPA is not the same as if creating it from scratch*” (Oceana researcher).

All in all, these three nested levels, i.e., environmental (island), organizational (MPA) and individual, strengthen each other as evidenced during the interviews; thus, the capacity development in Cabrera’s expansion process is considered relevant and fluid.

5.2 Evaluative framework after the empirical confrontation

Table 5 summarizes the main takeaways from the evaluation and shows the evaluation framework after being confronted with empirics. It illustrates the measured indicators and their scoring level according to interviewees’ perceptions for Cabrera’s MPA expansion process.



Table 5. Evaluation framework after the empirical confrontation

<i>Criteria</i>	<i>Indicators</i>	<i>Level</i>
<i>Principled engagement</i>	<i>Discovery</i>	High: There is a diversity of worldviews and shared concerns/interests
	<i>Participation</i>	Moderate: There are irregular meetings with involved actors
	<i>Deliberation</i>	High: There is honest communication between all actors
	<i>Clarity on tasks definition</i>	Low: There is neither clarity nor flexibility regarding actors' tasks and expectations
<i>Shared motivation</i>	<i>Mutual understanding</i>	High: Actors understand and respect others' opinions and interests
	<i>Shared commitment</i>	Moderate: Occasional engagement of all actors takes place
	<i>Internal legitimacy</i>	High: The collaboration process is representative and transparent
	<i>Accountability</i>	Moderate: Democratically legitimized bodies are enabled to monitor and evaluate actors' behaviour but are not able to induce them to modify that behaviour according to the regulations of use
<i>Capacity for joint action</i>	<i>Bi-directional relationships</i>	Moderate: There is flexibility but not clarity concerning actors' relationships
	<i>Leadership</i>	Moderate: Initiative is taken but the direction is not given by actors
	<i>Knowledge</i>	Moderate: Awareness is raised but shared knowledge is not generated by actors
	<i>Resources</i>	Low: Resources in terms of staff and funding are neither mobilized nor shared across actors
	<i>Capacity development</i>	High: The enabling environment, organizational and individual levels influence each other in a fluid way



5.3 Interpretation of results

Figure 10 below shows the conceptual framework filled in with the colour coding approach, while it is the cornerstone to answer the assumption put forward at the beginning of the thesis. This starting assumption was that a fruitful collaborative process as conceptualised by Emerson et al. (2012) is conducive to support. Hence, *if the iterative cycle of collaboration is reinforced (green colour predominates), then the support of Cabrera's MPA is strengthened*. On the contrary, *if the iterative cycle of collaboration is weakened (red colour predominates), then the support of Cabrera's MPA is undermined*. In addition, some reflection is provided on the strengths and weaknesses of the scoring of the MPA. Overall, the section answers the second sub-question: *SQ2) How well does Cabrera's MPA expansion score on these criteria and indicators?*

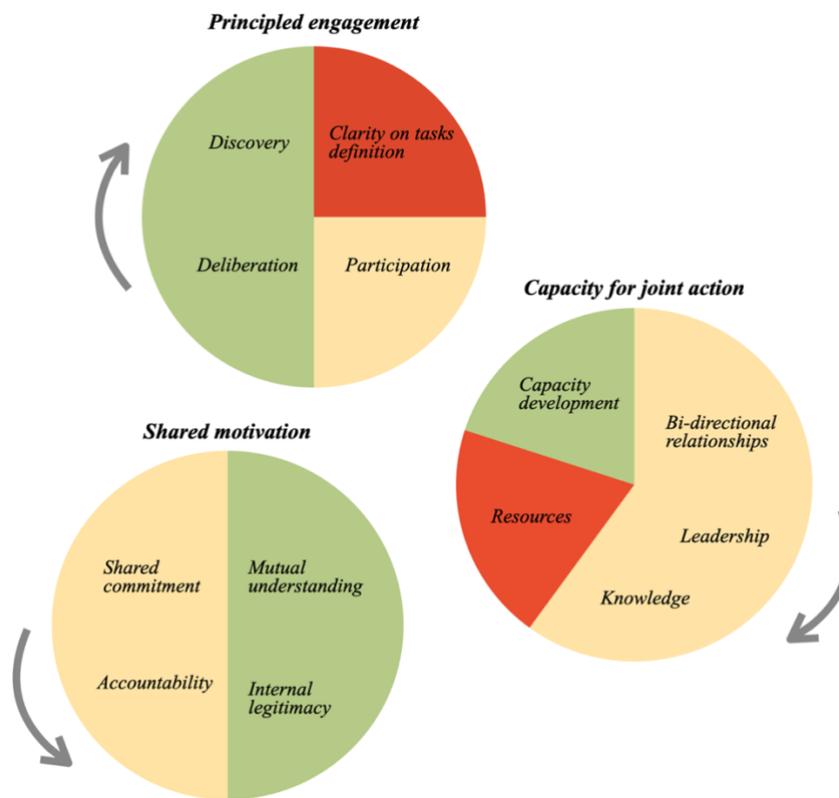


Figure 10. Overview of results

As displayed in Figure 10 the collaboration dynamics of Cabrera have several strengths as well as weaknesses as perceived by interviewees. Starting with the strengths of the expansion process, it is important to highlight that the collaboration process includes many different worldviews with shared concerns and interests – ‘discovery’–, which is positive because this variety of viewpoints facilitates the collaboration process. In addition, all actors in Cabrera's MPA do show honest communication



between them – *'deliberation'*. Besides, those actors possess the ability to understand and respect others' opinions and interests – *'mutual understanding'*. On top of that, the MPA expansion process is favourable in terms of representation and transparency – *'internal legitimacy'*. Lastly, Cabrera's enlargement is positive because actors have obtained, strengthened and maintained the capabilities to set and achieve their development objectives over time, hence there is fluid influence across individuals, organizations and society – *'capacity development'*. These aspects of the collaborative governance dynamics score high and are beneficial for the collaboration process and community support.

Carrying on with the shortcomings and points of further improvement, it appears that there are numerous participation tools and actions in Cabrera's MPA, however, the frequency of such meetings is moderate – *'participation'*. In addition, actors are committed to the expansion process, but such commitment is only complete if they are equally willing to participate and have a sense of duty – *'shared commitment'*. Furthermore, because the plan of regulations of use and management is not updated yet (it is where the zoning rules are defined), and the declaratory law of the expanded MPA is written yet neither, it is argued that democratically legitimized bodies are enabled to monitor and evaluate actors' behaviour; however, they are not able to induce them to modify that behaviour according to the normative requirements – *'accountability'*. Regarding the relationships across actors, it is the case that in Cabrera there is not clarity but there is flexibility concerning actors' relationships – *'bi-directional relationships'*. As far as taking the initiative is concerned, Cabrera's expansion performed well, nevertheless a specific direction was not given – *'leadership'*. Besides, awareness has been raised but shared knowledge has not been generated – *'knowledge'*. Furthermore more *'clarity on tasks definition'* and more *'resources'* are needed as these two indicators scored the lowest. Nonetheless, there are hints about the reactivation of the development (and updating) of the plan of regulations of use and management of the MPA, as highlighted by some interviewees. In addition some argued that there are indications that resources are arriving soon to the MPA. These facts would upgrade the performance of both indicators in the future.

On a different note, referring back to the assumption, the current picture of the iterative cycle of collaborative governance during the expansion process of Cabrera's MPA seems to be stagnated. This indicates that support in the collaboration dynamics in the MPA is restrained (6/13 indicators scored yellow, i.e., moderate). However, based on the fact that there is more green than red (i.e., 5/13 indicators that score high in comparison with 2/13 indicators that score low) we can hope that, if things do not substantially change, the virtuous collaborative governance cycle is reinforced and then, support



of Cabrera's MPA is strengthened. Despite they are only two out of thirteen indicators that score low, those should not be overlooked, as they may lead to undermined support at a later stage, because the cycle involves repetition. This iterative process is in turn influenced by all the components over time, although their relative importance may vary along the process (Emerson et al., 2012).

Linking that aspect of relative importance and significance of each indicator, Emerson et al. (2012) invite researchers to identify the elements (indicators in this evaluative research) that are the most necessary for each governance setting. Following their advice, this thesis argues that when governing this regional MPA, the indicators that ought to be present and score high indisputably are 'accountability', 'clarity on tasks definition', 'participation' and 'bi-directional relationships'. The rationale behind this selection is explained in the following discussion chapter (section 6.3). All in all, Cabrera's MPA scores moderate in their collaborative governance dynamics. Its collaboration cycle is stagnated in terms of collective support, although the interviewee's perceptions suggest that the virtuous cycle (current picture) points towards an increase rather than a decrease of support.

5.4 Results of the validation workshops

This section answers the third and last sub-question: *SQ3) What degree of transferability do MPA experts assign to the empirical findings of Cabrera?* As seen in Appendix C, the individual workshops with experts (Table 3) addressed the transferability of results regarding the Spanish National Parks of Doñana (Andalucía) and Islas Atlánticas (Galicia) as they cover maritime territory, and they have prospects of being enlarged too (OCEANA, 2017). In addition, transferability was discussed for the marine Areas Beyond National Jurisdiction (ABNJ) as two of the five experts were legal specialists on these areas. ABNJs are located on the high seas, cover over 60% of the ocean, and are governed under the United Nations Convention on the Law of the Sea because they are beyond national jurisdiction.

Overall, findings of these five individual workshops with experts, suggest that empirical outcomes like the Table 5 can be transferable and used in national and international MPA settings to a large extent, as the dynamics depicted in the MPA might be relevant across different ocean contexts. E.g., MPAs in ABNJ, in national or international waters, like the Pelagos sanctuary for Mediterranean marine mammals (Notarbartolo-di-Sciara et al., 2008). The workshops' main results are presented next.



- i. The expert workshops suggested that the administrative context and stakeholder analysis are rather similar for the cases of Doñana and Islas Atlánticas in comparison with Cabrera.**

The structure of '*patronato*' (i.e., advisory body made up of the administrations, associations and organizations related to the National Park) is present in these two cases too (MITECO, 2021a). As pointed out by specialists, replication of results for the case of Doñana is more difficult than for the case of Islas Atlánticas. That is because although Doñana has almost 30 kilometers of protected beach, numerous salt marshes and wetlands, the marine fauna and flora under protection are almost minimum, as they are restricted to the first kilometres of internal waters - i.e., coastal sea like water within bays. Instead, the case of Islas Atlánticas includes territorial waters too - i.e., the territorial sea extends up to 12 nautical miles from the coast's baseline (Brisman, 2011). In fact, the MPA of Islas Atlánticas encompasses 7,285. 20 maritime hectares (MITECO, 2021c).

For this reason, the transferability of results for the national context is higher for the scenario of Islas Atlánticas as it bears more resemblance in terms of cartography (archipelagos), dimensions (ha), marine use (fishing and tourism activities) and actors involved (National Park administration, fisheries administration, academic institutions, NGOs, artisanal fisherman) with the present research. Moreover, Islas Atlánticas' MPA was created in 2002 (MITECO, 2021c). According to experts, this pre-established scenario acts as an opportunity to set collaborative mechanisms more easily than if creating an MPA from scratch, as would happen with Doñana because the MPA is almost non-existing (in terms of dimensions and the derived contextual scenario).

- ii. Specialists pointed out that the administrative context and stakeholder analysis are rather different for the cases of ABNJ.**

According to specialists, Figure 9 shows the typical case of implementation of an environmental policy, where government actors hold the most influential positions and civil society is divided into groups. Those whose interests are in line with the policy objective and those who do not agree.

Moreover, experts pointed out that it is possible to look at MPA processes in ABNJ through the lenses of stakeholder analysis (i.e., interest-influence matrix). What was emphasised during the workshops was that some actors who may not play a role in ABNJ are artisanal fisherman, as they do not work in international waters away from the coasts. Instead, they may appear actors such as merchant vessels and industrial fishermen who work on the high seas.



Moreover, the decision-making in ABNJs is at the level of the state, which is in turn composed of various ministries like the one of environment and fisheries. There are also various NGOs such as WWF, Greenpeace or Sea Shepherd that act as observers in ABNJ's treaties. NGOs have taken initiatives to foster greater ocean protection in international waters too, like the case of Oceana in Cabrera. Changes in ABNJ are related to the attendance of different intergovernmental organizations that collaborate. Some international actors mentioned during the workshops include i) The North-East Atlantic Fisheries Commission (NEAFC): it is the regional fisheries management organization mandated to manage most fisheries in the Oceanic Northeast Atlantic ecoregion. ii) The OSPAR Commission is the regional environmental management organization that promotes protection and conservation in the Northeast Atlantic. iii) The International Maritime Organization (IMO): it is the regulatory authority for shipping. iv) The International Whaling Commission (IWC). v) The North Atlantic Marine Mammal Commission (NAMMC). vi) The International Seabed Authority: it is the regulatory authority for mining. vii) The Food and Agriculture Organization (FAO): is a specialized agency of the United Nations that leads international efforts to improve nutrition and food security.

This global context of ABNJ implies that the high seas are open to all states, which adds layers of complexity because there are more actors and more levels of governance than in regional MPAs such as Cabrera.

iii. The expert workshops confirmed the adequacy of utilizing the evaluative framework (Table 5) for both MPAs in national waters and MPAs on the high seas.

The expert workshop confirmed the relevance of the indicators to evaluate collaborative governance in both regional and international settings. International law experts argued that in legal analyses they use similar indicators like the ones highlighted in Table 5. However, the methods to conduct the evaluation do not consist of interviews, but on document analyses on meeting reports, or legal documents and other related primary sources.

Besides, concerning the policy implications, it was argued that influential indicators in legal settings were: i) '*Mutual understanding*'. Emphasis was placed on the importance of finding a common language during negotiations to achieve a shared understanding. ii) '*Clarity on tasks definition*'. This indicator was associated with the mandates in legal issues. iii) '*Leadership*'. Experts highlighted the fact that international cooperation processes require clearly led and properly organized meetings and negotiations (e.g., taking initiative and giving direction regarding participants,



timeframe, type of outcome and legal value of the outcome). Besides, 'accountability', 'internal legitimacy' 'knowledge' and 'resources' were also considered decisive in legal and polity aspects.

Whereas in terms of managerial implications, it was especially highlighted the relevance of i) 'leadership', ii) 'bi-directional relationships' and i) 'internal legitimacy'. Regarding the latter, it was argued that it is not only a legal responsibility of the process itself, but also it is in hands of the project leader to maintain and ensure representation and transparency. Apart from these three indicators, all the others from Table 5 were also viewed as highly relevant when managing an MPA.

iv. Experts corroborated that the enlargement process of MPAs benefit from the already established collaboration from previous endeavours (when the MPA existed and was smaller in size).

This pre-condition facilitates the collaborative governance dynamics. This means that results obtained from this study might not have been the same as if evaluated in a recently created MPA (not expanded) because actors still need to get familiarized with the collaboration mechanisms between them. In turn, policy and managerial recommendations obtained in this study are preferably transferable to a pre-existing MPA, such as Islas Atlánticas' for example.

v. Specialists confirmed the relevance of utilizing a multi-sectoral approach⁶ for governing MPAs.

On the one hand, MPAs in ABNJ cannot be government-led by one state only; they are led by an international body and this body, in turn, represents the different stakeholders. Such diversity in actors (e.g., regional fisheries and environmental management organizations, specialized agencies, different ministries from various countries) is essential to grasp the legal, economic, and environmental requirements necessary to gain the support and fruitful collaboration in the area under protection. On the other hand, MPAs in national waters cannot be government-led exclusively either. Sectoral approaches in environmental governance are prejudicial. Some of the specialists expressed the deadlocks that can be triggered in the management of MPAs, if cooperation and holistic approaches are not in place.

⁶ "Multi-sectoral approaches refer to the collaboration between organisations in different areas of policy (e.g. health, social, environment) and different sectors (e.g. public, private, third), as well as communities and people, working together to achieve policy outcomes. Typically, multi-sectoral approaches involve holistic inter-organisational and inter-agency efforts across key and relevant sectors, to address common and specific goals" (EC, 2017, p.5).



6. Discussion

This chapter reflects on the research approach, places the findings back in literature, discusses the implications for future research and practice.

6.1 Reflection on the research approach

Studying collaboration dynamics is inherently a daunting task because it is highly subjective. Nonetheless, it is still necessary to try to do it, as it expands our understandings of collaboration in MPAs (Jentoft et al., 2007; Hard et al., 2012; Hoelting et al., 2013). Contributions of this thesis include the direct and valuable experience of the sixteen interviewees on the MPA of Cabrera. Their open and detailed responses have enriched considerably the results of this study. Moreover, since the transferability of results was discussed with five renowned experts on water governance and MPAs, the points derived from the validation are considered solid and beneficial for the study, not only theoretically but also practically. On top of that, it is believed that the variety of languages used in this thesis (English, Spanish and Catalan) has overcome communication and cultural barriers and instead, this plurality has become an opportunity to grasp more detail on the points to answer the research question. Lastly, the novelty of this study is perceived as a major strength. Many of the references used in the research were published during these past few months, which makes the thesis timely.

Notwithstanding, there are some limitations too. Firstly, regarding data collection methods it is argued that if face-to-face communication had been possible, more in-depth results might have been obtained during the interviews. In addition, if observation on the field had been permitted, the evaluation results might have been more validated, rather than just using the technique of interviews. However, mobility restrictions due to the COVID-19 pandemic did not make it possible to go to Palma de Mallorca, Spain. Moreover, it is acknowledged that in respect of the category 'fishermen' (Table 2) only one artisanal fisher could be interviewed. As some other fishermen rejected to take part in this study. Either way, data was reaching saturation with the last three interviews as claimed in section 3.2. Hence, having interviewed sixteen individuals is not perceived as a major issue. What is also a shortcoming is that using interviews to generate data depends on interviewees' ability to express their opinions. It is admitted that as the questions embraced aspects of collaboration in Cabrera's MPA since 2015, participants' answers might have been slightly blurred, as the interview required them to recall how the design stage of the expansion process was six years ago. Another limitation is the fact that, as the case study strategy prioritizes depth over breadth, the transferability of the findings is partially reduced (Creswell & Poth, 2016). Nonetheless, the attempt to address this weakness was successfully



made following discussions with experts regarding the applicability of the evaluation framework and the overall degree of transferability of the findings. This was done when asking them pertinent questions as seen in Appendix C.

Carrying on with a critical reflection on the findings of Cabrera, it is relevant to mention that the expansion of its National Park is very recent, and it is an addition to a former MPA. This means that some of the traits that have been evaluated might have scored as they have (moderate and high mainly), due to the pre-established collaboration dynamics in the last thirty years. It is probable, as corroborated by specialists (see section 5.4) that these findings might not have been encountered in other MPAs that begin from scratch and still need to get familiarized with the collaboration mechanisms between the actors.

Lastly, reflecting on the coding process it is acknowledged that subjectivity could not be entirely avoided. As there is an inherent degree of uncertainty involved in every evaluation (Verschuren & Dooreward, 2010). Moreover, the evaluation of the indicators depends on the perception of the sixteen interviewees, not on the analyses of documents, reports or regulations. In any case, the evaluation and scoring process based on participants' answers was done straightforwardly. Having used the operationalization system (Table 4) helped substantially. As many of the operationalization indications assigned levels of high, moderate, and low to the indicators depending if two, one or any conditions were fulfilled respectively. Moreover, there was unanimous agreement on the answers provided by the actors inside their category. All NGO and academic actors had similar opinions; thus, it was clear what information to subtract from their categories. However, the answers provided by the groups of National Park administration and fisheries administration were not that unified, which made it harder to take out precise information for their categories. These differences in extracting takeaways may have influenced the comparing and contrasting process, and in turn, the scoring results. Nonetheless, the key findings (Figure 10) stand, as they go along with what experts have recently claimed in press (see Pherrer, 2021) and during the workshops (particularly experienced specialists in Cabrera have supported the key findings and agreed with them). Hence, there are reasons to believe that the internal validity of the findings is high.

Similarly, after having discussed with the participants of the workshop the generalisability of the findings, there is substantiation of their external validity too. A general lesson on how to mobilise support for the protection of MPAs is using multi-sectoral approaches and fostering actors' participation. A more specific lesson for ocean governance in international law settings is to use complementary evaluative approaches – apart from the use of primary sources – which may be the



perceptions of the international community on ocean treaties, e.g., through interviewing ministers, NGOs or policy-makers. By doing so, international collaborative governance may be explored more in-depth, and valuable insights on how to obtain global support – which is an urgent issue – might be obtained. Lastly, a specific lesson for the national level is to consider the recommendations of the evaluative approach for the case of the National Park of Islas Atlánticas. As there are strong similarities in its governance context with Cabrera. This MPA in Galicia might benefit from doing a self-critical analysis, e.g., thinking if they have a high, moderate or low level of the thirteen indicators. This may highlight points of further improvement for their setting. If that is the case, the recommendations put forward next (in 6.3) are potentially applicable for their MPA too.

6.2 Placing the findings back in literature

The collaborative governance framework of Emerson et al. (2012) has been tested in MPA governance research first time in the Mediterranean and proved its applicability in marine environments just as seen in Kossmann et al. (2016) for the Indonesian MPA and in Avoyan (2016) for the Black Sea Commission. What is more, this practical application has evidenced the suitability of using public administration literature in coastal SES. This is believed to contribute not only to ongoing scientific debates on governing MPAs in national and international waters, but also it contributes to Emerson et al. (2012) theory, as they express that their framework would benefit from critical applications to cases and examples of collaborative governance.

Besides, as a result of using the evaluation framework, collaboration mechanisms to meet the international thirty-by-thirty target of protecting at least 30% of the ocean by 2030 are further understood, especially for the cases of regional MPA's expansions. On top of that, one indicator has been removed – i.e., '*trust*' – and two new indicators have been added – i.e., '*accountability*' and '*capacity development*' – to the original framework derived from Emerson et al. (2012) (Table 1). Altogether these understandings have contributed to filling in the knowledge gap of lack of systematic insights into the evaluation of collaborative mechanisms on MPA's expansion processes. The case of Cabrera's MPA blends government-led approaches based on binding legislation and community-led approaches focused on involving local people in the decision-making process. It is a fact that their combination in MPAs is a challenge (Jones, 2002) as evidenced in this thesis with the indicators that score the weakest, i.e., low and moderate. This thesis suggests that the major barriers derived from this duality in governance modes, as far as Cabrera's regional MPAs and its collaboration dynamics is concerned are:



- Moderate participation: irregular instead of regular meetings take place.
- Moderate shared commitment: occasional instead of constant engagement of all actors.
- Moderate accountability: democratically legitimized bodies are enabled to monitor and evaluate actors' behaviours but are not able (although they ought to) to induce them to modify their behaviour according to the regulations of use.
- Moderate bi-directional relationships: there is flexibility but not clarity (although it should be) concerning actors' relationships.
- Moderate leadership: initiative is taken but the direction is not given (although it must).
- Moderate knowledge: awareness is raised but shared knowledge is not generated (although it ought to).
- Low clarity on tasks definition: there is neither clarity nor flexibility regarding actors' tasks and expectations (although there should be).
- Low resources: resources in terms of staff and funding are neither mobilized nor shared across actors (although they should be).

As the combination of government-led and community-led modes of governance in MPAs is incipient, there are few studies yet – apart from Gaymer's et al. (2014) – that have highlighted the challenges on how to merge this dual approach. Hence, through comparing these abovementioned barriers (derived from the evaluation results) with the ones detected by Gaymer et al. (2014, p.138-141), five obstacles are confirmed and three new ones are identified.

Corroborated challenges are related to “inadequate funding” (*resources*), “clear terms of reference”(*clarity on tasks definition*), “illegal fishing”(accountability), “continuity on the participation process”(participation), and “continuity of engagement”(shared commitment). Conversely, novel barriers on how to blend these two governance modes in MPAs correspond with clarity in *bi-directional relationships* amongst the MPA actors, giving the direction in the *leadership* process, and creating shared *knowledge* in the MPA.

It is also convenient to draw attention to the fact that most of these weaknesses on collaborative governance in Cabrera, illustrate a recurring pattern in environmental governance especially when it comes to the implementation of regional frameworks. This evidence means in practice that emerging regional topics in sustainable development face recurrent challenges, like to better address and institutionalize aspects related to e.g., climate adaptation (Runhaar et al., 2018) or related to the regulation of longline fishing aspects in protected spaces. This latter concern is particularly apparent in Cabrera's MPA because longline fishers are benefiting from the legal loopholes of the transition



measures (see section 5.2 '*accountability*'). Certainly, this ambiguity poses a risk for the ecological wellbeing of the MPA, and as the literature suggests (Van Leeuwen, Van Hoof & Van Tatenhove, 2012) these institutional voids should be filled with urgency in marine environments.

Summing up, MPAs are not a simple solution to ocean conservation but they are fundamental. As the clock is ticking on the thirty-by-thirty target, we have nine years left to take action. This urgency to commit to the goal could tempt some to take more hierarchical approaches, solely via legal measures to create MPAs. However, if collaborative governance is not in place there is a risk for the MPA to become a 'paper park⁷' because there may be numerous laws and regulations but lack of community compliance with such norms, ergo ecological degradation – as recently demonstrated by China's experience (see Hu et al., 2020). For instance, in the case of Cabrera if indicators scored insufficient (all in red) there would be weak community support (based on the assumption) and there would be ecological damages as argued by Christie et al. (2003). To set an example, if there was not principled engagement in the governance dynamics, actors would not act with integrity and conflict would arise, in other words, cooperation and the shared goal would not be achieved. Then, it is crucial to not overlook the importance of fruitful collaboration dynamics between MPA actors, as the synergies that may arise from such cooperation might be the key to accomplish the 30% goal of ocean protection by 2030. Furthermore, collaboration in MPAs ensures long-term benefits, as mirrored in the validation workshops, when experts suggested that the pre-established collaboration scenario in Cabrera played a positive role since 1991 which has been reflected in the current collaboration mechanisms in 2021. Overall, such positive long-term social relations should be pursued in ocean governance and conservation.

6.3 Implications for practice

To establish adequately the middle ground between the binding legislation and the involvement of local people in the decision-making, this Mediterranean MPA asks for policy and managerial requirements. The former include the development of the new updated plan of regulations of use and management of Cabrera's enlarged MPA and the enactment of its new declaratory law. Those legal requirements may increase the '*clarity on tasks definition*' and '*accountability*' indicators, which in turn will lead to policy implications as discussed below. Instead, managerial requirements consist of

⁷ A legally established protected space where experts consider that current protection activities are insufficient to stop deterioration (Dudley & Sonton, 1999).



increasing further actors' interpersonal skills, which given the interviews' results, could be enhanced by boosting further '*participation*' and '*bi-directional relationships*'. Those changes will result in managerial implications as argued next. In sum, these practical implications hinge upon the performance of the indicators '*clarity on tasks definition*', '*accountability*', '*participation*' and '*bi-directional relationships*'. This is why they have deemed the most significant components of the evaluative framework (Table 5) for the case of Cabrera's MPA.

When it comes to policy implications concerning the indicator '*clarity on tasks definition*' it is argued by Emerson et al. (2012) that such clarity is vital during the initial steps of the collaboration. As put forward in this thesis, Cabrera's expansion is in its initial steps of the management stage (only two years old). Therefore, this clarity on tasks definition is fundamental at the moment. For this reason, it is key to avoid the misinterpretations caused by the diversity of regulations such as those indicated in the outdated plan of regulations of use and management (BOIB, 2006), in the Barcelona Convention Protocol (Art.11 in EEA, 1995), in the initial law of the National Park (BOE, 1993) as well as in the judicial resolution (BOE, 2019). As pointed out by most interviewees that lack of clarity hampers successful conservation. On the other side, policy implications are related to '*accountability*' as argued by Bovens et al. (2014) and Bovens (2007). Holding actors accountable is crucial in Cabrera's MPA too. Not only because accountability systems will benefit from the monitoring and control activities, but also because accountability will aid smoother law enforcement in the future (once the new declaratory law of the expanded MPA is created). This advice might help overcome the divide between expectation and action in the MPA according to Messner (2009).

Conversely, when it comes to managerial implications it is argued that on the one hand, if actors do not participate it is impossible to work together to achieve common objectives. In other words, '*participation*' is a prerequisite for fruitful collaborative governance dynamics in government and community-led MPAs in national waters. On the other hand, further advice that follows from this research is related to the (managerial) importance of the indicator '*bi-directional relationships*'. It is claimed that the mode of governance in Cabrera's MPA resonates well with Driessen's et al. (2012) definition of environmental interactive governance. According to these scholars, the label '*interactive*' is applied when the actor base is broad and governments, market actors, and civil society are collaborating in equal terms. Although in Cabrera market actors are not strongly involved in the governance of the MPA, they have been occasionally included. For instance, in the decision-making process of 2019 (when the expansion of the MPA was implemented) the tourism industry had a say, as the sustainable image of the MPA was beneficial for their economic activity. Hence, market actors



collaborated with civil society and government as pointed out by interviewees (see section 5.2 'discovery'). In addition, other actor features of interactive governance include the agreement on roles, positions and procedures, trust and knowledge (Driessen et al., 2012). It is brought to the authors' attention the similarity between this conceptualization of interactive governance with the current system of government-led and community-led governance approach that is in place in Cabrera. Therefore, it is suggested to enhance the indicator '*bi-directional relationships*' (namely increasing the clarity concerning actors' relationships) by stating more explicitly that Cabrera's governance is characterized – based on Driessen et al. (2012) framework – as an interactive governance mode. Thanks to that, it is considered that actors may interact with each other more clearly to make joint decisions. This type of interactive governance has many features. For instance, concerning the policy-science interface, there is transdisciplinary, i.e., there is expert and lay knowledge in networks, and there is emphasis placed on integrated and time-and-place specific knowledge. These traits are in fact in Cabrera, as evidenced in the results section when describing the thematic analysis on the indicator '*knowledge*'. An additional characteristic of interactive governance has to do with policy integration aspects. Meaning that policy sectors and policy levels are integrated in a multi-sectorial way. This is also evidenced in the case of study because many interviewees pointed out that multiple actors like the ministries of environment and fisheries interact to balance interests and reach common objectives (long-term conservation objectives and short-term economic benefits derived from fishing activities). Besides, this point of multi-sectorial approaches was brought up to light and emphasized during the validation workshop, where experts confirmed their importance for both national and international MPAs.

On a different note, the implications for practice from such multi-sectorial approaches are significant also at multiple governance levels. As MPAs are driven by overarching international targets, this means there are different levels of governance (e.g., global, European, Spanish, Balearic) that interact. Particularly, recommendations on the global level – as already discussed – entail using complementary evaluative approaches to the primary sources in international law settings. It is believed that interviewing individuals who take part in ocean governance arrangements, might offer useful insights to overcome conflict. For instance, by conducting a similar interview as the one displayed in Appendix A but addressing other questions on topics such as sustainable shipping, conservation, renewable marine energies, or mariculture. Consequently, the picture derived from the evaluation of collaborative governance in the marine international community may show us an interesting view of the global support for ocean action in different realms.



Aside from these practical implications that could be derived from the research, this thesis has permitted us to appreciate how the three components (criteria) '*principled engagement*', '*shared motivation*' and '*capacity for joint action*' of the framework of Emerson et al., (2012) work as gears iteratively and interactively. This means that once one of them is generated it enriches and maintains the others – note well that this is represented by arrows in Figure 10. For instance, when interviewees pointed out aspects of '*capacity for joint action*', such as '*leadership*' i.e., taking initiative and giving direction, it could be noticed that leadership sustained aspects of '*shared motivation*' like '*shared commitment*'. That is because continuous engagement of all actors is argued to be maintained when initiative and directions are highly present in the governance setting and dynamics.

Alternatively, when it comes to the concepts of '*principled engagement*' such as '*discovery*' i.e., different worldviews with shared concerns and interests, it could be appreciated that it enhances the concepts of '*shared motivation*' like '*mutual understanding*'. The reason for that, as far as this study has substantiated, is that there is more understanding and respect for others' opinions and interests when the diversity of actors' opinions is there. Otherwise, if there was no plurality of worldviews, the understanding of others' interests would not exist, as they will be unique and will then be considered statements rather than opinions. This point is highly important to bear in mind, as it implies that the indicators that score moderate and low now could influence negatively, at a later stage, the ones which score high. As a result, the collaboration cycle could be affected in terms of losing support and derived ecological affectations. Therefore, it is suggested to place efforts on maintaining and improving the scoring of all indicators equally. Maintaining and improving these scores in practice – in Cabrera – might entail allocating an ocean governance department inside the regional National Park's administration, to not only keep track of the indicators' performance but also to address their weaknesses as soon as they are detected. In addition, they may require (urgent) normative progresses to implement the legislative enactment of the National Park's new declaratory law. Lastly, all actors involved in the MPA dynamics could take part in the decision-making process more actively (i.e., more community participation) in order to create new shared knowledge for the 90,800.00 ha. For instance, further policy-science connection could be fostered (e.g., IEO and CSIC researchers coordinating efforts with fisheries administration) with the aim to create synergies in both dimensions; policy and managerial. This will help to improve the scoring of the collaborative dynamics substantially, in particular for the indicators '*knowledge*', and '*bi-directional relationships*'.



Besides, by incorporating such scientific inputs in policy processes, positive responses to the MPA may be triggered, as illustrated by Funtowicz and Ravetz (1993) in their post-normal science⁸ approach.

Along with these recommendations to government and community-led MPAs, it is suggested to i) monitor actors with low levels of interest and influence on the MPA (e.g., recreational and industrial fishermen), ii) inform actors with high interest and medium influence on the MPA (e.g., academic institutions and artisanal fishermen), iii) maintain those actors with medium interest and high influence on the MPA satisfied, and iv) boost active collaboration between those actors with high levels of interest and influence on the MPA (e.g., central and regional National Park administration and Oceana).

Last suggestions for Cabrera's MPA stemming from the findings call for two aspects. The first is upgrading the indicators that do not score high. Meaning: i) More frequency in meetings. One global meeting (with all actors) could take place per trimester, and when appropriate the number of sessions could be increased. ii) Enhance clarity with tasks and expectations. iii) Promote more continued engagement between all actors to establish further collaborative approaches in the MPA. iv) Enhance the capacity of democratically legitimized bodies to modify the behaviours of users according to the regulations of use. v) State more clearly what is the governance approach followed by the MPA. More clarity on the governance mode that is established in the MPA might be beneficial to boost bi-directional relationships and make more explicit their non-hierarchical but interlinked and synergistic nature instead. The governance system in the National Park of Cabrera depends on joint action to achieve the desired goals. By emphasizing this aspect, the current managerial mechanism in the MPA might be more conducive to collective support. vi) Give specific directions when leading the process. vii) Generate shared knowledge in the MPA. viii) Allocate funding and staff resources.

The second is maintaining the indicators that score high. This implies: i) continue including diversity of worldviews in the governance system, ii) sustain honest communication between actors, iii) uphold mutual understanding, internal legitimacy, and capacity development.

⁸ Post normal science is an approach based on the use of science to (environmental) problem solving, where “facts are uncertain, values [are] in dispute, stakes [are] high and decisions are urgent” (Funtowicz & Ravetz, 1993, p.744).



6.4 Implications for future research

When it comes to the potential for follow-up research five main topics become apparent. Firstly, studying 'trust' seems a promising pathway for future research on MPAs. In this thesis, the indicator 'trust' was deleted from the framework after empirical confrontation because it was almost a synonym of the indicator 'internal legitimacy'. Scholars argue that "the presence of trust in a relationship cannot be asked directly but needs to be observed and explored in different ways" (de Vos & Van Tatenhove, 2011, p. 219). Therefore, future studies on trust relationships in MPAs should be developed by the conduct of observations on the field rather than of interviews exclusively. If such an evaluation of trust is done, the new evaluation framework (Table 5) will be enriched and complemented.

Moreover, the issue of trust is considered to be embedded in this thesis on the indicator '*bi-directional relationships*' as it is an element that individuals might have or not have and this, in turn, influences the two-way relationships across actors. Alternatively, the other indicator '*knowledge*' is probably influenced by the presence of trust too, as most likely actors will share and create joint knowledge if they trust each other first. Exploring these aspects along those lines is considered relevant for MPA expansion processes because as pointed out by de Vos and Van Tatenhove (2011) when new actors get involved in (fisheries) arrangements, which are inherent in MPAs, there are shifts in rules and discourses, subsequently, there are changes in trust too. Given that MPA enlargements, incorporate new governance actors, as discussed in section 5.4, and that trust is crucial in collaborative governance while it is hard to achieve (Thomson & Perry, 2006), trust relationships should not be underestimated but instead explored further in future MPA governance studies.

Secondly, applying the evaluation framework to ABNJ deserves additional study. One reason is that at the moment, there are ongoing negotiations on the Biodiversity Beyond National Jurisdiction Treaty. This treaty is being updated because since the year 1982 when the United Nations Convention on the Law of the Sea was developed, there have been scientific and technological breakthroughs that have made the ocean ABNJ more accessible to human activities, which poses a threat to marine biodiversity in unimaginable ways back in the eighties (Humphries & Harden-Davies, 2020). Therefore, using and adapting this evaluation framework to the current context of the International Law of the Sea is an interesting and urgent area of study. It is envisaged to evaluate the cooperation across states and intergovernmental organizations to grasps general conclusions on the international community (e.g., NEAFC, IMO, IWC, NAMMCO, FAO) and its collaborative governance dynamics. Besides, the applicability of the evaluation framework might be useful in MPAs that are governed by



various states too. Like the case of the Pelagos Sanctuary for Mediterranean marine mammals, as it encompasses waters of Italy, Monaco and France (Notarbartolo-di-Sciara et al., 2008).

Thirdly, it is appropriate to explore the ecological impacts of the fruitful collaboration for future research. This study has focused more on the social aspect of the MPA however, it is pertinent to investigate the ecological status of the area to explore patterns between the governance process and the conservation state of the marine ecosystem. As the fruitful collaborative process will contribute to MPA protection based on the claims of Christie et al. (2003). Connecting such social and ecological results will not only add more value to Cabrera's MPA, but also it will build upon the strengths of this research and might increase our understandings of the governance of SES specifically related to MPAs. Those insights, in turn, might be useful for evidence-based transferability of results to other cases, such as the one of Islas Atlánticas.

Fourthly, follow-up research could explore the evolution of Cabrera's MPA. In particular studies might compare the current snapshot of the evaluation (Figure 10) with future states of the collaborative governance dynamics. By studying Cabrera's MPA longitudinally the assumption could be formulated not as a static picture but as a process instead.

Fifthly, researching the use of knowledge co-creation in marine policy development is interesting as it can enhance the governance of MPAs (Di Franco et al., 2020). Hegger et al., (2012) explored the success conditions for knowledge co-creation in regional climate change adaptation projects. Conducting similar attempts on marine environments offers promising insights as evidenced in Runhaar, Van der Windt and Van Tatenhove's (2016) work. They present the importance of including several types of shared knowledge and employing participatory processes for greater exchange of information and experiences in coastal contexts, in the Wadden Sea area. Hence, regional MPAs will most probably benefit from knowing the success conditions for knowledge co-creation that apply to their scenario/seas, such as the Mediterranean. For instance, it may be relevant to evaluate the necessity of bolstering knowledge co-creation, through the establishment of a bridging organization in Cabrera, as there is an influence between the national dynamics and the regional dynamics as recently observed (see Serra, 2021). Moreover, given that this MPA is a National Park, the connection of different levels of governance is indispensable.



7. Conclusion

It has been proven that community support in MPAs is fundamental for governing them. Moreover, if there is an absence of social support, there is also risk of ecological degradation in marine environments. Therefore, using the right kind of collaborative approaches in the governance of MPAs is essential.

Merging government and community-led (collaborative) governance approaches in ocean conservation has been recently recognized as the way forward. Its emerging realization, accounts then for the lack of systematic insights into the evaluation of collaborative mechanisms on the government and community-led MPA's expansion processes. This thesis has addressed this as the knowledge gap and has sought to answer the research question: *which lessons on how to realise support for the protection of MPAs can be derived from the evaluation of the collaborative governance dynamics of Cabrera's MPA?*

This case of Cabrera's MPA expansion (Balearic Islands, Spain), is a relevant case study because it mirrors the collaborative governance across different actors in the largest regional MPA of the Western Mediterranean Sea (90, 800.00 ha), as it has blended binding legislation with the involvement of the local community in the decision-making structure from the year 2015 until present.

This thesis has followed deductive, evaluative and prescriptive steps respectively to find answers to the main research question. Firstly, by deriving from collaborative governance literature a conceptual framework which was translated into an evaluation framework. Secondly, this framework (Table 1 on p.21 section 2.3) with three criteria, twelve indicators and a corresponding operationalization system (Table 4 on p.27 section 3.3) was applied to the empirics, by conducting sixteen interviews with actors who took part in the expansion process of Cabrera's MPA. Results consisted of a new framework of evaluation (Table 5 on p.56 section 5.2) and a snapshot of the various levels of performance of the indicators in the case of study (Figure 10 on p.57 section 5.3). Thirdly, discussions were held with water governance experts, who corroborated that Table 5 was applicable to evaluate collaborative governance in both regional and international MPA contexts.

All in all, collaborative governance has been overlooked when evaluating MPAs that utilize government and community-led approaches. This thesis has demonstrated that valuable lessons can be derived if using this type of governance, as it shows supportive and cooperative means to help to prevent 'paper parks' instead, as discussed in chapter 6. Such lessons are presented next.



Specific conclusions for this Mediterranean MPA indicate that it scores moderately across the majority of the indicators (i.e., 6/13) in respect to its collaborative governance dynamics. To establish adequately the middle ground between binding legislation and the involvement of the local community in the decision-making, Cabrera's MPA especially hinges upon the performance of its four most key indicators being; *'clarity on tasks definition'*, *'accountability'*, *'participation'*, and *'bi-directional relationships'*. They are the most important as they trigger both managerial and policy implications. This thesis has identified room for improvement in their measurements. Firstly, regarding the indicator *'clarity on tasks definition,'* it is relevant to enhance clarity on actors' tasks. This could be achieved by updating the plan of regulations of use and management, where the zoning rules of the enlarged MPA are defined. Secondly, concerning the indicator *'accountability'*, improvements could be made in the monitoring and control activities within the MPA, probably if the legislative enactment of its new declaratory law was implemented, as presently there is still a judicial resolution. Thirdly, concerning the indicator *'participation'* it is crucial that the National Park administration highlights and fosters it because if actors do not participate in the MPA it is not possible to work together to achieve common objectives. Lastly, for the indicator *'bi-directional relationships'* between actors, improvements can be made by not only giving them directions on how to be active in those non-hierarchical relations but also by letting them know they are included in the decision-making process of Cabrera's management.

General conclusions on how to realise support for the protection of MPAs point out that it is relevant to follow multi-sectoral approaches for governing marine environments. Besides, empirical confrontation proves that evaluating the indicators of *'accountability'* and *'capacity development'* illustrates important cooperative mechanisms. *'Capacity development'* upholds that the enabling environment (island), organizational (MPA) and individual levels influence each other to achieve their objectives over time. The means to attain the objectives consists of obtaining, strengthening, and maintaining such human development capabilities. These two indicators were not in the initial framework (Table 1), but practice suggests that they broaden the context to be explored in collaborative governance processes within MPAs.

Furthermore, this thesis has assumed that if the collaboration in the MPA is reinforced the support for the MPA is strengthened. Based on that, novel insights on the barriers to blend government and community-led approaches in MPAs show difficulties in three areas. Addressing them points to new ways of achieving more support for MPAs and therewith better marine protection.



One way is to create new shared knowledge in the MPA. Another is to establish clear bi-directional relationships amongst the MPA actors. The last one is to lead the process providing specific directions to the MPA actors.

In addition, the results chapter (sections 5.1 and 5.4) shows that pre-established MPAs that are to be expanded may have vantage points in terms of achieving a fruitful collaborative process as the collaborative mechanisms between actors are already in place from previous endeavours. Thus, exploring these areas further and considering their expansions is promising, as they hold bright prospects for protecting the world's ocean.

In conclusion, MPAs are not a simple solution to marine conservation but they are fundamental. As the clock is ticking on the international target of 30% of ocean protection by 2030, taking global action is inescapable and fruitful social relations should be pursued with urgency. Hence, it is worth using and improving collaborative governance in MPAs as it offers the right cooperation mechanisms to jointly achieve a protected ocean.



Bibliography

- Alvarez, M. (2021, June 8). *Coiba: Panama's Underwater Paradise Now Protected by Expanded Marine Protected Area*. Blog.padi.com. <https://blog.padi.com/coiba-panamas-underwater-paradise-now-protected-by-expanded-marine-protected-area/>
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of public administration research and theory*, 18(4), 543-571. <https://doi.org/10.1093/jopart/mum032>
- Avoyan, E. (2016). *Marine collaborative governance in the Black Sea: assessing the performance of Black Sea Commission*. [Master's thesis, Wageningen University]. <https://edepot.wur.nl/384221>
- Batory, A., & Svensson, S. (2019). The fuzzy concept of collaborative governance: A systematic review of the state of the art. *Central European Journal of Public Policy*, 13(2), 28-39. <https://doi.org/10.2478/cejpp-2019-0008>
- BOE. (1991, April 30). *Agencia Estatal Boletín del Estado*. Boe.es. <https://www.boe.es/boe/dias/1991/04/30/pdfs/A13642-13643.pdf>
- BOE. (1993, February 18). *Agencia Estatal Boletín del Estado*. Boe.es. <https://www.boe.es/eli/es/rd/1992/11/27/1431/dof/spa/pdf>
- BOE. (2019, February 19). *Agencia Estatal Boletín del Estado*. Boe.es. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2019-2215
- BOIB. (2006, July 11). *BOIB Num. 97. 11-07-2006*. Miteco.gob.es. https://www.miteco.gob.es/es/red-parques-nacionales/nuestros-parques/cabrera/PRUGCabrera_tcm30-62821.pdf
- Bovens, M. (2007). Analysing and assessing accountability: A conceptual framework. *European law journal*, 13(4) 447-468. <https://doi.org/10.1111/j.1468-0386.2007.00378.x>
- Bovens, M., Schillemans, T., & Goodin, R. E. (2014). *Public accountability* (Vol. 1). The Oxford handbook of public accountability.
- Brander, L., Baulcomb, C., van der Lelij, J. A., Eppink, F., McVittie, A., Nijsten, L., & van Beukering, P. (2015). *The benefits to people of expanding Marine Protected Areas*. University of Amsterdam–IVM Institute for Environmental Studies. <https://www.issuelab.org/resources/25951/25951.pdf>
- Brisman, A. (2011). United Nations Convention on the Law of the Sea. In D. K. Chatterjee, *Encyclopedia of Global Justice*. Springer. https://doi.org/10.1007/978-1-4020-9160-5_661



- Bryson, J. M., Crosby, B.C., & Stone, M.M. (2006). The design and implementation of Cross-Sector collaborations: Propositions from the literature. *Public administration review*, 66(5), 44-55. <https://doi.org/10.1111/j.1540-6210.2006.00665.x>
- Burgos, A., & Fernandez, D. (2014, March 15). Marine Protected Areas: Spanish context and the case of “Os Miñarzos”. *Letras Verdes*, 15, 30-54. <https://doi.org/10.17141/letrasverdes.15.2014.1256>
- Charles, A., & Wilson, L. (2009). Human dimensions of marine protected areas. *Marine Science*, 66(1), 6-15. <https://doi.org/10.1093/icesjms/fsn182>
- Christie, P., McCay, B. J., Miller, M. L., Lowe, C., White, A. T., Stoffle, R. W., ... & Lowry, K. (2003). Toward developing a complete understanding: a social science research agenda for marine protected areas. *Fisheries*, 28(12), 22-26.
- Christie, P., Bennett, N. J., Gray, N. J., Wilhelm, T. A., Lewis, N. A., Parks, J., & Friedlander, A. M. (2017). Why people matter in ocean governance: Incorporating human dimensions into large-scale marine protected areas. *Marine Policy*, 84, 273-284. <https://doi.org/10.1016/j.marpol.2017.08.002>
- Chuenpagdee, R., de la Cruz-Modino, R., Barragan-Paladine, M. J., Glikman, J. A., Fraga, J., Jentoft, S., & Pascual-Fernandez, J. J. (2020). Governing from images: Marine protected areas as case illustrations. *Journal for Nature Conservation*, 53, 125756. <https://doi.org/10.1016/j.jnc.2019.125756>
- Creswell, J. V., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. SAGE.
- de la Cruz-Modino, R., & Pascual-Fernandez, J. J. (2013, January 31). ¿Áreas marinas protegidas para mejorar la gobernabilidad local? El caso de la reserva marina de la restinga. *Revista Andaluza de Antropología*, 4, 10-32. <http://dx.doi.org/10.12795/RAA.2013.i04.02>
- de Vos, B. I., & Van Tatenhove, J. P. (2011). Trust relationships between fishers and government: new challenges for the co-management arrangements in the Dutch flatfish industry. *Marine Policy*, 35(2), 218-225. <https://doi.org/10.1016/j.marpol.2010.10.002>
- Dehens, L. A., & Fanning, L. M. (2018). What counts in making marine protected areas (MPAs) count? The role of legitimacy in MPA success in Canada. *Ecological Indicators*, 86, 45-57. <https://doi.org/10.1016/j.ecolind.2017.12.026>
- Di Franco, A., Hogg, K. E., Calò, A., Bennett, N. J., Sévin-Allouet, M. A., Alaminos, O. E., & Guidetti, P. (2020). Improving marine protected area governance through collaboration and co-production. *Journal of environmental management*, 269, 110757. <https://doi.org/10.1016/j.jenvman.2020.110757>



- Dressel, S., Ericsson, G., Johansson, M., Kalén, C., Pfeffer, S. E., & Sandström, C. (2020). Evaluating the outcomes of collaborative wildlife governance: The role of social-ecological system context and collaboration dynamics. *Land Use Policy*, 99, 105028. <https://doi.org/10.1016/j.landusepol.2020.105028>
- Driessen, P. P., Dieperink, C., van Laerhoven, F., Runhaar, H. A., & Vermeulen, W. J. (2012). Towards a conceptual framework for the study of shifts in modes of environmental governance—experiences from the Netherlands. *Environmental policy and governance*, 22(3), 143-160. <https://doi.org/10.1002/eet.1580>
- Dudley, N., & Stolton, S. (1999). *Conversion of Paper Parks to Effective Management: Developing a target*. WWF-World Bank Alliance from the IUCN/WWF Forest Innovation Project.
- Dudley, N. (2008). *Guidelines for applying protected area management categories*. IUCN. <https://doi.org/10.2305/IUCN.CH.2008.PAPS.2.en>
- EEA. (1995, January 1). *Barcelona Convention Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean*. Eunis.eea.europa.eu. <https://eunis.eea.europa.eu/references/1820>
- EC. (2017). *Thematic session 2: Multi- sectoral approaches to tackling health inequalities*. Ec.europa.eu. https://ec.europa.eu/health/sites/default/files/social_determinants/docs/ev_20171107_co22_en.pdf
- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory*, 22(1), 1-29. <https://doi.org/10.1093/jopart/mur011>
- Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). Adaptive governance of social-ecological systems. *Annu. Rev. Environ. Resour.*, 30, 441-473. <https://doi.org/10.1146/annurev.energy.30.050504.144511>
- Funtowicz, S. O., & Ravetz, J. R. (1993). Science for the post-normal age. *Futures*, 25(7), 739-755.
- Gattuso, J. P., Magnan, A. K., Gallo, N. D., Herr, D., Rochette, J., Vallejo, L., & Williamson, P. (2019, November). *Opportunities for increasing ocean action in climate strategies*. Iddri.org. https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Propositions/201911-PB0219-ocean%20NDCs_0.pdf
- Gaymer, C. F., Stadel, A. V., Ban, N. C., Cárcamo, P. F., Lerna, J. J., & Lieberknecht, L. M. (2014). Merging top-down and bottom-up approaches in marine protected areas planning: Experiences from around the globe. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 24(2), 128-144. <https://doi.org/10.1002/aqc.2508>



- GM. (2021). *Stakeholder Analysis*. Groupmap.com. <https://www.groupmap.com/portfolio/stakeholder-analysis/>
- Hard, C. H., Hoelting, K. R., Christie, P., & Pollnac, R. B. (2012). Collaboration, legitimacy, and awareness in Puget Sound MPAs. *Coastal Management*, 40(3), 312-326. <https://doi.org/10.1080/08920753.2012.677640>
- Hegger, D., Lamers, M., Van Zeijl-Rozema, A., & Dieperink, C. (2012). Conceptualising joint knowledge production in regional climate change adaptation projects: success conditions and levers for action. *Environmental science & policy*, 18, 52-65. <https://doi.org/10.1016/j.envsci.2012.01.002>
- Herrero, O. (2020, November 12). Sentencia Tribunal Supremo 12/11/2020. *Otrosi.net*. <https://www.otrosi.net/administrativo/jurisprudencia/2020-708667>
- Hoelting, K. R., Hard, C. H., Christie, P., & Pollnac, R. B. (2013). Factors affecting support for Puget Sound marine protected areas. *Fisheries research*, 144, 48-59. <https://doi.org/10.1016/j.fishres.2012.10.006>
- Hu, W., Liu, J., Ma, Z., Wang, Y., Zhang, D., Yu, W., & Chen, B. (2020). China's marine protected area system: Evolution, challenges, and new prospects. *Marine Policy*, 115, 103780. <https://doi.org/10.1016/j.marpol.2019.103780>
- Humphries, F., & Harden-Davies, H. (2020). Practical policy solutions for the final stage of BBNJ treaty negotiations. *Marine Policy*, 112, 104214. <https://doi.org/10.1016/j.marpol.2020.104214>
- IOC. (2018). *The United Nations Decade of Ocean Science for Sustainable Development, 2021-2030*. Intergovernmental and Oceanographic Commission. UNESDOC <https://unesdoc.unesco.org/ark:/48223/pf0000261962>
- Jentoft, S., van Son, T. C., & Bjørkan, M. (2007). Marine protected areas: a governance system analysis. *Human ecology*, 35(5), 611-622. <https://doi.org/10.1007/s10745-007-9125-6>
- Jones, P. J. (2002). Marine protected area strategies: issues, divergences and the search for middle ground. *Reviews in fish biology and fisheries*, 11(3), 197-216. doi:10.1023/A:1020327007975
- Jones, P. S., Qiu, W., & De Santo, E. M. (2011). *Governing Marine Protected Areas - Getting the Balance Right*. United Nations Environment Programme. [https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/other/Governing Marine Protection Areas TechReport Finalvrs040411-1.pdf](https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/other/Governing_Marine_Protection_Areas_TechReport_Finalvrs040411-1.pdf)
- Jones, P. J., De Santo, E. M., Qiu, W., & Vestergaard, O. (2013a). Introduction: an empirical framework for deconstructing the realities of governing marine protected areas. *Marine Policy*, 41, 1-4. <https://doi.org/10.1016/j.marpol.2012.12.025>



- Jones, P. J., Qiu, W., & De Santo, E. M. (2013b). Governing marine protected areas/social-ecological resilience through institutional diversity. *Marine policy*, 41, 5-13. <https://doi.org/10.1016/j.marpol.2012.12.026>
- Kooiman, J. (2008). Exploring the concept of governability. *Journal of Comparative Policy Analysis: Research and Practice*, 10(2), 171-190. <https://doi.org/10.1080/13876980802028107>
- Kossmann, C. M., Behagel, J. H., & Bailey, M. (2016). Action and inertia in collaborative governance. *Marine Policy*, 72, 21-30. <https://doi.org/10.1016/j.marpol.2016.06.007>
- Laffoley, D. (1995). Techniques for managing marine protected areas: zoning. In S. Gubbay, *Marine Protected Areas. Conservation Biology*, 5, 103-118. Springer. https://doi.org/10.1007/978-94-011-0527-9_6
- Lemos, M. C., & Agrawal, A. (2006). Environmental governance. *Annu. Rev. Environ. Resour.*, 31, 297-325. <https://doi.org/10.1146/annurev.energy.31.042605.135621>
- Lewis, N., Day, J. C., Wilhelm, A., Wagner, D., Gaymer, C., Parks, J., . . . Evans, J. (2017). *Large-Scale Marine Protected Areas: Guidelines for design and management*, 26, 1-120. IUCN <https://doi.org/10.2305/IUCN.CH.2017.PAG.26.en>
- LivingOceans. (2021). *IUCN Categories for Marine Protected Areas (MPAs)*. Livingoceans.org. <https://livingoceans.org/maps/how-protected-are-canadas-oceans/iucn>
- Marbà, N., Duarte, C. M., Holmer, M., Martínez, R., Basterretxea, G., Orfila, A., . . . & Tintoré, J. (2002). Effectiveness of protection of seagrass (*Posidonia oceanica*) populations in Cabrera National Park (Spain). *Environmental Conservation*, 509-518. <https://www.jstor.org/stable/44520635>
- Marilles. (2020, May). *Les àrees marines protegides de la mar Balear*. Marilles.org. <https://marilles.org/storage/media/2020/06/580/ca-briefing-amp-maig2020.pdf>
- Mason, J. (2018). *Qualitative researching*. Third edition. SAGE. https://books.google.es/books?hl=es&lr=&id=8JM4DwAAQBAJ&oi=fnd&pg=PP1&ots=ne36DNsGXq&sig=TGa11G_glQz_i2Qu8GbbJAPvCY&redir_esc=y#v=onepage&q&f=false
- McIntosh, P., & Luecke, R. (2011). *Increase your influence at work*. American Management Association.
- MD. (2019, December 9). *El turismo monopoliza la economía balear, con casi el 35 por ciento del PIB*. Mallorcadiario.com. <https://www.mallorcadiario.com/estudio-constata-peso-sector-servicios-85-por-ciento-economia-balear>
- Messner, M. (2009). The limits of accountability. *Accounting, Organizations and Society*, 34(8), 918-938. <https://doi.org/10.1016/j.aos.2009.07.003>



- MITECO. (2018). *Red de Parques Nacionales. Boletín de la Red. El Parque Nacional del Archipiélago de Cabrera, en la recta final de su ampliación.* Miteco.gob.es. <https://www.miteco.gob.es/es/red-parques-nacionales/boletin/ampliacion-cabrera.aspx>
- MITECO. (2019). *Red de Parques Nacionales. Boletín de la Red. Ampliación del Parque Nacional de Cabrera.* Miteco.gob.es. <https://www.miteco.gob.es/es/red-parques-nacionales/boletin/mar-cabrera.aspx>
- MITECO. (2020, September 24). *Ministerio de Transición Ecológica. Sala de prensa. Últimas noticias. España avanza en el cumplimiento de los objetivos nacionales e internacionales de conservación marina.* Miteco.gob.es. <https://www.miteco.gob.es/es/prensa/ultimas-noticias/españa-avanza-en-el-cumplimiento-de-los-objetivos-nacionales-e-internacionales-de-conservación-marina/tcm:30-512162>
- MITECO. (2021a). *Red de Parques Nacionales: Responsabilidad de la gestión.* Miteco.gob.es. <https://www.miteco.gob.es/es/red-parques-nacionales/la-red/gestion/responsabilidad.aspx>
- MITECO. (2021b). *Parque Nacional Marítimo - Terrestre del Archipiélago de Cabrera.* Miteco.gob.es. <https://www.miteco.gob.es/es/red-parques-nacionales/nuestros-parques/cabrera/>
- MITECO. (2021c). *Islas Atlánticas de Galicia: Ficha técnica.* Miteco. gob.es. <https://www.miteco.gob.es/es/red-parques-nacionales/nuestros-parques/islas-atlanticas/ficha-tecnica/default.aspx>
- Moncloa. (2018, December 18). *Gobierno de España. Presidencia del Gobierno. El Consejo de la Red de Parques Nacionales informa favorablemente la ampliación del parque nacional del Archipiélago de Cabrera.* Lamoncloa.gob.es. <https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/ecologica/Paginas/2018/181218-parques.aspx>
- MPA. (2021). *The Marine Protection Atlas.* Mpatlas.org. <https://mpatlas.org>
- Nalau, J., Preston, B. L., & Maloney, M. C. (2015). Is adaptation a local responsibility? *Environmental Science & Policy*, 48, 89-98. <https://doi.org/10.1016/j.envsci.2014.12.011>
- Neumann, B. (2020). Marine Regions Forum 2019: Achieving a healthy ocean – regional ocean governance beyond 2020. Conference Report. *PROG Marine Regions Forum - International forum to strengthen regional ocean governance.* Institute for Advanced Sustainability Studies (IASS); Institute for Sustainable Development and International Relations (IDDRI); TMG - ThinkTank for Sustainability (TMG). DOI:10.2312/iass.2020.001
- Neumann, B., & Unger, S. (2019). From voluntary commitments to ocean sustainability. *Science*, 363(6422), 35-36. DOI: 10.1126/science.aav5727



- Notarbartolo-di-Sciara, G., Agardy, T., Hyrenbach, D., Scovazzi, T., & Van Klaveren, P. (2008). The Pelagos sanctuary for Mediterranean marine mammals. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 18(4), 367-391. <https://doi.org/10.1002/aqc.855>
- OCEANA. (2009, March 27). *Un estudio de Oceana, clave para la ampliación del Parque Nacional del Archipiélago de Cabrera*. Oceana.org. <https://europe.oceana.org/es/prensa-e-informes/comunicados-de-prensa/un-estudio-de-oceana-clave-para-la-ampliacion-del-parque>
- OCEANA. (2017, June). *Parques Nacionales Marinos. Hacia una mejora en la protección del patrimonio natural sumergido de los mares de España*. Europe.oceana.org. <https://europe.oceana.org/es/publicaciones/informes/parques-nacionales-marinos-hacia-una-mejora-en-la-proteccion-del-patrimonio>
- OCEANA. (2021a). *Nuestras campañas. Cabrera. Visión general*. Europe.oceana.org. <https://europe.oceana.org/es/nuestras-campanas/cabrera/vision-general>
- OCEANA. (2021b, May 4). *Gestión pesquera y conservación marina en la zona ampliada del Parque Nacional marítimo-terrestre del Archipiélago de Cabrera*. Europe.oceana.org. https://europe.oceana.org/sites/default/files/propuestagestioncabrera_oceana.pdf
- Olson, M. (1965). *The logic of collective action*. Harvard University Press: Cambridge, MA.
- Oñate, K. (2021, April 23). *El parc de Cabrera fa 30 anys i es regala sobirania energètica*. Arabalears.cat. https://www.arabalears.cat/societat/parc-cabrera-30-anys-regala-sobirania-energetica_1_3960202.html#
- Ostrom, E. (1995). Designing complexity to govern complexity. In S. Hanna & M. Munashingue, *Property Rights and the Environment: Social and Ecological Issues. The Beijer International Institute of Ecological Economics and the World Bank*. 33-45.
- Ostrom, E. (2007). A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences*, 104(39), 15181-15187. <https://doi.org/10.1073/pnas.0702288104>
- Pascual-Fernández, J. J., Chinea-Mederos, I., & de la Cruz-Modino, R. (2015). Marine protected areas, small scale commercial versus recreational fishers: governability challenges in the Canary Islands, Spain. In S. Jentoft & R. Chuenpagdee. *Interactive Governance for Small-Scale Fisheries. MARE Publication Series*, 13, 397-412. Springer. https://doi.org/10.1007/978-3-319-17034-3_21
- Pherrer, R. (2021, May 16). *Cabrera, tres décadas de protección*. Ultimahora.es. <https://www.ultimahora.es/noticias/local/2021/05/16/1265017/archipiélago-cabrera-tres-decadas-proteccion.html>
- Pittman, J., & Armitage, D. (2016). Governance across the land-sea interface: a systematic review. *Environmental Science & Policy*, 64, 9-17. <https://doi.org/10.1016/j.envsci.2016.05.022>



- Pollnac, R., Christie, P., Cinner, J. E., Dalton, T., Daw, T. M., Forrester, G. E., & McClanahan, T. R. (2010). Marine reserves as linked social–ecological systems. *Proceedings of the National Academy of Sciences*, 107(43), 18262-18265. <https://doi.org/10.1073/pnas.0908266107>
- Pomeroy, R. S., Mascia, M. B., & Pollnac, R. B. (2007, June). Marine protected areas: the social dimension. In *FAO expert workshop on marine protected areas and fisheries management: review of issues and considerations*, 149-275.
- Ramos-Esplá, A. A., Valle-Pérez, C., Bayle-Sempere, J. T., & Sánchez-Lizaso, J. L. (2004). *Áreas Marinas Protegidas como herramientas de Gestión Pesquera en el Mediterráneo. Serie Informes y Estudios. COPEMED, 11*.
- Reuchlin-Hugenholtz, E., & McKenzie, E. (2015). *Marine protected areas: Smart investments in ocean health*. WWF. [http://assets.worldwildlife.org/publications/801/files/original/Smart Investments in Ocean Health.pdf](http://assets.worldwildlife.org/publications/801/files/original/Smart_Investments_in_Ocean_Health.pdf)
- Roberts, N. (2004). Public deliberation in an age of direct citizen participation. *The American review of public administration*, 34(4), 315-353. <https://doi.org/10.1177/0275074004269288>
- Robledo-Ardila, P. A. (2016). *El Parque Nacional marítimo-terrestre del Archipiélago de Cabrera un paisaje entre la tierra y el mar*. Ministerio de Agricultura, Alimentación y Medio Ambiente, Organismo Autónomo Parques Nacionales : Instituto Geológico y Minero de España.
- Rudolph, T. B., Ruckelshaus, M., Swilling, M., Allison, E. H., Österblom, H., Gelcich, S., & Mbatha, P. (2020). A transition to sustainable ocean governance. *Nature communications*, 11(1), 1-14. <https://doi.org/10.1038/s41467-020-17410-2>
- Runhaar, H. A., Van der Windt, H. J., & Van Tatenhove, J. P. (2016). Productive science–policy interactions for sustainable coastal management: Conclusions from the Wadden Sea area. *Environmental Science & Policy*, 55, 467-471. <https://doi.org/10.1016/j.envsci.2015.09.002>
- Runhaar, H., Wilk, B., Persson, Å., Uittenbroek, C., & Wamsler, C. (2018). Mainstreaming climate adaptation: taking stock about “what works” from empirical research worldwide. *Regional environmental change*, 18(4), 1201-1210. <https://doi.org/10.1007/s10113-017-1259-5>
- Saint-Onge, H., & Armstrong, C. (2012). *The conductive organization*. Routledge. ISBN:0-7506-7735-X
- Serra, J. J. (2021, June 3). *Balears recibirá 230 millones para la transición energética y 19 para Cabrera*. Periodicodeibiza.es. <https://www.periodicodeibiza.es/noticias/baleares/2021/06/03/1271265/balears-recibira-230-millones-para-transicion-energetica-para-cabrera.html>



- Smith, C. R. (2009). Institutional determinants of collaboration: An empirical study of county open-space protection. *Journal of Public Administration Research and Theory*, 19(1), 1-21. <https://doi.org/10.1093/jopart/mum037>
- SS. (2021). *What is the Difference between Content Analysis and Thematic Analysis?* Statisticssolutions.com. <https://www.statisticssolutions.com/the-difference-between-content-analysis-and-thematic-analysis/>
- Thomson, A. M., & Perry, J. L. (2006). Collaboration processes: Inside the black box. *Public administration review*, 66, 20-32. <https://doi.org/10.1111/j.1540-6210.2006.00663.x>
- UNDP. (2009). *Capacity Development: A UNDP Primer*. *Adaptation-undp.org*. <https://www.adaptation-undp.org/resources/relevant-reports-and-publications/capacity-development-undp-primer>
- Unger, S., Neumann, B., & Boteler, B. (2021). *EU International Ocean Governance Forum*. *Webgate.ec.europa.eu*. <https://webgate.ec.europa.eu/maritimeforum/en/system/files/iog-discussions-paper-twg1.pdf>
- Van Assche, K., Hornidge, A. K., Schlüter, A., & Vaidianu, N. (2020). Governance and the coastal condition: Towards new modes of observation, adaptation and integration. *Marine Policy*, 112. <https://doi.org/10.1016/j.marpol.2019.01.002>
- Van Leeuwen, J., Van Hoof, L., & Van Tatenhove, J. (2012). Institutional ambiguity in implementing the European Union marine strategy framework directive. *Marine Policy*, 36(3), 636-643. <https://doi.org/10.1016/j.marpol.2011.10.007>
- Verschuren, P., & Doorewaard, H. (2010). *Designing a research project*. Eleven International Publishing.
- Voyer, M., Gladstone, W., & Goodall, H. (2012). Methods of social assessment in Marine Protected Area planning: Is public participation enough? *Marine Policy*, 36(2), 432-439. <https://doi.org/10.1016/j.marpol.2011.08.002>



Appendix A. Informed consent form interviews

Note that the original version of the letter was in Spanish. The translated English version is found below.

Information for subjects invited to participate in scientific research (social)

Research project title: **Evaluating the collaborative dynamics of governing Marine Protected Areas. The case of the expansion of the MPA of Cabrera, Mediterranean Sea**

Date: April 2021, Barcelona, Spain

Dear Mr. / Mrs.,

Through this letter, I would like to invite you to participate in the research project entitled ‘Evaluating the collaborative dynamics of governing Marine Protected Areas’. This research objective is to contribute to insights and recommendations into collaborative mechanisms in the governance of MPAs by evaluating the collaborative governance processes in the empirical case of Cabrera's MPA expansion. To reach this objective, the study will be steered by the research question: *Which lessons can be derived from the evaluation of the collaborative governance dynamics of Cabrera's MPA?*

Why is this research important?

In terms of scientific aspects, it is argued that this research is important because studies on MPAs with dual governance modes -government and community led- represent early developments according to many scholars⁹ while they are recommended. As Cabrera's MPA is an example of such an emergent dual approach, this thesis adds to that timely theoretical debate on the desirability and suitability of specific governance modes and their likelihood of increasing support for MPAs. Additionally, results expand on existing understandings¹⁰ of collaboration in MPAs. Alternatively, in terms of the societal relevance this study is deemed to be useful too. Given that in the coming decade more MPAs are going to be designed in order to meet the international ‘thirty-by-thirty’ target, i.e., 30% of the oceans

⁹ Gaymer, C. F., Stadel, A. V., Ban, N. C., Cárcamo, P. F., Lerna, J. J., & Lieberknecht, L. M. (2014). Merging top-down and bottom-up approaches in marine protected areas planning: Experiences from around the globe. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 24(2), 128-144. <https://doi.org/10.1002/aqc.2508>

Jones, P. S., Qiu, W., & De Santo, E. M. (2011). *Governing Marine Protected Areas - Getting the Balance Right*. Technical Report, United Nations Environment Programme. https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/other/Governing_Marine_Protection_Areas_TechReport_Finalvrs040411-1.pdf

Jones, P. J., De Santo, E. M., Qiu, W., & Vestergaard, O. (2013). Introduction: an empirical framework for deconstructing the realities of governing marine protected areas. *Marine Policy*, 41, 1-4. <https://doi.org/10.1016/j.marpol.2012.12.025>

¹⁰ Hoelting, K. R., Hard, C. H., Christie, P., & Pollnac, R. B. (2013). Factors affecting support for Puget Sound marine protected areas. *Fisheries research*, 144, 48-59. <https://doi.org/10.1016/j.fishres.2012.10.006>

Hard, C. H., Hoelting, K. R., Christie, P., & Pollnac, R. B. (2012). Collaboration, legitimacy, and awareness in Puget Sound MPAs. *Coastal Management*, 40(3), 312-326. <https://doi.org/10.1080/08920753.2012.677640>

Jentoft, S., van Son, T. C., & Bjorkan, M. (2007). Marine protected areas: a governance system analysis. *Human ecology*, 35(5), 611-622. <https://doi.org/10.1007/s10745-007-9125-6>



protected by 2030. Considering their placement, if they are located in territorial seas like the case of Cabrera, it is safe to assume that more social sectors are going to be affected in the near future too. Results of this thesis may assist towards such emerging challenges of new and existing MPAs. This is because the research addresses social considerations related to aspects of collective support, which are fundamental to maintain the success of the MPA structure and its respective ecological gains. This in turn is of paramount social relevance in the context of climate change, because MPAs are central in building food security, protecting coastal communities and creating employment.

What is expected of you as a participant?

Participating in the study consists of answering around eight questions about the design and management stages of the expansion of Cabrera's AMP, that is, between the period 2015-2019, and from 2019 to the present. The time required to complete the interview is approximately an hour and there is no financial remuneration for it.

Confidentiality of data processing

This study requires us to collect some of your personal data. With your permission I would like to be able to record the conversation during the interview. I need this recorded data to be able to process and analyze your responses to correctly answer the research question or to be able to contact you for a follow-up investigation. As a researcher, I have an obligation to protect the confidentiality of your data. This personal data of yours will be confidential, that is, the information in this study will only be used in a way that does not reveal who you are. You will not be identified in any publication of this study or in any data file shared with other researchers. However, your answers will be analyzed and therefore will form results which may be part of data that could be used for future research. These final research data will be stored on a different computer than the research data itself (the so-called raw data). The computer on which your personal data is stored is protected to the highest standards, and only the researchers involved will have access to this data. The data itself will also be protected by a security code. Your data will be stored for at least 10 years. This is in accordance with the guidelines provided by the VSNU Association of Universities in the Netherlands. See the Personal Data Authority website: <https://autoriteitpersoonsgegevens.nl/nl/onderwerpen/avg-europese-privacywetgeving> , for more information on privacy.



Voluntary participation and independent contact and complaints manager

Participation in this study is voluntary. You can end your participation in the study at any time, without explanation and without negative consequences. If your participation ends, we will use the data collected up to that point, unless otherwise stated. If you receive this letter and participate in the interview, it is assumed that you've agreed with what is stated in the form. If you have an official complaint about the study, you can email the complaints officer at klachtenfunctionaris-fetcsocwet@uu.nl. If you have any questions or comments about the study, please contact:

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Sincerely,

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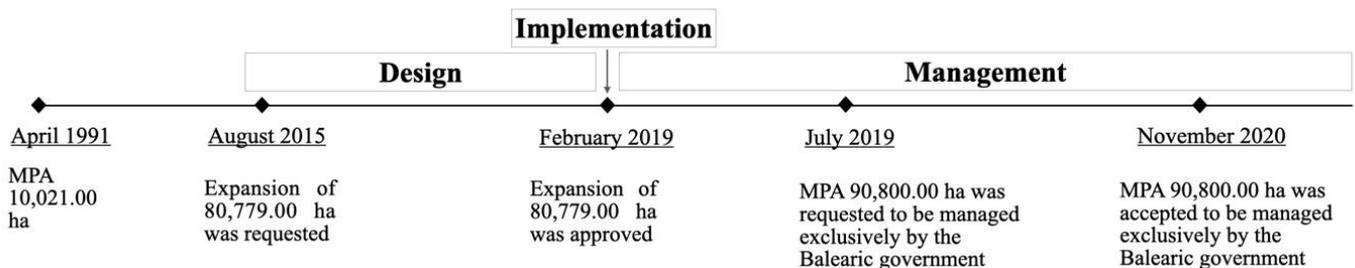
Dr. Dries Hegger

Appendix B. Interview guide

Note that the original version of the interview was in Spanish. The translated version is found below.

Based on the information on the operationalization of the three criteria of: *principled engagement, shared motivation and capacity for joint action* and its twelve indicators: *discovery, determination, definition, deliberation, mutual understanding, shared commitment, trust, internal legitimacy, procedural and institutional arrangements, leadership, knowledge and resources*, the following interview guide was developed.

Firstly, I introduced briefly my thesis and the aim and structure of the interview by repeating the information displayed on the informed consent form that was sent to the participants. Then I asked interviewees' role and positions. Secondly, I showed them the next timeline in order to contextualize the questions and I told them that they could answer each question per design stage and per management stage individually if they considered that the facts changed significantly throughout the process. This **background data** was accompanied by the preliminary question: #0) Do you think this timeline is correct? Should I add any correction?



Questions

FACTS

C1-I2 Determination Regular meetings (e.g., for setting agendas) take place

About your participation in the expansion implementation process:

- a) What kind of communication and participation tools or actions have you had? How often?

C1- I4 Deliberation There is honest communication (e.g., expressing disagreements, answering questions) between actors

- b) Were these communication tools transparent among all the actors, only some or not with any of them?
c) Do these tools allow you to express your opinion without any constraint?

C2-I1 Mutual understanding There is a shared perception of the problems triggered by the MPA expansion (e.g., there is understanding of the affected users and their positions by all actors)

What are the problems caused by the expansion of the MPA? Do you think that these problems / affectations are understood and respected by everyone, or only by some?

C2- I2 Shared commitment Continuous engagement of all stakeholders takes place

Is the commitment / involvement of all stakeholders in MPA constant / occasional / infrequent?

C2- I3 Trust The collective interest is supported and predictable (e.g., actors prove each other that they are reasonable)

Have the interests of all groups been always supported? Are the interests predictable over time? (or do they change depending on the political parties that are governing, or the various NGOs involved...)

C2- I4 Internal legitimacy There is representation and transparency which allow for monitoring and sanctioning during the collaboration process

Is the collaboration process representative? To what extent it transparent to everyone involved?

C3 – I2 Leadership Initiative is taken, and direction is given

Who takes the initiative of leadership in the governance of the AMP? (How) does this person / entity give direction to the rest of the actors?



OPINION

C1- I1- Discovery There are different worldviews included with shared concerns/interests

In your opinion, what do you think is the main objective of expanding the marine protected area? What are the main challenges facing the AMP? What are the main interests that you have in the MPA?

C1-I3 Definition There is clarity and flexibility regarding tasks and expectations

Do you think the activities that can be developed in the AMP have been clear? Are you allowed to participate flexibly and translate your ideas / expectations into the current management mechanism?

C3- I1 Procedural and institutional arrangements There is clarity concerning actors' roles and relationships

Is there clarity in the roles and relationships between the actors to reach institutional and procedural agreements? For instance, relationships between politicians and scientists to reach legal arrangements, or between central and regional administration to reach coastal surveillance accords/resolutions, or between fishermen and scientists.?

C3 – I3 Knowledge Awareness is raised, and shared knowledge is generated

About knowledge created during the MPA expansion process:

- a) To what extent do you think that knowledge is important for management?
- b) To what extent do you think that the knowledge that is generated during the collaboration is shared with all the actors?

C3 – I4 Resources Resources in terms of staff and funding are mobilized and shared

How satisfied are you with the personnel and financing resources allocated to the AMP?

- a) Are these sufficient?
- b) Are they shared, i.e., have they reached you? Or are they just for the service of some actors?
- c) Do you think it would be beneficial to allocate more? of what kind (staff/funding)?

Closing questions: Are there any points or opinions that you want to raise and have not been discussed yet? E.g., *What should be changed in the future?*

Thank you that's the end of the interview. If you are interested on the results of this research, I will be glad to send you the final document by the end of July.



Appendix C. Validation workshops with experts

VALIDATING FINDINGS

Master thesis:

Evaluating the collaborative dynamics of governing Marine Protected Areas
The case of the expansion of the Marine Protected Area of Cabrera, Mediterranean Sea

<p><u>Aim</u></p>	<p>Contribute to insights and recommendations into collaborative mechanisms in the governance of MPAs by evaluating the collaborative governance processes in the empirical case of Cabrera's MPA expansion</p>
<p><u>Research question</u></p>	<p>Which lessons on how to realise support for the protection of MPAs can be derived from the evaluation of the collaborative governance dynamics of Cabrera's MPA?</p>
<p><u>Sub-questions (SQ)</u></p>	<ul style="list-style-type: none"> - SQ1) Which evaluation criteria and indicators can be derived from collaborative governance literature - SQ2) How well does Cabrera's MPA expansion score on these criteria and indicators? - SQ3) What degree of transferability do MPA experts assign to the empirical findings of Cabrera?
<p><u>Research framework</u></p>	



Criteria	Indicators	Description	References
Principled engagement	Discovery	There are different worldviews included with shared concerns/interests	Ansell and Gash, 2008; Koeman, 2008; Bryson, Crosby & Stone, 2006; Thomson & Perry, 2006; Roberts, 2004 in Emerson et al., 2012
	Determination	Regular meetings (e.g., for setting agendas) take place	
	Deliberation	There is honest communication (e.g., expressing disagreements, answering questions) between actors	
	Definition	There is clarity and flexibility regarding tasks and expectations	
Shared motivation	Mutual understanding	There is a shared perception of the problems triggered by the MPA expansion (e.g., there is understanding of the affected users and their positions by all actors)	
	Shared commitment	Continuous engagement of all stakeholders takes place	
	Trust	The collective interest is supported and predictable (e.g., actors prove each other that they are reasonable)	
	Internal legitimacy	There is representation and transparency which allow for monitoring and sanctioning during the collaboration process	
Capacity for joint action	Procedural and institutional arrangements	There is clarity concerning actors' roles and relationships	
	Leadership	Initiative is taken and direction is given	
	Knowledge	Awareness is raised and shared knowledge is generated	
	Resources	Resources in terms of staff and funding are mobilized and shared	

EVALUATIVE FRAMEWORK BEFORE THE EMPIRICAL CONFRONTATION

DERIVED FROM LITERATURE ON COLLABORATIVE GOVERNANCE (Emerson et al., 2012)

EVALUATIVE FRAMEWORK

AFTER EMPIRICAL CONFRONTATION (THEMATIC ANALYSIS & COLOUR CODING)



Criteria	Indicators	Description	Level
Principled engagement	Discovery	There are different worldviews included with shared concerns/interests	High: There is diversity of worldviews and shared concerns/interests
	Determination	Regular meetings (e.g., for setting agendas) take place	
	Participation	The name is changed for 'participation' because it makes more explicit that what it actually being measured has to do with participation aspects. This in turn, makes clearer its distinction with the indicator 'shared commitment'	Moderate: There are irregular meetings
	Deliberation	There is honest communication (e.g., expressing disagreements, answering questions) between actors	High: There is honest communication between all actors
	Definition	There is clarity and flexibility regarding tasks and expectations	Low: There is neither clarity nor flexibility regarding tasks and expectations
	Clarity on task definition	Flexibility is delated from the indicator <i>definition</i> , because it fits better into the indicator of procedural and institutional arrangements as it relates to the flexibility in terms of relationships between actors to reach arrangements in the MPA	
Shared motivation	Mutual understanding	There is a shared understanding and respect of others' opinions and interests	High: Actors understand and respect others' opinions and interests
	Shared commitment	Continuous engagement of all stakeholders takes place	Moderate: Occasional engagement of all actors takes place
	Trust	The collective interest is supported and predictable (e.g., actors prove each other that they are reasonable) This indicator is delated because the next one of 'internal legitimacy' is already understood source of trusted interaction among actors (Bryson, Crosby & Stone, 2006). In addition, the term 'supported' is an element of 'legitimacy', which is emphasised in the next indicator already. Similarly, the term 'predictable' is inherent in the concept of 'transparency' as underlined next too.	
	Internal legitimacy	There is representation and transparency which allow for monitoring and sanctioning during the collaboration process	High: The collaboration process is representative and transparent
	Accountability	Democratically legitimized bodies are enabled to monitor and evaluate actors' behavior and are able to induce them to modify that behavior according to the regulations of use	Moderate Democratically legitimized bodies are enabled to monitor and evaluate actors' behavior but are not able to induce them to modify that behavior according to the regulations of use



Capacity for joint action	Procedural and institutional arrangements	There is clarity and flexibility concerning actors' roles and relationships	
	Bi-directional relationships	The term 'roles' is delated from this indicator because the indicator 'definition' already mentions that clarity regarding tasks, which is a synonym of roles. Moreover, the concept of relationships deserves unique attention via an exclusive indicator, as argued next. For this reason, the indicator's name is changed for 'bi-directional relationships'	Moderate: There is flexibility but not clarity concerning actors' relationships
	Leadership	Initiative is taken and direction is given	Moderate: Initiative is taken but direction is not given
	Knowledge	Awareness is raised and shared knowledge is generated	Moderate: Awareness is raised but shared knowledge is not generated
	Resources	Resources in terms of staff and funding are mobilized and shared	Low: Resources in terms of staff and funding are neither mobilized nor shared
Capacity development	The enabling environment (island), organizational (MPA) and individual levels influence each other	High The enabling environment, organizational and individual levels influence each other in a fluid way	

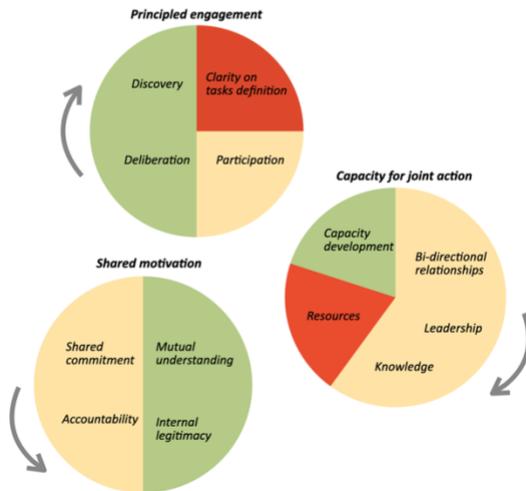
INTERPRETATION OF RESULTS

Assumption: The starting assumption of this thesis is that a 'fruitful' collaborative process as conceptualised by Emerson et al. (2012) is conducive to support in the MPA. Hence, *If the iterative cycle of collaboration is reinforced, then support of Cabrera's MPA is strengthened. On the contrary, if the iterative cycle of collaboration is weakened, then support of Cabrera's MPA is undermined*



SQ2) How well does Cabrera's MPA expansion score on these criteria and indicators? → 5/13 score high
6/13 score moderate
2/13 score low

Do these scores point to a virtuous or vicious cycle of community support?

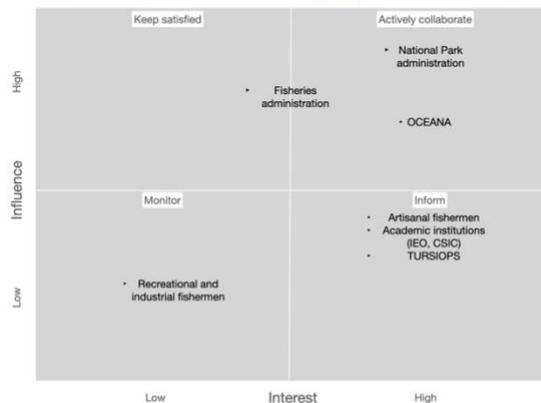


The iterative cycle is mainly **stagnated**, it indicates that support in the collaboration dynamics in the MPA is restrained (6/13 yellow).

QUESTIONS FOR DISCUSSION

Doñana & Islas Atlánticas (D&IA) // Marine Areas Beyond National Jurisdiction (ABNJ)

0. Similar Stakeholder Analysis?/ Recurring patterns? (Administrative context, type of (collaborative) governance process that is in place?)



D&IA Junta de Andalucía/Galicia, local administrations, NGOs, academic institutions? Are these expansions led NGOs mainly during the initial stages of the process?

ABNJ Intergovernmental Organisations (IGOs); e.g., IMO, WB, WTO, Convention on the high seas? -legal regime UN conference- NGOs?



1. Do your experiences confirm the relevance of the indicators: 1-13 in governing MPAs?

2. Relative importance of the indicators? Zoom in on indicators; project leader perspective & legal perspective

Discovery, participation, deliberation, clarity on definition and tasks, mutual understanding, shared commitment, internal legitimacy, accountability, bi-directional relationships, leadership, knowledge, resources, capacity development

3. Are these recommendations for Cabrera also applicable to your field of expertise? →

4. Is the multi-sectoral governance approach needed for both; regional and high seas MPAs?

→	Managerial implications -Level of a project leader	Policy implications - Level of MPA (Legal side)
	Monitor recreational and industrial fishermen, inform academic institutions and artisanal fishermen, keep the fisheries administration satisfied, actively collaborate with government administration and NGOs	Enhance the capacity of democratically legitimized bodies to modify the behaviours of users according to the regulations of use. Hold actors accountable with a better enforcement of law/punishments.
	Give specific directions when leading the process	
	Generate shared knowledge in the MPA	State more clearly what is the governance approach followed by the MPA (institutional arrangements).
	Allocate resources	
	Enhance clarity with tasks and expectations	
	More frequency in meetings	
	+?	+?

Discovery, participation, deliberation, clarity on definition and tasks, mutual understanding, shared commitment, internal legitimacy, accountability, bi-directional relationships, leadership, knowledge resources, capacity development

