Endangered Seascapes

Progress, needs and opportunities for seascape restoration

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ARCADIA

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Summary

If we are to achieve our global ambitions for nature and society, it is not enough to simply conserve what nature we have left. A business-as-usual approach will not prevent further loss and support recovery. Effective and targeted restoration is required to recover what has been lost and support nature, people and economies. Recognizing this, a considerable amount of money has been provided by governments, the private sector and civil society to support restoration. More is needed and it must be spent wisely to deliver the intended benefits.

Within marine and coastal areas, where ecosystems are highly interconnected and the pressures they face often originate kilometres away, an integrated approach to restoration is required. “Seascape” restoration, which seeks to address the pressures driving degradation has been proposed as one such approach.

In order to support the targeting of funds for seascape restoration, we identified and synthesized information on restoration projects active between 2015 and 2022. In total, the data sets of 237 projects were analysed, representing an investment of €3.35 billion from 161 different funders. Donor governments and international bodies were the most frequent source of funds and contributed the most financially. Non-governmental organizations had the greatest number of restoration projects, while governments received the greatest amount of money.

The projects occurred in 127 countries across seven regions with Asia Pacific receiving the greatest proportion of the funds. Coral reefs were the most frequent target of restoration (67 projects), followed by mangroves (49) and seagrass beds (40), however, mangroves received the largest proportion of funding. Fifty-three projects were undertaken across multiple habitats. Coral reefs and seagrasses were the most frequent combination habitats to be targeted by projects. This was followed by coral reefs and mangrove forests and saltmarshes and estuaries. Most projects had multiple goals, with biodiversity conservation the most common and the most funded, followed by climate change adaptation. Active restoration, such as the planting of seedlings, was the most common method used to restore degraded and lost habitats, followed by a combination of active restoration and passive measures (addressing the pressures causing ecosystem degradation and allowing natural regeneration). The relative infrequency of purely passive restoration measures may stem from the methodology used, and the fact that management measures such as marine protected areas and fisheries closures are rarely classified as restoration actions despite having the potential to restore populations and ecosystems.

Identifying the details of restoration projects, like the amount of funding provided, actions taken, and outcomes expected, proved challenging, seascape scale projects are rarely framed as such and often lack detailed information. Information on the capacity of project partners and stakeholders to design, implement, monitor, identify and communicate the “success” of restoration is also very scarce.

There is a commitment and determination to restore coastal and marine ecosystems, however, the relative infancy of coastal and marine restoration can be barrier in translating aspiration into action. In order to overcome this barrier, there needs to be complete transparency in what actions are being undertaken, how, by who and what is working well and what less so. We hope the information collected in this study (available at www.restorationfunders.com) supports the development of evidence-based restoration planning and action which delivers impactful and equitable outcomes for people and nature.

Background

The overexploitation of marine and coastal species and ecosystems, combined with human activities including agriculture, transport and energy generation have significantly impacted marine and coastal areas and ecosystems. Cumulatively, they have decreased the capacity of impacted ecosystems to support nature and people. This situation is being exacerbated by climate change and is impacting portions of the human population differently[1,2]. For example, women are significantly more heavily impacted by biodiversity loss and climate change than other groups.

Recognizing the societal and economic cost of inaction, and the benefits that can be obtained by restoring species populations and habitats, ecosystem restoration is high on the agenda of politicians, businesses and wider civil society[3]. The increased awareness and desire for action has resulted in the mobilization of considerable funds to support national, regional and international restoration pledges, commitments and ambitions (e.g., Bonchallenge). However, it is vital that the money that is made available to support these efforts is allocated in a strategic way and used efficiently in order to maximize the benefits for people and nature.

Determining how to strategically allocate funds for conservation and restoration is an on-going challenge, with funders needing to consider multiple factors and often balance incompatible objectives and interests. Broadly speaking, consideration must be given to 1) the biophysical setting of the proposed action 2) the stakeholders that need to be directly engaged and 3) the capacity of those undertaking the restoration action at the target location.

- *Biophysical setting* includes the physical properties of a location (e.g., the sediment type, salinity, temperature, degree of rainfall), the species and habitats present and their level of degradation, if the pressures causing the loss and degradation are still present, the degree to which the location is projected to experience climate change impacts, the size of the location and how accessible it is.
- *Stakeholders* includes blue economy sectors, governmental and non-governmental organizations, local communities and residents. These groups should be gender balanced. Consideration must be given to their degree of reliance and impact on natural ecosystems, their desired outcomes and the degree to which they can affect or be affected by restoration actions.
- *Capacity and governance* includes how well existing regulations protect ecosystems, the capacity of local stakeholders to administer funds and design, implement, enforce, and monitor restoration projects. It also includes the capacity of women to be effectively involved, the degree of communication between stakeholders and their degree of commitment.

The broad objective of this report is to support evidence-based restoration funding and planning by providing a high-level overview of:

1. The funds committed to seascape restoration activities and the sources that these funds come from.
2. Current and recent large-scale seascape recovery projects.
3. The regions with greatest large-scale seascape recovery potential.
4. The capacity of delivery organizations to implement large-scale seascape recovery projects and the degree of political support.

What is a seascape and why is it important?

The need for an integrated approach to the use and conservation of coastal and marine socio-ecological systems is widely accepted and is commonplace in national, regional and international management frameworks[4]. This can take a variety of forms, including, Marine Spatial Planning, Integrated Coastal Zone management and Source to Sea watershed management. A commonality among all approaches is the understanding that coastal and marine ecosystems are highly dynamic and connected (including across political and biophysical boundaries). Another commonality is the need to design, implement and monitor actions at spatial scales that take human pressures into account and that are relevant to the species in a targeted ecosystem.

Following on from this logic, the use of the term "seascape" has been used in policies, management plans, academic studies and wider civil society in relation to restoration. The term is derived from "landscape" and has no formal definition. Ecologically, it is used to describe a marine area of interacting species and ecosystems that emerge as single habitats and small geographic areas are considered on a grander scale. The spatial scale at which such interactions occur varies depending on the location, the species present and the nature of human pressures.

When a seascape is considered in the context of conservation and restoration planning and actions, it is vital that consideration is given to physical and anthropogenic processes and activities. Together, they have a strong influence on which species are present, where they are found, what their abundance is and what their capacity to recover to a desired state might be. This includes processes many miles away from the coast like upstream dams, agriculture and forestry, which impact marine species, habitats and ecosystems and are thus part of the wider seascape.

In this report we have adopted a definition of a seascape that is based on spatial area rather than any specific combination of habitat types, physical or administrative boundaries and/or anthropogenic processes.

What is restoration?

As with the term seascape, the term restoration is used in an inconsistent way, although more concrete definitions have been proposed, including, under the UN Decade on Ecosystem Restoration, where it is defined as "the process of halting and reversing degradation, resulting in improved ecosystem services and recovered biodiversity. Ecosystem restoration encompasses a wide continuum of practices, depending on local conditions and societal choice"[3]

The types of actions which can be associated with this definition are relatively broad in scope, including the planting of vegetation, activities which increase fish stocks, remediate polluted sites, restore ecological processes and/or conserve fauna and flora that can assist in the restoration process. Actions can be active (e.g., planting seeds or seedlings are implemented) or passive (e.g., reducing the stressors impacting the system). The scale of these activities can range from a few hundred metres to thousands of kilometres, depending on the actors and ecosystems involved. While this dichotomy is often used to separate restoration strategies, in reality there is no hard line between the two approaches and successful projects often draw from both approaches.

In this report we have generally focused upon "active" restoration approaches, yet we have highlighted projects and actions that sit outside this definition.

Current funding landscape

A desk-based study was undertaken to aggregate funding information related to seascape scale marine and coastal restoration projects between 2015 and 2022. The full methodology, including the search terms and definitions used are presented in Appendix A – Overview of methodology used in desktop study and Appendix B – Definition of funder types. While an extensive search was undertaken, the location, purpose, implementing organization and funder of restoration projects is not always in the public domain or easily accessible. It is therefore recognised that the underlying dataset of this report is not exhaustive.

What funding has been committed?

237 projects

161 funders

€3.35 billion committed funds

Between 2015 and 2022 at least 237 marine and coastal restoration projects[1] were undertaken, with funding information available for 133 (56%). Combined, these 133 projects had a value of €3.35 billion, with individual project costs ranging from €9,300 to €7.36 million (Figure 1).

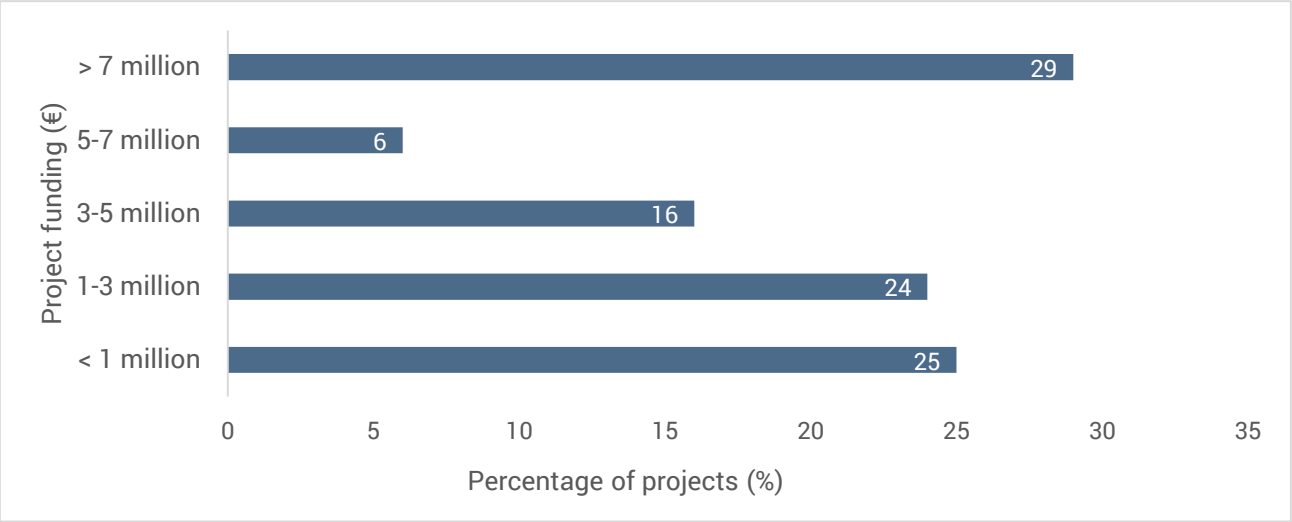


Figure 1: The funds allocated to restoration projects.

[1] While the search was targeted at "seascape" restoration projects, relatively few were termed as such and relatively few contained the details required to make an assessment. As such the results presented include projects that do not meet the strict definition. This was particularly the case In Europe. The implications of this are discussed throughout the report.

Who are the funders and beneficiaries of seascape restoration?

Funding was provided by 161 different funders, representing four categories. These included: international, governments, the private sector and foundations (including not-for-profit and non-governmental organizations). Governments and international bodies funded the greatest number of projects (Figure 2) and provided the most money (Figure 3). Thirty-six projects (15%) had funding from multiple sources. A comprehensive list of the funders and beneficiaries of funding are listed in Appendix C – Key funders of marine restoration projects.

Figure 2: The number of restoration projects funded by each funding source.

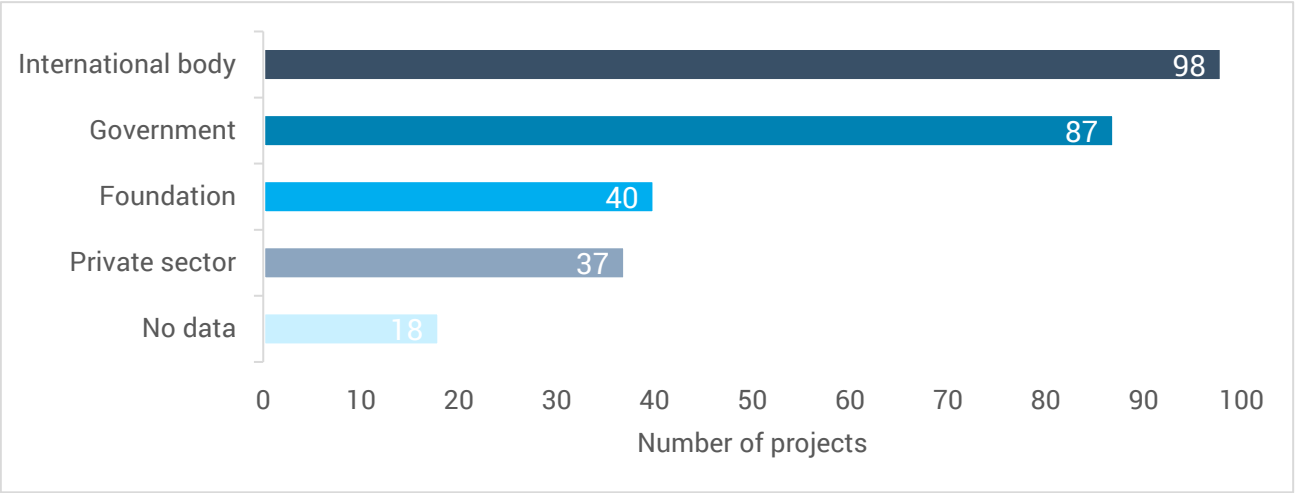
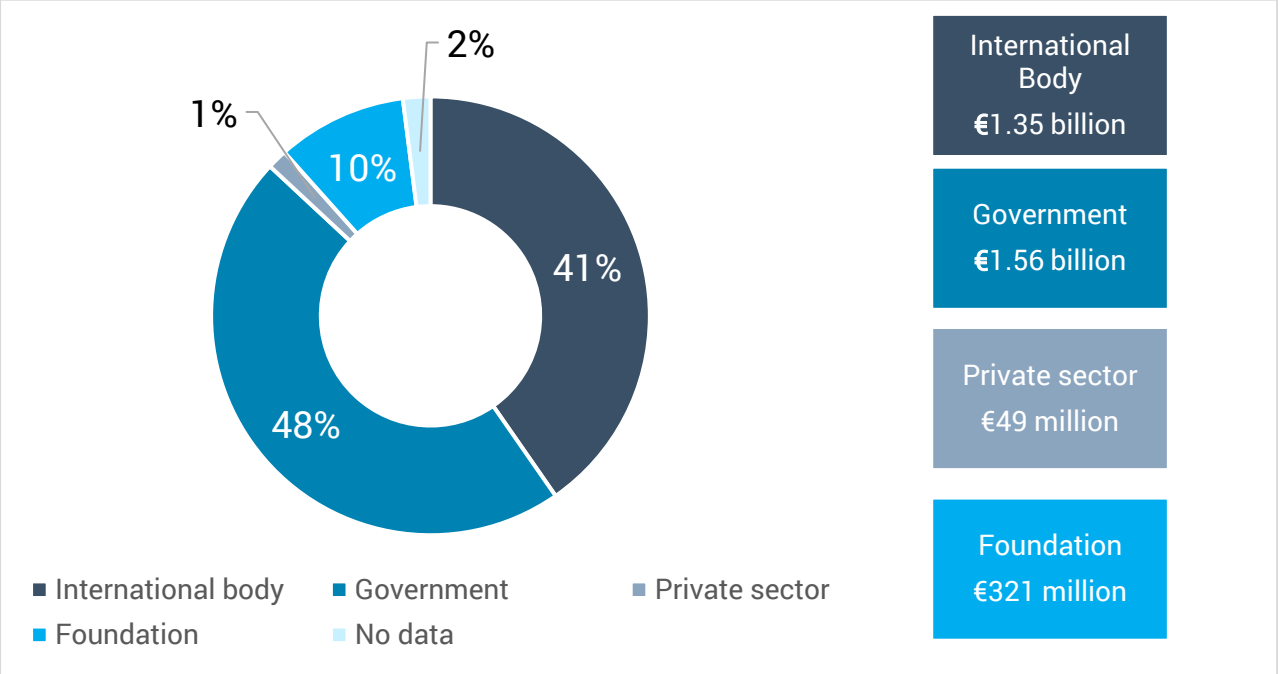


Figure 3: The amount of funds committed by each funder.



Information on the beneficiaries of funding was available for 209 of the 237 projects evaluated. There were 185 beneficiary organizations that represented five groups – international bodies, the private

sector, research institutes, governments, and non-governmental organizations (NGOs). Non-governmental organizations had the largest number of projects (45%), followed by governments (28%) and research institutes (18%) (Figure 4). Information on the inclusion of funding for key vulnerable groups, like women, was not possible due to a lack of resolution in the data sets. A breakdown of the relationship between funder and beneficiary is given in Table 1.

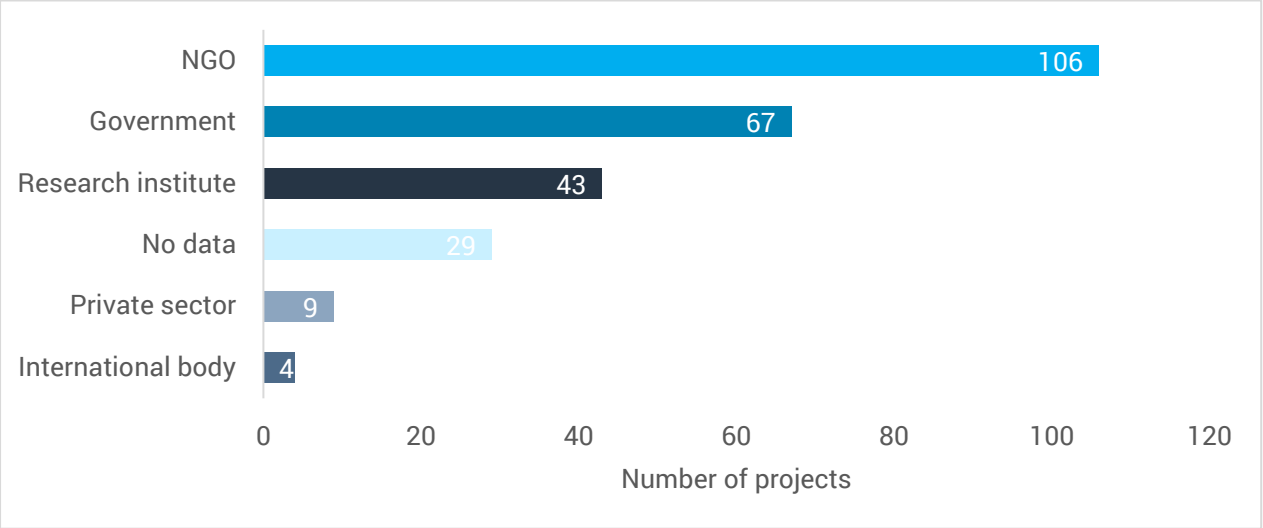


Figure 4: The number of projects undertaken by each type of beneficiary.

Table 1: The number of projects given by each type of funder to each type of beneficiary.

	Beneficiary					
Source of funding	NGO	Government	Research institute	No data	Private sector	International body
Government	45	25	9	6	4	2
Research institute	-	-	-	-	-	-
No data	7	1	0	10	1	0
Private sector	26	5	6	4	1	0
International body	33	40	25	5	2	2
Foundation	21	5	7	4	3	0

In financial terms, governments received the greatest amount of funding (64%), followed by NGOs (17%) (

Figure 5). Where multiple recipients were identified, it was assumed that the funding was distributed equally among them.

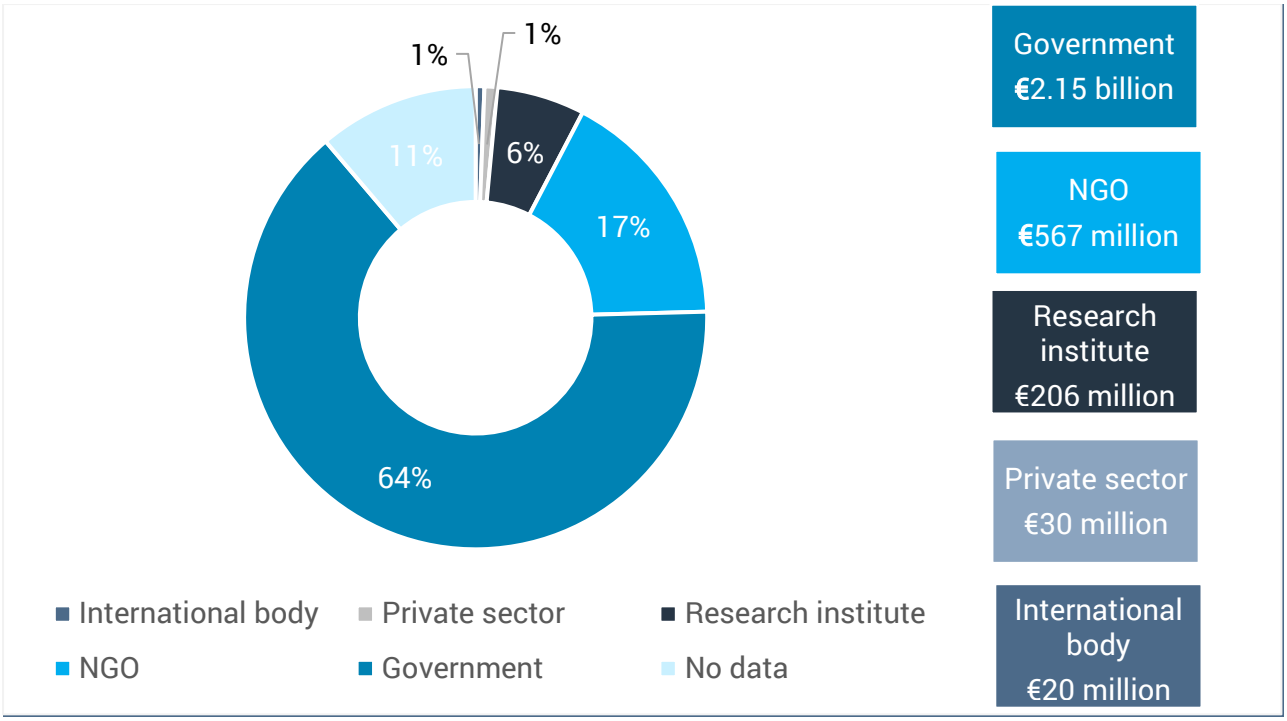


Figure 5: The amount of funds received by each type of beneficiary.

Where is seascape restoration taking place?

The restoration projects identified occurred in 127 countries across seven regions[2] (North America, Latin America and the Caribbean, Western Europe, Eastern Europe, Europe, Africa, and Asia-Pacific). From 2015 – 2022, the largest number of projects were in the United States of America, United Kingdom and Italy (Figure 6). Overall, 24% of the projects were multinational, with organizations from an average of five countries collaborating. Within this subset, the majority (70%) were collaborations within the same region with 20% taking place across different regions.

[2] Regions reflect the Regional groups of Member States as defined by the UN.

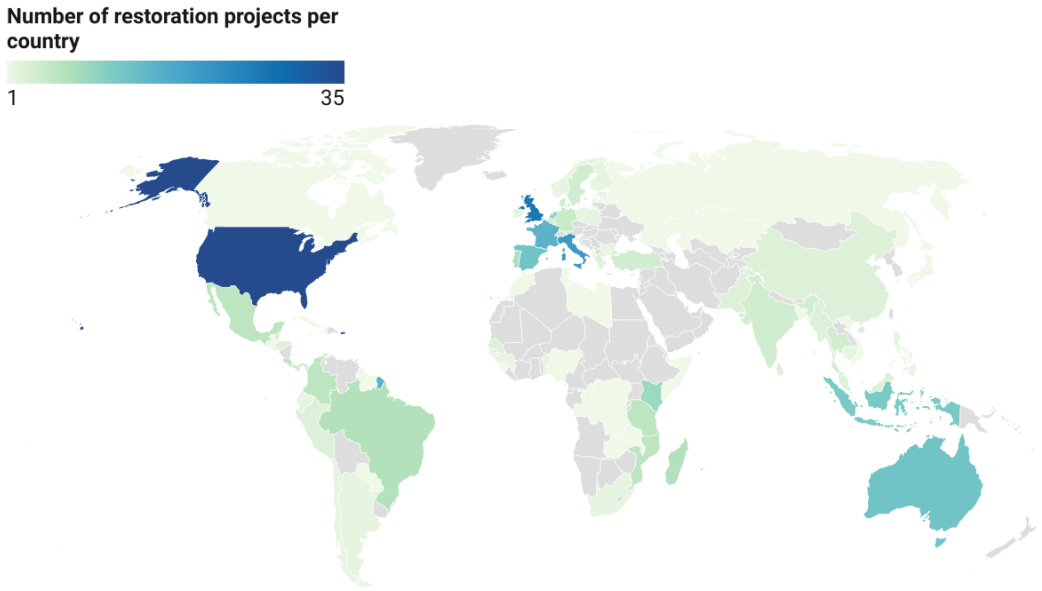


Figure 6: The number of restoration projects per country.

The United States of America, Pakistan and Indonesia received the highest amount of funding (Figure 7), this is likely because they had the three highest funded projects (Pakistan €736 million, Indonesia €411 million and the United States of America €405 million). However, the value of funding received in each country and region does not relate to the total number of projects being undertaken. Western Europe for example, had the largest number of projects, while the Asia-Pacific region received the highest amount of funding (€1.35 billion). The discrepancy lies in the fact that the majority of projects within Western Europe were relatively small in scale and had lower levels of fundings.

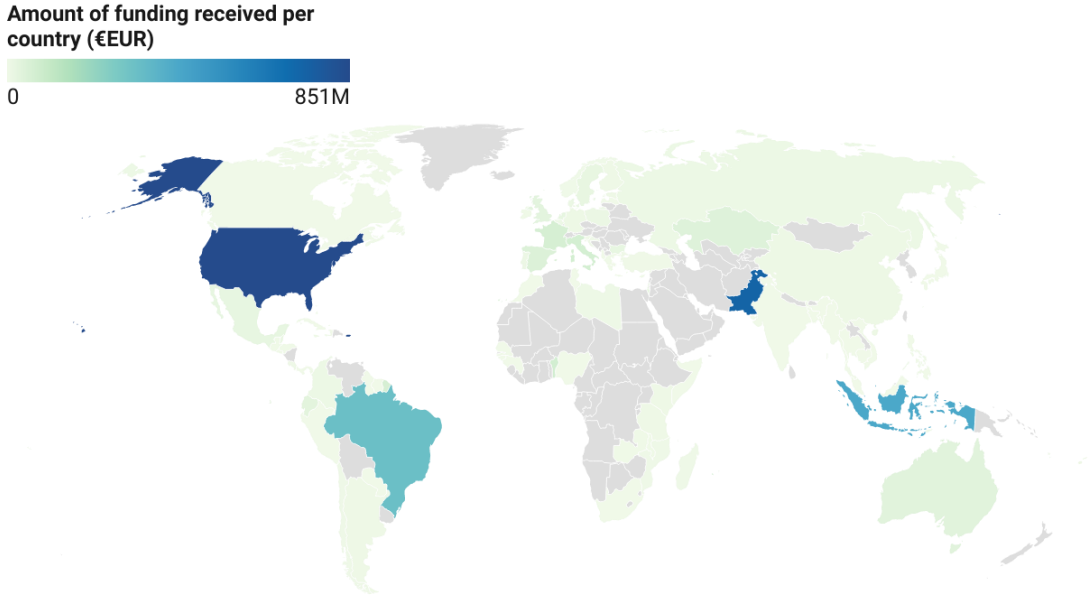


Figure 7: The amount of funding received per country.

Which habitats are being restored?

Information describing the focal habitat was available for 88% of the projects identified, with coral restoration projects the most frequent (29%), followed by the restoration of mangrove forests (28%) and seagrass beds (21%) (Figure 8). This may seem at odds with the fact that the largest number of projects were found in Western Europe, which do not contain these habitats.

The projects identified in this study were all in coastal habitats. This reflects the fact that offshore restoration projects are relatively rare, costly and often use small scale exploratory techniques. The restoration of offshore habitats also tend to follow 'passive' approaches, such as reducing fishing pressures, which, as noted earlier in the report, were not captured in this study.

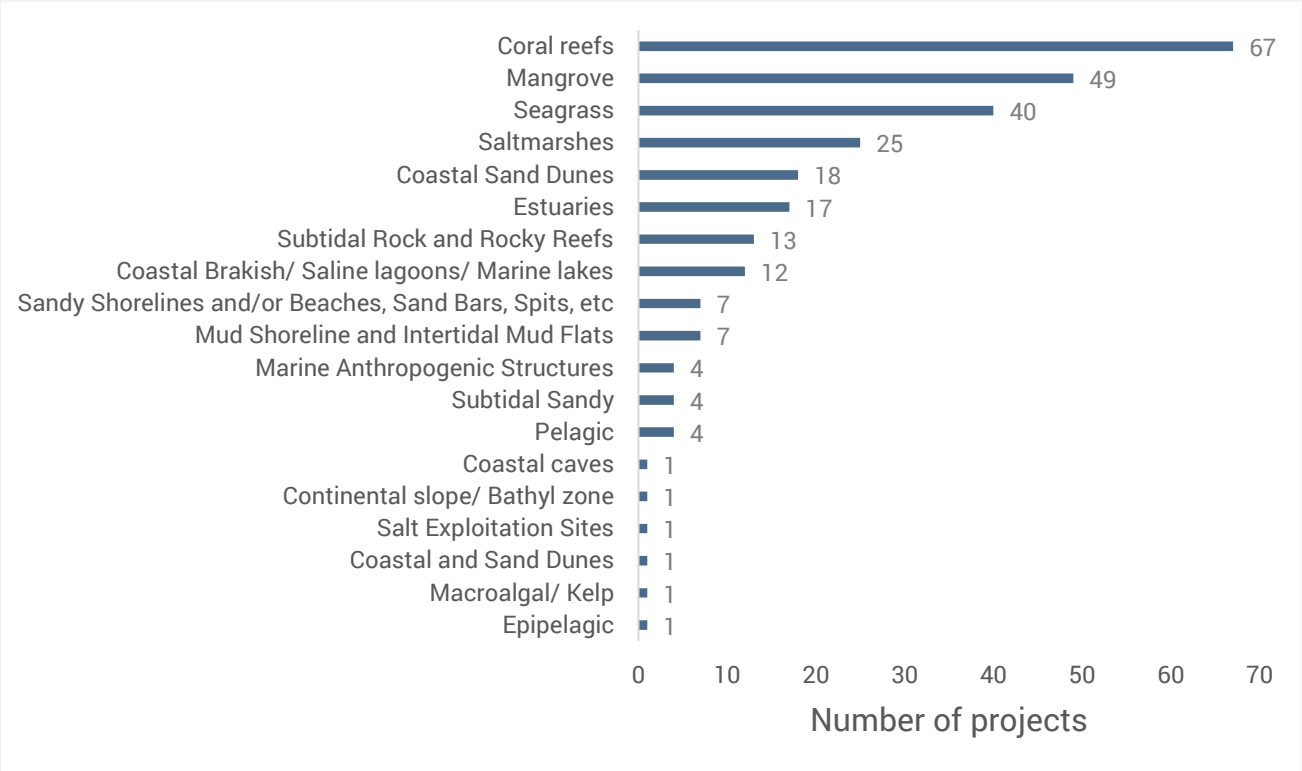


Figure 8: The number of restoration projects per habitat.

Of the 237 projects identified, 137 had both habitat and funding information available. This covered 43% of total funding, meaning that for most projects where funding information was available, no

information on the specific habitats restored was found. Of the subset of projects where funding and habitat information was available, mangroves received the largest proportion of funding (35%), followed by coral reefs (19%) and saltmarshes (11%) (

Figure 9).

Figure 9: The amount of funding amount committed to restore each habitat type.

Mangroves have received considerable attention in recent years. Concepts such as “blue carbon” (e.g., the potential for mangroves to sequester and store carbon and aid climate change mitigation) have strongly resonated with funders, NGOs and Governments. The high proportion allocated to mangroves is, in part, due to the “Mangroves for Coastal Resilience project” announced by the Government of Indonesia in 2020. The project’s total funding will amount to €411 million over five years and therefore makes up most of the funding allocated to mangroves. Another high profile and high value mangrove related project is the “Ten Billion Tree Tsunami programme” in Pakistan, however funding is for the entire project and extends beyond coastal and marine habitats

Fifty-three projects were undertaken across multiple habitats. In this case, it was assumed that the funding was equally distributed between these habitats. The most common multi habitat projects combined coral reefs and seagrasses (13 projects), coral reefs and mangrove forests (10 projects) and saltmarshes and estuaries (9 projects) (Table 2). Despite the widespread understanding of the need for integrated approaches, very few projects provided information on their spatial extent (43%), how the appropriate scale was identified and the degree to which the project linked up with existing management measures, communities and pressures to ensure seascape level action.

Table 2: The combinations of habitats that were included in projects.

Habitat type	Subtidal Rock, Rocky Reefs	Mud Shoreline, Mud Flats	Estuaries	Seagrass	Saltmarshes	Coral reefs	Mangrove
Subtidal Rock, Rocky Reefs	-	2	5	4	3	2	1
Mud Shoreline, Mud Flats	2	-	3	1	5	2	1
Estuaries	5	3	-	6	9	4	7
Coastal Sand Dunes	0	1	4	4	3	3	1
Coastal Brackish/ Saline lagoons/ Marine lakes	2	1	3	3	2	1	1
Seagrass	4	1	6	-	5	13	7
Sandy Shorelines and/or Beaches, Sand Bars, Spits,	2	0	3	4	1	1	3
Shingle and/or Pebble Shoreline and/or Beaches	0	0	1	0	1	0	1
Saltmarshes	3	5	9	5	-	4	7
Coral reefs	2	2	4	13	4	-	10
Mangrove	1	1	7	7	7	10	-

How has seascape restoration funding changed over time?

Over the time period considered, there was a steady increase in the number of projects from 75 in 2015 to 118 in 2022 (Figure 10). A slight decrease was seen in 2020, which could be attributed to the cessation of activities at the start of the Covid-19 pandemic.

The reported length of projects ranged between 1 and 22 years, with an average length of five years. A total of 13% lasted less than three years and 6% lasted over 10 years. The duration of the projects relates to restoration activities and does not include the grant awarding process.

Figure 10: The number of restoration projects per year.

The majority of projects (55%) are ongoing, with very little information on planned future restoration activities. Of the ongoing projects, the majority are in Western Europe (36), then Asia-Pacific (32), Latin-America and the Caribbean (20), North America (13), Africa (13), Eastern Europe (6), and Europe as a whole (6) (

Figure 11).

Figure 11: The status of the restoration projects.

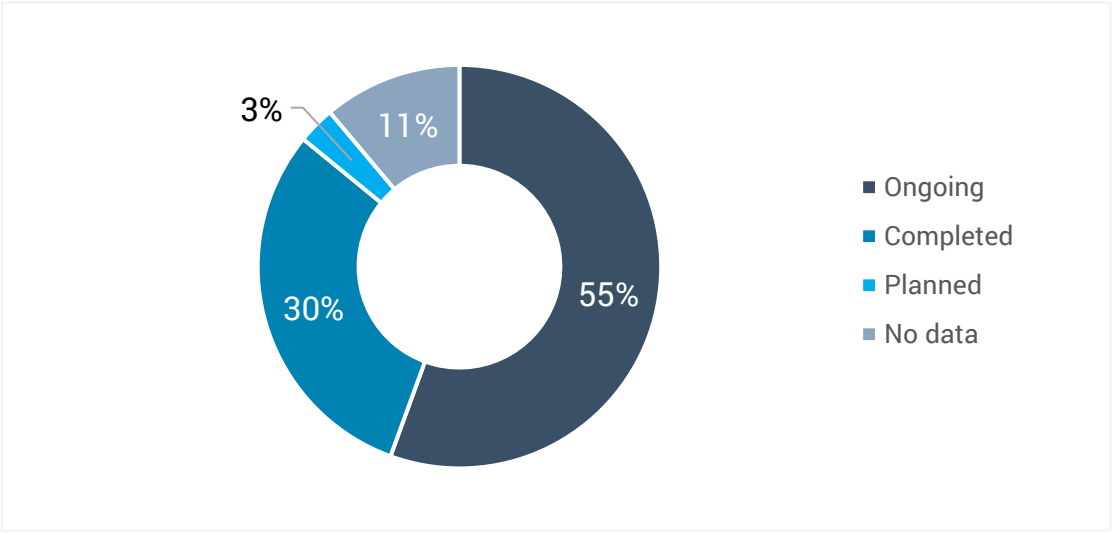
What are the seascape restoration project goals and measures?

Understanding and effectively communicating the goals and objectives of restoration projects can aid the strategic allocation of funds and seek to maximize the benefits for people and nature. Where restoration goals were specified in the projects in this analysis, they were classified into five categories. The goals included biodiversity conservation, climate adaptation and mitigation, research and other ecosystem services.

The majority of projects had multiple goals (53%), with biodiversity conservation being the most common (88% of projects) and most funded, accounting for €3.1 billion of committed funds (

Figure 11). This was followed by climate change adaptation (24% of projects) while a smaller proportion explicitly mentioned climate change mitigation or research (17% each). Of the other ecosystem services, regulating services such as erosion prevention and moderation of extreme events were most frequently recorded (50% of projects) (Figure 12). Additional services included waste-water treatment, cultural services (like tourism and recreation), provisioning services (like food from fisheries) and supporting services (like the creation of habitats for species). In the vast majority of cases, the goals and benefits linked to restoration activities were not linked to specific stakeholders or members of society, this is despite the importance of considering gender equity [3] and the differential benefits and consequences for marginalized peoples[5]

A major factor that limited the information available for this work was a frequent absence of clear goals indicators and frameworks to track and communicate restoration progress. This made it extremely challenging to measure how successful individual projects were and to discern the benefits that the projects granted[4]. Where goals were mentioned, they tended to not be specific, measurable and time



[3] Gender equity is key to mangrove restoration | IUCN

[4] To demonstrate the benefits of restoration, improved monitoring is paramount - UNEP-WCMC

bound. The majority had qualitative (e.g., an increase in the area of a target habitat) rather quantitative (e.g., set numeric) targets. Furthermore, relatively few projects had monitoring and evaluation frameworks and indicators.

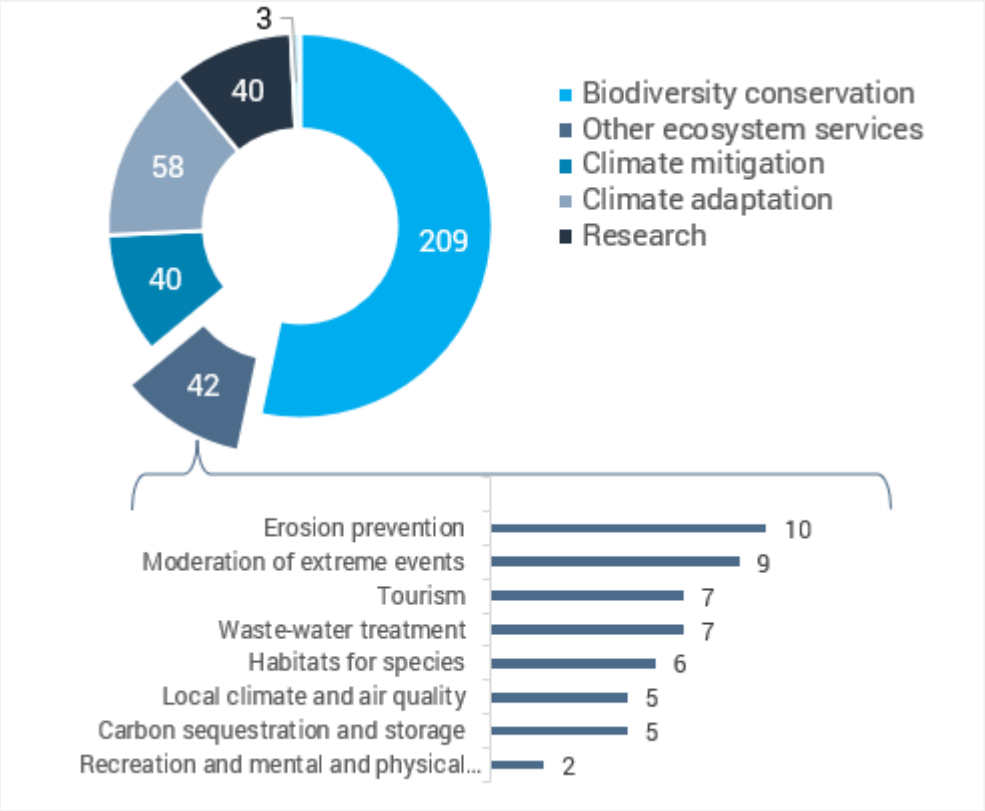


Figure 12: The stated goals of the restoration projects analysed, “Other ecosystem services” were further categorized following the classification system of “The Economics of Ecosystems and Biodiversity”.

Active and passive restoration

The increasing rate of degradation and loss in in coastal and marine environments calls for a range of large-scale and integrated approaches to enable their recovery. These can be broadly classified into passive (e.g., natural regeneration) and active (e.g., human-assisted regeneration). Information on the specific restoration measures implemented was available for 89% of the projects included in this analysis.

In the projects identified, active restoration actions were the most common (40%), followed by a combination of active and passive measures (38%). Passive measures used on their own were the least frequent (19%). The dominance of active restoration measures compared to passive measures, is partly a bias generated by the approach used in this study and the fact that other forms of coastal and marine management may not be “labelled” as restorative actions for this work to detect. Such actions include the management of pollution that ultimately ends up in the oceans or the use of area-based management tools (like marine protected and conserved areas and fisheries closures), which can deliver significant benefits by restoring food webs, ecosystem structure and supporting population and species recoveries (Table 3).

Table 3: Example integrative measures that can support and deliver restoration goals.

Intervention measure	Further information
Marine Protected Areas	https://mpatlas.org/ https://www.protectedplanet.net/en/thematic-areas/marine-protected-areas
Marine Spatial Planning	https://ioc.unesco.org/our-work/marine-spatial-planning#:~:text=Marine%20Spatial%20Planning%20(MSP)%20is,specified%20through%20a%20political%20process.
Ecosystem-based management	https://www.iucn.org/our-union/commissions/commissions-ecosystem-management
Integrated coastal zone management	https://ec.europa.eu/environment/iczm/index_en.htm
Integrated land-freshwater-sea approaches	https://www.thegef.org/what-we-do/topics/ridge-reef
Fishing gear restrictions	https://www.fao.org/fishery/en/topic/16011
Fish catch limits	https://www.fao.org/fishery/en/topic/16011
Prevention of land-based pollution	https://www.iisd.org/articles/deep-dive/protecting-marine-environment-land-based-activities
Other Effective Area-Based Conservation Measures	https://docs.google.com/presentation/d/1HDJeavwiDeU5yR0UzHdPmgD6ezWB7DjKOkN6bFRadKs/edit#slide=id.g1517eeb0673_0_0

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Conclusion: Future potential, ambition and capacity

When successful, the restoration of marine and coastal ecosystems provides multiple benefits to a range of stakeholders and rightsholders[5,6]. However, the success rate of restoration projects is typically low. A fundamental consideration when planning and implementing restorative actions is context. This requires consideration of the potential for success and the benefits that can be obtained. It also requires awareness of the forces that influence the degree to which the proposed actions align with local, national or regional priorities and the capacity for stakeholders to conceptualize, design, implement and monitor restoration actions in an equitable and evidence based manner.

Mapping seascape restoration potential

While our understanding of coastal and marine habitats continues to increase, there remain significant gaps in our knowledge of where key habitats are, where they were historically located and what condition they are in. There is also still a great deal of information missing on what must be done to help these habitations, what the chances of success are if action is taken, what benefits will come from successful restoration and what penalties we will face if restoration fails or is not attempted at all.

Mangroves are the only marine and coastal habitat for which a detailed map of restoration potential exists[7]. The analysis, led by The Nature Conservancy's Mapping Ocean Wealth Initiative, focused on areas of recent mangrove loss and excluded areas that cannot be restored (e.g., which are now open water). Consideration was also given to factors that will influence the probability of future restoration success such as sea level rise, size of the area and the proximity to remaining mangroves. A policy support tool displaying mapped and statistical data allows users to explore mangrove restoration potential by country and region, as well as the potential benefits for people and economies (Figure 13. Illustration of mapping restoration potential.).

[5] Gender equity is key to mangrove restoration | IUCN
[6] How to Restore Ecosystems and Center People | World Resources Institute (wri.org)
[7] Mapping Ocean Wealth

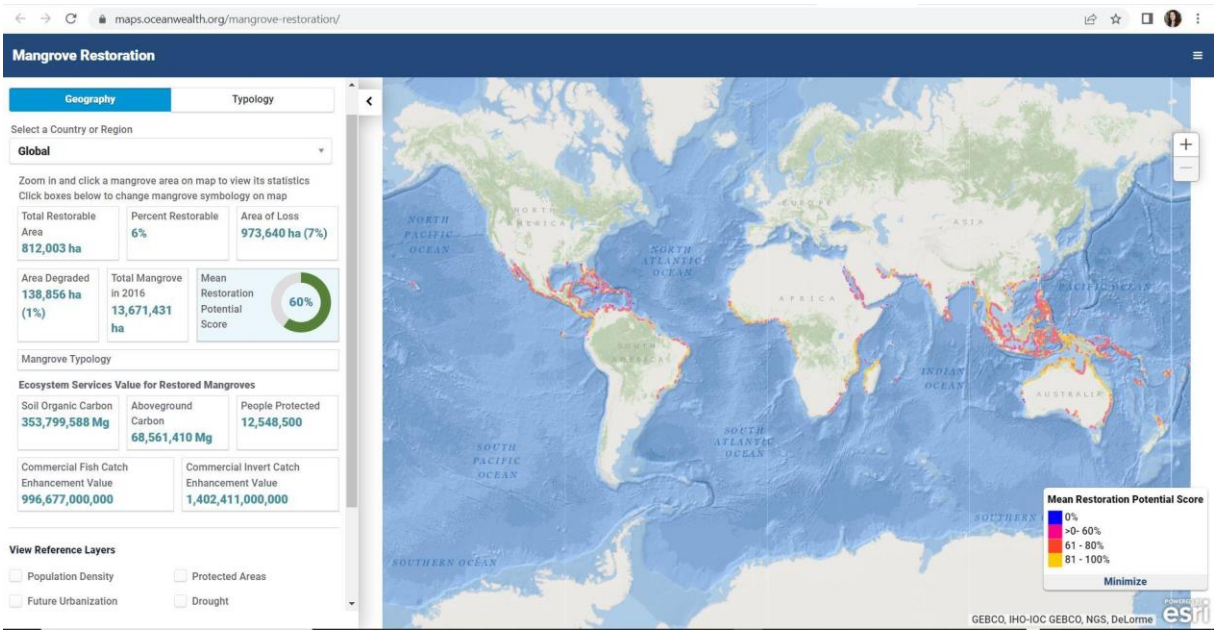

Figure 13. Illustration of mapping restoration potential.

For Coral reefs there is no comprehensive global mapping effort to identify potential restoration areas, while also accounting for feasibility, cost, benefits and long-term suitability in the context of a changing climate. There are a number of maps of the global extent of corals, as well as the threats they face, the priority regions for conservation and the ecosystem services that they currently provide. Yet, these have not been brought together to guide restoration potential while simultaneously accounting for contextual factors that will influence the probability of long-term success.

The simple maps that present below provide some insight into possible areas where restoration could potentially benefit coral reefs. Areas identified are based on threats to coral reefs from water pollution and information of where forest restoration in disturbed coastal catchments can reduce sediment runoff and thereby support the recovery of coral reef systems (Suárez-Castro et al 2021). This later data set is relatively novel in that it utilizes a seascape approach by considering the benefits that can be obtained by undertaking activities in land from the focal area. Figure 14 demonstrates how water pollution can be used as an indicator to examine coral reef restoration areas. Figure 15 illustrates how biodiversity importance can be used as an indicator to identify the potential of restoration areas. Please note that this is not a full assessment but illustrative of the type of analysis and the data that can be brought together to inform restoration potential.

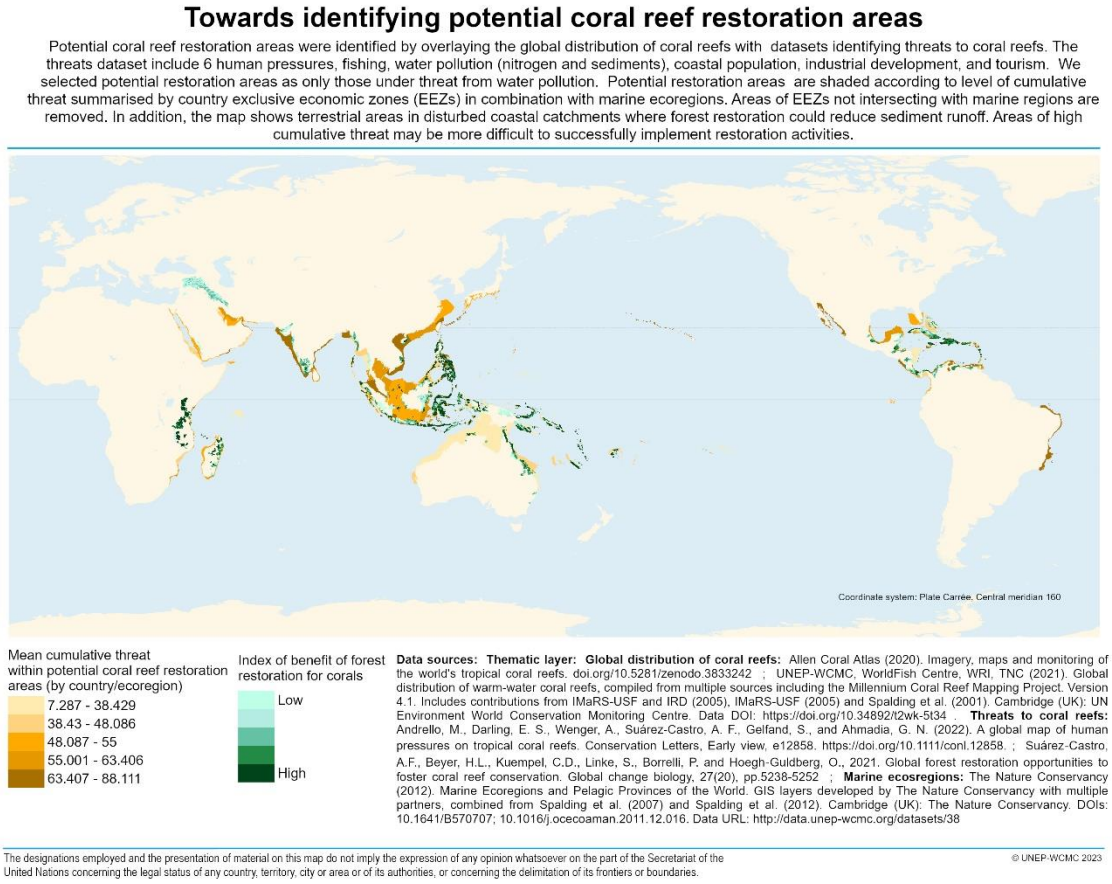

Figure 14: Coral reef threats and potential areas for seascape restoration.

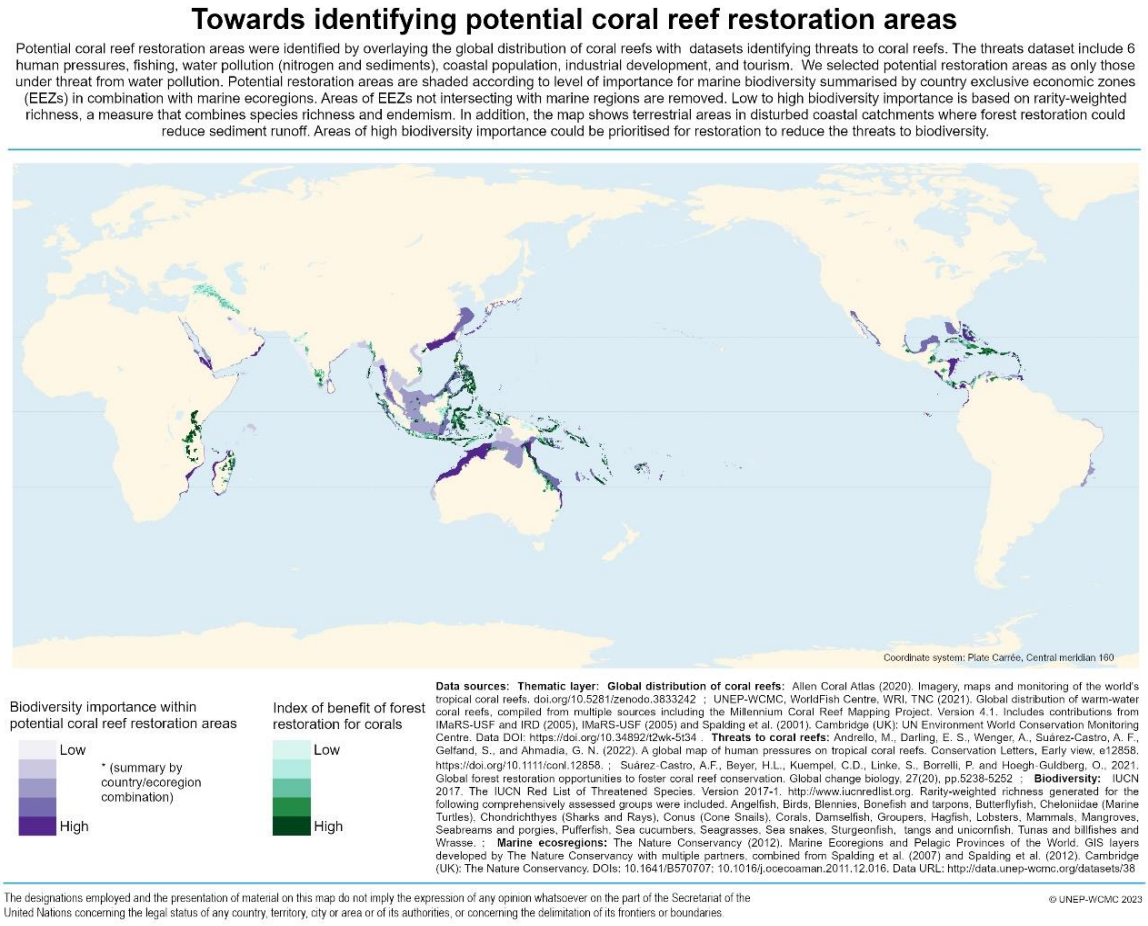

Figure 15: Areas of high coral reef biodiversity and potential areas for seascape restoration.

For other key habitats such as seagrass, saltmarsh or kelp the lack of data is even more pronounced. Many of these habitats have incomplete and/or old distribution maps. There is also a poor understanding of these areas, the ecosystem services that they provide and their level of degradation.

For Seagrass a basic analysis that uses a global dataset of modelled seagrass extent to identify areas that are currently not in the available global seagrass distribution maps and combined them with cumulative human impacts [8] (Figure 16) and areas of biodiversity importance (

Figure 17). The cumulative impacts layer included many aspects such as ocean acidification, sea level rise and sea surface temperatures. We did not have the necessary resources to examine these threats separately.

[8] Halpern *et al.* 2015

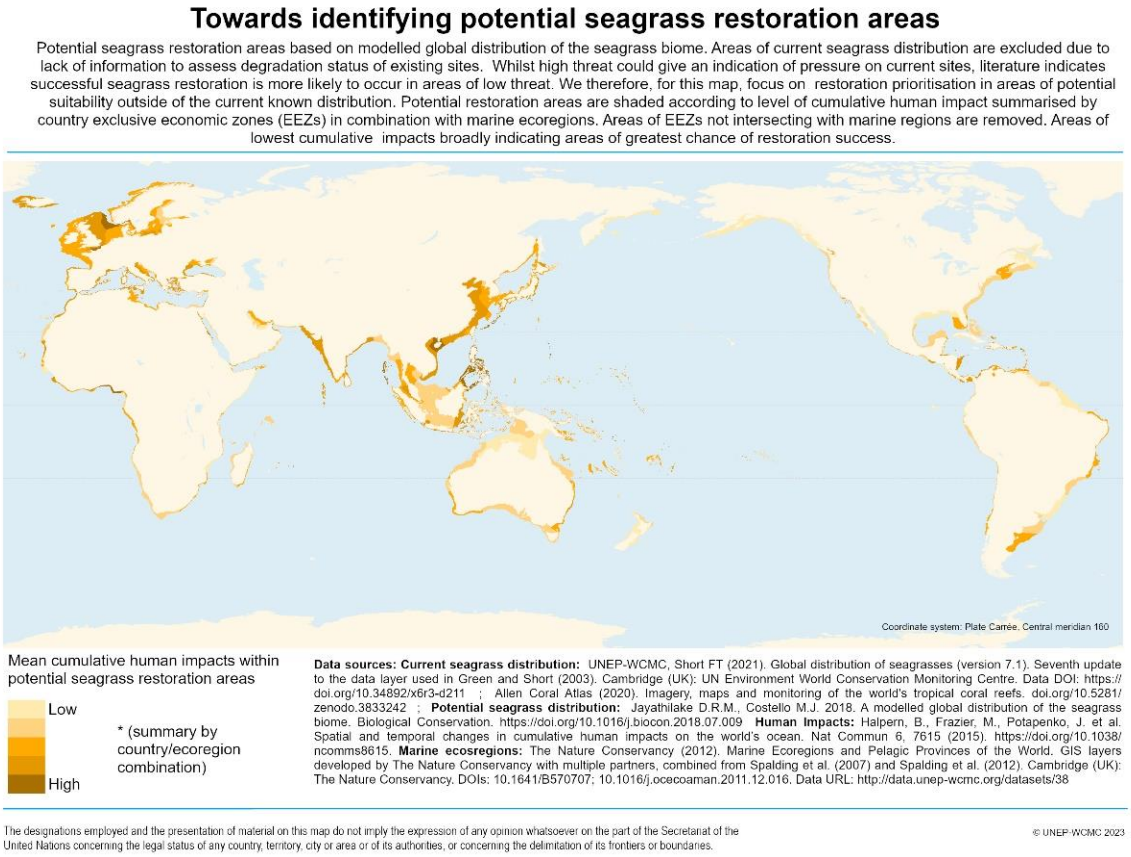

Figure 16: Areas of high coral reef biodiversity and potential areas for seascape restoration.

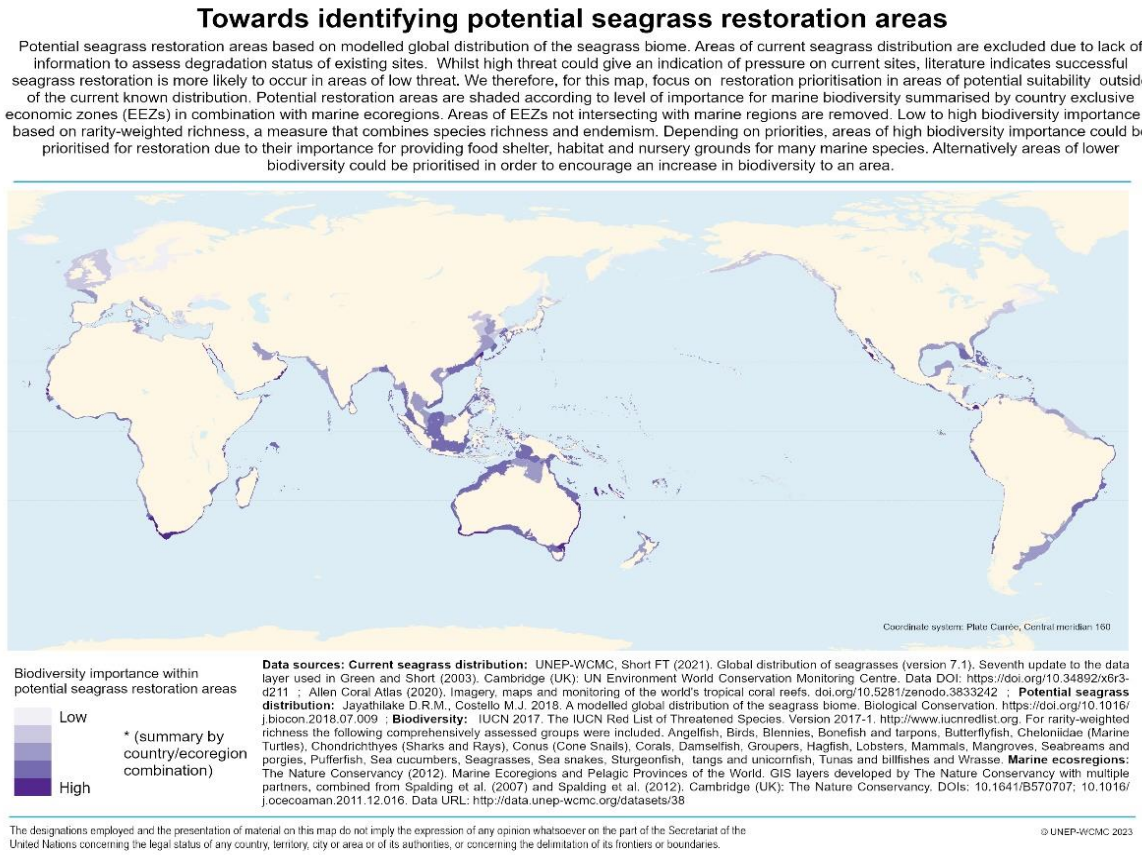

Figure 17: Areas of high coral reef biodiversity and potential areas for seascape restoration.

Commitments and Capacity

Successfully restoring and recreating degraded and lost habitats is a significant challenge and failure rates are high[6]. The context in which the restoration action takes place can have a considerable impact upon its success, possibly more so than how it is undertaken [7]. Typically, practitioners focus upon the ecological and environmental context (e.g., the species present or the amount of rainfall) and the nature and degree of human impacts within a location. However, the political, gender and socio-economic context is clearly vital. Ensuring that there is political willingness can help mobilize funds and ensure that projects are not undermined by external factors like urban development. While meaningfully engaging with local stakeholders and building the capacity of the implementing team is vital to the long-term success of projects.

Commitments

If proposed restoration actions align with and help deliver local, national or regional policies and objectives then it can be assumed that there will be a greater probability of success. We conducted a review of policy documents and broad Google searches to identify key restoration commitments across major global geographic areas (a detailed methodology is provided in Appendix A – Overview of methodology used in desktop study). Our aim was to identify where restoration actions are high on the political agenda.

Our review identified 105 restoration related commitments from 49 different countries, two regional blocks (EU and African Union) and the Rio Conventions (Convention on Biological Diversity, The United Nations Framework Convention on Climate Change and The United Nations Convention to Combat Desertification). These were classified into two main groups: commitments specifically addressed at marine ecosystems (73) and general ecosystem restoration targets that included both terrestrial and marine ecosystems (32). The commitments that we identified were at the international level (i.e., targets under relevant multilateral environmental agreements and global initiatives), regional level and national level. Commitments at sub-national levels were excluded from the analysis. This must be considered when comparing commitments across regions as some regions, such as North America, are composed of fewer countries and this might result in fewer national-level commitments.

The highest number of commitments were in Latin-America and the Caribbean (38% of all commitments), followed by Asia-Pacific and Africa (Figure 18). In part this is due to the higher number of countries in these regions (in comparison to other regions like North America) as well as the recognized importance of coastal ecosystems within island states, for example to support climate change adaptation and blue economy sectors.

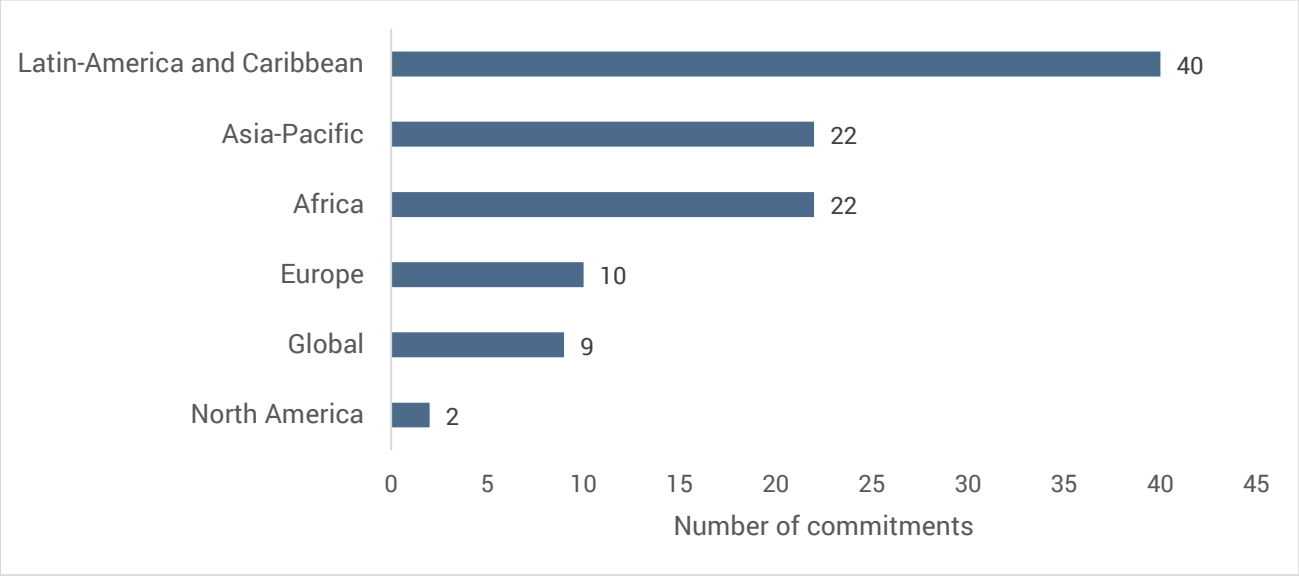

Figure 18: The number of restoration related commitments per region.

International level commitments included the global target to restore at least 15% of degraded ecosystems by 2020 (Aichi Biodiversity Target 15) under the Convention on Biological Diversity. Other relevant commitments identified were the Bonn Challenge and the New York Declaration to restore 350 million hectares of land by 2030 (including coastal habitats such as mangroves). Over 50% of the commitments identified targeted a specific marine habitat, the most frequent being mangroves, followed by coral reefs, seagrass, wetlands and beaches (Figure 19).

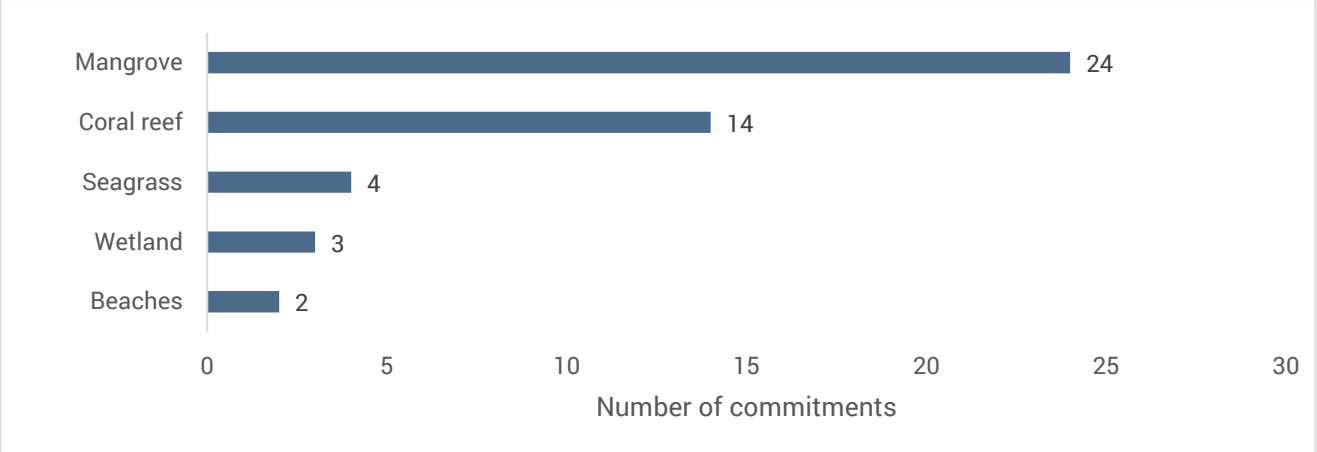

Figure 19: The number of restoration related commitments per habitat.

The analysis considered general commitments, which were relevant to coastal and marine systems, as well as coastal and marine specific commitments. Broadly speaking, the commitments fell into the following groups: (1) quantified commitments aiming to restore a given ecosystem area by a specified date, (2) commitments to secure/mobilize funding restoration actions (3) general commitments for restoration that did not provide quantified time-bound targets and (4) commitments for supportive measures such as increasing capacity and research for restoration (Table 4).

Twenty-two quantified, time-bound, coastal and marine-specific ecosystem restoration commitments were identified (of which the majority were for mangrove systems). The most frequent coastal and marine specific commitments were for supportive measures. Funding related commitments were those that were the least frequently made. In several cases, policy frameworks and initiatives outlined more specific targets for terrestrial ecosystems while stressing that more research is needed to establish similar targets in marine ecosystems (e.g., the 2021 Spanish Strategy for Green Infrastructure, Connectivity, and Ecological Restoration[9]).

Table 4: The number of coastal and marine related and general commitments relating to restoration.

	Commitment type	Number
Coastal and marine commitments	Quantified and time bound restoration target	22
	Quantified time bound restoration funding target	5
	General target (without quantification)	29
	Supportive targets	38
General	Quantified and time bound restoration target	17
	Quantified time bound restoration funding target	2
	General target (without quantification)	12
	Supportive targets	17

[9]Spain's National Recovery and Resilience Plan - https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/698878/EPRS_BRI(2022)698878_EN.pdf

Capacity

Capacity can take many forms, including technical capacity (knowledge on the science, culture and economics of restoration) and institutional capacity (to plan projects, build partnerships, write proposals and deliver large and complex projects). Evaluating these aspects in a systematic, comparable and quantitative way proved a significant challenge. The information required is rarely publicly available and, where it is, it is in a form that makes comparisons between projects or locations (e.g., countries) difficult.

A high-level review identified 83 organizations from 72 locations which have been or are currently involved in restoration projects. The vast majority of those identified are non-governmental organizations (39), followed by academic institutions (10). While this provides a useful starting point, it is important to note that just because an entity has undertaken a restoration project in the past does not mean it is well equipped to do so in the future. In addition, just because an organization has implemented a project in the past does not mean it was a success and it does not mean it has retained the skillset, staff and personality that were involved. Furthermore, it is vital that money and time are spent building the capacity and expertise of local and national actors and institutions to undertake restoration actions, rather than keep funding existing “established” partners. This is particularly true in developing countries and remote areas where local knowledge is vital to develop and implement effective actions but funding, capacity and expertise at the local level are often lacking.

Limitations and biases

- The database of projects, funders and beneficiaries is not exhaustive due to time constraints, a focus on seascape level restoration and the relative inaccessibility of information. While the method used included a subset of countries from each region, differences in the availability of information between geographical regions and languages, creates a bias. Therefore, the information presented here should be interpreted as a minimum estimate.
- The projects included were mainly those that explicitly referenced restoration, rehabilitation or recovery of ecosystems. As a result, some relevant actions or commitments that could contribute to restoration (e.g., those that decrease pressures to marine ecosystems such as marine litter) but did not include related key words are not included.
- As there is no common definition for 'seascape' restoration, relevant projects were selected on a case-by-case basis. Some of the smaller projects likely do not meet the definition for seascape restoration, as the criteria for inclusion and exclusion (such as the size of the project) will have likely slightly varied between researchers collecting the data.
- The extent of restoration projects and activities is not included since the information was available for less than half of the projects (43%).
- Funding was standardized to EUR for ease of comparability. This was done with current conversion rates and not historical ones, so these are approximate amounts. For some projects, only yearly funding amounts were available. In this case, the figures were multiplied over the project's timeframe.
- Where projects covered more than one habitat type, an equal distribution of funding was assumed between the habitats. Similarly, when a project received funding from more than one type of funding source, or the funding was received by more than one beneficiary type, an equal distribution was assumed.
- A number of projects included restoration beyond the marine realm (including the most highly funded project) and funding information directed towards marine and coastal restoration could not be disaggregated from funding that was directed elsewhere.
- Unfortunately, gender could not be explicitly considered when assessing the restoration projects due to a lack of disaggregated gender data available in the project information.
- The restoration potential maps included are only illustrative and should not be used to identify specific areas. There are many factors that can affect the potential of restoration areas, such as the cost, feasibility benefits, stakeholder willingness and capacity and the long-term suitability of the location in the context of a changing climate. However, such information is largely absent for coastal and marine habitats.
- In reviewing the commitments of governments and regional bodies, not all policies were considered. There was a focus on national and international groups (e.g., less focus on regional) and environmental policies (e.g., less focus on policies linked to food security and urban planning) will may contain content relevant to restoration.

References

1. United Nations. *The Second World Ocean Assessment*. *The Second World Ocean Assessment* vol. I (2021).
2. Brondizio, E. ., Settele, J., Díaz, S. & Ngo.H.T. *IPBES, 2019. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Population and Development Review* vol. 45 (2019).
3. UNEP. *Becoming #GenerationRestoration: Ecosystem restoration for people, nature and climat*. *United Nations Environment Programme* (2021).
4. Schøning, L. More or Less Integrated Ocean Management: Multiple Integrated Approaches and Two Norms. *Ocean Dev. Int. Law* **51**, 95–115 (2020).
5. Fleischman, F. *et al.* Restoration prioritization must be informed by marginalized people. *Nature* **607**, 5 (2022).
6. Bayraktarov, E. *et al.* The cost and feasibility of marine coastal restoration. *Ecol. Appl.* **26**, 1055–1074 (2016).
7. Fraschetti, S. *et al.* Where Is More Important Than How in Coastal and Marine Ecosystems Restoration. *Front. Mar. Sci.* **8**, (2021).

Appendices

Appendix A – Overview of methodology used in desktop study

1. Large-scale coastal and marine restoration projects database

This report developed a database of current large-scale coastal and marine restoration projects globally. It is not a comprehensive database, but it instead aims to highlight key large-scale marine restoration projects listed under the major databases and websites that were examined.

Aim: Compilation of a database of large-scale coastal and marine ecosystem restoration projects worldwide within the last five years.

Scope:

- **Geographic**: Global
- **Actors**: NGOs, intergovernmental, private, academia, governmental, etc.
- **Restoration measures**: The projects included were mainly those that explicitly referenced restoration, rehabilitation or recovery of ecosystems. This included a wide range of restoration actions, including active and passive measures. The type of restoration actions included depended upon the definition of restoration within the 'source' of the commitment. As a result, some relevant commitments that could contribute to restoration (e.g., those that decreased pressures to marine ecosystems such as marine litter commitments) were not covered in the database.
- **Language**: The project information reviewed was primarily in English as the databases used to identify projects were all in English. Relevant documents and online resources in Spanish, French, German, and Portuguese were also reviewed, where available. The additional languages were chosen based on the language expertise within the research team. As such, some bias was inevitably introduced as relevant documents in other languages may have been missed.

Project identification:

1. **Database scan**

Relevant projects were identified from key databases and sites identified by the project team. The following sources were included:

Source	Search details	Link
Global Environment facility funded projects (GEF)	Search terms: "restore", "marine", "sea", "blue", "coral", "mangrove", "seagrass", "fish", "saltmarsh"	https://www.thegef.org/projects-operations/database
IKI International Climate Initiative project database	Topics selected: conserving biological diversity marine and coastal areas, reduction of loss rate, degradation and fragmentation of ecosystems/ areas, restoration of ecosystems	https://www.international-climate-initiative.com/en/search-project/
Society for Ecological Restoration Europe knowledge base	Filter biome: coastal/marine	https://www.ser-rrc.org/project-database/
OPPLA	Search terms: "marine", "coastal", "dunes", "coral", "sea", "mangrove", "seagrass", "beach". "estuary", "saltmarsh"	https://oppla.eu/case-study-finder
Funding the ocean	Search: "restoration", "restore", "recover", "rehabilitate"	https://fundingtheocean.org/?s=restoration

Coral funders	Only included projects that received funding over 800,000 USD	https://coralfunders.com/
Mapping Ocean Wealth	All places and projects	https://oceanwealth.org/project-areas/
Mangrove Alliance	Scanned all initiatives	https://www.mangrovealliance.org/
NORA	All projects	https://noraeurope.eu/
Mangroves for the future	Large grants facilities projects	http://www.mangrovesforthefuture.org/
CEEweb	Recent projects	https://www.ceeweb.org/
EUROSITE	Activities - projects	https://www.eurosite.org/projects/
Rewilding Europe	All projects	https://rewildingeurope.com/
European Investment Bank	Project list: From 2015	https://www.eib.org/en/products/mandates-partnerships/ncff/index.htm
LIFE public database	Search terms: “marine”, “coastal”, “dunes”, “coral”, “sea”, “mangrove”, “seagrass”, “beach”. “estuary”, “saltmarsh”	https://webgate.ec.europa.eu/life/publicWebsite/index.cfm
LUCID	Restoration database – terrestrial ecosystems filtered by ‘mangroves’	http://lucid.wur.nl/datasets/forest-and-landscape-restoration
eConservation	Project list	https://econservation.jrc.ec.europa.eu/ecountries
LMMA Network, Pacific	Our work	https://lmmanetwork.org/
NBS Initiative	Ecosystem: “coral reefs”, “coastal”, “deltas and estuaries”, “mangroves”, “temperate oceans”, “polar oceans”, “saltmarsh”, “seagrass”	https://casestudies.naturebasedsolutionsinitiative.org/
Blue Solutions		https://bluesolutions.info/
Seagrass restoration network	Success stories	https://seagrassrestorationnetwork.com/
World Restoration Flagships	Marine related nominations for restoration flagships under UN Decade on Ecosystem restoration	https://implementers.decadeonrestoration.org/implementers

2. Complimentary searches

Following the initial database scan, a complimentary targeted google search was undertaken. The following search terms were used:

- "[COUNTRY]" AND "marine restoration" AND ("project" OR "action" OR "initiative" OR “funding”)
- "[COUNTRY]" AND "coastal restoration" AND ("project" OR "action" OR "initiative" OR “funding”)
- "[COUNTRY]" AND "coral restoration" AND ("project" OR "action" OR "initiative" OR “funding”)
- "[COUNTRY]" AND "mangrove restoration" AND ("project" OR "action" OR "initiative" OR “funding”)
- "[COUNTRY]" AND "seagrass restoration" AND ("project" OR "action" OR "initiative" OR “funding”)
- "[COUNTRY]" AND "sand dune restoration" AND ("project" OR "action" OR "initiative" OR “funding”)
- "[COUNTRY]" AND "blue carbon AND ("project" OR "action" OR "initiative" OR “funding”)

Due to time constraints, this research focussed on up to three representative countries from different subregions:

- Africa
    - North Africa (Algeria, Libya, Tunisia)
    - West Africa (Ghana, Benin, Guinea-Bissau)
    - East Africa (Kenya, Zanzibar, Tanzania, Madagascar, Seychelles)
    - South Africa (South Africa, Mozambique)
- Latin America and Caribbean
    - Central America (Mexico, Belize, Costa Rica)
    - Caribbean (Cuba, Jamaica, Dominican Republic)
    - South America (Brazil, Peru, Colombia, Ecuador),
- North America (USA, Canada)
- Asia-Pacific
    - Central and Western Asia (UAE)
    - East Asia (Japan)
    - South Asia (Maldives, India, Pakistan, Sri Lanka)
    - South East Asia (Philippines, Indonesia, Cambodia)
    - Pacific (Fiji, Australia, Samoa, Timor Leste),
- Europe
    - Eastern Europe (Bulgaria, Croatia, Albania)
    - Western Europe (France, UK, Portugal)
    - Northern Europe (Norway, Sweden, Denmark)
    - Southern Europe (Greece, Spain, Italy)

3. Project eligibility

Projects were included in the database if they met the following criteria:

- Ongoing or completed no earlier than 2015
- Undertaking restoration action: "restoration", "recovery", "enhancement" or "rehabilitation" mentioned in the project description
- Projects on coastal and marine ecosystems
- Large scale projects (a case-by-case approach was taken where researchers took a judgement call regarding the size of the project)

4. Data collection

For each eligible project identified, data was collected for the following variables and response categories:

	Variable	Response categories
Project information	Project name	Name of project
	Focal country	Countries where project is taking place
	Geographical region	Africa, Asia-Pacific, Europe, Latin America and Caribbean, North America, Multiple
	National or Multinational	One country or multiple
	Partner type	e.g., academia, government, private
	Project partners	Name of partners
	Start and end date and timeframe	Month and year and duration
	Project stage	Ongoing or completed
	Major habitat	Primary designation using IUCN habitat classification

Restoration details	Minor habitat	Secondary designation using IUCN habitat classification scheme
	Restoration goal	e.g., biodiversity conservation, climate mitigation, research
	TEEB category	Other ecosystem services which were a goal of the project (see TEEB classification below)
	Restoration measure	P1; P2; P3; A1; A2; A3; A4; A5 from specific measure classification (below)
	Overall extent of restoration	Area in ha
Funding details	Donor	Name of donor
	Types of donor	e.g., private, foundation, government
	Donor country	Country of donor
	Beneficiary type	e.g., Government, NGO, Academia
	Beneficiary	Beneficiary name
	Implementing agency	Implementing agency name
	Primary funding	Amount in EUR
	Co-funding	Amount in EUR
	Total funding	Amount in EUR
More information	Webpage	Link
	Contact emails	Email address
	Comments	Additional information

The IUCN habitat classification scheme v3.1 was used to classify the habitats covered by the restoration projects.

Project goals

Restoration goal		
Restoration goal	**Description**	**Further categorisation**
Biodiversity conservation	Explicit mention of biodiversity, protecting a particular habitat or species in the project description or objectives	NA
Climate adaptation	Explicit mention of “climate change adaptation” in the objectives.	NA
Climate mitigation	Explicit mention of climate change mitigation or carbon storage and sequestration in the project description or objectives.	NA
Other Ecosystem Services		See TEEB classification (see table below)
Research	Explicit mention of research in the project description and objectives.	NA

TEEB classification

One of the identified project goal categories was 'other ecosystem services. The Economics of Ecosystems and Biodiversity (TEEB) ecosystem service classification was used to classify the benefits specified in project objectives beyond biodiversity conservation, climate change mitigation and adaptation, and research.

Source: TEEB (2010), The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A Synthesis of the Approach, Conclusions and Recommendations of TEEB.

Ecosystem service category (TEEB)	Services within Category	Definition and examples
Provisioning services	1. Food	Growing food either form managed agro-ecosystems or "wild"
	2. Raw materials	Materials for construction and fuel, e.g., wood, biofuels and plant oils
	3. Fresh water	Regulation of hydrological cycle, including water flow, purification of water
	4. Medicinal resources	Traditional medicines and raw materials for pharmaceutical industry
Regulating services	5. Local climate and air quality	Shade, rainfall, water availability, air quality
	6. Carbon sequestration and storage	Removal of carbon dioxide from the atmosphere into plant tissue
	7. Moderation of extreme events	Natural hazard buffers
	8. Waste-water treatment	Filter human and animal waste, buffer to surrounding environment
	9. Erosion prevention and maintenance of soil fertility	Prevention of soil erosion, maintenance of nutrients
	10. Pollination	Insects, birds, bats and wind pollinate plants and trees
	11. Biological control	Regulating pests and vector borne diseases
Habitat or supporting Services	12. Habitats for species	Each ecosystem provides different habitats for species' lifecycle
	13. Maintenance of genetic diversity	Provides the basis for locally well-adapted commercial crops and livestock
Cultural Services	14. Recreation and mental and physical health	The role green space plays in maintaining mental and physical health
	15. Tourism	Provides considerable economic benefits and is a source of income Educates people about the importance of biological diversity
	16. Aesthetic appreciation and inspiration for culture, art and design	Nature relates to language and knowledge and acts as a source of inspiration
	17. Spiritual experience and sense of place	Places with a sacred or religious meaning

Specific measure classification

Name of restoration measure	Further categorisation	Description/Notes
P Passive restoration No human intervention "Spontaneous restoration"	1. Policy, planning and research Project planning, policy regulations, feasibility studies Link to financial incentive, e.g. agricultural subsidy, or certification, e.g. FSC	Policies to protect an area; policies to conduct research, but no mention of actions
	2. Capacity building, awareness raising and stakeholder engagement	Educating people about restoration, but not training them to do a task
	3. Purchasing land for protection (3P)	Allowing or enabling natural regeneration to occur
A Active restoration Human intervention	4. Policy planning and research	E.g., "x% of land must be restored"
	5. Capacity building, awareness raising and stakeholder engagement	E.g., training volunteers to remove invasive species
	6. Removal of invasive species	
	7. (Re)introduction of flora or fauna – not a direct species conservation measure	Reintroduction if it is a native species that has been in decline. Introduction if it is a non-native species used to help speed restoration.
	8. Physical or environmental alterations	Includes: removal of or modifying vegetation or soil; vegetation management, removal of non-invasives; creating habitat; improving habitat conditions

2. Policy commitments for seascape restoration

Aim: Search for relevant policy commitments for seascape restoration

Scope:

- **Geographic**: Global.
- **Administrative level**: The scan included international level, regional level and national level commitments. Due to time constraints, commitments at the subnational level were excluded from the search.
- **Actors**: Only commitments made by governments/ in policy documents are included. Commitments and multi-actor initiatives made by non-state actors in the public, private and civil society sectors were excluded.
- **Restoration measures**: The commitments included were those explicitly referencing restoration, rehabilitation, or recovery of ecosystems. This included a wide range of restoration actions, including active and passive measures and goals. The type of restoration actions included depended upon the definition of restoration within the 'source' of the commitment. As a result, some relevant commitments which could contribute to restoration (e.g., those that decreased pressures to marine ecosystems such as marine litter commitments) were not included in the database.

Method:

A review of policy documents and broad Google searches were conducted to identify key restoration commitments across major global geographic areas.

For each commitment that was recorded: the country, region, commitment (as written in the source document), main ecosystem, quantification, deadline year, source and link to the source.

1. **International level**

High level targets under relevant MEAs and initiatives were included including the Rio conventions (CBD, UNFCCC, UNCCD), Bonn challenge, UN Decade on Ecosystem Restoration, and the Sustainable Development Goals.

2. **Regional level policy**

Search for marine-related commitments under relevant regional policies: e.g., For the EU - EU Nature Restoration law, MSFD, WFD.

3. **Country level policy**
    - Relevant commitments extracted from past and current UNEP-WCMC work looking at NBSAPs.
    - To supplement this, the most recent NBSAPs were used along with a Google search (where not enough information). Due to time constraints, up to three representative countries from different subregions were focussed upon:
        - Africa - North Africa (Algeria, Libya, Tunisia), West Africa (Ghana, Benin, Guinea-Bissau), East Africa (Kenya, Zanzibar, Tanzania, Madagascar, Seychelles), South Africa (South Africa, Mozambique),
        - Latin America and Caribbean - Central America (Mexico, Belize, Costa Rica), Caribbean (Cuba, Jamaica, Dominican Republic) South America (Brazil, Peru, Colombia, Ecuador),
        - North America (USA, Canada)
        - Asia-Pacific - Central and western Asia (UAE), East Asia (Japan) South Asia (Maldives, India, Pakistan, Sri Lanka), South-East Asia (Philippines, Indonesia, Cambodia), Pacific (Fiji, Australia, Samoa, Timor Leste),
        - Europe - Eastern Europe (Bulgaria, Croatia, Albania), Western Europe (France, UK, Portugal), Northern Europe) Norway, Sweden, Denmark), Southern Europe (Greece, Spain, Italy)
    - **Google search**
        - "[COUNTRY]" AND "restoration strategy"
        - "[COUNTRY]" AND "marine restoration" AND ("commitment" OR "target" OR "goal")
        - "[COUNTRY]" AND "coral restoration" AND ("commitment" OR "target" OR "goal")
        - "[COUNTRY]" AND "mangrove restoration" AND ("commitment" OR "target" OR "goal")
        - "[COUNTRY]" AND "blue carbon AND ("commitment" OR "target" OR "goal")

3. Evaluation of the capacity of countries to implement large (marine) restoration projects

A database of the key organizations working on restoration for each main global geographical area was created. The focus was on marine/coastal restoration, but also included organizations that do restoration in general. The list was by no means exhaustive, e.g., a search the Coral Restoration Database was not conducted due to time constraints, and there could be many more academic institutions included that conduct marine/coastal restoration.

For each organization the following was included:

- The region the restoration work focuses on
- The name of the organization
- Type or organization (e.g., NGO, Academia)
- Relevant activities
- Country/region
- Main ecosystem the organization focuses on
- Relevant links

These were extracted from the review of current large-scale marine restoration projects under the first tasks and supplemented with Google searches for each of the regions.

Appendix B – Definition of funder types

Funder type	Definition
Foundation	This includes private foundations, trusts, NGOs
International body	Intergovernmental institutions and international partnerships such as UNEP or The World Bank
Government	National governments
Private sector	Economic and financial sector

Appendix C – Key funders of marine restoration projects

Name	Type of funding	Description	Amount of funding (EUR)	Ecosystem	Geographic focus	Weblink
11th Hour Racing	Foundation	Restoration of ocean health, Ecosystem restoration, Clean Technologies & Best Practices, Ocean Literacy & Stewardship	Grants range from 9,7000 to 970,000 with an average of 24,200.	Marine	Strong focus in US but also grants internationally	https://11thhourracing.org/
Arcadia Fund	Foundation	The fund's goal is to "protect the natural diversity of the world, now and in the future. Our grants help to safeguard and restore unique and biodiverse areas of land and sea."	Approximately 19.4 million on marine biodiversity related activities	Various	Global	https://www.arcadiafund.org.uk/
Australian government through Blue Carbon Ecosystem Restoration Grants	Governmental	These grants are a core component of the broader Blue Carbon Conservation, Restoration and Accounting Program. The grants aim to fund on-ground implementation of at least 4 blue carbon ecosystem restoration projects in Australia.	Varies	Marine and coastal	Australia	https://www.communitygrants.gov.au/grants/2021-6188
Blue Action Fund	International body	Supports marine conservation projects that are implemented by NGOs in their efforts to conserve and restore the ocean and improve the livelihoods of coastal communities in developing countries.	98,902,918 (blue action funding 72,241,653 and match funding 26,661,265)	Marine; Coastal	Developing countries	https://www.blueactionfund.org/
Blue Carbon Accelerator Fund (BCAF)	Foundation	The BCAF was established by Australia and IUCN to help increase coastal blue carbon ecosystems conservation and restoration for the benefits to climate change mitigation and adaptation, biodiversity and livelihoods of coastal communities.	Varies	Seagrass; Mangroves; Tidal/salt marshes	Asia-Pacific	https://bluenaturalcapital.org/bcaf/
Coastal Restoration Fund	Governmental	Funding for projects that help restore coastal aquatic habitats	55.3 million; 73,730 and 368,665 per year and project	Coasts	Canada	https://www.dfo-mpo.gc.ca/oceans/crf-frc/index-eng.html
Conservation International	Foundation	Conservation International works with governments to develop policies that prioritize assisted natural regeneration.	Varies	Various but strong focus on forests.	Global	https://www.conservation.org/priorities/science-based-restoration

Critical ecosystem partnership fund (CEPF)	International body	Fund founded in 2000. Aim is to empower civil society in developing countries and transitional economies to protect world biodiversity hotspots. Joint program of l'agence francaise de development, conservation international, the EU, GEF, the Government of Japan and the World Bank	Large Grants: The average amount is around 153,000. Grants of more than 510,000 are awarded only in exceptional cases.	Various; Marine	Indo-Burma, Madagascar, Mediterranean basin, Guinean forests of West Africa	https://www.cepf.net/
DOB ecology	Foundation	DOB Ecology supports and funds partners that work to protect and restore threatened ecosystems.	Varies	Forests; Wetlands	Africa and South America.	https://www.dobecology.nl/
Endangered Landscapes Programme	Foundation	The Endangered Landscapes Programme aims to give space back to nature, so that ecological processes recover, ecosystem services increase, and species populations grow – and in so-doing making places – whether cities, forests or fens – more natural, richer in biodiversity and more dynamic, for the benefit of nature and people.	Varies	Forest; Grassland; Freshwater; Mountains; Oceans and Coasts	Global (United Kingdom; Ukraine; Belarus; Portugal; Romania; Moldovia; Georgia; Turkey)	https://www.endangeredlandscapes.org/
EU LIFE programme	International body	The LIFE programme is the EU funding instrument for the environment and climate action. It is structured under two fields: the Environmental field (including nature and biodiversity), and climate field.	5.43 billion 2021-2027, with 1.94 billion for the field of climate action	Various	EU	https://cinea.ec.europa.eu/programmes/life_en
European Commission - Horizon Europe	Governmental	Horizon Europe is the EU's key funding programme for research and innovation with a budget of €95.5 billion. Its aims are to tackle climate change, help to achieve the UN's Sustainable Development Goals and boost the EU's competitiveness and growth. Horizon Europe incorporates research and innovation missions to increase the effectiveness of funding. One of the five missions is "Restore our Oceans and Waters".	95.5 billion	Various	Europe	https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

European Maritime, Fisheries and Aquaculture Fund (EMFAF)	International body	EU funding instrument supporting the EU common Fisheries policy, maritime policy and agenda for international ocean governance. The aim is to achieve sustainable fisheries and conserve marine biological resources. Successor to the European maritime, fisheries fund (EMFF)	797 million direct management by commission and 5.311 billion through national programmes and co-finances by EU budget	Marine	EU	https://oceans-and-fisheries.ec.europa.eu/funding/emfaf_en
Food and Agriculture Organization (FAO)	International body	The United Nations General Assembly has proclaimed the UN Decade following a proposal for action by over 70 countries. Led by FAO/UNEP with participation of Convention Secretariats, NGOs, CSOs and private sector.	Varies	Various	Global	https://www.decadeonrestoration.org/
GIZ	Governmental	The GIZ is the main German development agency	Varies	Various	Global	https://www.giz.de/en/html/index.html
Global Challenges Research Fund (GCRF)	Governmental	The Global Challenges Research Fund (GCRF) supports research to address challenges faced by developing countries. It is part of the UK's official development assistance (ODA).	Varies	Various	Developing countries	https://www.ukri.org/what-we-offer/international-funding/global-challenges-research-fund/
Global Conservation Fund (Conservation International)	Foundation	The GEF aligns its work with international efforts like the Bonn Challenge and the GPFLR.	Varies	Various	Global	https://www.conservation.org/about/global-conservation-fund
Global Environment Facility (GEF)	Governmental	The GEF aligns its work with international efforts like the Bonn Challenge and the GPFLR. Its first three initiatives, started in GEF-5 (2010-2014), share a common approach. They are creating multiple benefits from restoration, engaging local communities who make a living from the land.	Varies	Various	Global	https://www.thegef.org/ https://www.thegef.org/what-we-do/topics/forest-and-landscape-restoration
IKI (German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB))	Governmental	Part of the German government international climate finance commitment. Led by the federal ministry of economic affairs and climate action.	5 billion (2008-2021)	Various	Global (over 150 countries)	https://www.international-climate-initiative.com/en/about-iki
International Union for Conservation of Nature	Foundation	Involved in several restoration efforts, e.g. The Restoration Initiative	Varies	Various	Global	https://www.iucn.org/
John Ellerman Foundation	Foundation	Creating richer, more sustainable places on land, building healthier ecosystems, linking habitats together, large-scale interventions for restoration Protecting the seas: safeguarding and restoring the marine environment	1.8m in 2020/21 for environmental projects	Various; Marine	Worldwide Past projects have focussed on Latin	https://ellerman.org.uk/

					America and the Caribbean	
MacArthur foundation	Foundation	Support non-profit organizations. It has four "Big Bets" which are: Climate Solutions; Criminal Justice; Nuclear Challenges and On Nigeria	Varies	Various	Global	https://www.macfound.org/
MAVA Foundation	Foundation	MAVA is a Swiss-based philanthropic foundation with a focus on biodiversity conservation. Running three region-based programmes in Switzerland, the Mediterranean and West Africa, and a fourth programme focused on Sustainable Economy, it works through partnerships with international, national and local NGOs, research institutions and universities, and occasionally with government bodies or individuals.	Varies	Various	Switzerland, Mediterranean, West Africa	https://mava-foundation.org/
National Coastal Resilience Fund	Governmental	National Fund aiming to increase and strengthen natural infrastructure to protect local coastal communities and enhance habitat. Partnership between the NFWF, NOAA, Shell, TransRe and Occidental. It funds conservation projects that restore and expand coastal and marine habitats. Founded in 2016.	142 million in competitive grants in 2022	Coastal marshes and wetland; dune and beach systems; oyster and coral reefs; forests; coastal rivers and floodplains; barrier islands.	USA	https://www.nfwf.org/programs/national-coastal-resilience-fund?activeTab=tab-3
National Lottery Heritage Fund	Governmental	Dedicated grant funder of UK heritage. Non-departmental public body accountable to Parliament.	1.36 billion (2019-2024)	Various	UK	https://www.heritagefund.org.uk/
Natural Capital Funding Facility	International body	NCFF, a financial instrument set up by the European Investment Bank and the European Commission, supports projects on biodiversity and climate adaptation through tailored loans and investments. NCFF will be replaced by InvestEU (https://www.eib.org/en/products/mandates-partnerships/investeu/index.htm)	Varies	Various	Global	https://www.eib.org/en/products/mandates-partnerships/ncff/index.htm

Natural England Green Recovery Challenge Fund	Governmental	Funding period finished - must be spent by 31 March 2022. Short term competitive fund developed by Defra aiming to support environmental renewal and to create jobs.	45 million fund. Grants of 56,800 - 5.69 million to deliver environmental projects in England	Various	England	https://www.heritagefund.org.uk/funding/closed-programmes/green-recovery-challenge-fund#:~:text=The%20Green%20Recovery%20Challenge%20Fund%20is%20a%20short-term,and%20their%20partners%20to%20deliver%20projects%20in%20England.
Natural Environment Research Council (NERC)	Governmental	Investment in environmental science	Varies	Various	UK	https://www.ukri.org/councils/nerc/
Nature Restoration Fund	Governmental	The aim is to support projects which help Scottish species and habitats while improving the health and well-being of local communities	14.2 million available in 2022-23. Grants of up to 284,000	Various; marine	Scotland	https://www.gov.scot/news/more-funding-for-nature-restoration/
NOAA Coral Reef Conservation Program	International body	The Coral Reef Conservation Program is a partnership between the NOAA Line Offices that work on coral reef issues. The aim is a multidisciplinary approach to understanding and conserving coral reef ecosystems. The Coral Reef Conservation Program provides financial awards (grants and cooperative agreements) to support conservation projects and scientific studies that benefit coral reef management.	21.8 million in grants and cooperative agreements in 2021	Marine (Corals)	Seven U.S. states and territories, the Caribbean, and the Pacific.	https://coralreef.noaa.gov/
Norwegian Agency for Development Cooperation (Norad)	Governmental	Norad is Norway's development aid which aims to contribute to global development.	Varies	Various	Global	https://www.norad.no/en/front/
Oceans 5	Foundation	Oceans 5 is an international funders' collaborative dedicated to protecting the world's five oceans. The focus lies investments on projects and campaigns to establish marine reserves and constrain overfishing.	Approximately 19.4 million	Marine	Global	https://www.oceans5.org/
Prince Albert II of Monaco Foundation	Foundation	Development of MPAs, biodiversity knowledge, restoration of coral reefs (GCRF), conservation and restoration of all freshwater ecosystems in the Mediterranean (DIMFE)	Up to 500,000 for projects not exceeding 3 years	Marine; Freshwater	Mediterranean Basin, Polar Regions and Least Developed Countries.	https://www.fpa2.org/en/index
Proteus	Private sector	Proteus was initiated in 2003 as a unique collaboration to provide companies with the biodiversity information needed for better informed decisions, and to support the development, improvement and dissemination of global biodiversity data and information.	Varies	Various	Global	https://www.proteuspartners.org/

The Nature Conservancy	Foundation	The Nature Conservancy (TNC) is working with partners to develop best practices, as well as provide training and build communities of restoration specialists around the globe.	Varies	Various	Global	https://www.nature.org/en-us/
The Swedish International Development Cooperation Agency (Sida)	Governmental	Sida is Sweden's government agency for development cooperation	Varies	Various	Global	https://www.sida.se/en/publications/sustainable-ocean-economy
Turing Foundation	Foundation	Sustainable land use, protection and sustainable management of the nurseries of the sea in developing countries.	50,000 - 300,000	Various; marine; mangroves	Netherlands, developing nations of Africa and internationally	https://www.turingfoundation.org/index_uk.html
UK Blue Carbon Fund	Governmental	The Fund promotes the sustainable management, conservation and restoration of mangrove habitats in the Caribbean and Latin America.	Varies	Mangroves	Latin America and the Caribbean	https://devtracker.fcdo.gov.uk/projects/GB-GOV-7-ICF-PO008-UKBLUECARBONFUND/summary
UN Decade on Ecosystem Restoration Multi Partner Trust Fund	International body	The Multi-Partner Trust Fund for the UN Decade on Ecosystem Restoration 2021-2030 is the financial engine behind the implementation of the strategy for this UN Decade. The primary aims of the fund are to combat declining biodiversity, support livelihoods and green jobs, enhance natural resource bases, and help societies adapt to and mitigate climate change through restoration of terrestrial, freshwater and marine ecosystems globally.	Varies	Various	Global	https://www.decadeonrestoration.org/multi-partner-trust-fund-un-decade
United Nations Environment Programme (UNEP)	International body	The United Nations General Assembly has proclaimed the UN Decade following a proposal for action by over 70 countries. Led by FAO/UNEP with participation of Convention Secretariats, NGOs, CSOs and private sector.	Varies	Various	Global	https://www.decadeonrestoration.org/
USAID	Governmental	The US government's foreign aid and development assistance.	Varies	Various	Global	https://www.usaid.gov/
World Bank Adaptation Fund	International body	Created under the UNFCCC it aims to fund climate change adaptation projects and programs.	589 million	Various; beyond ecosystems	Global	https://fiftrustee.worldbank.org/en/about/unit/dfi/fiftrustee/fund-detail/adapt
World Wildlife Fund (WWF)	Foundation	Involved in several restoration efforts, e.g. Forest Landscape Restoration (FLR) or grassland restoration.	Varies	Various	Global	https://www.worldwildlife.org/ https://forestsolutions.panda.org/approach/forest-landscape-restoration

Name of the organization	Organization type	Relevant activities	Country/region	Main ecosystem	Relevant links
Action le Vert	NGO	Education; Restoration	Congo	Mangroves	https://www.action-le-vert.org/index.php
Akdeniz Koruma Derneği / Mediterranean Conservation Society	NGO	Education and awareness	Turkey	Marine	https://akdenizkoruma.org.tr/
Algal Forest Restoration in Mediterranean Sea	Global partnership between nations and organizations	Research; Restoration	Algeria; Italy; Tunisia; Morocco	Marine; Coastal	http://www.afrimed-project.eu/
Association for Coastal Ecosystem Services (ACES)	NGO	Management (developing; financing and managing projects support);	Kenya; Tanzania	Mangroves; Saltmarsh; Seagrass	https://aces-org.co.uk/what-we-do/
Azraq for the Oceans	NGO	Awareness; Education; Knowledge Generation; Knowledge Sharing	UAE	Marine; Coastal	https://azraqme.org/
Blue Forest	NGO	Restoration; Knowledge generation	Mozambique	Mangroves	https://blueforest.co/iucn/
Blue Forests	NGO	Restoration; knowledge generation; knowledge sharing; network creation; awareness and education	Indonesia	Mangroves; Coastal	https://blue-forests.org/en/
Blue Marine Foundation	NGO	Knowledge generation; research; knowledge sharing; restoration; awareness and education	Global	Marine; Coastal	https://www.bluemarinefoundation.com/projects/solent/
Blue Ventures	NGO	Piloting pressure; developing innovative approaches; policy frameworks	Global	Marine	https://blueventures.org/
Bulgarian Biodiversity Foundation	Foundation	Restoration; Knowledge generation; Partnerships/ collaborations between stakeholders; network creation; policy framework	Bulgaria	General	https://biodiversity.bg/en/Mission.c92
Caribbean Coral Restoration	NGO	Restoration; partnerships/ connecting stakeholders	Caribbean	Coral reefs	https://loveforthesea.com/
Centro Terra Viva	NGO	Knowledge generation; legal; planning frameworks	Mozambique	Marine; Coastal	http://ctv.org.mz/en/who-we-are/centro-terra-viva/

CEPAN	Private	Planning, management, policy framework support; training; knowledge sharing	Brazil	General	https://cepan.org.br/programas-e-acoes/
Coalicion Restauracion ecosistemas Santurcinos (CRES)	NGO	Monitoring; education; volunteer training; planning frameworks; knowledge generation	Puerto Rico	Coral reefs; Coastal dunes	https://www.crespr.org/
Commission de l'océan Indien (COI)	Intergovernmental organization	Education; Policy framework	La Reunion; Madagascar; Maurice; Seychelles; Comoros	Marine; Coastal	https://www.commissionoceanindien.org/presentation-coi/etats-membres-coi/
Commonwealth Blue Charter Action Group on Coral Reef Protection and Restoration	Action Group	Knowledge sharing; knowledge generation; best practice sharing; partnerships/ connecting stakeholders	53 Commonwealth countries	Coral reefs	https://bluecharter.thecommonwealth.org/action-groups/coral-reef-restoration/
Commonwealth Blue Charter Action Group on Coral Reef Protection and Restoration	Intergovernmental	Best practice sharing; partnerships/ connecting stakeholders	Global	Marine; Coastal	https://bluecharter.thecommonwealth.org/action-groups/coral-reef-restoration/
Commonwealth Blue Charter Action Group on Mangrove Ecosystems and Livelihoods	Action Group	Best practice sharing; partnerships/ connecting stakeholders	53 Commonwealth countries	Mangroves	https://bluecharter.thecommonwealth.org/action-groups/mangrove-restoration/
Commonwealth Blue Charter Action Group on Mangrove Ecosystems and Livelihoods	Intergovernmental	Best practice sharing; partnerships/ connecting stakeholders	Global	Forests; Marine; Coastal	https://bluecharter.thecommonwealth.org/action-groups/mangrove-restoration/
Conservation International	NGO	Restoration; knowledge generation; knowledge sharing; network creation	Global	General	https://www.conservation.org/
Coral Restoration Consortium	Global partnership between nations and organizations	Knowledge sharing; Partnerships/ collaborations between stakeholders; network creation	Global	Oceans and Coasts	https://www.crc.world/
Coral Restoration Foundation	Foundation	Restoration; Education; monitoring; knowledge generation	Florida	Coral reefs	https://floridascoralreef.org/partner/coral-restoration-foundation
Coral Triangle Centre	Foundation	Knowledge generation; knowledge sharing; restoration; partnerships; network creation	Asia-Pacific (especially Indonesia)	Marine; Coral reefs	https://www.coraltrianglecenter.org/
Corales de Paz	NGO	Restoration; knowledge generation; training; monitoring; partnerships/ connecting stakeholders	Colombia	Coral reefs	Scaling-up Coral Reef Restoration | Corales de Paz
Creando Redes	NGO	Knowledge generation; management, design, planning frameworks, ; project implementation; monitoring	Spain	General	https://creandoredes.es/que-hacemos/
Deep-sea Sponge Grounds Ecosystems of the North Atlantic: an integrated approach	Academia	Research	Canada; Germany; Italy; Netherlands; Norway; Portugal;	Marine; Coastal	https://www.shellfishrestoration.org.au/

towards their preservation and sustainable exploitation (SponGES)			Spain; Sweden; United Kingdom; USA		
DOB ecology	Foundation	Knowledge generation; Knowledge sharing, best practice sharing	Global	Forests; Wetlands	https://www.dobecology.nl/ecology/programmes/
Dugong & Seagrass Conservation Project	NGO	Research; awareness and education	Indo-Pacific	Seagrass	https://www.dugongconservation.org/
Dugong & Seagrass Hub	NGO	Research; knowledge creation; knowledge sharing	Indo-Pacific	Seagrass	https://www.dugongseagrass.org/about-us/
Dugong and Seagrass	NGO	Knowledge sharing; community building	Indian and Pacific Ocean basins	Seagrass	https://www.dugongconservation.org/
Duke University Marine Lab	Academia	Research; Education	Global	Marine; Coastal	https://nicholas.duke.edu/marinelab
Ecocean	Company	Research; restoration	Global	Marine; Coastal	https://www.ecocean.fr/home/
Ecomares	NGO	Knowledge generation; restoration; education	Colombia	Marine; Coastal	https://ecomares.org/quienes-somos/
Eduardo Mondlane University	Academia	Education; Restoration	Mozambique	Seagrass	https://www.unep.org/news-and-stories/story/saving-mozambiques-seagrass
Endangered Landscapes Programme	Partnership between NGOs and academia	Restoration; Knowledge generation; Partnerships/ collaborations between stakeholders; network creation	Europe	General	http://www.endangeredlandscapes.org/
Fauna & Flora Internatinal (FFI)	NGO	Restoration; knowledge generation; knowledge sharingl; network creation	Global	General	https://www.fauna-flora.org/
Florida State University	Academia	Research; Education	Global	Marine; Coastal	https://www.lester-lab.com/
Fundacion Rewilding Argentina	NGO	Conservation; knowledge sharing; partnerships/ connecting stakeholders	Argentina	General	https://www.rewildingargentina.org/programa-marino-oceanos/
FUNDACIÓN COSTARRICENSE PARA LA RESTAURACIÓN ECOLÓGICA	Foundation	Partnerships/ connecting stakeholders;	Costa Rica	General	https://www.fucore.org/nosotros-copy-nqwnoB-cbzigZi9h3roDc
Fundacion Rewilding Chile	NGO	Creating collaboration; restoration	Chile	General	https://www.rewildingchile.org/en/our-work/
Gates Coral Lab - Hawaii Institute of Marine Biology	Academia	Knowledge generation; Knowledge sharing	Hawaii	Coral reefs	http://www.gatescorallab.com/
Global Mangrove Alliance	Global partnership between nations and organizations	Restoration; Awareness and education	Global	Forests; Oceans and Coasts	http://www.mangrovealliance.org/about/
Grenada Coral Reef Foundation	NGO	Management (management and zoning plans; staff training and development);	Grenada	Coral reefs	https://www.grenadacoralreef.org/what-we-do

		monitoring; education; knowledge generation; restoration			
Hawai'i Institute of Marine Biology	Academia	Research; Education	Global	Marine; Coastal	https://www.himb.hawaii.edu/
Healthy Reefs for Healthy People Initiative	NGO	Knowledge generation; monitoring; knowledge sharing; networking	Mesoamerican Barrier Reef	Coral reefs	https://www.healthyreefs.org/cms/what-we-do/
Hellenic Society for the Protection of Nature	NGO	Research; awareness; restoration	Greece	General	https://eepf.gr/en/hspn
International Coral Reef Initiative	Global partnership between nations and organizations	Knowledge sharing; network creation; connecting stakeholders		Coral reefs	https://icriforum.org/
International Partnership for Blue Carbon	Partnership	Network creation; connecting stakeholders; knowledge sharing; partnerships	Global	Marine; Coastal	https://bluecarbonpartnership.org/the-partnership/
Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA)	Academia	Research; Knowledge generation	Italy	General	https://www.isprambiente.gov.it/it/istituto
Maldives Coral Institute	Academia	Knowledge development; awareness; policy framework	Maldives	Coral reefs	https://www.maldivescoral.org/
Mangrove Action Project	NGO	Restoration; knowledge sharing; network creation	Global	Mangroves	https://mangroveactionproject.org/
Mangrove Restoration Potential (Tool)	University of Cambridge; The Nature Conservancy; IUCN	Knowledge generation; Awareness and education	Global	Mangroves; Marine; Coastal	http://maps.oceanwealth.org/mangrove-restoration/
Mangroves for the Future	Global partnership between nations and organizations	Knowledge sharing; Partnerships/ collaborations between stakeholders; network creation	Bangladesh; Cambodia; India; Indonesia; Maldives; Myanmar; Pakistan; Seychelles; Sri Lanka; Thailand; Viet Nam	Mangroves; Marine; Coastal	https://www.mangrovesforthefuture.org/
MarBrasil	NGO	Tool development; knowledge generation; education; stakeholder involvement	Brazil	Marine; Coastal	https://marbrasil.org/institucional/
Mother of Corals	NGO	Training; education; restoration; monitoring	Panama	Coral reefs	https://motherofcorals.org/our-impact/
National Marine Sanctuary Foundation	Foundation	Knowledge generation; Restoration	USA	Marine	https://marinesanctuary.org/conservation-and-restoration/
Native Oyster Network	Network	Stakeholder engagement' collaboration; awareness and	UK	Oyster beds	https://nativeoysternetwork.org/

		education; knowledge and best practice sharing			
Native Oyster Restoration Alliance (NORA)	NGO	Community building; network building; knowledge sharing; best practice sharing	Europe	Oyster beds	https://noraeurope.eu/nora-mission-statement/
Nature Environment and Wildlife Society	NGO	Knowledge development; planning and policy frameworks; restoration and pilot projects; monitoring; awareness and education	India	Mangroves	https://naturewildlife.org/about-news/
Nature-based Solutions Initiative (University of Oxford)	Academia	Knowledge generation; Knowledge sharing; Restoration; Partnerships	Bangladesh; Peru; Ghana	General	https://www.naturebasedsolutionsinitiative.org/what-is-the-nature-based-solutions-initiative/
NOAA's Coral Reef Institutes	Academia	Management support; Knowledge generation	USA	Coral reefs	https://coastalscience.noaa.gov/project/national-coral-reef-institute-ncri/
Ocean Conservation Trust	NGO	Education and awareness; restoration	UK	Marine; Seagrass	https://oceanconservationtrust.org/ocean-habitats/
Oceana	NGO	Knowledge generation; knowledge sharing; restoration; partnerships	Global	Marine	https://oceana.org/about-us/
Project Seagrass	NGO	Knowledge generation; research; knowledge sharing	Global	Seagrass	https://www.projectseagrass.org/
Rare	NGO	Knowledge generation; empowering communities; policy framework; governance framework	Mesoamerican Reef; Brazil; Mozambique; Indonesia; Philippines; FSM & Palau	General	https://rare.org/about-us/
Re:wild	NGO	Restoration; knowledge generation; knowledge sharing; network creation	Global	General	https://www.rewild.org/
Red Chleana de Restauracion Ecologica	Network	Creating collaboration; knowledge sharing; partnerships/ connecting stakeholders	Chile	General	Restauremos Chile | Red Chilena de Restauración Ecológica
Red Colombiana de Restauracion Ecologica	NGO	Knowledge generation; knowledge exchange; best practice exchange; education and awareness	Colombia	General	https://redcre.com/sobrelared/
Red de Restauración Ecológica Argentina (Red REA	Network	Knowledge generation; stakeholder exchanges; best practice exchange	Argentina	General	https://enrea.com.ar/presentacion/
Regional Partnership for the Conservation of the Coastal and Marine Zone (PRCM)	Coalition	Knowledge generation; Legal; Planning frameworks	Cape Verde, Gambia, Guinea Conakry, Guinea-Bissau, Mauritania, Senegal and Sierra Leone	Mangroves; Coastal wetlands	https://prcmarine.org/en/thematique/

Rehabilitation of Coastal and Marine Habitat in UAE	Governmental with community partnership	Restoration	UAE	Mangroves; Coral reefs; Coastal	https://rehabilitation-of-coastal-and-marine-habitat-in-uae-fcsa.hub.arcgis.com/
Resilient Reefs Initiative	Global partnership	Research; knowledge sharing; restoration	Australia; Belize; Palau; New Caledonia	Marine; Coastal	https://www.barrierreef.org/science-with-impact/resilient-reefs
Restor	NGO	Knowledge sharing; best practice sharing; connecting stakeholders; collaboration building	Global	General	https://restor.eco/about/
RestoreSeas	NGO	Knowledge generation; monitoring; restoration	Atlantic coast	Seagrass; Coral reefs; Seaweed	https://www.restoreseas.net/
Rewild our Seas	NGO	Education; Knowledge generation	South Africa	Kelp forest	https://www.parley.tv/updates/2022/june/rewild-our-seas-south-africa
Rewilding Britain	NGO	Restoration; network building; knowledge sharing; knowledge generation; best practice sharing; partnerships/connecting stakeholders	Great Britain	General	https://www.rewildingbritain.org.uk/about-us
Rewilding Europe	NGO	Restoration; network building; knowledge sharing; knowledge generation; best practice sharing; partnerships/ connecting stakeholders	Europe	General	https://rewildingeurope.com/our-story/
Rewilding the Global Alliance	Network	"We base our work on 12 guiding "Principles for Rewilding" outlined in our Global Charter for Rewilding the Earth"	Global	General	https://rewildingglobal.org/
Royal Netherlands Institute for Sea Research	Academia	Knowledge generation; knowledge sharing	The Netherlands	Coastal	https://www.nioz.nl/en/research/expertise/wadden-delta/coastal-protection
Save the Bay	NGO	Knowledge generation; restoration	San Francisco	Estuary	https://savesfbay.org/restore/
Sea Change Project	NGO	Education	South Africa	Kelp forest	https://seachangeproject.com/about/
Seagrass Restoration Network	NGO	Awareness and education; knowledge generation; restoration;	Australasia	Seagrass	https://seagrassrestorationnetwork.com/
Shellfish Reef Restoration Network	Network	Education; knowledge sharing; best practice sharing; building collaborations; policy and regulation; training; awareness	Australia	Shellfish reef	https://www.shellfishrestoration.org.au/

SOBRE REBRE (Brazilian Ecological Restoration Network)	NGO	Partnerships/ connecting stakeholders; knowledge sharing; data sharing	Brazil	General	https://www.sobrestauracao.org/
Sociedad Ambiente Marino (SAM)	NGO	Knowledge generation; restoration; education and awareness; community building/ stakeholder partnerships	Puerto Rico	Coral reefs	https://www.sampr.org/
SOS MATA ATLANTICA	NGO	Management framework support	Brazil	General	https://www.sosma.org.br/iniciativas/areas-protegidas-marinhas-e-costeiras/
The Australian Coastal Restoration Network	Network	Knowledge sharing; network creation; connecting stakeholders	Australia	Coastal (saltmarsh, shellfish reef, kelp, mangrovecoral reef, seagrass…)	https://www.acrn.org.au/
The Maldives Underwater Initiative	NGO	Knowledge development; education; community engagement	Maldives	Marine	https://www.maldivesunderwaterinitiative.com/about-mui
The MedFund	Cooperation platform	Knowledge generation; monitoring; restoration	Mediterranean coast	Marine; Coastal	https://themedfund.org/en/about-us/
The Nature Conservancy	NGO	Restoration; knowledge generation; knowledge sharing; network creation	Global	General	https://www.nature.org/en-us/
The Oceancy (Baokalo and Oceanus Conservation)	NGO	Education; training; guidance to stakeholders; restoration	Global	Marine	https://theoceancy.org/
The Scottish Rewilding Alliance - 'Seawilding'	NGO	Restoration; awareness and education; knowledge creation; knowledge sharing	Scotland	Oyster beds	https://www.rewild.scot/seawilding
UN Decade on Ecosystem Restoration	FAO; UN Environment Programme	The United Nations General Assembly has proclaimed the UN Decade following a proposal for action by over 70 countries. Led by FAO/UNEP with participation of Convention Secretariats, NGOs, CSOs and private sector.	Global	General	https://www.decadeonrestoration.org/
University of Cambridge	Academia	Knowledge generation; network building; knowledge sharing	Global	General	https://www.clr.conservation.cam.ac.uk/about-centre;
Western Indian Ocean Marine Science Association (WIOMSA)	NGO	Knowledge generation; Supporting cooperation; Education and training	Somalia; Kenya; Tanzania; Mozambique; South Africa; Comoros; Madagascar; Seychelles; Mauritius; La Réunion (France)	Marine; Coastal	https://www.wiomsa.org/
Wildlife Conservation Society (WCS)	NGO	Restoration; knowledge generation; knowledge sharing; network creation	Global	General	https://www.wcs.org/

World Resources Institute (WRI)	NGO	Research; restoration; knowledge generation; knowledge sharing	Global	General	https://www.wri.org/
World Restoration Flagships	UN Decade on Restoration partnership	Best practice sharing; network creation	Global	General	https://www.decadeonrestoration.org/nominate-world-restoration-flagships
World Wildlife Fund (WWF)	NGO	Restoration; knowledge generation; knowledge sharing; network creation	Global	General	https://www.wwf.org.uk/
YAGASU	NGO	Knowledge development; restoration; policy; education	Indonesia	Mangroves	https://yagasu.or.id/about/