CONCEPT NOTE

ON A PROPOSED GRANT

IN THE AMOUNT OF US$ 14.5M

TO

Ministry of Environment

FOR

Sustaining Healthy Coastal and Marine Ecosystems Project (P168989)

Vice President: Axel van Trotsenburg | Country Director: Martin Raiser | Senior Global Practice Director: Karin Erika Kemper | Practice Manager: Valerie Hickey | Task Team Leader(s): Adriana Goncalves Moreira, Sylvia Michele Diez

BASIC INFORMATION

Country(ies)	Project Name	
Brazil	Sustaining Healthy Coastal and Marine Ecosystems Project (P168989)	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P168989	Investment Project Financing	Moderate

GEF Focal Area

Multi-focal area

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
04-Mar-2020	

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To strengthen governance and management of the MCPA system and build Brazil's capacity to transition to a blue economy in targeted areas.

Organizations

Borrower:	Ministry of Environment
Implementing Agency:	ICMBIO, Funbio

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	14.48
Total Financing	14.48
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	14.48
Global Environment Facility (GEF)	14.48

INSTITUTIONAL DATA

Practice Area (Lead)
Environment & Natural Resources

Contributing Practice Areas

Gender Tag

Does the project plan to undertake any of the following?	
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	TBD

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Low
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary No Fiduciary Risk rating has been completed to date	Low
7. Environment and Social Environmental Risk rating from Specialist: Low as of 21-Mar-2019 Social Risk rating from Specialist: Moderate as of 21-Mar-2019	Moderate
8. Stakeholders	Low
9. Other	
10. Overall	Low

PREPARATION SCHEDULE

Preparation Schedule

Milestone	Original	Revised	Actual
AIS Sign off			Sep 13, 2018
Concept Review	Sep 28, 2018	Apr 02, 2019	
Disclosure of Concept PID			
Disclosure of Concept ESRS			

Quality Enhancement Review(QER)		
Decision Review	Mar 15, 2019	Nov 29, 2019
Disclosure of Appraisal PID		
Disclosure of Appraisal ESRS		
Begin Appraisal	Apr 01, 2019	Dec 10, 2019
Authorize Negotiations	Apr 15, 2019	Feb 14, 2020
Approval	Jun 28, 2019	Mar 04, 2020
Signing		
Effectiveness	Oct 30, 2019	Mar 31, 2020
Project Closing/Cancellation Date		
ICR/NCO		

Team

Bank Staff

Name	Role	Specialization	Unit
Adriana Goncalves Moreira	Team Leader(ADM Responsible)		GENLC
Sylvia Michele Diez	Team Leader	Co-TTL	GENLC
Frederico Rabello T. Costa	Procurement Specialist(ADM Responsible)		CNGME
Susana Amaral	Financial Management Specialist(ADM Responsible)	safeguard	GGOLF
Agnes Velloso	Environmental Specialist(ADM Responsible)		GENLC
Juliana Medeiros Paiva	Social Specialist(ADM Responsible)		GSU04
Cassia Coutinho Barreto	Team Member		GTR04
Jorge Guillermo Barbosa	Team Member		GENLC
Maria Bernadete Ribas Lange	Environmental Specialist		GENLC
Zelia Brandt de Oliveira	Team Member		LCC5C

Extended Team

Name	Title	Organization	Location

INTRODUCTION AND CONTEXT

A. Country Context

1. **After a decade of rapid growth and social progress up to 2013, Brazil's economy first stumbled and then fell into deep recession.** A decade of sound macro policies and a favorable external environment contributed to fast economic and social progress between 2001 and 2010. However, the deterioration in both factors led to a steady decline in growth after 2010. Growth declined from an average of 4.5 percent per year in 2006–10 to 2.4 percent in 2011–14, followed by contractions of 3.5 percent in 2015 and 2016. While external factors triggered the slowdown, an expansionary policy response led to rapidly rising fiscal disequilibria and, with rising domestic political uncertainty, to a loss of confidence and a sharp drop in investment. The economic recovery remains weak with 1 percent growth in 2017 and 1.2 percent growth projected in 2018.

2. **The crisis threatens a decade of development progress.** Brazil experienced an unprecedented reduction in poverty and inequality when 24.8 million Brazilians escaped poverty between 2006 and 2015 and the Gini coefficient of household incomes fell from 0.59 in 1999 to 0.51 in 2015. Most of this reduction was explained by the creation of formal sector jobs, with sharp decline in the unemployment rate to a low of 6.8 percent in 2014. However, the economic crisis precipitated a rapid rise in unemployment with job losses of 0.6 million in 2015 and 2.0 million in 2016. As a result, poverty increased in 2015 and 2016. With on-going tepid economic growth poverty is estimated to have leveled off at 20.6 percent in 2017.

3. **Restoring fiscal sustainability is the most urgent economic challenge for Brazil.** To address unsustainable debt dynamics, the government adopted a constitutional amendment that limits public expenditure growth through an accumulated adjustment of 5 percentage points of GDP for the period 2019-2026 stabilizing debt at around 89 percent of GDP by 2026 and declining thereafter. Implementing this fiscal adjustment requires alleviating the rigidities affecting public spending and revenue earmarking mechanisms, which turn mandatory over 90 percent of the federal government's primary spending. Furthermore, this large fiscal disequilibrium also affects subnational governments, with limited capacity to cope with growing wage bill and pension payments unless reforms are adopted. Reforms should aim to accelerate inclusive sustainable growth, productivity, and infrastructure development.

4. **Brazil's marine and coastal assets offer an opportunity for accelerating inclusive sustainable growth and productivity.** These natural assets provide a wide array of ecosystem goods and services that help fuel the economy including, among others, (a) seafood, (b) tourism and recreation, (c) oil and gas, (d) transportation, and (e) coastal protection and resilience from reefs and mangroves. The economic growth opportunities and the natural capital that supports them, are however threatened by increasing development pressures and competing interests for the use of marine and coastal resources. The responsible management of this natural capital, without compromising the ecological integrity and health of ecosystems, represent the means by which to develop a sustainable economy. To reduce the uncertainties stemming from fiscal disequilibrium and maintaining a prosperous rate of growth, Brazil is aiming towards the sustainable and integrated development of economic activities in their coastal and marine environment. This 'blue economy' approach will help boost economic growth, create jobs, reduce poverty, and build local skills while conserving the public good nature of the marine and coastal resources.

B. Sectoral and Institutional Context

5. **Brazil's extensive coastline measures over 9,000 km, including bays and promontories.** The coastal and marine zone includes a land area of 514 thousand km² and a marine area of over 3.5 million km^2, an area equivalent to 41 percent of the Brazilian terrestrial territory (8.5 million km^2) and comparable in size to the Brazilian Amazon (4.1 million km^2).[1] The Brazilian coast hosts an immense variety of environments and wildlife including, in the Northern coast, one of the

longest continuous stretches of mangrove ecosystems in the world, important as nursery sites, biological filters and carbon sinks. This region in particular, forms part and contributes to the Caribbean and Northern Brazil Shelf Large Marine Ecosystem (CLME+). The Brazilian coast also hosts the only coral reefs in the South Atlantic; many endemic species; dune fields; lagoon complexes; restingas (sandy-coastal plain vegetation); and flood plains. Brazil's coastline sits within three out of the 68 internationally recognized Large Marine Ecosystems (LMEs), one shared with its northern regional neighbors, French Guiana, Suriname, Guyana and Venezuela (North Brazil Shelf LME), and two of which fall exclusively within national territory (East Brazil Shelf and South Brazil Shelf LMEs).

6. **The marine and coastal ecosystems of Brazil provide food, livelihoods, and income to millions of people through fisheries, tourism, coastal protection, transportation, oil and gas, and resilience to climate change.** The coastal zone houses 50.7 million inhabitants, or 26.6 percent of the national population, who generate approximately 30 percent of all national wealth[1], and are distributed across 463 municipalities and 21 of Brazil's 74 metropolitan regions[2, 3]. It is estimated that 19% of Brazil's GDP is derived from coastal and marine based activities, such as oil and gas, transportation, fisheries, underwater cables, and tourism[4]. The coastal zone is the main geographic area for economic growth for many of those industries, including the oil and gas industry, which engages in significant off-shore drilling. Brazil ranks ninth in the world of oil producers and 31st in the world of natural gas producers, with 94% of Brazil's total oil production and 77% of natural gas deriving from the marine environment. Oil production primarily occurs within the continental shelf off the states of Rio de Janeiro and Espírito Santo, while the continental shelf off the states of Rio de Janeiro and São Paulo are the largest producers of natural gas[5].

7. **The goods and services derived from the coastal and marine assets are exposed to key threats that can compromise the foundation for a sustainable blue economy.** Brazil's fisheries and aquaculture sector is projected to grow by 104% by 2025[6]**;** aquaculture—particularly for shrimp and molluscs—plays a key role in this expected growth, especially in Brazil's northeast region[7]. Shrimp farming is also one of the main threats to the conservation of mangrove ecosystems. Overall, weak enforcement and regulation of the fisheries and aquaculture sector and its management practices compounded by overfishing and habitat degradation threatens the value of these assets[8]. Aside from fishing, other pressures affecting Brazil's Exclusive Economic Zone (EEZ) include unsustainable maritime port activities[9] and contamination of marine waters through the release of untreated sewage (it is estimated that only 14 to 46 percent of the sewage generated is treated)[10]. Mitigating measures such as adopting technological innovations and strengthening institutional capacity for better management of marine resources will create the enabling environment for Brazil's transition to a blue economy.

8. **Marine protected areas have been shown to help the recovery of collapsed and threatened stocks, serving as nursery areas and as a source of export of mature individuals to adjacent areas[11]**. Brazil currently recognizes 74 Vulnerable, 35 Endangered, and 51 Critically Endangered marine and coastal species[12], with recovery plans elaborated for 138 species. The establishment of marine protected areas is considered essential to conserve the ocean's biodiversity and, since the 1990's, it is increasingly recognized as an important factor in maintaining productivity, especially of fish stocks.

9. **Brazil has put in place several ecosystem management policies and strategies conducive to sustainable growth and in line with international commitments.** Brazil signed the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, and Congress ratified them on February 28, 1994. Since then, the Brazilian Federal Government, with the support of the Global Environment Facility (GEF) and other international organizations, has taken decisive measures to implement the three objectives of the CBD. These include: enhancement of the legal framework; institutional capacity building of the Ministry of the Environment; and establishment of national policies, programs, and major projects. As part of Brazil's commitment to the CBD, the Brazilian government established a National Policy for Biodiversity with general principles and guidance (Decree 4339, of 22 August 2002) and a National Protected Areas Strategic Plan (PNAP) in 2006 (Decree n° 5.758), which sets out principles, guidelines, and actions for the establishment of a comprehensive system of terrestrial and marine protected areas that are ecologically representative and effectively managed.

10. **With support from the GEF financed Marine Protected Areas Project (GEF MAR1), Brazil expanded its marine protected surface from 1.57% to 26.34%[13] of its EEZ**. This milestone has substantially surpassed the Aichi 2020 Target for protecting 10% of the marine environment. This expansion represents a significant national interest, not only from an environmental perspective but also from the economic point of view, as an important measure to curb the collapse of fish stocks. In addition, the joint management of these areas by governmental environmental institutions and by the Brazilian Navy constitutes an effective strategy for the sustainable use of the Brazilian EEZ, safeguarding important and unique marine ecosystems. Brazil is also conducting gap analyses to ensure the representativeness, effectiveness, equity and connectivity of the national system of protected areas. The gap analyses also includes the vulnerability of species, ecosystems and protected areas to climate change and their role in social, economic and ecological adaptation strategies. These results will help identify key areas that are not yet under formal protection. Finally, GEF MAR1 has also fostered the discussion and proposition of the Brazilian Blue Initiative[14], an ambitious, broad strategy that seeks to articulate, promote and coordinate programs, projects and activities that aim to foster the conservation and sustainable use of marine and coastal ecosystems.

11. **Recognizing the multisectoral nature of developing an integrated approach to the conservation and sustainable use of coastal and marine areas, the Inter-ministerial Commission for the Resources of the Sea (CIRM), established in 1974, recently approved the Federal Coastal Action Plan (PAF-ZC).** This plan was prepared by the Coastal Management Integration Group (GI-Gerco) for the period 2017-2019. The PAF integrates the implementation strategy of the National Coastal Management Plan (PNGC), the main public policy for the conservation and climate change adaptation and mitigation in the coastal belt. The plan coordinates actions, responsibilities and institutional arrangements for coastal environmental management to be carried out by different governmental entities, such as the Federal Public Ministry, the National Association of Municipal Environmental Bodies (ANAMMA), civil society, and others. Also approved by CIRM, and currently under implementation, is the IX Sectorial Plan for the Resources of the Sea (IX PSRM) for the period 2016-2019, which includes targets for the monitoring of coastal and marine ecosystems as well as the establishment of new Marine and Coastal Protected Areas (MCPAs).

Baseline:

12. **A variety of initiatives contribute and complement the proposed project, in addition to GEF MAR1.** The Procosta, a National Programme for the Conservation of the Coastline, was recently launched by the Ministry of Environment and was created to monitor coastal-marine zones and map future risks. The Programme comprises four projects, all aimed at projecting future scenarios and mapping risks related to the Brazilian coast for the next 100 years. The Programme will work with a set of federal agencies—including the Ministry of Defense, Brazilian Navy and Brazilian Institute of Geography and Statistics (IBGE)—along with states and municipalities.

13. **The Terramar Project (GIZ) is another ongoing initiative that supports an integrated approach to environmental and spatial planning of the Costa dos Corais and Abrolhos regions.** This includes the Rio Doce Basin, where the biggest mining disaster in Brazil occurred. Sustainable management capacities of local stakeholders are strengthened through training activities, institutional support, increased knowledge management and networks in the region applying participatory approaches.

14. **Brazil is part of the GEF financed CLME+ Project**. The CLME+ Project is an umbrella for initiatives and actions to support implementation of the Strategic Action Programme (SAP) for enhanced ocean health in the wider Caribbean and Northern Brazil Shelf up to the territorial waters off the Brazilian state of Maranhao[15]. The CLME+ region covers a vast marine area (4.4 million km^2) that is a major contributor to regional economic development and is key to many globally relevant ecological processes[16]. In this context, the proposed project is well aligned with the CLME+ SAP Strategies and Actions as it contributes to the integrated management of marine ecosystems and resources in the Northern Brazil Shelf LME (i.e the Parcel Manuel Luís MPA off the coast of Maranhao and the vast mangrove forest spanning across the Northern states of Brazil)[17]. Another ongoing GEF financed initiative is the National Strategy for Conservation

of Threatened Species Project (GEF Species), which is designed to develop tools and mechanisms to promote conservation beyond protected areas, mainly in sites where few conservation measures are taken, and establish a coherent and integrated effort to conserve flora and fauna.

15. **Finally, the European Commission is promoting cooperation between managers of Marine Protected Areas (MPAs) in countries and territories around the Atlantic Ocean.** This is done via the Towards a Transatlantic Partnership of Marine Protected Areas (MPAs). The project is designed to stimulate exchange and the sharing of best practices to improve the effective management of MPAs in coastal and marine protected areas of the Atlantic, focusing on marine mammal migration, resilience of MPAs to coastal impacts of climate change, and the establishment of MPA managers' networks.

C. Relationship to CPF

16. **The proposed Project is consistent with the World Bank Group's Country Partnership Framework (CPF) 2018–2023 for the Federative Republic of Brazil (Report N° 113259-BR) discussed by the Executive Directors on July 16, 2017**. The CPF proposes a reorientation of new lending and advisory services and analytics toward supporting the Government in addressing the main development constraints identified in the Systematic Country Diagnostic, including natural resources management. The Project is directly related to the third focus area of the FY18-23 CPF. As stated in Objective 3.1 (Support the achievement of Brazil's NDC with a particular focus on land use), the Bank is supporting the achievement of Brazil's NDC and the implementation of its targets in all sectors, including through the strengthening of Brazil's national system of marine protected areas to increase the areas of environmental significance under protection measures. The proposed project will support the consolidation of coastal and marine protected areas, including advocacy activities on the blue economy to safeguard Brazil's strong track record in the protection of the marine environment and coastal communities. As per CPF, the WBG continues to support management of natural resources in a sustainable way, combining conservation with the promotion of local and regional economic development. The project also contributes to the WBG's twin goals of ending extreme poverty and boosting shared prosperity sustainably, by working toward the longer-term objectives of supporting food security, creating jobs for coastal populations, and increasing resilience to climate variability of those who depend on the marine resources, which are among the poorest and most vulnerable.

17. **The Project supports the new GEF-7 Programming Directions, by contributing to the long-term protection of Brazil's globally important marine ecosystems.** Specifically, the Project targets the Biodiversity Focal Area. In line with the goal of the GEF-7 Biodiversity Focal Area strategy, the project will maintain globally significant biodiversity in marine habitats and contribute to two Focal Area Objectives of 1) Mainstreaming Biodiversity across Sectors as well as within Production Seascapes[18], and 2) Reducing Direct Drivers of Biodiversity Loss in marine protected areas[19].

18. **At the global level, Brazil has committed to several key environmental international initiatives.** Brazil signed the CBD in 1992 and Congress ratified it 1994. The country also ratified the Ramsar Convention on Wetlands in May 1996. The proposed Project contributes to Brazil's commitments under these two Conventions (including CBD´s 2020 Aichi Biodiversity Targets) and meets the Brazilian eligibility criteria for GEF-7 funding according to the guidelines set by the CONABIO – Decree Number 4.703, of May 22, 2003 and the National Biodiversity Policy Decree Number. 4.339, of August 22, 2002. The project is also well-positioned to support the Sustainable Development Goals (SDGs), particularly SDG 14 dedicated to the conservation and sustainable use of the oceans for sustainable development; the National Policy on Climate Change (NPCC) and Nationally Determined Contributions (NDCs) by contributing to the climate change policies and measures in the country. Finally, the implementation of ocean governance tools such as the marine spatial plans (MSPs) will also contribute to achieving the Aichi targets through incorporating protected areas into spatial designs with the purpose of conserving marine and coastal ecosystems (Target 11).

PROPOSED PDO/RESULTS

A. Proposed Project Development Objective(s)

19. To strengthen governance and management of the MCPA system and build Brazil's capacity to transition to a blue economy in targeted areas.

B. Key Results

20. The following outcome indicators are proposed to measure PDO achievement:

i. Mobilization of additional resources for the Brazilian Marine Fund
ii. Hectares of Brazilian marine territory brought under *enhanced* biodiversity protection
iii. Improved institutional capacity to monitor the MCPA system
iv. Number of direct project beneficiaries (of which % are women)

PROJECT CONTEXT

A. Concept

1. Description

21. **The proposed Project will build upon the on-going GEF MAR1 project, and expand its scope to harmonize protected area management with policy frameworks and activities for a sustainable blue economy.** In line with Brazil's Blue Initiative, the proposed Project seeks to reinforce and expand ongoing efforts to protect and manage Brazil's extensive coastal and marine environments and the rich biodiversity and ecosystem services they support; and to foster the emergence of a sustainable and equitable blue economy. More specifically, the proposed project would aim to improve management and strengthen the financial sustainability of the MCPA system by the capitalizing the Brazilian Marine Fund. In parallel, the project would support actions to help mainstream blue economy principles into the overarching policy, legislative and institutional frameworks, adopt innovative approaches and technologies, and strengthen specific sustainable coastal and marine productive value chains in selected coastal Brazilian states. Additionally, the project would support local, national and international knowledge exchange and collaboration, helping build the capacity of Brazilian stakeholders to effectively contribute to the management of both nationally and globally important coastal and marine environments.

22. **The Project will be funded by a GEF Trust Fund grant in the amount of US$14.5 million.** The World Bank's instrument would be an Investment Project Financing (IPF). In addition to GEF funding, partners will be supporting in parallel with a total of US$86.5 million from Government budgets and legal financial mechanism such as environmental compensation and conversion of fines. The project comprises four components.

23. **Component 1: Management of Coastal and Marine Protected Areas System (US$8.00 million).** Building on achievements of GEF MAR1, this component will scale up efforts towards the capitalization and consolidation of the national MCPA system, with activities divided in two sub-components.

a) ***Subcomponent 1.1: Brazilian Marine Fund - (US$4.70 million).*** This subcomponent will seek to capitalize the Brazilian Marine Fund and strengthen the management and monitoring of marine and coastal protected areas, traditional artisanal sustainable fishing areas and no-take fishing zones. More specifically, this subcomponent will i) establish a sustainable financing mechanism for Brazil's MCPA system through the capitalization of the Brazilian Marine Fund; ii) develop a fundraising strategy and innovative mechanisms to attract additional funds and promote the financial sustainability of MCPAs (public-private partnerships, public funding initiatives, etc.); and iii) support the management and monitoring of the MCPAs established under GEF MAR1 through the consolidation of selected MCPAs, traditional artisanal sustainable fishing areas and no-take fishing zones. These activities will provide sufficient human and financial resources, adequate infrastructure, supportive local constituencies, and technical capacity for strategic planning, political support, and sufficient ecological information for the long-term conservation of the selected PAs[20]. The governance, financial, and legal structure of the Fund, along with eligibility criteria for subprojects will be defined during the preparation of the project following the successful lessons of the Amazon Region Protected Areas Project (ARPA).

b) ***Subcomponent 1.2: Strengthening the Coastal and Marine Protected Area System (US$ 3.30 million).*** This subcomponent will ensure that the protected and conserved area systems are effectively and equitably managed, ecologically representative and well-connected, as well as integrated into the wider seascape (Aichi Target 11). It will support cross-cutting initiatives to strengthen conservation and management of the MCPA system led by the Ministry of Environment and relevant partners. More specifically, this subcomponent will i) strengthen **governance, equitability, legal and regulatory framework** of the MCPA system, including *inter alia*: strengthening of governance and management of vulnerable and under-protected ecosystems with an emphasis on sustainable fisheries management, including artisanal fisheries (e.g. regulations within PAs), and strengthening the social organization of local traditional communities within MPAs[21]; ii) strengthen **management effectiveness and connectivity of the MCPA system** by identifying and piloting integrated and participatory planning approaches for MCPAs, preferably large mosaics, ecological networks and ecological corridors (e.g. development of integrated management plans; implementation of selected endangered species plans in priority areas; participatory fisheries management plans; invasive species control plans; sustainable tourism plans, etc.), and piloting new management arrangements for protected areas, including community co-management, concessions, privately managed conserved areas, and integration with military areas, etc.; and iii) perform **gap analysis** periodically to guarantee the national system representativeness, effectiveness, equity and connectivity, as well as the vulnerability of species (e.g. including red list of endangered species), ecosystems and protected areas to climate change and their role in the social, economic and ecological adaptation strategies.

24. **Component 2: Developing a Pathway for a Blue Economy (US$ 3.89 million).** The objective of this component is to develop a pathway towards transitioning to a blue economy by promoting the sustainable use of coastal and marine assets while fostering economic growth, innovation, and improving livelihoods and jobs. Activities are divided in two subcomponents.

a) ***Subcomponent 2.1: Creating an Enabling Environment for the Blue Economy (US$ 2.20 million).*** This subcomponent will develop policies, strategies, models and partnerships to support the country's pathway towards a blue economy. More specifically, this subcomponent will i) develop **public policies/strategies** to mainstream blue economy principles into other sectors, including development and implementation of an Action Plan for the Brazilian Blue Initiative to promote and oversee partnerships, finance and innovative management models for the MCPAs. Other blue strategies would include, *inter alia*: promotion of payment for ecosystem services; natural capital accounting and strategic evaluation of economic activities in marine and coastal zones; strategies for sustainable marine and coastal tourism (including international recognition of World Heritage and Ramsar Conventions, as well as IUCN Green List, among others), with particular attention to promoting community-based ecotourism and enhancing capacity for further developing and successfully managing public-private partnerships; and, strategies for the development of marine renewable energy technologies (e.g. solar, wind, tide) with potential

pilot in selected MPAs of Northern Brazil; ii) explore and pilot **blue economy decision making models** (e.g. Marine Spatial Planning) for effective management of the marine space including the already established MCPAs; and iii) strengthen social organization and support **innovative models of business development**, marketing, and income generation for traditional coastal communities, so that value-addition and benefits are maximized and recognized at the community level (such as certifications related to collective, sustainable, origin, fair and other qualities of their production and services – including community-based tourism).

b) ***Subcomponent 2.2: Promotion of Technological Innovation (US$ 1.69 million).*** This subcomponent will identify and pilot innovative technologies to improve management of coastal and marine assets across sectors. More specifically, this subcomponent will i) adopt **technological tools and instruments** for decision making over marine assets, including *inter alia*: remote monitoring and surveillance of fishing vessels, innovative technologies for reducing fisheries incidental captures and by-catch, climate change and biodiversity monitoring tools (e.g. satellite-based tools; drones, underwater mapping and monitoring technology), state-of-the-art technological mapping and data processing tools (e.g. Google Earth), monitoring of emerging pollutants including plastics and tracking their production; and remote sensing for the management of very large/remote MPAs and oceanic remote islands; ii) foster local economic development through the adoption of **innovative technologies for assisting value addition practices across value chains** and promoting sustainability of those practices closely associated with local traditional communities that rely on coastal and marine resources for their livelihoods. These activities will include, *inter alia,* promotion of sustainable approaches and technologies to seafood harvesting and artisanal fishing; techs for coral reef restoration and monitoring; techs for climate resilience through conservation and sustainable use of mangroves; techs for sustainable or community-based tourism; and techs for seafood certification and tracking; and iii) implementation of a **pilot monitoring program for marine pollutants** (e.g. solid waste, phantom fishing gear, and contaminants, including microplastics, heavy metals, organochlorines and hydrocarbons) using for example remote sensing technologies and contributing to Brazil's commitments to UNEP and UNEA on environmental quality of the oceans.

25. **Component 3: Strengthening Knowledge, Raising Awareness and Building Capacity (US$ 1.90 million).** The objective of this component is to strengthen knowledge and enhance Brazilian stakeholders' capacity at multiple levels with a view to increase project impact and further enhance participation and dialogue with respect to the country's international commitments. Activities are divided in two subcomponents.

a) ***Subcomponent 3.1 – Supporting Capacity Building at Multiple Levels (US$ 1.0 million).*** This subcomponent will i) build capacity for conservation management at various levels, including local community stakeholders (e.g. study tours, training for fishers, community tourism operations, etc.), MCPA institutions, ICMBio research centers (e.g., turtles, migratory birds, fisheries, aquatic mammals) through *inter alia*: targeted workshops, training, voluntary work, environmental education, dissemination of informative material, and the establishment of a national MCPA managers network; and ii) support Brazil's participation in the international dialogue on coastal and marine conservation and management, including those related to EBSAs, CBD, CMS, UNCLOS and ABNJ.

b) ***Subcomponent 3.2 – Strengthening Knowledge and Raising Awareness (US$ 0.9 million).*** This subcomponent will i) support communication activities to raise awareness, disseminate information and lessons learned among cross-sectoral stakeholders, ii) strengthen stakeholder networks and forge new partnerships, with a particular focus on those engaging women's participation, targeting both conservation and economic activities including to raise investment interest in the blue economy, and iii) foster knowledge exchange and learning opportunities with countries facing similar challenges to improve Brazilian capacities (including protected areas agencies, local traditional communities, National Navy, fisheries management agencies etc.) on the management of MCPAs systems (e.g. large marine ecosystem management, migratory species management, socio-biodiversity, and climate resilience).

26. **Component 4: Project Management, Monitoring and Assessment (US$ 0.69 million).** This component supports cross-cutting activities designed to strengthen coordination, communication, management and monitoring of implementation for all components. It aims to ensure project efficiency and efficacy through the establishment of a satisfactory management system and the maintenance of the Project's participatory structures.

27. **Beneficiaries:** The Project involves a range of beneficiaries at the national and community levels, given the large scale of the countries' marine environment**.** In particular, direct beneficiaries include ministries from various sectors, protected area management agencies and ICMBio Research Centers, local populations and resource users living inside the MCPAs system, nongovernmental organizations (NGOs), Civil Society Organizations (CSOs), scientific community and the national and international societies. Project activities will be targeted to these stakeholders to enhance their capacity and provide the foundation needed to drive the blue economy agenda. More specifically, local populations, including local fishers, fishing communities and some indigenous communities, will benefit from improved resource management and conservation, community empowerment and increased access to public policies. The Project will support their participation in Management Councils, elaboration and updating of Management Plans for PAs. The tourism industry will benefit from improved public use management, infrastructure, environmental education and conservation. The fishing industry will benefit from improved sustainability of their activities. Local, state, and federal stakeholders will be strengthened through participation in project activities and targeted capacity-building initiatives. The national and international community, as secondary beneficiaries will benefit from the establishment and implementation of a globally representative system of marine and coastal PAs in Brazil - better protected ecosystems and trans-boundary biodiversity. Critical information will be generated to scientists and policymakers on the achievement of CBD and Ramsar Convention targets.

28. **Environmental and Social assessment.** For the purposes of the proposed Project, a full assessment of the environmental and social impacts and benefits of Project activities would be carried out prior to appraisal, to inform the preparation of an Environmental and Social Management Framework (ESMF). Environmental impacts are expected to be minimal, localized and reversible, as project activities are designed to generate positive environmental conservation results. The Project will utilize a highly participatory approach that emphasizes consensus and community participation in MCPA management, improving MCPA design to consolidate mosaics avoiding conflict with local people while maximizing conservation benefits. The ESMF would give special consideration to impacts and benefits for vulnerable social groups. The assessment of social impacts and benefits would incorporate a gender-sensitive lens to the extent possible and would propose, to the extent needed, specific actions to close identified gender gaps as well as indicators to monitor actions designed to address or narrow these gaps. GEF MAR1 has made considerable progress addressing gender gaps and this dimension will continue to be a priority for the proposed project.

29. **Citizen engagement.** Consultations with key stakeholders, beneficiaries, and affected people would be carried out by the client during preparation. GEF MAR1 has developed and relies on a robust strategy of engagement with communities especially indigenous peoples. These consultations would take advantage of the channels already established, which convenes representatives of civil society, nongovernmental organizations, and academia. Local community leaders would also be consulted. These consultations would address the findings of the social and environmental assessment and evaluate the identification of impacts and benefits derived from project activities as well as the proposed measures to avoid, minimize, and/or mitigate adverse impacts.

30. **Climate change.** The project will foster multi-sectoral and participatory approaches to climate resilience in marine protected areas through actions that restore degraded or altered marine and coastal habitats in a manner that results in multiple benefits such as decreased vulnerability of coastal communities and improved habitat availability and/or function. By strengthening the management effectiveness of the MCPA system, the project will increase resilience to climate change of those who depend on the marine resources, which are among the poorest and most vulnerable. The policies, strategies, and spatial planning will incorporate climate analysis scenario to analyze future implications for the marine environment. Through the adoption of technological innovations, the project will improve accurate and systematic observation of the

climate and its effects on the MCPA system. Overall, the project is expected to strengthen the knowledge base and the analytical capacity needed to design MCPA approaches and establish governance mechanisms that will facilitate the integration of climate adaptation and mitigation measures in the protection of coastal and marine protected areas as well as ocean economic sectors such as in fisheries, tourism, etc.

31. **Grievance Redress Mechanism**. The Client will propose and implement a Grievance Mechanism with multilevel feedback to receive and facilitate resolution of concerns and grievances. The Project's GRM will rely on the network of sectorial ombudsman offices and the General Ombudsman Office, which includes a web-based portal http://www.mma.gov.br/areas-protegidas/programas-e-projetos/projeto-gef-mar/governan%C3%A7a-gef-mar.html). In addition to this official website, requests of information and grievances will be filed through the phone-hot line, e-mail or social networks. Moreover, the implementation agency will designate a focal point for the territories served, who will act on project-related issues and address information requests and grievances. The structure and processes of these mechanisms will be included in the Project Operational Manual and in the ESMF. The operation of the project's GRM will be periodically reported to the World Bank and monitored according to agreed performance indicators.

32. **World Bank's Grievance Redress Service.** Communities and individuals who believe that they are adversely affected by a World Bank–supported project may submit complaints to existing project-level grievance redress mechanisms or the World Bank's grievance redress service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project-affected communities and individuals may submit their complaint to the World Bank's independent inspection panel which determines whether harm occurred, or could occur, as a result of noncompliance with World Bank's policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit: http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

33. **Monitoring and Evaluation of Citizen Engagement and GRM.** Citizen engagement will be measured through beneficiary feedback surveys and efficiency of the project's Grievance Redress Mechanism. The project's intermediate results and indicators framework will be including an indicator of beneficiary satisfaction. This indicator will be disaggregated by gender. The efficiency of the GRM will be periodically evaluated in terms of: (i) Registered grievances satisfactorily responded in line with the Grievance Redress Mechanism, disaggregated by gender.

34. **Gender Strategy.** The Project is expected to address gender gaps. Women play an important role in smallholder family in Brazil, such as fishing communities and indigenous communities. However, they do not always reap the full financial benefits of their labor. There is little data on the exact extent of these gaps. Research in the urban area indicates gaps in terms of remuneration, use of time with domestic activities and care of children. Therefore, this Project will address this fundamental information gap by explicitly incorporating gender analysis into the formulation and implementation of actions. The Project could incorporate specific interventions to address identified gaps, particularly regarding equality of opportunities, through targeting of beneficiaries, and institutional strengthening.

35. **Gender-based Violence.** The Gender-Based Violence Risk Assessment (VBG) will be used to indicate the Risk related to the activities of the Project. In a preventive way the Project should adopt as a strategy to carry out actions to combat gender-based violence. A specific module on gender-based violence will be added in the staff training to ensure that all project staff are equipped to prevent, identify, and respond to any reports of GBV during project implementation.

2. Overall Risk and Explanation

36. **The overall risk for the project is expected to be Moderate**.

37. **Political and Governance risk is rated Moderate.** Brazil has a new government which may bring political uncertainties regarding the use and management of natural assets. Although the existing institutional structure and regulatory framework created by GEF MAR1 is already in place, the new government structures may result in implementation delays. The Bank will monitor closely any changes that may come as a result of the new government's priorities and engage early with possible new actors to ensure smooth transition.

38. **Macroeconomic risk is rated Moderate.** The new government took over in January 2019. Brazil's current macroeconomic situation could potentially impact the government implementing entities' funding due to the potential decreased budget to federal agencies. It remains to be seen how the new government priorities may potentially affect the financial, economic, and fiscal outlook of the country. This risk is mitigated because the project's fiduciary responsibility will be under the responsibility of a non-governmental institution (FUNBIO). The Bank team is monitoring the fiscal situation to avoid any potential impacts to the preparation of the project.

39. **Institutional Capacity for Implementation and Sustainability Risks are rated Moderate**. The Government of Brazil has been making substantial progress on the expansion of the system of PAs. However, this expansion and further consolidation of PAs are often constrained by the lack of financial resources and limited staffing and implementation capacity at the MMA and ICMBio. MMA and ICMBio's limited capacity will be addressed through close supervision and timely actions to improve implementation capacity and through partnerships with research institutions to help strengthening institutional capacity on MCPAs. Furthermore, FUNBIO's previous experience with World Bank-financed projects helps mitigate this risk.

Other risks were considered Low.

B. Economic Analysis

1. Briefly describe the development impact in terms of expected benefits and costs

40. **The economic cost and benefit analysis will be prepared and linked to the project's outcome indicators that will track the benefits of the proposed investment.** While the project scope does not lend itself to a simple cost-benefit analysis, significant benefits streams are expected from the consolidation of MCPAs and the focus on the blue economy. The project will generate local economic benefits, associated with improved and resilient coastal resources; improved local environmental conditions for resident households and businesses; increased earnings from work (wages) and/or natural assets productivity; access to and utilization of the information, knowledge, and institutional skills distributed across a diverse group of project stakeholders, organizations, and sectors of the coastal economy. Similarly, multiple socio-economic benefits are associated with the restoration of the health and resilience of coastal and marine ecosystems, such as increased economic activity, enhanced recreation including fishing, improved or protected infrastructure, decreased flooding impacts, etc.

41. **The GEF incremental support would assist the GOB in strengthening the representation of MCPAs, and its long-term economic and financial sustainability.** The project will establish the first Brazilian Marine Fund in the country, and involve new cross-sectoral actors to address policies related to the blue economy. The GOB budget is limited but the Project will support alternative instruments to overcome this limitation. Without the Project, the budget forecast to be allocated for MCPAs conservation by the GOB (the baseline scenario) would be very limited. The proposed GEF investment would leverage additional resources from other partners over the same period. This financing will help develop the necessary institutional capabilities, set up policy frameworks for the sustainable management of marine ecosystems, and develop mechanisms for the participatory management of MCPAs.

2. Rationale for public sector provisioning/financing, if applicable

42. **Institutional strengthening activities such as those to be supported by the Project will result in the provision of public goods and services that do not lend themselves easily to privatization.** Establishing sound marine policies and regulation, establishing appropriate rules of the game, and ensuring that the rules of the game are governance activities can be provided only by the state – though are essential for increased sustainable private investment and growth. This is particularly relevant in this instance because one of the higher-level objectives of the Project is to contribute to the sustainable management of the marine resources public good (e.g. fisheries)—an activity that will certainly require public engagement. The prohibitive costs of transitioning to sustainable value chain production for the benefit of local communities will require additional incentives from the public sector to create the enabling environment needed for effective management of the coastal and marine natural assets and associated benefits.

3. Value added of the Bank's support

43. **The proposed project expands the existing partnership between GOB and the World Bank established under the on-going GEF MAR1 for managing the country's coastal and marine space in a more sustainable and productive way**. The Bank's support brings in international expertise and implementation of lessons learned, enables knowledge sharing on marine and coastal management within Brazil and other countries, and catalyzes innovative processes to ensure that the country's long-term reform agenda for the blue economy is evidence-based and with strong scientific and institutional capacity underpinnings. The Bank's partnership with multi-country initiatives in the region, its global expertise on ocean governance, and helping governments implement policy, regulatory and institutional reforms makes it able to support Brazil in preparing and implementing the Project. As an Implementing Agency of the Global Environmental Facility, the Bank is committed to helping countries to conserve globally significant biodiversity and critical habitats.

C. Implementing Agency Assessment

44. **The Project will continue to be implemented by the MMA in partnership with the FUNBIO, ICMBio (responsible for federal PAs and threatened species), MCTI (Ministry of Science, Technology, Innovation and Communication), Brazilian Navy, and state agencies (for specific PAs in their jurisdictions).** Implementation will additionally involve the academic sector, NGOs and civil society. Following the successful implementation arrangement under GEF MAR1, the MMA will be responsible for the overall coordination of the four components, and through the PCU, will inter alia: (a) oversee the preparation of annual operating plans; (b) prepare supervisory and other reports as needed by donors or the World Bank. The Project Operational Manual (POM) will detail the roles and responsibilities of each of these institutional structures as well as the agencies involved in the Project's implementation.

45. **The Project's governance structure includes a Project Council (PC), POC, PCU, PIU and Technical Working Groups.** The PC will be comprised of representatives of governmental and non-governmental stakeholders to provide policy level and strategic guidance, ensuring linkages to sectorial policies and programs, assisting in the resolution of any inter-sectorial conflicts, and debating and suggesting improvements for the SNUC regarding coastal and seascape management challenges, among other issues. The POC will be comprised of representatives of the key executing agencies and chaired by MMA, serving as an administrative unit to ensure compliance with the PDO, considering PC guidance. The Project Coordination Unit (PCU), housed at MMA, will be responsible for coordination, supervision and monitoring of project implementation, whereas the Project Implementation Unit (PIU) at FUNBIO will be responsible for procurement and financial management and monitoring, including approving and tracking the distribution of funds. The Technical Working Groups will be established as needed to provide in-depth guidance upon specific issues related to the Project implementation.

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[2] Marengo et al (2017) "Impacto, vulnerabilidade e adaptação das cidades costeiras brasileiras às mudanças climáticas: Relatório Especial do Painel Brasileiro de Mudanças Climáticas". 10.13140/RG.2.2.36042.16329. available from https://www.researchgate.net/publication/317351229_Impacto_vulnerabilidade_e_adaptacao_das_cidades_costeiras_brasileiras_as_mudancas_climaticas_Relatorio_Especial_do_Painel_Brasileiro_de_Mudancas_Climaticas
[3] IBGE (2017) Regiões Metropolitanas, Aglomerações Urbanas e Regiões Integradas de Desenvolvimento, available from https://www.ibge.gov.br/geociencias-novoportal/organizacao-do-territorio/estrutura-territorial/18354-regioes-metropolitanas-aglomeracoes-urbanas-e-regioes-integradas-de-desenvolvimento.html?=&t=o-que-e
[4] Valor Econômico, 11, 12 and 13 August 2018.
[5] Anuário Estatístico Brasileiro do Petróleo, Gás Natural e Biocombustíveis 2017), available at: http://www.anp.gov.br/wwwanp/publicacoes/anuario-estatistico/3819-anuario-estatistico-2017
[6] FAO. (2016) The state of world fisheries and aquaculture: contributing to food security and nutrition for all. Rome (Italy): Food and Agricultural Organization of the United Nations. Available at: http://www.fao.org/3/a-i5555e.pdf
[7] de Fátima VM, Ximenes LJF. (2016) Carcinicultura no Nordeste: velhos desafios para geração de emprego e de renda sustentáveis, até quando? Caderno Setorial ETENE 1(1): 41-45. URL: https://www.bnb.gov.br/documents/80223/1095131/5_Carcinicultura.pdf/e7b5180d-59a0-47fc-adc0-2bbfa2451259
[8] Marine and estuarine areas in Brazil are economically and socially relevant, as national production supplies 66% of the consumed fish, with the majority of fish sold domestically (Gasalla MA, Abdallah PR, Lemos D. (2018)). However, 80% of Brazil's marine capture fisheries resources are currently overexploited, and the coastal zone more generally can be considered one of the most environmentally threatened regions in the country WWF-Brasil, 2016).
[9] Agência Nacional de Transportes Aquaviários (ANTAQ) (2016) Panorama sobre o Transporte Aquaviário Brasileiro do primeiro semestre de 2016 da ANTAQ. Accessed 4 August 2017. Available at: http://web.antaq.gov.br/Portal/pdf/Dados-Estatisticos-1-semestre-2016.pdf
[10] Ministério de Cidades [Brazil] (2014). Diagnóstico dos Serviços de Água e Esgotos – 2014. Available at: http://www.snis.gov.br/diagnostico-agua-e-esgotos/diagnostico-ae-2014 (accessed 7 April 2018
[11] Prates, A.P.L. (2007) O Plano Nacional de Áreas Protegidas - O Contexto das Áreas Costeiras e Marinhas. *In* Prates, A.P.L. & Blanc, D. (2007) Áreas Aquáticas Protegidas como Instrumento de Gestão Pesqueira, p. 17-24. Ministério do Meio Ambiente, Secretaria de Biodiversidade e Florestas, Brasília.
[12] Brazil (2017). "MPAs as tool and pathway to achieving CBD (Aichi Target 11) and SDG 14." 4th International Marine Protected Areas Congress, La Serena, Chile.
[13] Brazil in 2018 gazetted two large offshore MPAs—the São Pedro - São Paulo and the Trindade-Martin Vaz archipelagos—which increased protected area coverage in the marine realm from 1,57% to 26,34% of Brazil's national waters.
[14] Ministry of Environment Decree no. 261 from 29 June 2018.
[15] Northern coastal Brazilian states part of the CLME+ SAP include (from North to South): State of Amapa; State of Pará; State of Maranhao.
[16] https://www.clmeproject.org/

[18] Objective 1 of maintaining globally significant biodiversity within production seascapes by improving policies and decision making informed by biodiversity and ecosystem values (Outcome 1), and by managing biodiversity in seascapes (Outcome 4).
[19] Objective 2 of reducing direct drivers of biodiversity loss by reducing pressures on coral reefs and other vulnerable coastal and marine ecosystems (Outcome 7) and enhancing the effectiveness of protected areas systems (Outcome 8).
[20] Activities will include inter alia: demarcation of protected areas; installation of signage in artisanal fishing areas and no-take fishing zones; preparation and implementation of management visitation or other plans; surveillance and enforcement; provision of basic infrastructure and equipment, etc. This would be undertaken by the Protected Area management agencies and ICMbio research centers.
[21] Integrated local committees, co-management arrangements with local traditional communities, and other social actors.