

Coral Reef Rescue: Resilient Coral Reefs, Resilient Communities

Part I: Project Information

GEF ID
10575

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
 CBIT
 NGI

Project Title
Coral Reef Rescue: Resilient Coral Reefs, Resilient Communities

Countries
Global, Fiji, Indonesia, Madagascar, Philippines, Solomon Islands, Tanzania

Agency(ies)
WWF-US

Other Executing Partner(s)

Executing Partner Type

Global Coral Reef Rescue Partnership; Ministry of Livestock and Fisheries, Tanzania; Ministry of Environment, Climate Change, Disaster Management and Meteorology, Solomon Islands; Ministry of Environment, Fiji; Ministry of Environment and Sustainable Development, Madagascar; Ministry of Science Technology and Environment (CITMA), Cuba; Department of Environment and Natural Resources, Philippines (tbc); Ministry of Marine Affairs and Fisheries (MMAF), Indonesia (tbc)

Others

GEF Focal Area

International Waters

Taxonomy

Focal Areas, International Waters, Marine Protected Area, Coral Reefs, Biomes, Fisheries, Learning, Strategic Action Plan Implementation, Coastal, Influencing models, Transform policy and regulatory environments, Deploy innovative financial instruments, Strengthen institutional capacity and decision-making, Demonstrate innovative approach, Convene multi-stakeholder alliances, Stakeholders, Beneficiaries, Civil Society, Non-Governmental Organization, Community Based Organization, Academia, Communications, Education, Awareness Raising, Behavior change, Public Campaigns, Type of Engagement, Participation, Consultation, Information Dissemination, Private Sector, Large corporations, Individuals/Entrepreneurs, Capital providers, Local Communities, Gender Equality, Gender results areas, Access and control over natural resources, Knowledge Generation and Exchange, Participation and leadership, Capacity Development, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Capacity, Knowledge and Research, Theory of change, Adaptive management, Indicators to measure change, Knowledge Exchange, Field Visit, South-South, Peer-to-Peer, Conference, North-South, Knowledge Generation, Training, Course, Workshop, Master Classes, Seminar, Innovation, Targeted Research, SIDS : Small Island Dev States, Large Marine Ecosystems, Seagrasses, Mangrove

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 2

Duration

48 In Months

Agency Fee(\$)

630,000.00

Submission Date

3/23/2020

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-1-1	GET	3,500,000.00	48,909,850.00
IW-1-3	GET	3,500,000.00	48,909,850.00
	Total Project Cost (\$)	7,000,000.00	97,819,700.00

B. Indicative Project description summary

Project Objective

To build capacity and solutions to ensure the long term survival of climate resilient coral reef ecosystems, thereby supporting the blue economies and communities dependent on these reefs.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Global to local capacity building for resilient coral reefs monitoring and conservation	Technical Assistance	<p>1.1. Government and non-government practitioners, academia and communities are connected into a global network of knowledge and best practices to identify solutions for the conservation of coral reefs and connected ecosystems;</p> <p>1.2. Near-real-time monitoring data and information is obtained at global to national scales to inform action by the national and regional hubs.</p>	<p>1.1.1. At least six peer-to-peer learning events at regional / global level for at least 1,000 practitioners (PA staff, policy makers, scientists).</p> <p>1.1.2. At least, four exchanges (virtual as well as live study tours stimulating and developing knowledge exchange) between communities dependent on resilient coral reefs.</p> <p>1.1.3. Online learning tools developed (including alternative offline options) and benefiting , at least 5,000 relevant stakeholders (including communities) across diverse expertise levels and languages</p>	GET	1,227,273.00	22,809,774.00

1.2.1. Global coral reef health and impact monitoring platform adapted and implemented in the 7 countries (e.g. live coral cover, benthic composition, reef fish abundance and biomass, turbidity level, bleaching events); using rapid acquisition and analysis (including standardized online-offline data collection, artificial intelligence, citizen science, and remote sensing tools) for management response by the national and regional hubs.

1.2.2. Technical assistance, training and operational support for on the ground monitoring activities (platform calibration and ground truth), with participation of local communities in the 6 countries.

Component 2: Planning for resilient Coral Reef Rescue at the national level	Technical Assistance	<p>2.1.1. 6 National coral reef hubs (stakeholder coordination platforms) created, connected and strengthened, including key sectors such as marine, planning, environment, coastal community health, to lead the planning process under 2.2.</p> <p>2.1.2. Training, and operational support for strengthening community representation in national hubs, to effectively participate in the planning process under Outcome 2.2 and activities under Component 3.</p> <p>2.1.3. Consultative and collaborative process to integrate traditional knowledge and vision from local communities in national strategies for resilient reef conservation.</p>	GET	3,139,394.00	38,058,535.00
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2.1. Strengthened capacities of national and local stakeholders to lead the development of national strategies for resilient reef conservation in the 6 countries.

2.2.1. Threat/opportunity analysis (science and traditional knowledge) for each of the climate resilient reefs; utilizing tools for understanding drivers of reef health at a wide range of scales.

2.2.2. Cost-benefit analysis (losses due to the impacts vs gains from the unsustainable fishing practices) in the 6 countries.

2.2.3. 6 National/sub-national action plans for resilient reef conservation (responding to threats identified in 2.1 and including solutions identified in Component 1) developed in the 6 countries, including sustainable finance strategies.

2.2. Integration of science, traditional knowledge and cross-sectoral perspectives in national action plans for resilient reef conservation in the 6 countries.

Component 3: Financial solutions for resilient Coral Reef Rescue	Technical Assistance	3.1. Increased sustainable financial flow to relevant seascapes and landscapes to reduce threats to resilient coral reefs.	<p>3.1.1. Technical assistance in countries to mobilize private and public investment opportunities for their national priorities identified under 2.2.4.</p> <p>3.1.2 Scoping of at least 200 existing and potential sustainable businesses (in the 6 countries) including options for business expansion and start up.</p> <p>3.1.3. Technical assistance to national teams to prepare business filtering and investment frameworks.</p> <p>3.1.4. Investments portfolio developed, including demonstrative sustainable livelihoods projects in priority reefs in the 6 countries.</p>	GET	1,500,000.00	20,908,960.00
Component 4: Knowledge Management and Monitoring and Evaluation	Technical Assistance	4.1. Increased awareness of governments, donors and resilient local communities, and knowledge (from local to global level) on the value of resilient coral reefs, their main threats, and good practices/actions for their conservation..	<p>4.1.1: Communication campaign (reaching head of state and ministers from the 6 countries as well as local community population in the resilient reefs) designed and implemented at local and global level including firsthand narratives on how coral decline is affecting livelihoods.</p> <p>4.1.2: Knowledge management and communication products for practitioners, such as firsthand narratives and lessons on community driven solutions for coral reef conservation.</p> <p>4.1.3. Participation in, at least, two IW:LEARN regional meetings, one GEF International Waters Conference, and other masterclasses and knowledge exchange events (real and virtual).</p> <p>4.2.1: M&E reports, including project progress reports, midterm evaluation and terminal evaluation.</p>	GET	800,000.00	11,151,446.00

4.2.2. 4 Annual reflection workshops with project executing partners and main stakeholders.

4.2. Informed and a daptive project man agement.

	Sub Total (\$)	6,666,667.00	92,928,715.00
Project Management Cost (PMC)			
	GET	333,333.00	4,890,985.00
	Sub Total(\$)	333,333.00	4,890,985.00
	Total Project Cost(\$)	7,000,000.00	97,819,700.00

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	WWF-US	In-kind	Recurrent expenditures	819,700.00
Donor Agency	Green Climate Fund	Grant	Investment mobilized	50,000,000.00
Private Sector	Vulcan, Inc. The Allen Coral Atlas	Grant	Investment mobilized	25,000,000.00
Civil Society Organization	WCS & Rare (Bloomberg Grant)	Grant	Investment mobilized	6,000,000.00
Others	Blue Action Fund	Grant	Investment mobilized	6,800,000.00
Others	Margaret A. Cargill Philanthropies	Grant	Investment mobilized	800,000.00
Civil Society Organization	Blue Ventures	Grant	Investment mobilized	6,900,000.00
Civil Society Organization	WCS	Grant	Investment mobilized	1,500,000.00
			Total Project Cost(\$)	97,819,700.00

Describe how any "Investment Mobilized" was identified

Investment mobilized has been identified for co-financing partners that are mobilizing grants towards coral reef technical assistance and investment. The term Investment Mobilized has been used to reflect co-financing that excludes recurrent expenditure, and financing that will be leveraged alongside the GEF grant.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
WWF-US	GET	Global	International Waters	NA	7,000,000	630,000	7,630,000.00
Total GEF Resources(\$)					7,000,000.00	630,000.00	7,630,000.00

E. Project Preparation Grant (PPG)

PPG Required



PPG Amount (\$)

200,000

PPG Agency Fee (\$)

18,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
WWF-US	GET	Global	International Waters	NA	200,000	18,000	218,000.00
Total Project Costs(\$)					200,000.00	18,000.00	218,000.00

Core Indicators

Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem	Global			
Count	1	0	0	0

Indicator 7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
				

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem Rating (Expected at PIF) Rating (Expected at CEO Endorsement) Rating (Achieved at MTR) Rating (Achieved at TE)

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministerial Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem Rating (Expected at PIF) Rating (Expected at CEO Endorsement) Rating (Achieved at MTR) Rating (Achieved at TE)

Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Global	1			

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,000			
Male	5,000			
Total	10000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Core Indicator 7: Number of shared water ecosystems (fresh or marine) under new or improved cooperative management: 2. Sub Indicator 7.4. Level of engagement in IW: Learn through participation and delivery of key products The project will actively engage in the International Waters Learning Exchange and Resource Network (IW:LEARN). Project staff and project representatives will actively participate in training/twinning events, IW Conferences, and will provide spatial data and other data points via project website. The website utilized in the project is in line with the IWLEARN Guidance activities. Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment: 10,000 (50% of which are women). The number is an estimation of the number of individual men and women who will receive direct support from project activities in the 6 countries, including: governments, practitioners, academia and local communities benefitting from global platforms, peer-to-peer events, and on line and face to face learning activities; the practitioners and government staff benefitting from the global coral reef monitoring platform; the stakeholders participating in the resilient national coral reef hubs, and the private sector, including local communities, directly benefitting and involved in the development of the investment portfolio. The target of this indicator will be further refined during the project development phase.

Part II. Project Justification

1a. Project Description

- a. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);

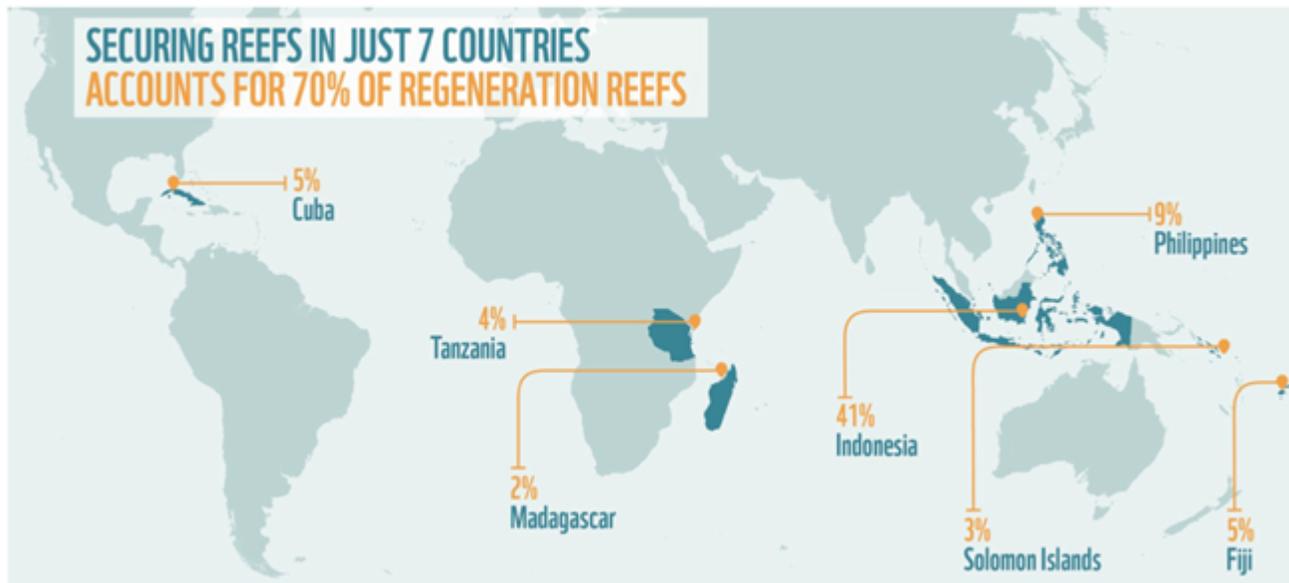
a.1. Project scope

Coral reefs are critically important ecosystems which support the livelihoods of coastal communities globally. They provide essential habitat for fisheries and tourism along with protection for coastal infrastructure and assets against sea level rise and increasing storm surge, making the socio-economic welfare of coastal communities closely linked with reef health. Despite their importance, coral reefs across the world's oceans are severely threatened by local and global factors that have resulted in losses of 50 to 80 percent over the last 50 years. Local factors such as overfishing and coastal pollution have driven these losses until recently. Climate change has accelerated these losses, however, primarily through increasing sea temperatures above the tolerance for many corals and hence coral reefs. In a 1.5°C atmospheric warming scenario, the IPCC has predicted that a further 70-90% of today's coral reefs will be lost.

Given the gravity and urgency of the situation, continuing to apply even the most promising solutions in as many locations as possible is no longer sufficient to drive the change required. A global analysis (led by University of Queensland and partners) [1] has revealed that some reefs have a substantially lower exposure to climate change stress due to local oceanographic conditions such as currents and upwelling. Many of these sites are linked to surrounding coral reefs via ocean currents which transport coral larvae and fish. These resilient and connected reefs embody the regeneration potential for the world's reefs once the stresses resulting from climate change have stabilized and are decreasing. Approximately 80% of these resilient reefs are found in developing countries and 90% of those are concentrated in seven countries: Indonesia, Philippines, Cuba, Fiji, Tanzania, Solomon Islands and Madagascar. These countries together hold 70% of the regeneration potential for the world's reefs (see Figure 1). All of these resilient reefs are facing decline and loss of resilience due to increasing local pressures. Given their importance as sources of coral reef regeneration in a 'climate stabilized world', supporting the health of these resilient and connected reefs in the coming decades clearly deserves greater attention if we are to secure and replenish the world's reefs as a whole.

The Coral Reef Rescue Partnership is a global initiative with governments, private sector, international NGOs, and civil society partners to sustain and restore the health of coral reef ecosystems in the face of climate threats. The Initiative is implemented by a partnership of organizations, including Blue Ventures, Rare, CARE International, The University of Queensland, WCS, and WWF, with extensive experience in delivering conservation in close collaboration with governments and local communities. **The Global Coral Reef Rescue Initiative's (CRRRI) underlying theory of change is that if the most resilient coral reefs that host 70% of the global regeneration potential within the coastal waters of the 7 countries can be identified, and if the main local threats to these priority reefs can be reduced to secure reefs in the face of climate change and community and commercial use, then a foundation for global reef maintenance and recovery can be provided for the long term.** The objective of the CRR Partnership is to apply this approach to building reef productivity and resiliency around the world to protect resilient coral reefs with regeneration potential to globally secure reefs while ensuring co-benefits of biodiversity and livelihoods, with a target of safeguarding the food security and livelihoods of over 120 million reef-dependent people over the next decade.

Figure 1: 7 countries hold 70% of the global coral reef regeneration potential



To meet that goal, the CRR Initiative Partnership is working with a group of private and public donors and technical partners such as the Green Climate Fund, The Blue Action Fund, Bloomberg Vibrant Oceans Initiative, Vulcan Inc, to secure investments towards the different components of the Initiative, including creating a global monitoring platform and securing on the ground investments for sustainable livelihoods and reef conservation, as described in the baseline section.

As a catalyst of the Global Coral Reef Initiative, the CRR GEF project will contribute to the goal of the Global Coral Reef Rescue Initiative, by anchoring public and key private sectors in the 6 countries. The project will create global knowledge and capacity building networks, including a global platform for near to real time monitoring of coral reef, that will create capacities in each of the 6 countries for coral reef assessment and to identify and target solutions for Coral Reef conservation^[2]. The project will support countries to identify key threats to coral reefs and to build national strategies that provide a path towards solving those identified threats in each country. The project will also facilitate the alignment of the different co-finance opportunities to the priorities identified in the national strategies and will assist countries to mobilize additional public and private investments towards those identified priorities, including the development of an investment portfolio of sustainable business and long term sustainable livelihood investments for local communities. The project has a strong component on knowledge management to ensure best practices and lessons learnt are captured, documented, applied during project execution and shared with the project stakeholders and broader conservation community.

The resilient reefs that are the focus of this project are located in 6 Large Marine Ecosystems (LMEs) (Somali Coastal Current, Agulhas Current, Indonesian Sea, Sulu-Celebes Sea, Pacific Warm Water Pool, Small Islands States). In those LMEs, previous and current GEF investments have resulted in development of Strategic Action Plans (SAPs). An analysis of the LME SAPs endorsed at country level shows that all LME SAPs highlight coral reef degradation as one of the key environmental problems in the LMEs and prioritize Coral Reef conservation in their objectives (see Table 1 below):

Table 1: LME SAP prioritizations of Coral Reef conservation objectives

Country	Tanzania & Madagascar	Indonesia & Philippines	Solomon Islands & Fiji
LME	Agulhas and Somali Coastal Current Large Marine Ecosystems	Indonesian Sea / Sulu-Celebes Sea	Pacific Warm Water Pool / Small Islands States
SAP	Strategic Action Plan for the Sustainable Management of the Western Indian Ocean Large Marine Ecosystems Published: 06 May 2019	Sustainable Development Strategy for the Seas of East Asia Implementation Plan (SDS-SEA IP) 2018-2022 Published: 17 Oct 2019	Strategic Action Programme for International Waters of Pacific Islands Published: 15 Sep 2014
Coral Reefs conservation prioritized in the SAP?	The SAP highlights the disturbance, damage, and loss of coral reef habitats as one of the main issues of concern in the LMEs. The SAP establishes specific actions for: monitoring and assessing the health of the coral reefs; Science-Based Governance and Adaptive Management, and ensuring community and other stakeholders' involvement, including private sector.	The SAP highlights threats to coral reefs as one of the main environmental problems of the LME. Coral Reef Conservation actions are prioritized under a Biodiversity Conservation and Management Program. Root causes are considered to be governance and socioeconomic conditions. Prioritized actions include baseline assessments, management plans, improved governance systems and sustainable financing mechanisms.	Coral reefs are one of the critical habitats identified by the SAP as a priority concern in the LME. Actions proposed include management and institutional strengthening, capacity-building, awareness/education, research/information for decision-making and sustainable investment promotion.

The proposed CRR project is fully aligned with the SAPs priorities and proposed actions related to Coral Reef protection. To complement existing GEF interventions within the International Waters Focal Area Strategy, and aligned to SAPs strategic actions, the project will give special consideration to creating capacities, knowledge management platforms, coral reef monitoring tools, awareness/education, national action plans and investment portfolios, therefore supporting the referred SAPs objectives, and facilitating their on the ground implementation.

The CRR GEF Project builds on previous GEF/World Bank supported coral conservation projects (Coral Triangle Initiative, CTI; Coral Reef Targeted Research Project, CRTR; Capturing Coral Reef Ecosystems Services, CCRES), which included a long term vision for filling knowledge gaps, developing effective tools and applying them to tropical coastal ecosystems with the intent of preserving coral reef ecosystems, building technical capacity through targeted training partnerships, aiming to reduce poverty in coral reef dependent communities, and helping build ecological and sociological well-being (see figure 2). The CCRES project produced a set of tools that can be applied to problem-solving within the context of tropical coastal ecosystems. These tools include off-the-shelf resources for learning how to undertake marine spatial planning, recognise and solve marine disease, or what goes into rebuilding fisheries in marine protected areas. Currently, there are hundreds of tools which are available globally, and which can be viewed on digital phones and other technology (which is becoming increasingly available). Despite this availability and access, these tools are often unknown to potential users. The CRR GEF will integrate these existing tools with the revolution in free distance or on-line education for all stakeholders and making them available for the stakeholders in the 6 countries (plus Cuba through co-financing sources) (see figure below that shows how the CRR GEF project will build on the legacy of tool development and knowledge acquisition from previous GEF Investments).

There is also a need to make sense of the diversity and utility of available tools for communities. Other developments (e.g. massive open online courses or MOOCs) are also increasing the opportunity to foster knowledge acquisition in the full range of stakeholders (from community to government). CRR GEF will bring the most useful of these tools together and will integrate them with new and established technologies such as MOOCs (free).

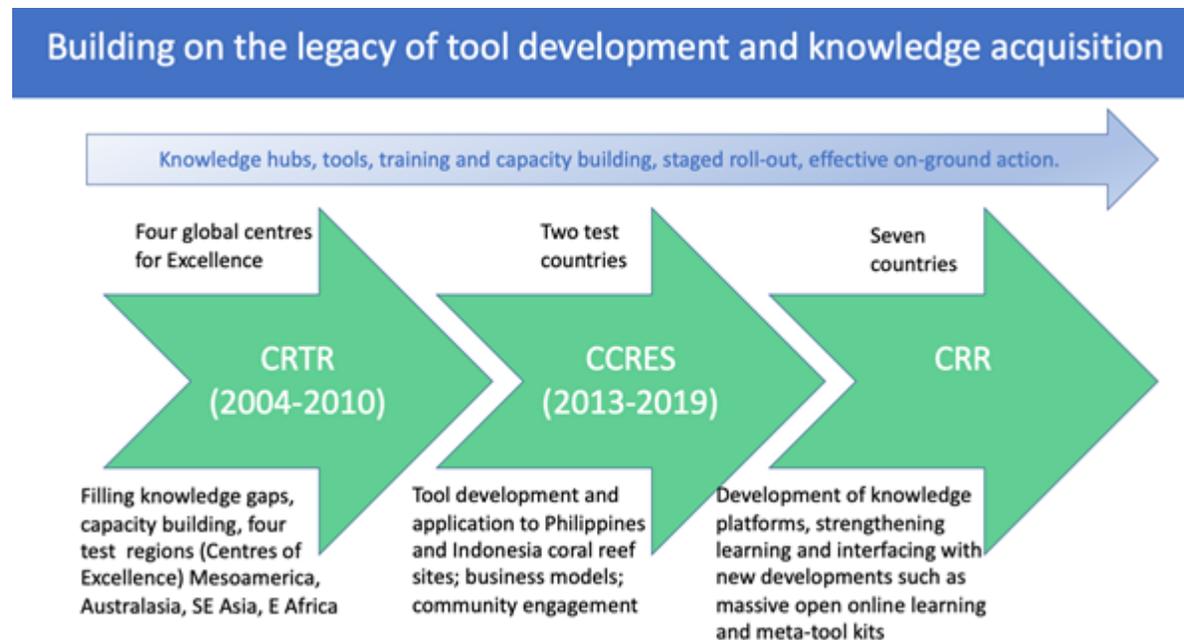


Figure 2. CRR GEF project builds on achievements of previous GEF Investments (note CRR GEF will fund six countries, plus Cuba with co-finance)

[1] Beyer, H.L., Kennedy, E.V., Begger, M., Chen, C.A., Cinner, J.E., Darling, E.S., Eakin, C.M., Gates, R.D., Heron, S.F., Knowlton, N., Obura, D.O., Palumbi, S.R., Possingham, H.P., Puotinen, M., Runting, R.K., Skirving, W.J., Spalding, M., Wilson, K.A., Wood, S., Veron, J.E., Hoegh-Guldberg, O. 2018. Risk-sensitive planning for conserving coral reefs under rapid climate change, *Conservation Letters*, Vol 11. (17):e12587 Available at: [https://www.researchgate.net/publication/326034705_Risk sensitive_planning_for_conserving_coral_reefs_under_rapid_climate_change](https://www.researchgate.net/publication/326034705_Risk_sensitive_planning_for_conserving_coral_reefs_under_rapid_climate_change)

[2] The CRR GEF project will finance activities in 6 of the 7 resilient coral reef priority countries (Philippines, Solomon Islands, Fiji, Indonesia, Tanzania, and Madagascar). Activities in Cuba will be financed through co-financing sources, and not by the GEF project budget, WWF US, or any other US funds.

a.2. Environmental significance

Coral reefs are the most biologically diverse ecosystems in the ocean, providing tangible and intangible benefits to people, many of whom are highly dependent on reef ecosystem goods and services (see figure 2). While they occupy less than 0.1% of the world's oceans, coral reefs provide habitat for at least 25% of all marine species, with estimates of over one million species (approximately 1 in 4 species in the ocean) living in and around coral reefs.[1] People living along tropical coastlines rely on many of these species for food security and as a means of gaining livelihoods.[2] An estimated six million fishers in 99 reef countries and territories worldwide—over a quarter of the world's small-scale fishermen—harvest from coral reefs.[3] The loss of coral reefs has been associated with a strong downturn in fisheries productivity[4] possibly by at least a three-fold reduction[5] and therefore puts the estimated \$6 billion in revenues globally at risk.[6]

Furthermore, approximately 850 million people live within 100 kilometers of reefs and more than 275 million reside within 30 kilometers, many of whom are likely to be highly dependent directly or indirectly on coral reefs, especially those who look to these marine ecosystems for food and livelihoods.[7] The reef ecosystems protect coastal villages, businesses, and residents from wave action and storms, providing risk reduction benefits to an estimated 100 to 197 million people.[8] Some 30% of the world's coral reefs are understood to support tourism that generates, in turn, as much as \$36 billion annually.[9] Of course, dependence on coral reefs varies tremendously around the globe.

[1] Census of Marine Life n.d.; Reaka-Kudla and Wilson 1997

[2] Burke et al. 2011

[3] <https://coral.org/coral-reefs-101/coral-reef-ecology/coral-reef-biodiversity/>

[4] Graham 2014; Pratchett, Hoey, and Wilson 2014; Speers et al. 2016

[5] Rogers, Blanchard, and Mumby 2014

[6] Teh, Teh, and Sumaila 2013

[7] Burke et al. 2011

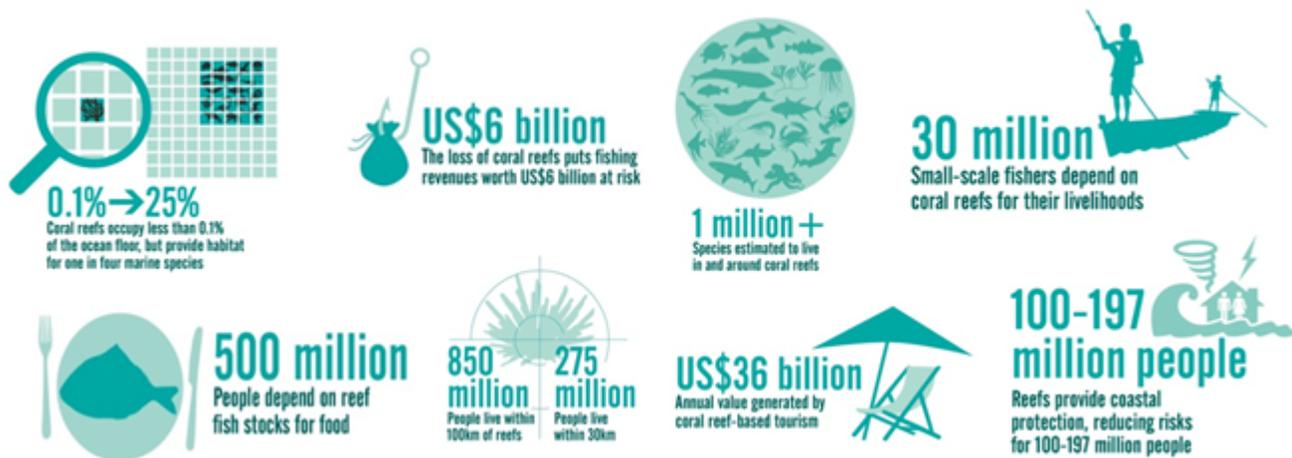
[8] Ferrario et al. 2014

[9] Spalding et al. 2017

[10] Bruno and Selig 2007; De'ath et al. 2012; Hughes et al. 2017; Côté et al. 2005; Gardner et al. 2003; Baker, Riegl, and Glynn 2008; Riegl 2003

[11] Hoegh-Guldberg, O. et al, 2015

Figure 3: Environmental Significance of Coral Reefs



a.3. Global Environmental Problem:

Coral reef systems across the world's oceans are currently experiencing major losses, including the Great Barrier Reef, the Indo-Pacific region, the Caribbean, and the Indian Ocean. Most of these reef systems have seen losses of 50 to 80 percent over the last 50 years[1].

Until a few decades ago, most of the stresses on corals were locally driven, often by the same human populations that benefited from coral reefs. Decline was largely the result of stresses such as pollution, overharvesting and destructive extraction of fish, corals and other organisms, and unsustainable coastal development. More recently, however, the principal drivers of global reef decline have been the warming and acidification of the world's oceans, with the impact of these changes on organisms and ecosystems growing rapidly. These global drivers (e.g. warming, acidification, and intensifying storms) have combined with local threats to drive some of the most rapid decreases in the extent of coral cover ever recorded.

As the ocean warms and acidifies, there is a rapid and unprecedented decrease in the extent of coral cover (i.e. coral abundance). The IPCC expert consensus (IPCC SR1.5) concludes that, even if the average global temperature rise is limited to 1.5°C above the pre-industrial period, 70-90% of today's corals will be lost by 2100. At 2°C or above, only 1% of what we have today is likely to survive (IPCC 2018).

Ecological changes driven by ocean warming and acidification include modified food webs, shifts in community structure, reduced habitat complexity, decreased fecundity and recruitment, changes to fisheries productivity and opportunity, and a shift in the carbonate budget of some ecosystems toward dissolution and erosion of calcium carbonate stocks. Projections of change in biological systems indicate future scenarios for coral reefs that will range from difficult to catastrophic, with serious challenges for the 500 million people who depend on reef fish stocks for access to nutrition, as well as the estimated 30 million small-scale fishers who depend on coral reefs for their livelihoods[2]. Eventually the loss of coral cover and capacity for reef building will see a loss of the structural ability to provide coastal protection against major storm events.

Despite the global trend towards warmer and more acidic ocean conditions, it is important to keep in mind that the threats are not uniform. It is also evident that the natural resilience to warmer and more acidic conditions varies across geographies. Furthermore, reefs that are already near their physiological tipping points may prove to be incapable of adapting to climate change, regardless of efforts taken to reduce other stressors. Other reefs may appear to be degraded but could actually represent a resilient transition state. This heterogeneity suggests that coral preservation interventions should focus on those reefs most likely to survive and where possible those reefs which also are known to be significant 'source' reefs with strong capacity to regenerate corals in connected places. This is made possible through the transport of coral larvae in oceanographic currents. The connectivity of reefs systems and their potential to regenerate regional reefs has been well documented, especially after disturbances such as large storms, outbreaks of coral predators (e.g. Crown-of-thorns starfish) and mass bleaching events.

Protecting these regions will also play a crucial role in supporting the regeneration of coral reefs in the future. This work will truly come into its own once the climate has stabilized and investments into restoration are less likely to be undermined by increasing climate impacts such as mass coral bleaching and mortality from thermal stress.

[1] Bruno and Selig 2007; De'ath et al. 2012Hughes et al. 2017Côté et al. 2005; Gardner et al. 2003bBaker, Riegl, and Glynn 2008Riegl 2003

[2] Hoegh-Guldberg, O. et al, 2015

a.4. Barriers

The main barriers for coral reef conservation the CRR project would address are:

(i) Insufficient knowledge sharing and coordination among researchers, practitioners and local communities to bring integrated solutions for coral reef conservation, and community-based approaches and solutions at the local, national and global level. This is despite the similarity of problems facing coral reefs and hence opportunities to collaborate on developing a similar series of solutions. There is also a lack of global integrated approaches to monitor threats, health of coral reefs, and human wellbeing.

(ii) Lack of coordinated strategies to address the greatest threats to resilient coral reef conservation at national levels. Countries suffer from lack of technical capacity and scientific knowledge on the key threats affecting coral reef conservation (at local to national scales) and there are insufficient coordination efforts to build national strategies for coral reef conservation. This is aggravated by weak governance systems with limited institutional technical capacities for monitoring and planning for coral reef conservation. Additionally, coral reef conservation emphasis has been generally focused around protected areas, and this approach can overlook other threats that cannot be mitigated by protected areas alone. The current proposal aims at identifying threats and interventions to address those threats and opportunities, beyond the scope of the protected areas.

(iii) Insufficient and inadequate investments for resilient coral reefs conservation and sustainable livelihoods of associated communities. Investment into coral reef conservation and management is currently spread thinly across a large number of projects too often with insufficient emphasis on pathways and investment for scaling up gains. A recent analysis undertaken by the UN Environment Programme revealed that 90% of all coral reef projects were valued below 1 million US\$. The status quo is not delivering the changes required and the window to secure coral reefs for the future is rapidly closing. Additionally, conservation efforts are not focused on resilient coral reefs, and fail to address (i) specific threats affecting those coral reefs with the highest potential to rekindle coral reefs ecosystems as global climate impacts slow; and (2) sustainable livelihood options for communities directly dependent on and directly impacting coral reefs.

(iv) **Lack of awareness at global, national and local level on the significance of resilient coral reef ecosystems**, including their role on the economic development of countries, the livelihoods, food security and wellbeing of local communities, particularly of women engaged in reef-related value chains, and on their capacity to regenerate coral reef ecosystems at the global level. The CRR project will support donors, governments, and local communities, to focus their attention and efforts to preserve the resilient reefs with regeneration capacity in the 7^[1] countries.

v) **Poor local level natural resource governance and engagement of the men, women and youth directly dependent on coral reefs**. Across all countries, there are high levels of dependency on coral reefs and associated ecosystems by local communities with low-income levels and low opportunities. As a result, levels of unsustainable exploitation is significantly coupled with limited resources by governments for conservation action, including enforcement. All countries in which stakeholder consultations took place highlighted the risks of not effectively engaging traditional leadership, men, women and youth in making and enforcing decisions related to coral reefs. Globally, there is growing evidence to demonstrate that the inclusive involvement of local communities in natural resource governance provides significant opportunity to mitigate risks associated with shortcomings in existing governance systems.

[1] The CRR GEF project will finance activities in 6 of the 7 resilient coral reef priority countries (Philippines, Solomon Islands, Fiji, Indonesia, Tanzania, and Madagascar). Activities in Cuba will be financed through co-financing sources, and not by the GEF project budget, WWF US, or any other US funds.

b) the baseline scenario and any associated baseline projects,

The Coral Reef Rescue Project will leverage a set of existing and planned initiatives at global, regional and national levels, that aim at preserving coral reef ecosystems in the prioritized geographies, in each of the CRR countries (6 countries under GEF and co-finance, plus Cuba through non US, non-GEF funds).

Global and Regional Level

The resilient reefs identified are located in 6 Large Marine Ecosystems (LMEs) (Somali Coastal Current, Agulhas Current, Indonesian Sea, Sulu-Celebes Sea, Pacific Warm Water Pool, Small Islands States). In those LMEs, previous and current GEF investments have developed the following TDA/SAPs: **Strategic Action Plan for the Sustainable Management of the Western Indian Ocean Large Marine Ecosystems**; **Sustainable Development Strategy for the Seas of East Asia Implementation Plan (SDS-SEA IP) 2018-2022**, and **Strategic Action Programme for International Waters of Pacific Islands**. The proposed CRR project is fully aligned with the SAPs priorities and proposed actions related to Coral Reef protection and will work to ensure the project investments build on and support implementation of the referred SAPs. To complement existing GEF interventions within the International Waters Focal Area Strategy, and aligned to SAPs strategic actions, the project will give special consideration to creating capacities, knowledge management platforms, coral reef monitoring tools, awareness/education, national action plans and investment portfolios, therefore supporting the referred SAPs objectives, and facilitating their on the ground implementation. Learning from and building upon the achievements of those previous GEF investments, the CRR project will strengthen capacities of LME managers and practitioners, supporting and participating in existing learning communities, such as IW:LEARN, LME:LEARN, and disseminating best practices and lessons learned generated by the proposed project.

Additionally, at the global and regional level, the project will build on the following planned and ongoing coral reef interventions, which are complementary and lay out the groundwork to advance the overall objective and the individual components, outcomes and outputs of the proposed project:

The CRR Initiative Partnership is formed by a group of organizations including Blue Ventures, Rare, CARE International, The University of Queensland, WCS, WWF and Vulcan Inc. The CRR project will leverage ongoing and planned initiatives from these organizations aimed at preserving coral reef conservation, and will mobilize additional investments from a diverse range of public and private donors, including:

- CCRES – As explained in *Section 1.1. Project scope*, an important baseline for the CRR project is the “Capturing Coral Reef Ecosystems Services, CCRES) GEF project, implemented by the World Bank and executed by University of Queensland. The CCRES project included a long-term vision for filling knowledge gaps, developing effective tools and applying them to tropical coastal ecosystems with the intent of preserving coral reef ecosystems and building technical capacity through targeted training partnerships. The CCRES project produced a set of tools that can be applied to problem-solving within the context of tropical coastal ecosystems, including off-the-shelf resources for learning how to undertake marine spatial planning, recognize and solve marine disease, or what goes into rebuilding fisheries in marine protected areas. The CRR GEF will build on the achievements of this past GEF investment, integrating these existing tools with the revolution in free distance or on-line education for all stakeholders in the 6 project countries (plus Cuba, through co-financing sources).
- The Blue Nature Alliance (BNA) (Conservation International (CI), the Pew Charitable Trusts (Pew), the Rob and Melani Walton Foundation and the GEF) have joined together to form the Blue Nature Alliance with the objective to catalyze the effective conservation of at least 1.25 billion hectares of ocean (approximately 3.5 percent of the global ocean), in order to safeguard global ocean biodiversity, build resilience to climate change, promote human wellbeing, and enhance ecosystem connectivity and function. The CRR project and the Blue Nature Alliance are complementary initiatives. Even if the CRR project will not specifically focus on MPAs, but on key resilient coral reefs, both projects will potentially work in similar geographies (in Indonesia, Philippines, Fiji and Solomon Islands). The potential work of the BNA, establishing new MPA in potentially key resilient coral reefs, and enhancing their management, will set up the ground for the CRR project, that would be able to complement BNA work by providing, in or around those MPAs in resilient reef areas, new monitoring tools and capacities for coral reef conservation, and new sustainable business opportunities, aligned with the conservation objectives of the newly created MPAs.
- Global Coral Reef Monitoring Network (GCRMN) – East African Node, Fiji node, and East Asia Region node. GCRMN works through a global network of government and non-government partners to strengthen the provision of best available scientific information and communication of the status and trends of coral reef ecosystems, for their conservation and management. GCRMN covers biophysical variables as well as socioeconomic variables, The main activity of GCRMN is the preparation of regional and global periodic assessments on the status and trends of coral reefs. This is enabled through development of core variables/indicators, recommended best practice in terms of methodology, and a range of evolving data products and services. Some of the limitations that countries find in this endeavor is the lack of available data and tools to monitor coral reef status. The project will build on the work develop by this initiative and will complement its objectives, by creating capacities and facilitating new monitoring tools in country that allow partners of the initiative to overcome current existing gaps of information.
- The Partnership in Environmental Management for the Seas of East Asia (PEMSEA) has the mission to foster and sustain healthy and resilient coasts and oceans, communities, and economies across the Seas of East Asia through integrated management solutions and partnerships. For over two decades, the organization has provided solutions for effective management of coasts and oceans across the shared seas of East Asia. As the regional coordinating mechanism for the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), PEMSEA works with national and local governments, companies, research and science institutions, communities, international agencies, regional programs, investors and donors towards implementation of the SDS-SEA. Crucial networks such as learning centers also contribute their expertise and coastal management skills to the shared goals of the SDS-SEA. The partnership includes 14 countries, including Philippines and Indonesia, and has specific strategy outcomes on increasing the area of extent of healthy, resilient habitats, including coral reefs and associated ecosystems.

- The Allen Coral Atlas, by Vulcan Inc. The Atlas aims to provide benthic and geomorphic coral reef maps of the globe by 2021. The Atlas will also have a fully functional change detection system monitoring for coral bleaching and sediment runoff and bringing machine learning to their map making, as new satellite images become available. They will work with partners on Artificial Intelligence-based maps which will be refreshed more frequently. The Global Coral Reef Rescue project will create capacities, in country, to facilitate the use these maps by national and local stakeholders, as a basis to develop the opportunity and threats assessments, the cost benefit analysis and the national strategies for resilient reef conservation in the 6 countries.

- MERMAID - a Marine Ecological Research Management AID - is the first online-offline data platform to accelerate data collection, analysis, and collaboration of coral reef survey information. MERMAID is a field-ready technology innovation that accelerates the transformation of data to decisions to save coral reefs, and delivers standardized, coordinated, and collaborative scientific information for rapid evidence-based decision making to protect and manage coral reefs. Currently in use by 400+ users in more than 10 countries around the world, MERMAID also integrates with the Allen Coral Atlas habitat maps and change detection information, and will deliver the first global platform for data visualization and real-time reporting for coral reefs in mid-2020. The Coral Reef Rescue project will use MERMAID to rapidly collect, analyze, and share coral reef monitoring information across partners, and deliver training resources to strengthen capacity for coral reef monitoring in the 7 countries.

National Level

At National level, there are a set of ongoing and planned initiatives that countries are developing to address barriers for coral reef conservation, such as MPAs, sustainable fisheries management, community management, promotion of private sector initiatives on sustainable fisheries and sustainable catchment management/land use/production. This baseline of national initiatives that the project will complement, will be further assessed, and completed during project preparation phase. Some of the most important national initiatives identified at PIF stage, that the CRR project will build on, include:

- Indonesia:

o National Action Plan on Coral Reef Conservation (2017-2021): The aim of the plan is to facilitate actions to conserve coral reef in Indonesia. The Action Plan sets up four targets: i) availability of data and information on coral reef, ii) community-based management model, iii) increasing the awareness and participation of stakeholder, and iv) strengthening surveillance and enforcement. The strategy under the coral reef action plan is strongly supported by the components outlined in this PIF.

o The National Plan of Action for Coral Triangle Initiative on Coral reefs, Fisheries, and Food security (CTI – CFF): Currently the Regional Secretariat is facilitating the discussion and establishment of CTI-CFF Regional Plan of Action. Once this plan is agreed the CTI member countries need to develop their national plan of action.

o Indonesia Coral Reef Garden: To rehabilitate coral reefs in a way that is integrated with restoration, tourism, and livelihoods.

o National Coral Reef Monitoring Network (NCRMN) is a national network that consists of scientists, MPA managers, NGOs, universities, private/dive operators, and community groups to provide data and information on coral reefs to support management and conservation action and policy.

o International Coral Reef Initiatives: Indonesia is currently the co-chair of ICRI with Australia and Monaco. Under the action plan of ICRI Secretariat 2018-2020, four themes are prioritized: i) Promote effective and adaptable solutions to improve the protection of coral reefs, ii) Understand the trends of coral reefs, iii) Live Reef Food Fish Trade (LRFFT), and iv) Help to reduce anthropogenic threats to coral reefs.

o CTI COREMAP, World Bank. The objective of the Coral Reef Rehabilitation and Management Program - Coral Triangle Initiative (COREMAP-CTI) Project for Indonesia is to institutionalize the COREMAP approach of a viable, decentralized and integrated framework for sustainable management of coral reef resources, associated eco-systems and bio-diversity for the welfare of the communities in seven selected districts of five provinces in the country. The project consists of the following components: 1) institutional strengthening for decentralized coral reef management; 2) development of ecosystem-based resources management; 3) strengthening sustainable marine-based economy; and 4) project management, coordination, and learning.

- Philippines:

o “Coastal and Marine Ecosystems Management Program (CMEMP)”, under implementation and funded by the Philippines government. This program is pursuant to DENR Administrative Order 2016-26 which aims to achieve the effective management of the country’s coastal and marine ecosystems thereby increasing their ability to provide ecological goods and services to improve the quality of life of the coastal population particularly ensuring food security, climate change resilience and disaster risk reduction.

o DENR-BMB, LGU, and WWF will implement the “Increasing coral reef resilience by strengthening marine key biodiversity area” project from 2021 to 2024. This project will increase effective management of MPAs and MPANs as well as improve long-term financial stability of these areas. The project will also enhance and enable policies that support marine biodiversity conservation in The Philippines.

o Connectivity of Large MPAs contributing to resilient reefs and food security: Effective management of Large Marine Protected Areas will improve by developing a monitoring framework and supporting reef connectivity to ensure food security of local communities. The expected duration of this project is 2 years, between 2022 and 2024, with involvement from partners at DENR-BMB/ PCSD, LGU, PAMB, and WWF.

o Financing infrastructures and facilities that promote carbon sequestration and / or reduce ocean acidification: A proposed project that would align with the Coral Reef Rescue project as the objective is to reduce CO2 emissions at the policy and site-based level to decrease ocean acidification. The project will be implemented between 2022-and 2025 with involvement from DENR, DOE, DOF, BSP, UPMSI, DLSU, Siliman University, MSU and WWF.

- Tanzania:

o Tanzania Coral Reef Task Force: The task force was established in 2002, under the WIO Coral Reef Task Force. The Chair of the task force is the Director General of the National Environment Management Council (NEMC); technical leadership by the Institute of Marine Science, Dar es Salaam. The objective of the Task Force is to support the development of local capacity in research, management, governance, and coordinate communication at the national level, and serve as a platform to share information on regional initiatives. A Coral Reef Status Report is prepared and presented to the International Coral Reef Initiative General Meeting after every two years. The Coral Reef Task Force will be an important stakeholder platform for the CRR GEF project, and the work conducted by this Task Force will be strengthened by the CRR project, that will provide new capacities and tools to its members, to improve their coral reef monitoring and assessment activities.

o Tanzania is focusing on coral reef protection through MPAs establishment including several, national level, fully protected coral reef MPAs, that also generate revenue which is ploughed back to conservation, and management interventions. Other MPAs are community- based and include locally marine management areas (LMMAs), and Collaborative Fisheries Management Areas (CFMAS). These include reef-based fishing grounds with the former often closed temporarily to fishing and the latter open to controlled fishing to easy fishing pressures and unsustainable fishing practices. Additionally, Beach Management Units (BMUS) have been legally established and are community based coastal resource management units that monitor resource use practices including reef-based fishing.

- o The Institute of Marine Sciences, upgraded to Center of Excellence (COE) for coral reefs studies, hosts working groups and promotes participation of local scientists and graduate students in reef research. Associated with this was the establishment of 5 national coral reef monitoring zones namely Tanga zone (north), Dar es Salaam zone (central), Rufiji-Mafia-Kilwa seascape zone (south), Mtwara zone (the south most), and the Zanzibar zone.

- **Solomon Islands:**

- o Solomon Islands Coral Triangle Initiative National Plan of Actions (NPOA). The NPOA, under Ministry of Environment, Conservation and Meteorology and the Ministry of Fisheries and Marine Resources, provides strategic direction for collaboration for government and non-government stakeholders to achieve the common goal of sustainably managing marine and coastal resources to ensure food security, sustainable economic development, biodiversity conservation and adaptation to emerging threats through community based resource management approaches supported by government agencies and other partners. The proposed GEF project will build on and complement the work done by the stakeholders already collaborating on the NPOA, to organize the resilient coral reef national hub, that will lead the development of assessments and national strategy for resilient coral reefs conservation.

- **Fiji**

- o The Great Sea Reef Resilience Programme in Fiji is led by various Fijian government ministries, WWF-Pacific, the WWF Landscape Finance Lab, and other partners. It began in 2017 And the program focuses on (1) land and marine use planning with improved ecosystem management (2) facilitating investments in green and blue businesses that promote regenerative production with market outcomes in Fiji that support the adjacent Great Sea Reef and (3) primary waste and pollution removal.

c) the proposed alternative scenario with a brief description of expected outcomes and components of the project;

The project objective is to build capacity and solutions for safeguarding globally significant climate resilient coral reefs, to ensure global long-term survival of coral reef ecosystems.

The project will achieve this objective by creating global knowledge and capacity building networks to share, identify, and target solutions for Coral Reef conservation, and will create a global platform for near to real time monitoring of coral reefs, that will create and strengthen capacities in each of the 7 countries (plus Cuba through non-GEF funds) for coral reef assessment (Component 1). The project will support countries to identify key threats to coral reefs and to build national strategies that provide a path towards solving those identified threats in each country. This will be achieved through a participatory process that will create national platforms and ensure effective participation from coral reef local communities (Component 2). The project will also facilitate the alignment of the different co-finance opportunities to the priorities identified in the national strategies and will assist countries to mobilize additional public and private investments towards those identified priorities, including the development of an investment portfolio of sustainable business and long term sustainable livelihood investments for local communities in the priority resilient coral reefs (Component 3). The project has a strong component on knowledge management to ensure best practices and lessons learnt are captured, documented, applied during project execution and shared with the project stakeholders and broader conservation community (Component 4).

In summary, the logic of the project's Theory of Change is depicted in Figure 4 below:

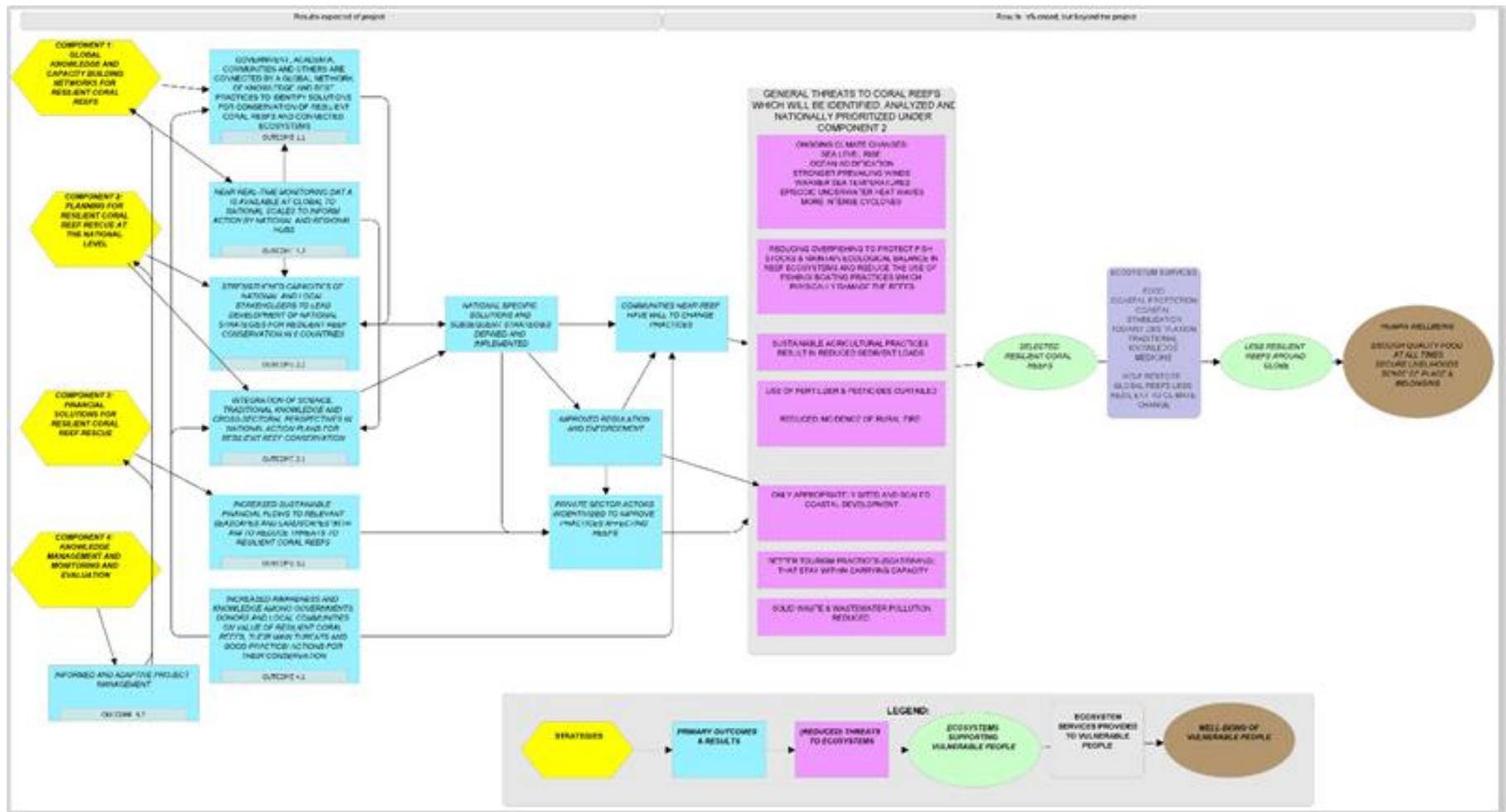


Figure 4: High level theory of change of the Coral Reef Rescue GEF Project.

The resilient coral reefs were identified by the “50 reef project” (2017-2018) and subsequent scientific reports. The analysis these initiatives performed, based on Modern Portfolio Theory, identified resilient reef pixels and clusters at the global scale level and created an optimal portfolio of (resilient reefs) Bioclimatic Units (BCUs). The CRR GEF Project Component 2 will focus on the BCU portfolio identified for each of the 7 countries. The project Component 3 will focus on specific project sites within the BCUs, for which an investment portfolio will be developed. The site selection will be done through a stakeholder consultative process, that will include criteria such as alignment to government priorities, political and community acceptability, community readiness, and private sector investment readiness.

The project will be achieved through the following components, outcomes, and outputs:

Component 1: Global to local capacity building for resilient coral reefs monitoring and conservation

While there is an increasing body of academic knowledge about problems and solutions for coral reefs and the coastal communities dependent on them, much of this information is inaccessible to people not exposed to science or relevant expert areas, or to non-English speaking backgrounds. So, in parallel to ongoing research, there is a need for more effective brokering and communication of known problems and solutions, across the 6 countries that have

significant coral reefs on their coastlines. The objective of Component 1 is to provide solutions to overcome this problem, by creating a global network of knowledge and best practices to identify and use solutions for the conservation of coral reefs and connected ecosystems. The project will be using and building on the set of tools developed by the CCRES project. This 'Knowledge Platform' will build resources that enable countries to tap into the latest insights and information, while contributing to increased understanding of the problem and improved practice in solutions. This will be done in a communal way in appropriate languages and levels of expertise. By drawing on the massive uptake in online learning, thousands of people that either help maintain or are dependent on coral reefs will increase their understanding and skill level. Additionally, component 1 will create capacities in the 6 countries to participate and use a global coral reef ecosystem monitoring system, using latest available remote sensing technologies, and based on achievements from the Allan Atlas and Mermaid Initiatives. This activity will allow the 6 countries to share information, and improve their coral reef monitoring and early warning capacities.

Outcome 1.1. Government and non-government practitioners, academia and communities are connected into a global network of knowledge and best practices to identify solutions for the conservation of coral reefs and connected ecosystems;

The CCRES project produced a set of tools that can be applied to problem-solving within the context of tropical coastal ecosystems. These tools include off-the-shelf resources for learning how to undertake marine spatial planning, recognise and solve marine disease, or what goes into rebuilding fisheries in marine protected areas. Under this outcome 1.1., the CRR GEF will bring these tools, and others available globally, to potential users, integrating these existing tools with the revolution in free distance or on-line education for all stakeholders. Other developments are also increasing the opportunity to foster knowledge acquisition in the full range of stakeholders (from community to government). CRR GEF will bring the most useful of these tools together and will integrate them with new and established technologies such as massive open online courses or MOOCs. These new opportunities will help communities, government, local universities and communities to develop skills and apply them to decision making and problem solving.

1.1.1. Peer to peer learning events at regional / global level for practitioners (PA staff, policy makers, scientists).

1.1.2. Exchanges (virtual as well as live study tools stimulating and developing knowledge exchange) between communities dependent on resilient coral reefs.

1.1.3. Online learning tools (including alternative offline options) developed and distributed to relevant stakeholders (including communities) across diverse expertise levels and languages.

Outcome 1.2. Near-real-time monitoring data and information is obtained at global to national scales to inform action by the national and regional hubs.

Under this outcome, the project will work, in collaboration with partners such as Vulcan and the Allen Coral Atlas Initiative, to prototype a global coral reef monitoring system (based on satellite imagery - refreshed frequently). The global monitoring system will show composition and structure from reefs, including in the 6 project countries, depth and water color, and decipher a set of geological and biological features, such as turbidity in waterways that flow into key reef areas. The project will create capacities in the 6 countries, for practitioners to utilize this system, allowing them for an early detection of changes in coral structure and composition, in near to real time, and facilitating better planning and targeting coral reef conservation and restoration efforts.

1.2.1. Global coral reef health and impact monitoring platform adapted and implemented in the 6 countries (e.g. live coral cover, benthic composition, reef fish abundance and biomass, turbidity level, bleaching events); using rapid acquisition and analysis (including standardized online-offline data collection, artificial intelligence, citizen science, and remote sensing tools) for management response by the national and regional hubs.

1.2.2. Technical assistance, training and operational support for on the ground monitoring activities (platform calibration and ground truth), with participation of local communities in the 6 countries.

Component 2: Planning for resilient Coral Reef Rescue at the national level

Coral reef conservation and the sustainable development of the communities dependent on these reefs require an integrated approach from resilient reef communities, involved private sector and government agencies managing different aspects of these ecosystems and community co-management. It requires careful coordination between natural resource management, finance and/or economy and rural and/or urban development agencies or ministries. Many of the resilient reef communities will have direct ownership and rights to manage these areas under customary law (e.g. Solomon Islands, Fiji and Indonesia) which then require a multi-layered planning process between federal or national agencies and provincial and or local agencies.

This component will build co-management and planning capacities at the national level to ensure integrated approaches are developed to management objectives and plans that ensure climate resilient reefs are managed sustainably.

Outcome 2.1. Strengthened capacities of national and local stakeholders to lead the development of national and local strategies for resilient reef conservation in the 6 countries.

Under this outcome, the project will create, or strengthen, existing national coral reef hubs (stakeholder platforms). The project will provide support to identify public and private stakeholders related to the topic of coral reef conservation, including sectors needed to find solutions for the threats the coral reefs are facing in each of the 6 countries (agriculture, sanitation, etc.). These national hubs will play a key role in coordinating the rest of the project activities, including the coordination of activities under Component 1 and 3 at the national level. The hubs will receive technical assistance from the project to lead the development of activities under Outcome 2.2. A special emphasis will be placed on representation from resilient communities in the hubs, to bring the voices from the field to the assessments and strategic planning the hubs will lead. Towards that objective, a specific output will ensure a consultative process to identify relevant traditional knowledge that can be integrated into the assessments and strategic plans under this component. 2.1.1. National and regional coral reef hubs created, connected and strengthened, including key sectors such as marine, planning, environment, health, to lead the planning process under 2.2.

2.1.1. 6 National coral reef hubs (stakeholder coordination platforms) created, connected and strengthened, including key sectors such as marine, planning, environment, health, to lead the planning process under 2.2.

The project will create Coral Reef national hubs (stakeholder coordination platforms). The national hubs will include private and public sector representatives from key sectors such as marine, planning, environment, health, etc. and representation from resilient reef communities in each country.

2.1.2. Training, and operational support for strengthening community representation in national hubs, to effectively participate in the planning process under Outcome 2.2 and activities under Component 3.

2.1.3. Consultative and collaborative process to integrate traditional knowledge and vision from local communities in national strategies for resilient reef conservation.

Outcome 2.2. Integration of science, traditional knowledge and cross-sectoral perspectives in national action plans for resilient reef conservation in the 6 countries.

This outcome will empower local communities to integrate existing knowledge into natural resource planning processes through the national working groups to be set up through the initiative. Under this outcome, the baseline assessments for the resilient reefs in the 6 countries will be developed, including a threat/opportunity analysis, that will assess the priority threats affecting resilient coral reefs in the 6 countries and pathways for their sustainable development, and a cost benefit analysis (that will apply the cost benefit analysis, with special focus on environmental services of the coral reefs, to the set of development options previously identified). Based on those assessments, the project will develop national action plans for the conservation of the resilient reefs, in each of the 6 countries. These strategies will seek complementarity with existing policies and strategies in each of the 6 countries, will inform the development of business portfolios under Component 3 and will include sustainable financing strategies.

2.2.1. Threat/opportunity analysis (science and traditional knowledge) for each of the climate resilient reefs; utilizing tools for understanding drivers of reef health at a wide range of scales, in the 6 countries.

2.2.2. Cost-benefit analysis (losses due to the impacts vs gains from the unsustainable fishing practices) in the 6 countries.

2.2.3. 6 National/sub-national action plans for resilient reef conservation (responding to threats identified in 2.1 and including solutions identified in Component 1) developed in the 6 countries, including sustainable finance strategies

Component 3: Financial solutions for resilient Coral Reef Rescue

The objective of the component is to increase available funding to support conservation objectives, in each of the 6 countries, and to support the identification and development of financially sustainable and environmentally impactful businesses (from local/grass-roots to SMEs) which will positively support both the communities who depend on the resilient coral reefs and ecosystems from which their incomes are derived. The component will support community, small and medium enterprises to grow their business towards a future in which these enterprises can graduate taking on debt or equity, and supporting the business overcome some of the most common barriers they face, such as lack of technical assistance for community, micro and small business owners to confidently run their businesses and the lack of market access and product development and innovation to reach more sophisticated markets willing to pay higher prices.

Outcome 3.1. Increased sustainable financial flow to relevant seascapes and landscapes to reduce threats to resilient coral reefs.

Under Outcome 3.1. the project will facilitate a scoping exercise to identify existing and potential sustainable grass-roots, small and medium size businesses, including options for expansion and business startup. The project will provide technical assistance to national teams to screen and filter businesses, with different criteria that could include business sustainability, alignment with resilient reef conservation objectives, economic viability, gender inclusion, etc. With the final list of selected businesses, the project will develop an investment portfolio, by providing strategic and tailored technical assistance to selected enterprises, supporting market access and connecting public and private investors with the small and medium sized enterprises and community identified businesses.

3.1.1. Technical assistance in countries to mobilize private and public investment opportunities for their national priorities identified under 2.2.4.

3.1.2 Scoping of, at least, 200 existing and potential sustainable businesses, including options for business expansion and start up in the 6 countries.

3.1.3. Technical assistance to national teams to prepare business filtering and investment frameworks.

3.1.4. Investments portfolio developed, including demonstrative sustainable livelihoods projects in priority reefs, in the 6 countries.

Component 4: Knowledge Management and Monitoring and Evaluation

A core component of the CRR project is facilitating learning and sharing between communities, practitioners and researchers striving to protect the future of reefs for people and nature. Doing this can help enable real-time adaptive management in the priority resilient coral reefs. To ensure knowledge from the project is appropriately documented and disseminated, the project will implement a knowledge management and communications plan (to be developed during the PPG phase). This will support scaling up of project lessons and impact. Knowledge management and communications will build on project partner's existing networks and communication mechanisms.

The project will actively participate in and contribute to IW: LEARN, including PMU attendance at regional meetings, the GEF IW Conference, and twinning exchanges. A website will be developed that is linked and searchable through IW: LEARN's International Waters Information Management System. This will be used to disseminate project results internationally and to relevant practitioners.

Outcome 4.1. Increased awareness of governments, donors and resilient local communities, and knowledge (from local to global level) on the value of resilient coral reefs, their main threats, and good practices/actions for their conservation.

4.1.1. Communication campaign (reaching head of state and ministers from the 6 countries, as well as local communities in the resilient reefs) designed and implemented at local and global level including firsthand narratives on how coral decline is affecting livelihoods.

4.1.2: Knowledge management and communication products, such as firsthand narratives and lessons on community driven solutions for coral reef conservation.

4.1.3. Participation in, at least, two IW:LEARN regional meetings, one GEF International Waters Conference, and other masterclasses and knowledge exchange events (real and virtual).

The project will be allocating at least 1% of the GEF grant to actively participate in IWLEARN activities, such as IWCs, regional and topical relevant meetings during project implementation, produce at least 2 experience notes, a results note and host a website to ensure dissemination of projects results and lessons learned.

Outcome 4.2. Informed and adaptive project management.

4.2.1: M&E reports, including project progress reports, midterm evaluation and terminal evaluation.

The PMU and project partners will follow an M&E plan to monitor and report on project progress, and identify any areas where adaptive management is needed. Under this Outcome, the following reports will be drafted and delivered:

- A bi-annual Project Progress Report (PPR), including tracking against the results framework and work plan
- Annual Work Plan and Budget (AWP&B)
- Quarterly Financial Report
- Annual adaptive management meeting to review project results and discuss any necessary adjustments to the project strategy
- Mid-term and Terminal Evaluation

4.2.2. 4 Annual reflection workshops with project executing partners and main stakeholders.

[1] The CRR GEF project will finance activities in 6 of the 7 resilient coral reef priority countries (Philippines, Solomon Islands, Fiji, Indonesia, Tanzania, and Madagascar). Activities in Cuba will be financed through co-financing sources, and not by the GEF project budget, WWF US, or any other US funds.

d) alignment with GEF focal area and/or Impact Program strategies;

The proposed project aligns with the GEF's International Waters Focal Area Objective 1.1. *Strengthening blue economy opportunities through sustainable healthy coastal and marine ecosystems*. Recognizing that healthy coral reefs (and associated ecosystems, mangroves and seagrass) are essential to economic development in the context of blue economy opportunities, the Coral Reef Initiative aligns to this IW Objective by fostering collaboration amongst the 6 countries [(plus Cuba through co-finance) for improving their capacity to monitor and protect the most resilient coral reefs, that can secure the regeneration of coral reef globally. This will be done through a global network of knowledge and good practices. At the national level, the project will engage and create capacities of key stakeholders (governments, non governmental organizations, private sector and local communities), creating national Coral Reef Hubs, to increase collaboration and cross support for developing national plans for coral reef conservation. Those plans will directly support Blue Economy strategies in each country. Through the global networks and the national Hubs, the project will engage with national, regional and global stakeholders to increase collaboration and cross support to investments and processes, including through IW-LEARN.

The project also indirectly aligns with IW's *Objective 1.3. Addressing pollution reduction in marine environments*. The Coral Reef Hubs in the 6 countries will facilitate, amongst others, the analysis of the main threats affecting Resilient Coral Reefs in each country. Those analyses will inform the design of the National Action Plans. The project will provide support for the countries to secure funding from private and public donors to implement the national action plans, helping countries reduce environmental threats to priority resilient coral reefs.

To complement existing GEF interventions within the International Waters Focal Area Strategy, the Coral Reef Rescue Project will give special consideration to multi-country Large Marine Ecosystems (LMEs) supported by the Global Environment Facility (GEF), as well as opportunities in Small Island Developing States (SIDS) (Solomon Islands is part of this project). The project will incorporate any relevant TDAs/SAPs guidance into the national strategies and site-based management plans (Outcome 2.1). Whenever feasible, the project will identify opportunities to align and support integration of resilient coral reef protection considerations into regional cooperation and transboundary governance frameworks. Aligned to SAPs strategic actions, the project will give special consideration to creating capacities, knowledge management platforms, coral reef monitoring tools, awareness/education, national action plans and

investment portfolios, therefore supporting the referred SAPs objectives, and facilitating their on the ground implementation. The project will strengthen capacities of LME managers and practitioners, supporting and participating in existing learning communities, such as IW:LEARN, LME:LEARN, including the dissemination of best practices and lessons learned generated from the project.

e) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;

A global analysis by University of Queensland and partners showed that some reefs have a substantially lower exposure to climate change stress due to local oceanographic conditions such as currents and upwelling. The work of UQ and partners has identified these resilient reef areas. These resilient and connected reefs embody the regeneration potential for the world's reefs, in the face of climate change, and 64% of this 'resilient reef' area is found in the jurisdictions of Indonesia, Philippines, Fiji, Tanzania, Solomon Islands and Madagascar.

The proposed Coral Reef Rescue GEF project will build off a global baseline, which includes identification of reef areas that are resilient to climate changes, knowledge and management tools developed through CCRES, MPA conservation financing, mapping and monitoring, and regional inter-government coordination, and a series of national baselines, which include policy, national action plans, monitoring, and actions to protect reefs through MPAs, LMMAs, and other management initiatives. Through the GEF financing and catalytic influence, this proposed project brings together the national governments, Blue Ventures, Rare, CARE International, The University of Queensland, WCS, WWF (as GEF Agency) and civil society partners to create a dedicated focus on climate change resilient reefs. GEF financing will support global knowledge and capacity building networks to share, identify, and target solutions for resilient reef conservation, a global platform for near to real time monitoring of coral reefs, identification of key threats to resilient coral reefs and participatory national strategies for reef protection, and technical assistance to mobilize public and private investments towards identified priorities, including the development of an investment portfolio of sustainable businesses that support local communities and the resilient reefs on which they depend.

The global and national baseline and the additional investment from the GEF will result in a dedicated focus on climate change resilient reefs in 6 countries, supporting the health of these resilient and connected reefs for global reef regeneration in the future.

Baseline	Alternative Scenario	Environmental Benefits
Component 1 - Global knowledge and capacity building networks for resilient Coral Reef Rescue		<p>The 6 countries (plus Cuba through co-finance) will improve their capacities to monitor, identify and better implement best available solutions to protect the most resilient coral reefs that can secure the regeneration of the coral reef globally.</p> <p>Key stakeholders at the national level will have strengthened capacities to use available data and</p>
<p>There are limited knowledge sharing networks at the global level on coral reef conservation, despite the rich knowledge and existing examples of good practices globally. Currently, there are limitations (both capacity and resourcing) in standardizing reef health monitoring and impacts of threats on reefs at the global level.</p>	<p>Building on a rich baseline of knowledge and tools developed by past GEF and non GEF interventions, the project will create a global network of governmental and non governmental practitioners, academia and communities for sharing knowledge and good practices on coral reef conservation. The project will support the creation of a real time coral reef monitoring platform (using a range of scales and approaches from citizen science to artificial intelligence) that will monitor and evaluate the health of coral reef in priority sites, in</p>	

	near real time, providing early warnings on coral reef impacts, such as changes to water quality, coastal deforestation, mass coral bleaching and mortality and related events (seagrass and mangrove die-offs).	information to identify and prioritize coral reef threats and make better decisions on priority solutions for coral reef conservation, including the use of traditional knowledge in coral reef conservation.
Component 2 - Planning for resilient Coral Reef Rescue at the national level		
Countries hosting resilient reefs lack specific strategies for their conservation and specific institutional platforms to coordinate these efforts. Very frequently, specific strategies or projects are designed without a strong science base and without taking into account the traditional knowledge of local communities.	The project will create and strengthen the capacity for multi-sectoral hubs to engage in strategic coral reef conservation in the 7 countries. Those hubs will lead and facilitate the development of science based knowledge platforms that will assist in developing, such as the mapping of threat/opportunity, cost benefit analysis and spatial analysis that will feed into national strategies for the conservation of coral reefs. In parallel, the project will facilitate consultative processes with local communities related to the coral reefs, to capture traditional knowledge and be able to include it in the analysis and national strategies.	Countries will have secured funding for implementing priority solutions to reduce key coral reef threats, and will have secured private investments towards sustainable business that will bring rapid solutions for regeneration and conservation of resilient coral reefs. Co-financing partners and investment opportunities generated through the project will provide on-the-ground support to these coral reefs, resulting in a variety of global benefits including: better management of the coral reefs, better carbon capture from healthy corals, restoration of degraded coral reefs, and improved biodiversity from these flora and fauna that depend on healthy corals to survive.
Component 3 - Financial solutions for resilient Coral Reef Rescue		
There are multiple ongoing and planned initiatives and funding opportunities for coral reefs, both in the context of the Coral Reef Rescue Initiative and outside of it. However, countries often have difficulties accessing these funds and directing those to activities aimed at preserving coral reefs and specifically to the identified resilient reefs. There is insufficient involvement of the private sector in identifying and implementing solutions for coral reef conservation.	The project will provide assistance to countries to help them access public and private funding opportunities to ensure an increased financial flow towards financing priorities identified in the National Action Plans, including sustainable livelihood initiatives in communities related to resilient coral reefs.	

f) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and

Overall, the proposed project will support knowledge exchange and planning to facilitate a harmonized and informed approach for safeguarding globally significant reefs in Indonesia, Philippines, Cuba^[1], Fiji, Tanzania, Solomon Islands and Madagascar. Co-financing partners and investment opportunities generated through the project will provide on-the-ground support to these coral reefs, resulting in a variety of benefits including: conservation of key coral reef ecosystems, preserving the potential for regeneration of coral reefs at global level, better carbon capture from healthy coral reefs and associated ecosystems, and improved biodiversity from those flora and fauna that depend on healthy corals to survive, including reef fish, that are important for local livelihoods.

The proposed project will generate global environmental benefits that will be measured through the following GEF Core Indicators, aligned with the GEF International Waters:

- *Core Indicator 7: Number of shared water ecosystems (fresh or marine) under new or improved cooperative management (2)*

The project will support national and regional strategies for resilient coral reef conservation, in support of national Blue Economy strategies, and will actively participate in IWLearn through participation and delivery of key knowledge products. The project will dedicate 1% of the budget to IW Learn activities, including the creation of a website, participation in the biannual IW Conference, and twinning events. The project will also produce experience and results notes under Component 4 to support knowledge sharing and scaling up of project results.

- *Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment (target, TBD during PPG).*

Through the creation of global knowledge networks, the project will increase knowledge and technical capacities of governmental and non governmental practitioners, and coral reef hubs that will include multisectoral governmental focal points. At the national level, the project will also create capacities in research institutions and government line ministries for monitoring resilient coral reef health. The project will also identify a portfolio of investments on sustainable business and sustainable livelihoods that will benefit local communities- women, men and youth - in coral reef areas.

[1] Activities in Cuba will be financed through project co-financing sources, and not by the GEF project budget.

g) innovation, sustainability and potential for scaling up.

Innovation

This project operationalizes the inclusions of climate change by identifying well connected reef regions that have a low exposure to climate change. This is novel as no other investment has strategically interwoven climate change into a decision-based system that seeks to preserve coral reefs on a global scale (Beyer et al 2018, Hoegh-Guldberg et al 2018). In this regard, the Global Coral Reef Rescue Initiative partners have adopted an innovative and novel framework to identify coral reef areas that will create a foundation for giving coral reef ecosystems, and the people they support, the best chance to remain ecologically healthy and productive.

The identification of reef sites (Bioclimatic units, Beyer et al 2018) is driven by the following objectives: a) Coral reefs refugia (these are the places most likely to provide a source of regeneration once the climate has stabilized based on Beyer et al. 2018) This analysis alone was highly innovative in that it adopted an approach developed in economics and applied portfolio theory to coral reef data allowing the selection of a portfolio of sites most likely to survive a 1.5 degree future as well as highly connected, increasing their ability to repopulate other reefs in the region; b) Those places where high dependence on coral reefs for food security and livelihoods exists (because this is where there is the most to lose and therefore the greatest urgency); c) Those places where the capacity to respond is the lowest (because this is where civil society has the greatest role to play); and d) Where local stressors threaten coral reef health (and therefore where local action can build reef resilience).

Sustainability

The project has been designed through a series of participatory workshops that have included key stakeholders in each of the participant countries. The project strategy is to create capacities in the relevant institutions and key stakeholders for coral reef restoration in the 6 countries (plus Cuba through co-financing), to be able to monitor coral reef health and identify the best solutions for tackling coral reef threats in each country. By focusing on creating capacities in competent institutions and communities at country level the project will ensure long term sustainability. The project will address the following key parameters of sustainability:

Institutional Sustainability:

Through the participatory design process followed in the preparation of this project, the ownership and involvement of all key government agencies is secured. As the officially designated agencies for this area of work, participating agencies' mandates stretch beyond the period of the project, ensuring continuity. This will ensure that experiences, lessons learned, and best practices generated by the project are maintained within the communities, NGOs, and government structures. The project has broad support from a large group of governments and NGOs that are 'on the same page' on an issue that has vexed scientists and frustrated reef managers up until the present day.

Financial Sustainability:

The project has a specific component on financial solutions for Coral Reef rescue, to ensure increased financial flow to the national strategies, developed in Component 2, towards reducing the main threats to coral reefs in each country. Furthermore, this proposal focuses on developing sustainable livelihood pathways and sustainable private business (to relieve the pressure on coral reefs and offer sustainable and alternative sources of income and livelihoods attracting impact investment). The project will support the enactment of essential enabling conditions for both public and private finance mechanisms to contribute to coral reef resilience through direct sustainable financing and through better alignment of private and public interests.

Social sustainability:

The engagement of non-governmental stakeholders, including communities and the private sector is a key factor in assuring the long-term sustainability of GEF investments. In this regard, under Component 2, the project will place special emphasis in ensuring the participation of these two stakeholder groups, for the development of the national strategies for coral reef conservation. Special attention will be placed to ensure national strategies capture traditional knowledge for coral reef conservation from local communities. Sustainable and gender responsive livelihood pathways and private business opportunities will be identified, to ensure incentives and benefit sharing systems, that are crucial for the long-term engagement of local communities and the private sector.

Project strategies for Scaling up

1) Replication and diffusion – The project has a strong approach on knowledge management to ensure sharing of best practices for coral reef monitoring and conservation. Successful local scale innovations will be replicated in other sites where such an intervention may also be successful. Successful models can also be replicated through diffusion of ideas through facilitating cross learning between these communities and the global knowledge networks under Component 1 and through IW Learn . The GCF has also been supportive of WWF's efforts to develop a CRRP Program, currently under preparation. The GCF CRRP Program will focus on 3 complementary components to the GEF Program leveraging its important lessons learned, including the leveraging of regulatory frameworks enabling land and marine use planning, the use and further improvement of learning networks for practitioners, and the and implementation of financial services to incentivize coral conservation.

2) Scaling through unlocking resources - To unlock resources to enable an on-ground response to support reefs and dependent communities' successful transition to a new climate regime.

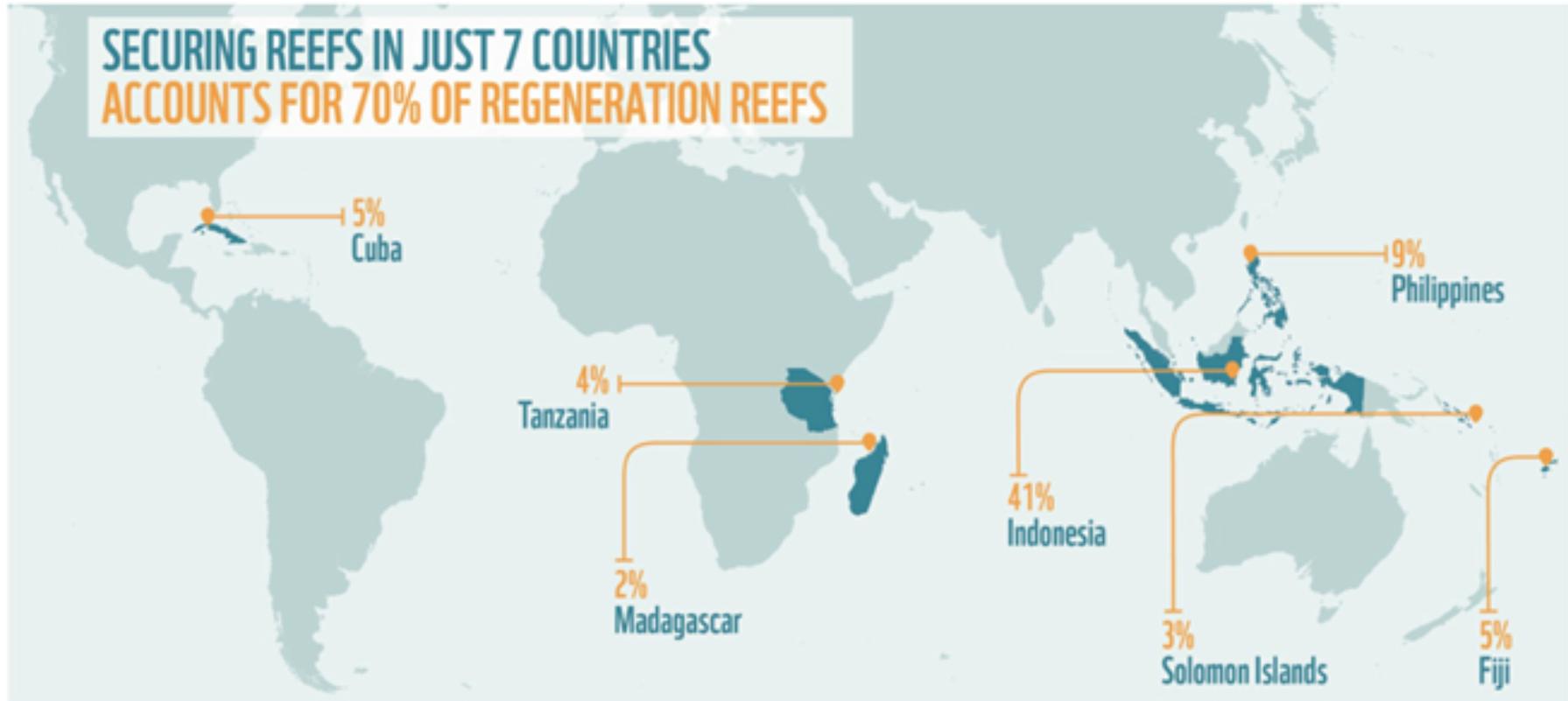
The project will provide technical assistance to support countries to unlock public financial resources towards the implementation of national strategies to reduce coral reef threats. The project will also support local stakeholders to develop an investment portfolio of business cases that blend both public and private sector finance, aligned to the reef resilience strategies. Through the thorough analytical and future-oriented approach described above, the project will build the confidence of both public and private sector investors that they are likely to see social, environmental as well as financial returns on their investments while the use of blended finance will in mitigating the financial risk. The project will explore options for using existing and/or building new

investment vehicles that can support return generating activities that protect coral reefs. It will also apply proven financial inclusion models such as Village Savings and Loans Associations (VSLAs) to ensure the engagement of women and to deliver economic empowerment benefits. Additionally, the proposed GCF Pacific Resilient Coral Reefs Program will draw significantly from the important ground setting established by the CRR GEF project, especially on the feasibility and viability assessments of sustainable financial products and services to incentivize coral reef protection, which will unlock resources to implement the business portfolio developed under the CRR GEF project.

3) Scaling through shifting the mindsets of the public and key policy makers - To highlight the implications of coral reef loss for economies and human well-being through political champions in contexts where the effects are most felt to enable scaling up through unlocking in key policy commitments to motivate onground action.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.



2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

Since November 2018, stakeholders to the Coral Reef Rescue Initiative were identified and meetings and workshops were held to solicit feedback and input.

- **Solomon Islands:** In the Solomon Islands, consultations with community representatives, provincial governments and national governments took place from the 23rd of August to the 6th of September, 2019. Consultations took place in the Central Islands, Isabel and Malaita Provinces, involving a total of 128 people in focused group discussions (75 men and 53 women). Through this process, information on stakeholder views on coral reefs, trends, threats and priorities were identified. The outcomes of the consultation process informed a stakeholder planning workshop involving about 30 participants representing government line ministries as well as non-governmental organizations. Over the course of the three days, participants: a) Carried out a broad-based scoping analysis, identifying critical threats and opportunities; b) Agreed on an overarching vision for the Coral Reef Rescue Initiative (CRRI) in the region; c) Identified and agreed upon priority areas, strategies and actions and d) Defined core capacity requirements for delivery.

Stakeholder feedback resulting from this workshop suggested strategies for successful project design and implementation such as ensuring project ownership by government partners and the community, involving women in the decision making process, creating reporting lines that are transparent, as well as implementing internal controls and checks and balances. Stakeholders emphasized the importance of communication, and their hopes that the project will use monitoring and evaluation for learning and sharing knowledge.

Fiji: In Fiji, a regional workshop was convened in May 2019, involving about 70 participants representing NGOs and regional organizations and platforms, universities, government agencies and line ministries from a range of sectors (including agriculture, water, forests, economy, fisheries etc), NGOs and community representatives including farmers, fisherwomen, representatives of community committees and traditional leaders. The workshop utilized participatory approaches to develop situational models, mapping threats, drivers and opportunities, developed results chains and identified implementation mechanisms. Stakeholder feedback from this workshop included several suggestions on actions to be taken to address the presented barriers and threats. Suggested actions included: increasing the support for involvement of communities in innovative and sustainable small and medium-sized enterprises (particularly focusing on women and youth); identifying alternative options for local level ecologically sustainable agriculture; support for production and processing, and low emission transport options such as traditional canoes. Stakeholders also identified opportunities through learning and innovation platforms to raise awareness around complex and persistent threats, research on climate projections and modelling to demonstrate the value of natural infrastructure, and research on effective forest restoration strategies to address barriers.

- **The Philippines:** In the Philippines, the consultative workshop was convened in August 2019 involving 40 representatives from NGO, academia, national and local government units and MPA management units. [A6] Participants identified critical threats and identified provincial-wide and reef MPA network cluster specific actions that would build on current actions addressing threats. The suggested additional actions included: (i) outsourcing qualified experts to train and build capacity of local staff; (ii) setting up transboundary mechanisms and agreements; (iii) advancing regular coordination with local security agencies and communities; (iv) networking with informal leaders of local communities; (v) developing an accessible communications plan; (vi)

creating a calendar of project activities to help prepare for natural disasters, and (vii) conducting a tourism carrying capacity study, and implementing local tourism regulations. Stakeholders highlighted the importance of identifying critical risks and risk mitigation strategies, especially as they pertain to financial and operational procedures.

In addition, partnerships and implementation arrangements were discussed. Based on this workshop and the refined project design, stakeholders were further prioritized. These include Palawan Council for Sustainable Development Staff (PCSDS), Bureau of Fisheries and Aquatic Resources (BFAR), Provincial Government of Palawan, City Government of Puerto Princesa, Western Philippines University, Tubbataha Management Office (TMO), Department of Environment and Natural Resources - Community Environment and Natural Resources Office (DENR CENRO), local governments of Taytay and Roxas, Palawan Biodiversity Conservation Advocates Inc, Malampaya Foundation, FISH RIGHT Project of USAID, Environmental Legal Assistance Center Inc. and will be engaging with them during prodoc development.

- **Indonesia:** A regional workshop in Indonesia was organized in November 2019. The workshop involved participants from Alor, Belu, East Flores, Ende, Kupang, Manggarai Barat and Sumba, including representatives of the national and local governments, communities (Baranusa, Bangkit Muda Mudi Mekko, Kelompok Cinta Persahabatan - mangrove community, Kangge - coral rockpile), non-governmental organisations (NGOs) and Universities. The workshop reviewed the CRRRI theory of change and discussed national priorities, including discussions on priority resilient reefs and vulnerable communities. Key barriers and threats stakeholders raised included: poverty and limited income generating options; limited funding for conservation activities; weak law enforcement, and the lack of awareness that local communities have on the importance of coral reefs and other natural resources. Strategies to address these threats were presented by stakeholders and comprised of: reducing the negative impacts of traditional whale hunting; supporting or encouraging environmentally friendly business development; increasing the availability of funding; improving awareness to preserve nature; strengthening the capacity of individuals at the government and community level to support an MPA, and improving regulation through inclusion of community members in monitoring and surveillance. Stakeholders highlighted the need to develop a strong MPA network in East Nusa Tenggara (NTT), and suggested doing so by drawing on the wealth of local wisdom that already exists in this region.

- **Tanzania and Madagascar:** A coastal east Africa regional workshop was held in Unguja, Tanzania, in November 2018. This workshop involved a cross section of stakeholders from CSOs and Government line ministries from Tanzania and Madagascar, as well as global teams and resource persons. The workshop utilized participatory planning approaches and tools, in order to build the theory of change of the Initiative and ensure alignment to local and regional realities and priorities. Subsequent country-level workshops were held in Madagascar (June 2019) and Tanzania (December 2019) to convene a broader set of diverse stakeholders (local and national government; resource users; NGOs) to build dialogue on broader issues and opportunities for community-driven conservation. In Tanzania, a follow up workshop with the national coral reef committee was organized on March 12th and 13th, to review and validate the PIF proposal. In March 2020, several consultations were organized in the Ministry of Environment and Sustainable Development of Madagascar.

- Some ideas for strategies that emerged from stakeholders participating in the workshop included: (i) strengthening community groups and institutions; (ii) controlling fishing efforts or limiting open access; (iii) strengthening coordinated enforcement including in monitoring and surveillance; (iv) utilizing integrated coastal and ocean management; (v) developing a charter of conduct covering coral reef use in Madagascar; (vi) establishing multi-stakeholder platform for collaboration of activities; (vii) empowering communities to participate in surveillance and biodiversity monitoring; (viii) perform natural capital accounting at local to national levels, and (ix) ensuring unified messaging from NGOs.

Table 1. List of potential key stakeholders and their possible contributions and roles in the proposed project.

Stakeholder type	Stakeholder list	Possible contributions and roles in the project
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<p>Government ministries (at central and local levels)</p>	<p>The project will engage with line ministries and other key governmental stakeholders from environment, marine, fisheries, agriculture and other related sectors, under the leadership of the following institutions:</p> <ul style="list-style-type: none"> - Marine Park and Reserve Unit of Tanzania (MPRU). - Ministry of Marine Affairs and Fisheries (MMAF), Indonesia. - Ministry of Environment, Climate Change, Disaster Management and Meteorology, Solomon Islands. - Department of Environment and Natural Resources, Philippines. The project will work closely with the regional offices of the Department of Environment and Natural Resources, during the project preparation and project execution phases. - Ministry of Environment and Ministry of Fisheries, Fiji. - Ministry of Science Technology and Environment (CITMA), and Minister of Higher Education, Cuba[1]. - Ministry of Environment and Sustainable Development, Madagascar. 	<p>The focal points from government ministries and other key institutions will actively participate in the global knowledge networks and learning events. They will benefit from the Global coral reef monitoring platform, which will increase their capacities for monitoring coral reef health in their countries and increase their capacity for emergency response. Government line ministries will participate in national coral reef hubs, and will coordinate and lead the development of the national coral reef plans in each country. This planning process will create technical capacities. Government ministries will also benefit from an increased private and public finance flow to initiatives aimed at preserving coral reef in each country.</p>
<p>Community - level stakeholders</p>	<p>Coastal communities living or benefiting from resilient coral reefs in the 7 countries.</p> <p>CBOs</p>	<p>Local communities will be engaged to participate in the learning and knowledge management activities of component 1 the on ground coral reef monitoring activities. They will participate in the consultation process for the planning exercise under Component 2 and will be beneficiaries of sustainable livelihood investments under Component 3.</p>
<p>CSOs</p>	<p>WCS, Blue Ventures, Rare, CARE International, WWF, Vulcan Inc. University of Queensland</p>	<p>CSOs will directly participating in the implementation of project activities.</p>

Private Sector	To be determined through PPG and project implementation. The project will engage with investors globally with an interest in sustainable activities in reefs including but not limited to Althelia, Mirova, Blue Natural Capital Finance Facility, Convergence, CI Ventures, Ecourage, Posaidon and Telos. The key to success will be to secure clear examples of investable projects.	The private sector will be engaged through activities in Component 3. Under this component, the scoping exercise will identify sustainable business opportunities compatible with the conservation of the coral reefs. National hubs will prepare investment frameworks that will be developed and initiated during the project life.
Research institutions	The project will involve key academic research institutions in the 7 countries, including but not limited to: <ul style="list-style-type: none"> - University of Havana, Center of Marine Research. - Madagascar: National Center for Oceanographic Research and the Institute of Marine and Halieutic Sciences. - Tanzania: Institute of Marine Sciences (IMS) - UDSM and the Department of Aquatic Sciences and Fisheries (DASF), University of Dar es Salaam. 	National Universities will be executing partners of the project, especially on component 1 and will also benefit from the global knowledge and learning platforms and products that the project will implement. They will provide technical advice and deliver learning and knowledge management activities.

[1] Activities in Cuba will be financed through project co-financing sources, and not by the GEF project budget.

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

Stakeholder type	Stakeholder list	Possible contributions and roles in the project
Government ministries (at central and local levels)	The project will engage with line ministries and other key governmental stakeholders from environment, marine, fisheries, agriculture and other related sectors, under the leadership of the following institutions: <ul style="list-style-type: none"> - Marine Park and Reserve Unit of Tanzania (MPRU). - Ministry of Marine Affairs and Fisheries (MMAF) Indonesia 	The focal points from government ministries and other key institutions will actively participate in the global knowledge networks and learning events. They will benefit from the Global coral reef monitoring platform, which will increase their capacities for monitoring coral reef health in their countries and increase their capacity for emergency response. Government line ministries will participate in national coral reef hubs, and will coordinate and lead the development of the national coral reef plans in each country.

	<p>ics (MIRA), Indonesia.</p> <ul style="list-style-type: none"> - Ministry of Environment, Climate Change, Disaster Management and Meteorology, Solomon Islands. - Department of Environment and Natural Resources, Philippines. - Ministry of Fisheries, Fiji. - Ministry of Science Technology and Environment (CITMA), Cuba. - Ministry of Environment and Sustainable Development, Madagascar. 	<p>country. This planning process will create technical capacities. Government ministries will also benefit from an increased private and public finance flow to initiatives aimed at preserving coral reef in each country.</p>
Community - level stakeholders	<p>Coastal communities living or benefiting from resilient coral reefs in the 7 countries.</p> <p>CBOs</p>	<p>Local communities will be engaged to participate in the learning and knowledge management activities of component 1 the on ground coral reef monitoring activities. They will participate in the consultation process for the planning exercise under Component 2 and will be beneficiaries of sustainable livelihood investments under Component 3.</p>
CSOs	<p>WCS, Blue Ventures, Rare, CARE International, WWF, Vulcan Inc. University of Queensland</p>	<p>CSOs will directly participating in the implementation of project activities.</p>
Private Sector	<p>To be determined through PPG and project implementation. The project will engage with investors globally with an interest in sustainable activities in reefs including but not limited to Althelia, Mirova, Blue Natural Capital Finance Facility, Convergence, CI Ventures, Ecourage, Posaidon and Telos. The key to success will be to secure clear examples of investable projects.</p>	<p>The private sector will be engaged through activities in Component 3. Under this component, the scoping exercise will identify sustainable business opportunities compatible with the conservation of the coral reefs. National hubs will prepare investment frameworks that will be developed and initiated during the project life.</p>
Research institutions	<p>The project will involve key academic research institutions in the 7 countries, including but not limited to:</p> <ul style="list-style-type: none"> - University of Havana, Marine Institute - Madagascar: National Center for Oceanography 	<p>National Universities will be executing partners of the project, especially on component 1 and will also benefit from the global knowledge and learning platforms and products that the project will implement. they will provide technical advice and deliver learning and knowledge management activities.</p>

eanographic research and the institute of Marine and Halieutic Sciences.

- Tanzania: Institute of Marine Sciences (IMS) - UDSM and the Department of Aquatic Sciences and Fisheries (DASF), University of Dar es Salaam.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Women and men in coral reef communities are usually involved in fisheries and harvesting activities, but with gendered divisions of labor, access and benefit sharing. Women and men fulfill different roles, use different types of equipment, and often have different sets of knowledge, experience and user rights. Often fishing activities on reefs tend to be dominated by men, as women have little or no access to fishing boats^[1]. Decision-making, both in local and national political processes and at household level, regarding investment or use of income, for example, is highly gendered, thus making gender responsive actions imperative.

Gender issues vary among the countries of the project, according to their levels of economic development; social and cultural norms; attitudes behaviors and power dynamics; demographic and migration patterns; policy environment, and political climate. The following paragraphs provide an overview of the gender situation in each of the project countries:

Indonesia: In recent years, Indonesia has made significant progress in promoting gender equality. Recent government actions for the advancement of women include establishing the National Action Plan on Human Rights 2011–2014; ratifying the International Convention on the Protection of Rights of All Migrant Workers and Members of Their Families (2012); ratifying the Optional Protocol of the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography; and the National Action Plans for the Protection and Empowerment of Women and Children during Social Conflicts 2014–2019 (2014). The results of these efforts can be seen in the elimination of the youth illiteracy rate, the near parity in enrollment rates in school, and more significant economic and political participation for women. Despite this progress, there are essential challenges such as low employment rate, high maternal mortality rate, and gender-based violence^[2].

Fiji. In the past decade, the Fijian Government has enacted and introduced several critical pieces of legislation, policies and strategic initiatives that reference gender inclusion, including a national strategic planning document, the Roadmap for Democracy and Sustainable Socio-economic Development^[3] and a national review on the progress in the implementation of the Sustainable Development Goals^[4] that directs all sectors to share the responsibility for achieving gender equality. Despite these efforts, Fiji still reflects vast gender-based inequalities in three main dimensions: reproductive health, empowerment, and economic activity^[5]. The gender gaps in labor force participation are significant; 81 % of men are employed or actively looking for work, while only 46% of women are employed or looking^[6]. Furthermore, there is a lack of gender analysis capacity across all the government ministries and the absence of sex-disaggregated data.

The Philippines. The latest Government's framework Plan for Women of Philippines emphasizes women's economic empowerment, women's human rights, and gender-responsive governance as the keys to gender equality. Besides, the Philippines scores well on international gender equality measures and indices. Despite the favorable policy environment, the Philippines government is still facing challenges as unequal participation of women in the formal labor market, a high percentage of female migrant workers employed mostly in low-skilled, low-paid, and unprotected jobs, declining enrollment and completion rates in elementary and secondary education, high maternal mortality rates and insufficient access to reproductive and essential health services for all^[7].

Tanzania. With over 130 ethnic and religious groups, Tanzania is well known for its ethnic integration policy and for the stability of internal politics. Since 1977, Tanzania has ratified critical international and regional human rights documents, including the Convention on the elimination of all forms of Discrimination Against Women (CEDAW) and the SADC Protocol on Gender and Development. At the domestic level, the Tanzania government has implemented the Vision 2025 Plan, which highlights the importance of gender equality and the empowerment of women, and the National Strategy for Poverty Reduction focuses on gender mainstreaming. It describes specific strategies on related education and gender-based violence. Also, Tanzania has recently committed to supporting the broader participation of women in the government decision-making by the design of Women and Gender Development Policy (WGDP) and the implementation of the reinforcement of the quota system for female representatives at the national and local councils^[8]. Despite the development and implementation of these policies, Tanzania faces a diverse set of cultures related to historical and structural power imbalances between women and men. Some of the main challenges for gender equality in Tanzania are inequitable access to ownership of land and resources, low participation of women in decision making, gender-based violence, and lack of equal access to credit and financial opportunities.

Madagascar. In the latest Gender Development Index, Madagascar scored 0.948^[9] indicating an average level regarding gender equality when compared to other countries on a global scale. On average, women in Madagascar have a lower income per capita, experience higher rates of illiteracy, economic exclusion, low levels of representation in politics, and a higher rate of sexual violence. To face these challenges, the Madagascar government has developed more gender-sensitive policies such as the National Policy of Women Promotion (PNPF) in 2000, focusing on reducing the disparity of gender groups. However, Madagascar is among the poorest countries in the world, and the challenges that women experience are still disproportionate. The high fertility rate and the fast-growing population make this context more challenging on the gender equality issues, and governance fronts^[10].

The Solomon Islands. Gender equality is a priority for the Government of Solomon Islands. It is reflected in the development of gender policy as the National Development Strategy, the Gender Equality and Women's Development Policy and the ratification of international agreements as the Convention on the Elimination of All Forms of Discrimination against Women and the Convention on the Rights of the Child. However, traditional customs are a major part of life in the Solomon Islands; including customary land tenure by which the majority of land is owned by matrilineal and patrilineal clans. Traditional norms influence gender relations in different Solomon Islands cultures in terms of division of labor, property rights, and decision making^[11].

Cuba[1]. The official government data shows significant advances toward gender equality. However, Cuban society still experiences gender challenges related to fair household work division, gender-based violence, economic access, and limited job opportunities^[13].

The proposed project will promote gender equality and the empowerment of women in several ways. Activities will be designed to take into account the context of these countries and to address critical gender imbalances related to the project: i) understanding the gendered division of labor ii) lack of participation in the decision making for the management of resources, and iii) lack of access to financial services. The gender analysis and action plan developed in the project development phase will be used in project implementation to influence the development of the financial solutions to be proactively gender responsive. Gender equality and women's empowerment outcomes, outputs and related activities will be clearly defined in the final project document and the GAP. This analysis and action plan will be used to refine the activities further and to develop gender-responsive indicators for the proposed project. In summary the approach to ensuring gender responsiveness will include;

1. Gender analysis and the subsequent development of a gender action plan (GAP)
2. The disaggregation of all beneficiary data based on gender
3. Engaging men and boys, and women and girls, in gender equality and women's empowerment activities
4. Resourcing project interventions with gender expertise
5. Ensuring mitigation of gender-based violence in interventions

The project will follow the WWF GEF Gender Policy, which is aligned with the GEF Policy on Gender Equality throughout the development and implementation of the proposed project. During project development, a gender analysis and action plan will be undertaken to identify gaps, opportunities, and entry points to mainstream gender in all components of the project. The Gender Analysis will provide a more detailed picture of women and men's role in management and resource use related to coral reefs in the 6 project countries. The Gender Action Plan (GAP) will provide recommendations to ensure all activities are gender responsive, including a gender-sensitive monitoring plan to track progress against the GAP. Gender-responsive stakeholder consultations will be conducted throughout the lifetime of the project.

[1] Activities in Cuba will be financed through project co-financing sources, and not by the GEF project budget.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources; Yes

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

Private sector will be engaged at the national level in the coral reef hubs to be created in the context of the national coral reef planning processes.

The private sector will be engaged and through activities under Component 3, with the objective of supporting the development of financially sustainable and environmentally impactful businesses which will positively support both the communities who depend on the resilient coral reefs and ecosystems from which their incomes are derived. Under Component 3, technical assistance through the proposed project will support community, small and medium enterprises to grow their business towards a future in which these enterprises can graduate taking on debt or equity, and supporting the business overcome some of the most common barriers they face, such as lack of technical assistance for community, micro and small business owners to confidently run their businesses and the lack of market access and product development and innovation to reach more sophisticated markets willing to pay higher prices.

Under Component 3, the project will facilitate a scoping exercise to identify existing and potential sustainable small and medium size business, including options for expansion and business start up. The project will provide technical assistance to national teams to screen and filter businesses, using criteria that could include alignment with resilient reef conservation objectives, business sustainability, economic viability, gender inclusion and women's empowerment, and will support the development of investments frameworks. With the final list of selected businesses, the project will develop an investment portfolio, by providing strategic and tailored technical assistance to selected enterprises, supporting market access and connecting public and private investors with the small and medium sized enterprises and community identified businesses. Some examples of potential small and medium business identified in resilient reef communities around the globe include community-owned coconut oil and surfboard wax business, women's businesses for beeswax production, community-based edible oyster farming, community-based ecotourism businesses, and supply chain companies for community produced bêche-de-mer (sea cucumber).

The work under Component 3, to facilitate the development of a portfolio business in the resilient coral reefs will be based on the experience of WWF and other partners on the Great Sea Reef Community Facility project (see baseline section). The mission of GSRCF is to develop financially sustainable and environmentally impactful grass-roots businesses which will positively support both the communities who depend on the Great Sea Reef and ecosystems from which their incomes are derived. The Facility offers impact-focused technical assistance, market assess support, financial products designed to address climate risk to coastal communities, cash grants and interest free loans to community, micro and small Fijian businesses aligned with the GSRRP objectives. These grass-roots businesses are supported to progress to debt and equity investments, GSRCF is being developed by Matanataki - a dedicated financial development and management partnership working with blue and green businesses, as well as investors - whose partners have deep experience incubating cooperatively-owned, micro and small businesses in low income economies. Private sector will be engaged at the national level in the coral reef hubs to be

created in the context of the national coral reef planning processes. Additionally, the private sector will be engaged also through activities in Component 3. Under this component, the project will facilitate a scoping exercise to identify and develop sustainable business opportunities compatible with the conservation of the coral reefs in each country.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

<i>#</i>	<i>Identified risk</i>	<i>Potential consequence</i>	<i>Counter measure</i>
1	Government support to the project declines during the life of the project, due to changes in political priorities.	Lack of project ownership from governments risks sustainability of project products.	Project development will actively involve governments (local to national) in the design, development and implementation processes of the project. Specific awareness raising and learning activities will be tailored to national governments.
2	High turnover of staff members in executing agencies.	This could lead to a loss of institutional knowledge regarding project interventions, and less effective implementation.	Relationships with the appropriate individuals in respective government bodies will be established through clear institutional mandates for roles and responsibilities in the project A knowledge management platform will be developed to facilitate the transfer of knowledge regarding project interventions.
3	Insufficient financial resources limits the implementation of investments on the ground needed to ensure coral reef conservation measures and sustainable livelihood activities.	National Action Plans for Coral Reef Rescue not implemented because of lack of funds.	The project will include a specific output for providing technical assistance to countries to secure private and public funding for their national coral reef strategies. The national strategies will include a sustainable finance strategy.
4	Low participation and support from key stakeholders due to competing personal priorities, inappropriate project activities, or a limited understanding of the value and importance for coral reef conservation.	If there is limited uptake by stakeholders or if they cease to implement project interventions after the project lifetime, it would result in continued unsustainable land use and management practices in the landscape.	Stakeholders will be actively involved in the design, development and implementation processes of the project, through a bottom-up approach. Awareness will be raised on the negative impacts for local communities and national economies from the loss of coral reef.

			Demonstrative projects on sustainable livelihoods for coral reef communities will demonstrate sustainable models compatible with coral reef conservation and economic development.
5	Capacity constraints of local and national institutions to undertake the required project interventions.	Project interventions could be delayed and there may be insufficient capacity to overcome potential implementation challenges.	The project has a strong approach on knowledge management, learning and, in general, strengthening capacities of national institutions and will be designed taking into account existing institutional capacities.
6	Unfavorable climate conditions, such as extreme weather events, and other extreme events caused by climate change.	Could result in implementation delays for sustainable livelihoods demonstration projects.	Current climatic variability will be taken into account in the design and development of the on ground investments in Component 3.

Climate Risk Analysis:

Country	Climate Change Risk	Impacts on Coasts and Reef	How Is the Project Addressing This?
Solomon Islands	<p>Germanwatch's Long-Term Climate Risk Index (1998-2017) rated Solomon Island as the 27th most at-risk country in the world.[1]</p> <p>Climate change risks in the Solomon Islands include increasing annual average temperatures, escalating storm intensity, rising sea levels, and ocean acidification. Category 4 and 5 storms have more than doubled since 1990, contributing to the Solomon Islands' vulnerability to climate change. Flooding as a result of storms and increased rainfall has also worsened on the islands. Average temperatures across the South Pacific, (encompassing the Solomon Islands) have increased by approximately 1°C since 1970. making the average</p>	<p>Climate change risks such as floods, storm damage and sea level rise all cause a loss of productivity and threaten reef-dependent livelihoods. In the Solomon Islands, average asset losses due natural disasters are estimated to be more than \$44 million.</p> <p>Other impacts that are affecting communities in the Solomon Islands such as</p>	<p>This project will support the creation of national strategies for climate-resilient reef conservation and in turn, protect reef systems that are part of Large Marine Ecosystems. Reef systems protect Coastal communities from storm surge and wave damage which have become more present in the face of rising sea levels and more frequent storms.</p>

	<p>approximately 1°C since 1990, making the average rate of increase 0.3°C per decade. Flooding and increased temperatures cause sea-levels to rise. Between 1994 and 2008, sea levels in SI rose by 7.6mm, almost double the global average, with projections that sea level rise will be three times the global average.[2]</p>	<p>coastal erosion and saltwater intrusion, affect water quality and resource availability, particularly in coastal fisheries, that have a direct effect on the health of coral reefs.</p>	
Indonesia[3]	<p>The World Bank conducted a global analysis and ranked Indonesia 12th out of 35 countries that face high mortality risk from multiple climate hazards.[4]</p> <p>Indonesia faces climate risks in the form of increased temperatures, flooding as a result of precipitation changes, and sea-level rise.</p> <p>Since 1990, the mean annual temperature in Indonesia has increased by about 0.3°C. Temperatures are projected to increase by approximately 0.2-0.3°C per decade. Varying precipitation patterns have demonstrated an increase in rainfall during the wet season, which will lead to an increase in flooding. In particular, Sumatra and Borneo are projected to become 10-30% wetter by the 2080s, but with this increased rainfall projected to occur later in the crop season. [5] Flooding will continue to increase during La Nina climate events which are also becoming more severe due to climate change.</p>	<p>Regions within Indonesia's islands that are most vulnerable to climate change risks are Java, Sulawesi and the southeastern Papua islands. These regions all face increased incidences of drought, floods, landslides, and sea-level rise.</p> <p>70% of the reefs located in Indonesia are already suffering damage from climate change risks. Wildlife within the reef systems account for 60% of the population's protein intake. This demonstrates how critically vulnerable the livelihoods and health of communities are as the coastal zones continue to degrade. [6]</p>	<p>This project will support communities that depend on the coastal reef systems by using appropriate measures to increase understanding and awareness of reef protection, as well as planning for coral reef protection at the national level.</p>
Fiji	<p>Germanwatch's Long-Term Climate Risk Index (1998-2017) rated Fiji as the 20th most at-risk country in the world.[7] This ranking demonstrates that Fiji is highly susceptible to climate risks such as floods, sea level rise, ocean acidification, warming sea temperatures and cyclones.</p> <p>Flooding of the river systems in Fiji has become a major climate risk event.</p>	<p>Fiji's 2017 Climate Vulnerability Assessment estimated that average losses due to extreme flooding events and damaging storms were around \$500 million annually.</p> <p>Within the provinces around the C, A, and B of Fiji</p>	<p>This project, through increased monitoring and the creation of national strategies for conservation will facilitate improvement of the health of local reef systems. Healthier reefs help protect Fijians against climate risk events physically</p>

	<p>me more frequent and is usually triggered by extreme weather events, including La Nina and El Nino events. [8] Sea level rise has affected Fiji more than most of the globe. The average global sea level rise is 2.8-3.6mm annually, whereas Fiji's Annual average increase was approximately 6mm per year since 1993. Rising temperatures in Fiji, demonstrated in daily maximum temperatures, have increased and average of .1°C per decade for the past 50 years. [9]</p>	<p>d the Great Sea Keet in Fiji, 40% of the population directly depend on the coastal reef system for protection against climate risk events. Sea-Level rise and other climate change events disrupt the natural processes and activities of reef systems and tidal flats. These areas provide habitats for fisheries and are critical for the Fijians that rely on them for their livelihoods.</p>	<p>lly (as reefs protect coastal communities by weakening storm surges and wave damage) and economically (because communities depend on coastal resources for their livelihoods).</p>
The Philippines	<p>The Philippines face similar climate change threats as other island nations such as Indonesia and Solomon Islands. The largest threats to the Philippines are increasing temperatures, storm occurrences and precipitation, leading to more floods.</p> <p>Like in other island countries, La Niña events trigger a more erratic precipitation pattern and correlate closely with flooding events. With a rise in frequency of severe storms and climate events, the number of rainy days in the Philippines has increased overall since the 1990s. Between 1971 and 2000, the mean annual temperature increased by 0.14°C, with a higher rate of increase occurring after the 1970s.[10]</p>	<p>The Philippines face an unprecedented number of cyclones, storm surges, floods and sea-level rise, all exacerbated by the amount of foreign aid the country depends on. In the heavily populated areas, climate related disasters threaten both the people and their economic stability. 74% of the country's population is exposed to multiple climate threats at any given time. [11]</p>	<p>This project will help The Philippines address the impacts of climate change by making an array of tools available to communities. These tools and multi-country platforms will provide support and information to aid in managing and utilizing coral reefs and associated ecosystems for protection and sustenance.</p>
Tanzania and Madagascar	<p>The West Indian Ocean has been identified as a global "hot-spot" for climate change, affecting all countries bordering this ocean. Tanzania and Madagascar are experiencing climate change risks in the form of changes in rainfall patterns resulting in floods, increase in cyclone events, sea-level rise, increasing temperatures and changes in current movement</p>	<p>Climate and weather-related changes to current systems could greatly impact the productivity of the coastal reefs and fisheries within those areas. Coupled with floods and an increase in cyclone or storm activity</p>	<p>Coastal Reef systems will benefit from the increased community involvement that this project will support. Communities will aid in monitoring the reefs and build capacity in management and protection of c</p>

<p>precipitation and changes in current movements.</p> <p>Precipitation patterns have become more erratic in Tanzania and Madagascar and can result in heavy river flows which cause flooding. Changes in the El Niño Southern Oscillation and the Indian Ocean Dipole can also cause flooding. These events lead to sediment input, soil erosion and run-off into nearshore marine habitats ultimately causing degradation of coastal zones. Sea-level rise in the Indian Ocean around Madagascar and Tanzania has been recorded to be three times that of the global average, increasing as much as 10 mm per year. Regional currents such as the Agulhas Current system have been warming as a result of abnormally high trade wind speeds that are linked to storm systems. The current system has warmed by 1.5°C since the 1980s. [12]</p> <p>The Indian Ocean has seen a mean temperature increase of 1°C since 1950.</p>	<p>ecosystems or storm activity, the surrounding communities are highly vulnerable to climate change risks. The communities most at risk are those dependent on fisheries, aquaculture and ecosystem services.</p>	<p>ment and protection of coastal zones. Stakeholders will learn how to access and utilize information and data gathered from a global platform, while national strategies will be created to govern future conservation efforts.</p>
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[1] Kreft, Sönke, David Eckstein, and Inga Melchior Global Climate Risk Index 2017. (2016). Bonn: Germanwatch e.V. <https://germanwatch.org/en/crisis>

[2] GFDL, 2011. Solomon Islands Climate Change and Disaster Risk Profile.

[3] Hulme, M and N. Sheard. 1999. Climate Change Scenarios for Indonesia. Climatic Research Unit, Norwich, UK, 6 pp

[4] World Bank, 2005. Natural Disaster Hotspots, A Global Risk Analysis. Washington, DC: Disaster Risk Management Series.

[5] USAID Indonesia, 2008. Conservation of Tropical Forests and Biological Diversity In Indonesia. Report submitted in accordance with Foreign Assistance Act Sections 118/119.

[6] WRI, 2001. World Resources 2000-2001: People and Ecosystems: The Fraying Web of Life.

[7] 1

[8] Harris et al., 2014: Updated high-resolution grids of monthly climatic observations – CRU TS3.10: The Climatic Research Unit (CRU) Time Series (TS) Version 3.10 Dataset, Int. J. Climatology, 34(3), 623-642, doi: 10.1002/joc3711; updated from previous version of CRU TS3.xx

[9] Federated states of Micronesia, Second National Communication to the United Nations Framework Convention on Climate Change, 2014

[10] Folland, C.K., J.A. Renwick, M.J. Salinger, N. Jiang, and N.A. Rayner, 2003: Trends and variations in South Pacific Islands and ocean surface temperatures. Journal of Climate., 16, 2859-2874 and Folland, C.K., J.A. Renwick, M.J. Salinger, and A.B. Mullan, 2002: Relative influences of the Interdecadal Pacific Oscillation and ENSO on the South Pacific Convergence. Zone. Geophysical Research Letters, 29, 21-1-21-4

[11] GFDRR Country Profile for the Philippines

[12] Union of Comoros, France, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, United Republic of Tanzania, A Strategic Action Programme (SAP) for Sustainable Management of the Western Indian Ocean Large Marine Ecosystems. ASCLME.org, 2014

COVID-19 Risk Analysis

Risk category	Potential Risk	Mitigations and Plans
Availability of technical expertise and capacity and changes in timelines	Continued or renewed efforts in COVID-19 containment are likely over the course of project development and possibly into implementation.	The project development work plan and team will be built with this in mind, for example, accessing experts in each country and not recruiting a consultant to travel to all of the countries. Project development will be coordinated from one central expert consultant and the WWF GEF team who will use remote technology to connect to in-country consultants and partners to design and consult the project.
	It is anticipated that for some countries it will be difficult to access government capacity while they are focused on COVID-19 containment or recovery. This is true for most of the project countries, especially Philippines and Indonesia, but also for Fiji and Solomon Islands where additional factors affect connectivity and availability of staff (e.g. cyclones).	At the start of project development the design team will discuss a plan with each of the key ministries on how best to carry forward the work (eg through consultants and partners) while ensuring government ownership (eg through meetings as possible and via agreed decision points with government).
	Coordinating across 7 countries fully thro	At the start of project development, the design

	<p>ough remote capacities for project design, consultation, decision making, and review s is highly likely to extend the timeline beyond the usual 12 months for project development, and may also lengthen the project start up period.</p>	<p>team will discuss a strategy to ensure the right mechanisms are in place for the effective and timely engagement of the 7 countries. In this effort, the project design team will have additional support from in country WWF focal points, who will facilitate virtual and face to face (when possible) government and other national key stakeholders' engagement. The project design team will regularly update the GEF Secretariat Project Manager on any potential risks, and jointly, will define mitigation measures towards the timely delivery of the project document and project start up.</p>
	<p>Changes in baseline and potential project co-financing sources</p>	<p>The project design team will closely monitor project baseline and co-financing sources along the project development process, to secure the expected project co-finance and, if possible, identify new co-finance sources.</p>
<p>Stakeholder engagement process</p>	<p>It is fortunate that a lot of consultation on the project design and to generate buy-in to the GEF project and overall project was undertaken from 2018-2020, prior to COVID-19 related restrictions.</p> <p>However, it is going to be difficult to do community-level consultations on the project in development phase.</p>	<p>Local level consultation will only be undertaken if it complies to national to local government guidelines and WWF national office guidelines. For example, it is likely that the consulting team will be smaller (1-2 people), national staff, and may have to be across design, gender, social and environmental issues, and they will likely consult with small group sizes (under 10 people or per local guidelines) and will have PPE for themselves and for people they talk to in person. Additionally, COVID protocol will be developed and followed, such as testing, and supply of sanitizer and masks. In any case where either party is not comfortable to engage in discussions; it will not proceed. As much as possible, remote connections will be sought, for example via local government offices visiting communities.</p> <p>In all cases, continued attention will be given to ensuring the voices of IP, women, youth, and an</p>

		<p>y underrepresented community members.</p> <p>Development of the Stakeholder Engagement Plan for implementation will also address such restrictions and mitigations.</p>
Enabling environment	It has been evident in PIF development that governments of some of the project countries have to put full attention to COVID-19 response, and the environment and GEF projects are less priority. This may continue.	The project design team will pay special attention to this challenging situation and will provide additional support to government focal points during the project development phase. WWF country focal points will provide continuous support to governments, to provide technical assistance and facilitate their lead role and active participation along the project development process.
Future risk of similar crises	It is not anticipated that this project will have adverse impacts that might contribute to future pandemics, for example, there will be no focus on increasing the human-wildlife interface or any actions that cause degradation.	This will be closely reviewed in the ESSF screening (when sites are selected) and in safeguards analysis and documentation.
	It is possible that COVID-19 impacts lead more people to move to rural areas, including areas around the project reef sites, and this may add more pressure to resources there.	This potential increased pressure to resilient coral reefs will be monitored during the project development phase, and during the early steps of project execution, under Outcome 2.1. The project will create national hubs that will develop a pressure analysis and will lead the development of national strategies for resilient reef conservation, to respond to the most important pressures identified in each country.

COVID-19 Opportunity Analysis

Opportunity Category	Potential	Project Plans
Can the project do more to protect and restore natural systems and their e	The proposed project will contribute to restoring ecosystems and function.	At the core of the project ToC is the strategy to reduce land, coastal and oc

<p>ecological functionality?</p>		<p>ean based threats to resilient coral reefs. This might include land use plans for more sustainable cattle farming and agriculture production in the resilient reef catchment, which will protect land and ocean ecosystems.</p>
<p>Can GWP/BD projects regulate consumption of wildlife and markets?</p>	<p>N/A</p>	
<p>Can the project include a focus on production landscapes and land use practices within them to decrease the risk of human/nature conflicts?</p>	<p>The project will include an assessment of production and land use practices, with a reef to ridge approach, that will identify the most important human pressures to resilient coral reefs and inform mitigation actions to decrease human/nature conflicts. Selected mitigation actions will be included in national action plans and will inform the development of the investment portfolio under Component 3.</p>	<p>With a reef to ridge approach, the project will assess the most important human pressures to resilient reefs in each country. This assessment will inform the participatory design of national action plans that will help address those pressures. The national action plans will also inform the rest of the project activities, including those aimed at increasing sustainable financial flow to reduce threats to resilient coral reefs.</p>
<p>Can the project promote circular solutions to reduce unsustainable resource extraction and environmental degradation?</p>	<p>A co-benefit of the project is to reduce pollutants to the ocean.</p>	<p>In project development, assessment will be made on how this can be further enhanced, with focus on pollutants such as nutrients and disposables, and attention will be given to any resilient reef sites where increased pollution has been noted due to COVID-19 (e.g. medical sector). Additionally, the project will scope for existing and potential sustainable business in the resilient coral reefs that can reduce environmental degradation, will provide technical assistance to national teams to develop an investment portfolio to reduce unsustainable resource extraction and will include demonstrative sustainable livelihood projects in priori</p>

		ty reefs.
Can the project innovate in climate change mitigation and engaging with the private sector?	The project will promote innovative engagement with private sector, by developing an investment portfolio of sustainable private business in support of the resilient coral reefs conservation.	One of the key project outcomes is to increase sustainable financial flow to relevant seascapes and landscapes to reduce threats to resilient coral reefs. This will be done through a scoping exercise, in which the project will identify innovative sustainable businesses in the resilient coral reefs that can reduce environmental degradation. The project will then provide technical assistance to national teams to develop an investment portfolio, to ensure the needed financial flows and incentives for private sector engagement in innovative sustainable and resilient reef friendly business.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

Institutional Structure:

The project will work with the Coral Reef Rescue Initiative Partnership, a consortium of organizations formed by WCS, RARE, CARE, the University of Queensland, Blue Ventures and WWF. During the project development phase, from this partnership, the most suitable entity to implement this global project will be selected for their implementation capacity and mandates relevant to the project. This organization, will act as the Lead Executing Agency, in close coordination with the lead ministries in each of the 6 GEF-funded countries. The lead executing agency will house the Project Management Unit, responsible for the day-to-day management of the project as well as reporting, monitoring, and evaluation functions. The PMU will be also responsible for the overall fiduciary oversight, and will subgrant funds to the Ministries and other executing partners in the 7 countries. Project oversight and strategic guidance will be provided by a national Project Steering Committee (PSC).

Coordination with other GEF-projects and other initiatives:

The project will coordinate with GEF and non-GEF projects being implemented in the 6 countries (and Cuba through non-GEF finance) focused on coastal and marine resource management. The project will coordinate with and build on these projects and initiatives to: i) benefit from lessons learned; and ii) effectively leverage relevant activities to maximize efficiency and impact.

The CRR Initiative will coordinate closely with “Solutions for Marine and Coastal Resilience” (SOMACORE) program, in the Coral Triangle- Sulu Sulawesi Seascape”, which aims to strengthen the resilience of the region’s ecosystems and communities in transboundary seascapes through protection, good governance and effective management of coastal and marine biodiversity. The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) commissioned the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the consortium partners to further develop the SOMACORE program.

The CRR Initiative will coordinate with the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), (Indonesia, Philippines, Solomon Islands). The Coral Triangle Initiative follows 9 principles: 1. Support people-centered biodiversity conservation, sustainable development, poverty reduction and equitable benefit sharing; 2. Be based on solid science; 3. Be centered on quantitative goals and timetables adopted by governments at the highest political levels; 4. Use existing and future forums to promote implementation; 5. Be aligned with international and regional commitments; 6. Recognize the transboundary nature of some important marine natural resources; 7. Should emphasize priority geographies; 8. Be inclusive and engage multiple stakeholders; and 9, Recognize the uniqueness, fragility and vulnerability of island ecosystems. The CRR project will support the CTI through providing data and analysis, as well as integrate the program across multiple countries, promoting transboundary cooperation.

The project will also coordinate with the Global Fund for Coral Reef, a recently launched UN initiative that seeks to raise and invest USD \$500 M in coral reef conservation over the next 10 years. The Fund, a finance instrument that blends private and public funding, will also support businesses and finance mechanisms that improve the health and sustainability of coral reefs and associated ecosystems while empowering local communities and enterprises.

Through engagement with LME:LEARN, IW:LEARN, and directly with governments and local implementing partners in each country, the project will work to build upon recently completed or existing LME projects and coordinate with ongoing or recently approved GEF projects. A preliminary list of potential projects that the project aims to collaborate with and learn from includes, but is not limited to:

- COREMAP CTI III (5171), The Project contributes to meeting MMAF's marine and fisheries sector development plan's overall target to develop 20.0 million ha of MPAs and to effectively manage 15 threatened, endangered and endemic species. It will complete the MPA development process and put it on a sound footing in terms of management effectiveness, financial sustainability, and enforcement of regulations. The overall project impact will be sustainable management of coral reef ecosystems in the project area. The outcome will be enhanced capacity to manage coral reef ecosystems in target MPAs. The project has been designed with four main components: (i) Coral reef management and institutions strengthened. This output will strengthen capacity developed under COREMAP II, and institutionalize community based coral reef management initiatives within existing government legal systems and institutions; (ii) Ecosystem-based resource management developed. This output will strengthen MPA management effectiveness and biodiversity conservation with a focus on 10 MPAs; (iii) Sustainable marine-based livelihoods improved. This output will build infrastructure to support sustainable livelihoods and income-generating activities; (iv) This output will manage and implement project activities, and also support institutionalization of national coral reef management arrangements.- COREMAP CTI III (5171),
- CTI Coastal and Marine Resources Management in the Coral Triangle: Southeast Asia under Coral Triangle Initiative (3589),
- LME-AF Strategic Partnership for Sustainable Fisheries Management in the Large Marine Ecosystems in Africa (PROGRAM) (4487),
- LME-EA: Applying Knowledge Management to Scale up Partnership Investments for Sustainable Development of Large Marine Ecosystems of East Asia and their Coasts (5110),
- LME-EA Scaling Up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts (PROGRAM) (4635),
- Public-Private Partnerships (PPPs) for Coral Reef Insurance in Asia and the Pacific (10431).
- First South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFISH) This project is implemented by the World Bank in partnership with Indian Ocean Commission (IOC), in Comoros, Mozambique and Tanzania. The objective of this project is to improve management of fisheries at the regional, national and community level (5905).
- Second South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish2), Like, SWIOFISH 1, the project is implemented by World Bank but is executed by Indian Ocean Commission (IOC) as well as the Ministry of Aquatic Resources and Fisheries (MRHP). This project builds on the previous SWIOFISH project while aiming to provide alternative livelihoods for targeted fishers (9692).

The Project will learn from and build upon the results achieved by the following completed IW GEF investments:

- Capturing Coral Reef and Related Ecosystem Services (CCRES) (4690),
- CTI Sulu-Celebes Sea Sustainable Fisheries Management Project (SCS) (3524),
- Programme for the Agulhas and Somali Current Large Marine Ecosystems: Agulhas and Somali Current Large Marine Ecosystems Project (ASCLMEs) (1462),
- Knowledge Base for Lessons Learned and Best Practices in the Management of Coral Reefs (2856),

Additionally, the project will coordinate with other relevant national GEF investments, such as:

- Sustainable Management of Madagascar's Marine Resources (9433),
- Expanding and consolidating Madagascar's marine protected areas network (9546)

- Ecosystem Approach to Fisheries Management in Eastern Indonesia (9129),
- EREPA - Ensuring Resilient Ecosystems and Representative Protected Areas in the Solomon Islands (9846),
- Strengthening Fiji's Network of Locally Managed Marine Areas (LMMAs) to Support Globally Significant Marine Biodiversity (9944),
- Implementing a "Ridge to Reef" Approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji (Fiji R2R) (5398),
- Protecting priority coastal and marine ecosystems to conserve globally significant Endangered, Threatened, and Protected marine wildlife in southern Mindanao, Philippines (10536).

WWF is the GEF Agency for the project: Expanding and consolidating Madagascar's marine protected areas network (9546). This project is just starting implementation, and there is the opportunity for alignment between the MPA project and this proposed CRR GEF project, especially for targeting priority resilient reef areas in assessing opportunities for MPA and LMMA development and management.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

National Priority	Alignment	Reference
Regional		
A Strategic Action Programme (SAP) for Sustainable Management of the Western Indian Ocean Large Marine Ecosystems (Madagascar and Tanzania)	To implement the Strategic Action Program for Sustainable Management of the Western Indian Ocean Large Marine Ecosystems the following will be developed: A. An Ecosystem Monitoring Programme; B. A Capacity Building and Training Programme, and C. A Science-Based Governance Program. The CRR project directly provides further training and capacity building on coral conservation.	UNEP, UNDP, GEF, 2016
South China Sea Strategic Action Programme (Philippines, Indonesia)	Coastal communities of the South China Sea's riparian states are, however, at the highest risk globally from the impacts of increasing rates of coastal and marine environmental degradation. The Strategic Action Programme (SAP) for the South China Sea is supported by the CRR project through knowledge sharing and capacity building to manage protected reef systems.	UNEP, 2016
The Sustainable Development Strategy for the Seas of East Asia Implementation Plan (Indonesia, Philippines)	The Sustainable Development Strategy encompasses 6 programs from 2018- 2022. The Priority Management Programs include: a) Biodiversity Conservation and Management; b) Climate Change and Disaster Risk Reduction and Management; and c) Pollution Reduction and Waste Management. The cross-cutting Governance Programs include: a) Ocean Governance and Strategic Partnerships; b) Knowledge Management and Capacity Development; and c) Blue Economy Investment and Sustainable Financing. The CRR supports this strategy by providing further information on ocean governance as well as capacity development.	UNDP, PEMS EA, 2018
CUBA		

National Biodiversity Strategy and Action Plan for Cuba	In the National Biodiversity Strategy and Action Plan for Cuba, several priority areas are addressed including marine species; economic valuation of ecosystem services; biological collections, ecosystem rehabilitation and restoration, and recovery of fishery resources. The Action plan also mentions the further development of indicators and monitoring processes and achieving these targets through strengthening coordination among existing structures and identifying synergies. The CRR project specifically supports this plan through improved research analysis and monitoring and evaluation systems for the coral reefs.	Ministerio de Ciencia, Tecnología y Medio Ambiente, 2016
National Plan for the Protected Areas System of Cuba	Cuba counts on an integrated Plan for the National System of Protected Areas (Sistema Nacional de Áreas Protegidas, or SNAP), which includes an important marine component. The plan designates protected areas managed efficiently in accordance with national legislation, representing 25% of coral reefs, and 95% of endemic and/or threatened species. The CRR project supports this through educating stakeholders on marine spatial planning.	Centro Nacional de Áreas Protegidas CNAP
UNFCCC National Determined Contribution for Cuba	<p>In the Contribución Nacionalmente Determinada, Adaptation is a priority for Cuba, with specific mention of reducing coastal vulnerability due to sea level rise. The contribution includes the recovery of Mangroves, reducing deterioration of coral reef ridges, conserving and rationally using natural resources such as beaches and forming an environmental monitoring network. This project will support the contribution by educating communities on how to plan and manage conservation in these reef systems.</p> <p>Change of per-capita emissions from 2010 to 2030 (average): +58%</p>	Convención Marco De Las Naciones Unidas, 2015
Fiji		
Policy on the Conservation and Management of Fiji's Coral Reefs and Associated Ecosystems	The aim of this policy is to enhance the Department of Environment's leadership and its mandatory legislative role in effectively supporting coral reef conservation and protection. The policy provides a guidance to fulfill the following objectives: i. Continue to promote the conservation and protection of Fiji's coral reefs and associated ecosystems; ii. To minimize and mitigate development threats by regulating developments through the Environment Management Act 2005 and Environment Management (EIA Process) Regulations 2007 and Environment Management (Waste Disposal and Recycling) Regulations 2007; iii. To protect Fiji's coral reefs and associated ecosystems from the threats imposed by Climate Change; iv.	Fiji's Ministry of Environment, 2020.

	<p>associated ecosystems from the threats imposed by climate change, iv. To promote coral reef stewardship through vigorous community and public awareness and outreach campaign; v. To effectively regulate trade in coral species, live rock, and cultured rock through the EPS Act 2002 and the Environment Management Act 2005; vi. To promote and facilitate scientific research and non-detrimental findings to support policy priorities and trade quota on coral and other Marine species listed under CITES; and vii. To effectively streamline data management and reporting at national and International level. 0 - 2025. The project preparation phase will ensure that the project activities strongly align and support the implementation of this Policy.</p>	
5-year & 20 Year National Development Plan	<p>The 20-Year Development Plan provides the forward-looking vision for “Transforming Fiji” towards an even more progressive, vibrant and inclusive society. It outlines a framework that encompasses strategic policy maneuvers, new approaches to development and the aspirations of all Fijians. The Fiji NDP highlights the underlying theme of inclusive socio-economic development, which ties into this project as communities will be provided with increased technical capacity to mobilize investment opportunities.</p>	Ministry of Economy, Republic of Fiji / 2017
National Adaptation Plan A pathway towards climate resilience	<p>The NAP provides a clear vision for adaptation and identifies priorities to be addressed in partnership with academic institutions, development partners, and private sector entities over the next five years, and beyond. It addresses vulnerabilities identified by the Climate Vulnerability Assessment and adopts the values and principles of the NAP Framework. The Fiji NAP aims to improve climate change information management and increase Fiji’s ability to predict and respond to climate events. This project will help achieve these goals through creating knowledge management tools, technical assistance and better threat analysis.</p>	Government of the Republic of Fiji/ 2018
Fiji NDC Implementation Roadmap 2017-2030	<p>Fiji’s current Nationally Determined Contribution (NDC) is specific to the energy sector both in terms of a GHG (greenhouse gas) baseline, with 2013 as the reference year, and in terms of potential mitigation actions. The goal of the NDC Implementation Roadmap 2017-2030 is to provide a temporal pathway with concrete mitigation actions and financing needs to achieve the transformational change called for under the NDC. This project will build capacity within local communities to understand and adapt to climate threats.</p>	Fiji’s Ministry of Economy with the Global Green Growth Institute / 2018
Climate Vulnerability Assessment	<p>The Fiji Climate Vulnerability Assessment was implemented with the objective to carry out a climate vulnerability assessment for Fiji and develop recommendations to inform Fiji’s investment planning process. The initiative helped inform the national development priorities, and its investment and development plan for the next 5, 10 and 20 years. The project will</p>	Government of the Republic of Fiji, 2017.

	<p>t and development plan for the next 5, 10 and 20 years. The project might also strengthen Fiji's Nationally Determined Contribution (NDC). The Climate Vulnerability Assessment for Fiji highlights the likely increase in extreme weather events, which lead to a large loss in income and assets for vulnerable communities. This project will increase the ability to deal with extreme weather events and recover financially with the help of long-term sustainable financing.</p>	<p>Support of World Bank Group and GDFRR.</p>
<p>Fiji's Intended Nationally Determined Contribution for UNFCCC</p>	<p>Fiji submitted their Intended nationally determined contributions (INDC) to the UNFCCC Secretariat on the 5th of November 2015.</p> <p>No further revisions were undertaken, and the same document was endorsed and submitted as the First nationally determined contributions on 22nd April 2016.</p> <p>Within the Adaptation goals in Fiji's NDCs are several key actions that this project will support such as increasing the understanding of impacts of climate change and helping to preserve livelihoods through understanding reef protection.</p>	<p>Government of the Republic of Fiji Islands, 2015.</p>
<p>National Biodiversity Strategy and Action Plan for Fiji 2017–2024</p>	<p>The Fiji National Biodiversity Strategy and Action Plan 2017–2024 (NBSAP) is a national policy document recognized under the Environment Act 2005. The NBSAP is also a requirement for all parties to the Convention on Biological Diversity and its 2020 Aichi Targets. This policy document prioritizes conserving biodiversity which will be achieved through this project by increasing community capacity to analyze and plan for marine protection.</p>	<p>Government of Fiji, 2017</p>
<p>Environment and Climate Adaptation Levy (ECAL)</p>	<p>The Government of Fiji's source of tax revenue is dedicated to climate resilience, which is a consortium of taxes on prescribed services, items and income. The ECAL is mandated to fund work across Fiji to support economic, community, and infrastructure adaptation to the worsening impacts of climate change, as well as protect the natural environment and reduce Fiji's carbon footprint. This project will be supporting ECAL efforts by providing resources for communities to increase adaptation to climate risks.</p>	<p>Government of Fiji, 2019</p>
<p>Madagascar</p>		
<p>Ministry of Environment and Sustainable Development Strategic Priorities</p>	<p>The 6 strategic priorities of the Madagascar Ministry of Environment and Sustainable Development are:</p> <ol style="list-style-type: none"> 1. Reforestation, biodiversity conservation, and ecosystem restoration 	<p>Ministry of Environment and Sustainable Development</p>

	<p>tion</p> <ol style="list-style-type: none"> 2. Sustainable and improved renewable natural resources governance, notably for the benefit of local communities 3. Green and blue economies, sustainable development with consideration for waste management 4. Information, Education and Communications: integration of Environment in school curriculum 5. Environmental diplomacy 6. Climate change and renewable energy <p>This CRR GEF project will support the ministry's priorities by providing educational tools and resources to further understand marine planning and management.</p>	<p>le Development, 2020</p>
<p>Blue Economy: National Blue Economy Strategy and Action Plan (Still in development)</p>	<p>Blue economy is fully part of Madagascar's voluntary commitments for the sustainable management of its seas for the 2030 horizon. Through the 2nd commitment entitled: "Integration of the concept of maritimisation and use of spatial planning as a basic tool for promoting the Blue Economy", the involvement of other relevant sectors should lead to a harmonization and inclusiveness during its implementation.</p> <p>The CRR project supports the efforts of Madagascar to deliver on the Blue Economy Strategic Action plan by providing marine spatial planning tools, and encourage collaboration between other participating countries.</p>	<p>UNEP, 2015</p>
<p>The General policy of the Government of Madagascar («Politique Générale de l'Etat» - PGE)</p>	<p>The primary objective of the PGE is to build a strong nation, prosperous, and cohesive, for the pride and well-being of all Malagasy. The pillars are:</p> <p>Peace and security, Energy and water for everyone., Fight against corruption: with zero tolerance, all responsables/officials need to become a model of integrity and uprightness, Education for all, Health: is an inalienable right for all citizens, Decent employment for all, Industrialisation, Tourism industry, Food self-sufficiency, Sustainable management and conservation of natural resources, Promotion of housing and upgrading, Autonomy and empowerment of local and regional governments, Sport, Culture: construction of museums and rehabilitation of cultural and historical heritages.</p> <p>The CRR GEF project will support the delivery of Madagascar's PGE by strengthening national capacity and sharing knowledge across all relevant stakeholders on reef conservation and better management of marine natural resources.</p>	<p>The Government of Madagascar, 2020</p>

National Biodiversity and Action Plans 2015-2025	NBSAP that calls for more extensive and effective protection of Madagascar's marine and coastal biodiversity. This will be accomplished by developing and implementing strategies to minimize the various pressures (anthropogenic or climate) on marine and coastal ecosystems, including coastal forests and their associated neighbouring habitats. The plan also involves strengthening and encouraging the use of local techniques, which this CRR project would promote through consultations with stakeholders, particularly on traditional cultural knowledge.	Convention on Biological Diversity, 2016
Madagascar's intended Nationally Determined Contributions	Madagascar is among the top-ten countries in terms of coastal zones' extent. It also hosts a significant part of the Northern Mozambique Channel transnational area which represents the world's 2 nd marine biodiversity hotspot (after the Coral Triangle area). The island frequently experiences extreme weather events that importantly affect its national economy and population's livelihood. In terms of NDCs, the Republic of Madagascar is then equally committed to contribute to mitigate climate change, as well as to reduce climate change vulnerability and promote adaptation measures. The CRR Project will support Madagascar in that regards by strengthening national institutions's capacity on coral reefs and associated marine ecosystems, which will be key in contributing to key priority actions defined in its NDCs (references to the reinforcement of natural protection and reduction of the vulnerability of coastal, inshore and marine areas affected by coastal erosion and receding shorelines progress, and to the formulation and implementation of the national policy of the maritime territory of Malagasy, considering climate change).	The Republic of Madagascar 2015
Ministerial Decree n°21816-2014 regarding harvest ban on black corals (Antipatharia sp.) at national level	<p>Through its Ministry of Fisheries, Madagascar has strictly forbidden any form of harvesting and use of black corals, notably its extraction, collection, storing, transportation, purchase and selling, on its entire territory.</p> <p>The CRR project will generally contribute to raise the importance of corals in the country, and thereby contributes to its conservation and sustainable use of coral areas.</p>	Ministry of Fisheries 2014
Solomon Islands		
UNFCCC National Determined Contribution for Solomon Islands	The Solomon Islands National Determined Contribution for the UNFCCC mention that the country contains over 900 volcanic islands and coral atolls that provide shelter for 600,000 inhabitants. The reefs provide fisheries and marine resources which make up a significant portion of the country's economy. Extreme weather events linked to climate change have caused higher tides which are systemically eroding and degrading coral reefs.	Solomon Islands Government, 2015

	fs.	
National Biodiversity Strategy Action Plan (NBSAP) 2016-2020	The National Biodiversity Strategy Action plan for Solomon Islands highlights the importance and necessity of the reefs due to their provisions and ecosystem services. The plan aims to safeguard the environment and reduce the rate of the loss of biodiversity, and thereby by 2030 ecosystems continue to maintain their resiliencies and continue to provide essential services, securing the Solomon islanders variety of life, and contributing to people's wellbeing and the reduction of hardship.	Ministry of Environment, CC, Disaster Management & Meteorology, 2016
Program of work on Protected Areas (PoWPA) for the Solomon Islands (within the NBSAP)	Program of work on Protected Areas uses Traditional and Cultural Management practices and Institutional and legislative framework to protect 40% terrestrial / inland waters and 60% marine area within the protected areas of Solomon Islands. 90% of the population of Solomon Islands inhabits coastal areas and heavily rely on fish for their main protein source. This plan focuses on Unsustainable Fishing Practices as well as Climate Change to protect reef systems.	Ministry of Environment, CC, Disaster Management & Meteorology, 2016
Ridges to Reefs Conservation Plan for Choiseul Province, Solomon Islands	Lauru Land Conference of Tribal Communities established a Lauru Ridges to Reefs Protected Areas Network that will safeguard Solomon Island's cultural and natural heritage. The plan explains that Coral reefs, which provide many ecosystem services to island people, are highly sensitive to temperature and chemical changes in seawater as a consequence of Climate Change and increased carbon dioxide (CO2) in the atmosphere. The CRR GEF project will provide an opportunity to survey stakeholders and gather cultural knowledge to improve ecosystem management.	The Nature Conservancy, 2010
The Philippines		
Philippines Intended Nationally Determined Contributions	Republic of The Philippines Communicated their Intended Nationally Determined Contributions to the UNFCCC in October 2015. As a country highly vulnerable to climate and disaster risks, mitigation measures as presented in the INDC will be pursued in line with sustainable development and a low-emission development that promotes inclusive growth. The CRR Project supports the contribution of the Philippines by increasing national capacity in handling climate threats and risks.	UNFCCC, 2015
Philippine Biodiversity Strategy Action Plan 2015-2028	This Biodiversity Strategy Action Plan explains how fisher overcapacity has resulted in major overexploitation of Philippine reef fisheries and states that fish is a staple food for the population. Hundreds of 2,000 species	Republic of the Philippines, 2016

	<p>es that fish is a staple food for the population. Upwards of 2,000 species of fish have been identified in Philippines as being situated at the apex of the Coral Triangle, the country is considered to be the richest marine eco-region in the world or the center of marine shorefish diversity. This project will help protect the diversity by providing marine management plans and resources.</p>	s. 2010
National Integrated Protected Area System or NIPAS Act	<p>The National Integrated Protected Area System includes "outstandingly remarkable areas and biologically important public lands that are habitats of rare and endangered species of plants and animals, biographic zones and related ecosystems, whether terrestrial, wetland, or marine". All such areas shall be designed as "protected areas".</p>	Department of Environmental and Natural Resources, 1992
Coastal and Marine Ecosystems Management Program (CMEMP)	<p>The Coastal and Marine Ecosystems Management Program or CMEMP is a national program which aims to achieve the effective management of the country's coastal and marine ecosystems, thereby increasing their ability to provide ecological goods and services to improve the quality of life of the coastal population particularly ensuring food security, climate change resiliency and disaster risk reduction.</p>	Department of Environmental and Natural Resources- Administrative Order 2016-26
International Blue Carbon Initiative	<p>The Philippines, as member of the International Blue Carbon Scientific Working Group, has a function for research on coastal conservation, management, and assessment of blue carbon ecosystems. This CRR project ties well to the</p>	International Blue Carbon Initiative, 2020
Nagoya Protocol National Report for Philippines	<p>The Philippines commitment to the Nagoya Protocol ensures that the country will create conditions to promote and encourage research contributing to biodiversity conservation and sustainable use, pay due regard to cases of present or imminent emergencies that threaten human, animal or plant health; and consider the importance of genetic resources for food and agriculture for food security. The CRR GEF project will support the Philippines objectives by providing more research and data analysis.</p>	Department of Environmental and Natural Resources, 2015
Tanzania		
United Republic of Tanzania National Adaptation Programme of Action	<p>The main objectives of Tanzania's NAPA that are directly supported by the CRR project are:</p> <ul style="list-style-type: none"> · Protect life and livelihoods of the people, infrastructure, biodiversity and environment; 	UNFCCC, 2007

	<ul style="list-style-type: none"> · Increase public awareness to climate change impacts and adaptation activities in communities, civil society and government officials; supported through toolkits provided by this project · To assist communities to improve and sustain human and technological capacity for environmentally friendly exploitation of natural resources in a more sustainable way in a changing climate; · To complement national and community development activities which are hampered by adverse effects of climate change; 	
Tanzania's Intended Nationally Determined Contributions	The NDCs for Tanzania will be implemented by 2030. The Reef, Coastal and Marine contributions were listed as: Strengthening management of coastal resources and beach erosion/sea level rise control systems. b) Promoting livelihood diversification for coastal communities. c) Improving monitoring and early warning systems of both sea level rise impacts and extreme weather events for building adaptive capacity. d) Enhancing programme for management of saltwater inundation and intrusion. e) Mangrove & shoreline restoration programme. f) Enhancing conservation & fishery resource management. g) Strengthening key fisheries management services for sound development and management of the fishery sector for resilience creation. The CRR project will help achieve these contributions by providing marine management guidance and increasing community involvement.	UNFCCC,2015
Tanzania National Climate Change Strategy	The National Climate Change Strategy, developed to support the Tanzania Development Vision 2025, focuses on cross-cutting issues, including the establishment and implementation of awareness creation programmes, establishment of adequate research capacity, building sufficient capacities of social facilities to address climate change related health risks and promoting effective documentation of indigenous knowledge on climate change adaptation and mitigation in diverse sectors. The CRR project will highlight indigenous knowledge and cultural understanding of climate change threats, in alignment with the National Climate Change Strategy.	United Republic of Tanzania VP Office, 2012
Tanzania National Environment Management Act	The National Environment management Act, is an Act to provide for legal and institutional framework for sustainable management of environment; to outline principles for management, impact and risk assessments, public participation, compliance and enforcement; to provide basis for implementation of international instruments on environment; to provide for implementation of the National Environment Policy. Some aspects of this act, for example, the Promotion of coastal environmental zone, will be supported by the CRR project through the provision of management plans and resources to better protect the habitats.	National Environment Management Council,2004

Tanzania National Integrated Coastal Environment Management Strategy	The NICEMS outlines the commitment to sustainable coastal governance THROUGH 2025; champions ICM and establishes the foundation for coastal governance in Tanzania. Apart from identifying the six broad governance issues facing the coastal and marine environment, it also lays down seven strategies that are implementable to solve the identified issues through the ICM approach. Moreover, this Strategy defines the boundary of operation and gives the institutional structure for coastal management in Tanzania. The CRR GEF Project will aid in this strategy by providing additional coastal management resources and data.	United Nations, 2003
Indonesia		
National Mid-Term Development Plan 2020-2024	Coral reef conservation and restoration is prioritized under the National Development Agenda No. 6 Environmental Management, Increasing Disaster Resilience, and Climate Change. The development plan guides all actions on policy, program, and activities of the government. The proposed PIF activities align and support the implementation of the Mid Term Development Plan, in particular component 3 that will enable economic/livelihood activity based on coral reef health.	MMAF, 2020
National Action Plan on Coral Reef Conservation 2017-2021	To facilitate actions to conserve coral reef in Indonesia, the conservation action plan put four targets: i) availability of data and information on coral reef, ii) community based management model, iii) increasing the awareness and participation of stakeholder, and iv) strengthening surveillance and enforcement. The strategy under the coral reef action plan is strongly supported by the PIF document in all components.	MMAF, 2020
SDG Goal 14 – Life Below Water	Under the Goal 14, there are two closely related with coral reef i.e. protect and restore ecosystem and conserve coastal and marine areas. Under this goal, Indonesia prioritizes coral reef protection under MPAs and restoration through the coral garden approach	

National Plan of Action for CTI-CFF	Currently the Regional Secretariat is facilitating the discussion and establishment of CTI-CFF Regional Plan of Action. Once this plan is agreed the CTI member countries need to develop their national plan of action. The project will support the development and implementation of the action plan.	
First Nationally Determined Contribution Republic of Indonesia	<p>The Nationally Determined Contributions will be achieved by:</p> <ul style="list-style-type: none"> · Employing a landscape approach: Recognizing that climate change adaptation and mitigation efforts are inherently multi-sectoral in nature, Indonesia takes an integrated, landscape-scale approach covering terrestrial, coastal and marine ecosystems. · Highlighting existing best practices and scale up the diversity of traditional wisdom · Mainstreaming climate agenda into development planning · Promoting climate resilience in food, water and energy. <p>The CRR project will also build upon traditional knowledge and wisdom, in order to further the landscape-scale plan for conservation.</p>	UNFCCC, 2016
Indonesia's National Action Plan on Climate Change Adaptation (RAN-API)	The National Action Plan identifies two key areas of climate change and their impacts on livelihoods; increases in sea level and changes in weather, climate, and rainfall. The plan will address these threats through budget policy reform, development of socio-economic policies, and social-culture transformation to address climate change among other interventions. The CRR project will support the NAP by engaging local communities in climate change knowledge sharing and practices to best adapt to the i	State Ministry of Environment, 2007

	Increasing pressures.	
Improvement of maritime and marine management	<p>Improvement of maritime and marine management carried out by making Fisheries Management Area (WPP) as spatial basis in the development and utilization of marine affairs and fisheries, which includes strategies:</p> <ol style="list-style-type: none"> 1) Improve the management quality of WPP and its institutional arrangements in accordance with sustainable principles, marine spatial planning and coastal zoning plans; 2) Manage marine ecosystem and sustainable use of marine services, and management of marine area; 3) Increase production, productivity, standardization, and quality of marine and fishery products including fish, seaweed and salt; 4) Improve business facilitation, financing, technology and markets; protection of small-scale marine and fisheries business and access to resource management; 5) Improve competence, human resource capacity, technological innovation and research in maritime and marine, as well as strengthening the marine and fisheries database. 	Indonesia National Medium Term Development Plan, 2020-2024

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Utilizing available knowledge to apply best practices and lessons learned is important during both project design and implementation to achieving greater, more efficient, and sustainable conservation results. Sharing this information is useful to other projects and initiatives to increase effectiveness, efficiency, and impact among the conservation community. Knowledge exchange is tracked and budgeted under Component 1 and 4 of the Results Framework.

Prior to finalizing the project design, during the project preparation phase, existing lessons and best practices will be gathered from other past and ongoing projects and incorporated into the project design. Lessons learned, best practices, and guidance notes for scaling up will be collated and disseminated according to a communication strategy developed during project development. During project implementation and before the end of each project year, knowledge produced by or available to the Project will be consolidated from project stakeholders and exchanged with relevant project stakeholders (see section 2) and other related programs, initiatives and research institutions, including the global networks created under Component 1. This collected knowledge will be analyzed alongside project monitoring and evaluation data at the annual project reflection workshop. It is at this meeting that the theory of change will be reviewed, and modifications to the annual work plan and budget will be drafted.

Lessons learned and best practices from the Project will be captured from field staff and reports, and from stakeholders at the annual reflection workshop. External evaluations will also provide lessons and recommendations. These available lessons and best practices will then be documented in the semi-annual project progress reports (PPR) (with best practices annexed to the report). The PMU Project Manager will ensure that key project stakeholders and related projects are informed of the reflection workshop, formal evaluations, and any documentation on lessons and best practices. These partners will receive all related knowledge management products.

All knowledge and communication products produced by the Project will be shared on a project-specific website and the project will also share information via IW Learn webpage. These web interfaces will also link to libraries of reviewed tools, learning components such as MOOCs (massive open online courses) and other knowledge assets. This will allow a wider audience to gain knowledge from the Project. The Project will budget travel to key workshops, such as the IW Conference and IW Learn regional meetings to share best practices and lessons learned and to learn from practitioners in the same field to strengthen the Project. Further details of the project's approach to knowledge management will be determined during the project development phase in consultation with the relevant project stakeholders.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF

CEO Endorsement/Approval MTR

TE

Low

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Regarding social and environmental safeguards, given the available information on current outputs, the proposed project is indicatively pre-screened as a Category C (low risk), as most of the outputs are related to technical assistance, and capacity building, and may include some provision of equipment of materials.

The safeguards categorization may be revised during project development once activities have been explicitly defined. If mitigation plans or measures to address identified risks are needed, they will be developed during the project development phase.

Supporting Documents

Upload available ESS supporting documents.

Title

Submitted

CRR1 - ESSF PIF pre-screen

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Faraja Ngerageza	GEF Operational Focal Point Tanzania	United Republic of Tanzania Vice President's Officer	3/23/2020
Hery Andriamirado Rakotondravony	GEF Operational Focal Point Madagascar	Ministry of Environment and Sustainable Development	8/14/2020
Joshua Wycliffe	Permanent Secretary	Ministry of Environment	9/22/2020
Chanel Iroi	Undersecretary and GEF Operational Focal Point	Ministry of Environment, Climate Change, Disaster Management and Meteorology	3/23/2020
Analiza Rebueta – Teh	GEF Operational Focal Point Philippines	Department of Environment and Natural Resources	10/2/2020
Laksmi Dhewanthi	GEF Operational Focal Point Indonesia	Ministry of Environment and Forestry	10/14/2020

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

