Joint SDG Fund - 1st Call on SDG Financing

Component 2 Joint Programme Document
Fiji - Investing in Coral Reefs and the Blue Economy

A. COVER PAGE

1. Fund Name: Joint SDG Fund

2. MPTFO Project Reference Number: Leave blank / automatically populated in Atlas

3. Joint programme title: Investing in Coral Reefs and the Blue Economy

5. Country and region: Fiji

6. Resident Coordinator: Sanaka Samrasinha; sanaka.samrasinha@one.un.org

7. RCO Joint Programme focal point: Mohammed Mozeem, UN Partnerships Specialist; mohammed.mozeem@undp.org

8. Lead agency Joint Programme focal point: Kevin Petrini, Deputy Resident Representative, UNDP; kevin.petrini@undp.org

9. Government Joint Programme focal point: Vineil Narayan, Acting Head of Division - Climate Change and International Cooperation Division, Ministry of Economy; vineil.narayan@economy.gov.fj

10. Type of financial intervention:
The JP will leverage philanthropic and development finance to mobilize concessional and commercial impact investment channeled exclusively through debt for reef-first business models, de-risked by partners providing loan guarantees (i.e., blended finance). Revenue generation to repay debt will be generated through ecotourism, waste management, fertile factory, sustainable fisheries, blue carbon and sustainable infrastructure.

11. Short description:
The JP seeks to create a blended finance facility and build capacity to mobilize private and public investment capital for initiatives that have a positive impact on Fijian coral reefs and the communities that rely on them. The JP will construct a pipeline of bankable projects providing a blend of technical assistance, performance grants and concessional capital for de-risking. Projects will leverage finance from private investors and other financing facilities. The JP’s expected results include:
1. Private sector investment in a US$10M blended finance facility for effective management of 30 Locally Managed Marine Areas (LMMAs) in Fiji. The JP will accelerate the short-term investment readiness of a pipeline of 10 LMMA projects (US$3.1M target) and bring the wider pipeline to market (US$10M target). Business model include reef-first businesses such as eco-tourism, visitor center, sustainable fisheries and blue carbon credits.

2. Private sector investment in a US$14M blended finance facility for sanitary landfill project before replicating the approach to other landfill projects in the country.

3. Private sector investment in an eco-fertilizer factory before replicating the approach to other 5 reef-first SME projects in the pipeline.

4. Established and operational gender responsive Technical Assistance Facility (TAF) for blue economy SMEs and financial instruments. The TAF will:
   i. Bring expertise during the pre-investment and post-investment life cycle of the Blue Economy SMEs
   ii. Aggregate and pool the investments and other financial instruments reducing transaction costs and reducing risk profile
   iii. Work with Government to improve regulatory framework
   iv. Fundraise development and private finance

5. Leveraged a total US$50M in public and private investments in reef-first SMEs and financial instruments.

6. Measurement and verification of positive economic and environmental impacts to vulnerable coastal communities (>70,000 beneficiaries) and coral reefs, of which 50% will be women and youth.

12. Keywords:
coral reef; blue economy; fisheries; Marine Protected Area; blended finance; Fiji; waste management; ecotourism; communities; businesses

13. Overview of budget:

<table>
<thead>
<tr>
<th>Joint SDG Fund contribution</th>
<th>USD 5,340,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-financing by the Global Fund for Coral Reefs</td>
<td>USD 4,700,000</td>
</tr>
<tr>
<td>Impact Investment by the Mirova Sustainable Ocean Fund, at individual deal level (LMMA, Waste &amp; Fertile Factory transactions)</td>
<td>USD 13,300,000</td>
</tr>
<tr>
<td>Potential GCF Concessional loans mobilized by BNP Paribas (2022-2030)</td>
<td>USD 10,000,000</td>
</tr>
<tr>
<td>Add. Potential Impact Investment by the GFCR Investment window (2022-2030)</td>
<td>USD 26,600,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>USD 60,000,000</td>
</tr>
</tbody>
</table>

Co-financing ratio (1: Total/SDG Fund Contribution) 1:10

14. Timeframe:

<table>
<thead>
<tr>
<th>Start date</th>
<th>End date</th>
<th>Duration (in months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2021</td>
<td>March 2025</td>
<td>48 Months</td>
</tr>
</tbody>
</table>

1 See 2.2
15. Gender Equality Marker: 2.3

16. Participating UN Organizations (PUNO) and Partners:

16.1 PUNO
   - Convening agency:
     o Agency – UNDP
       Name – Kevin Petrini
       Position – Deputy Resident Representative
       Email - kevin.petrini@undp.org

   - Other PUNOs:
     o Agency – UNEP
       Name - Sefanaia Nawadra
       Position - Head, Pacific Sub-regional Office
       Email - sefanaia.nawadra@unep.org

     o Agency – UNCDF
       Name - Bram Peters
       Position - Program Manager
       Email - bram.peters@uncdf.org

16.2 Partners
   - National authorities: Ministry of Economy, Ministry of Local Government, Ministry of Fisheries, Ministry of Forestry,
   - Civil society organizations and NGOs: Fiji Hotel and Tourism Association; Blue Finance (Implementing Partner); Fiji Locally Managed Marine Area Network (LMMA);
   - Private sector: Sustainable Ocean Fund - Althelia/Mirova (Private Investment); Matanataki (Technical Assistance and Implementing Partner)
   - Funds: Global Fund for Coral Reefs, a coalition of Private and Public entities (Grant Co-Funding; public and private investment through GFCR investment window)
UN SIGNATURE PAGE

Resident Coordinator
Name: Sanaka Samarasinghe
Date and Signature
30/11/2020

Participating UN Organization (lead/convening)
Name of PUNO: United Nations Development Programme (UNDP)
Name of Representative: Levan Bouadze, Resident Representative Fiji MCO
Date:
Signature and seal:
30/11/2020

Participating UN Organization
Name of PUNO: United Nations Environment Programme (UNEP)
Name of Representative: Sefania Nawadra, Head of Pacific Office
Date:
Signature and seal:
30/11/2020

Participating UN Organization
Name of PUNO: United Nations Capital Development Fund (UNCDF)
Name of Representative: Judith Karl, Executive Secretary
Date: 30-Nov-2020
Signature and seal:
30/11/2020

Judith Karl
GOVERNMENT SIGNATURE PAGE

National Coordinating Authority

Name Ministry: Ministry of Economy
Name of representative: Ms Konrote Makereta, Permanent Secretary
Date 30/11/2020

Signature and seal

Official support letter attached
B. STRATEGIC FRAMEWORK

1. Call for Joint Programmes: SDG Financing (2020) – Component 2

2. Programme Outcome [pre-selected]
   - Additional financing leveraged to accelerate SDG achievement (Joint SDG Fund Outcome 2)

3. UNDAF Outcomes and Outputs

UNDAF in Pacific = UN Pacific Strategy 2018-2022 (UNPS)

The initiative specifically addresses the following outcomes from the UNPS:

Outcome 1: Climate Change, Disaster Resilience, and Environmental Protection

By 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened

Outcome 3: Sustainable and Inclusive Economic Empowerment

By 2022, people in the Pacific, in particular youth, women, and vulnerable groups, benefit from inclusive and sustainable economic development that creates decent jobs, reduces multi-dimensional poverty and inequalities, and promotes economic empowerment.

4. SDG Targets directly addressed by the Joint Programme

4.1 List of goals and targets:

The main targeted SDGs are as follows:

- Goal 8: Sustained, inclusive and sustainable economic growth is targeted specifically through the promotion of and investment in LMMA’s and SPE’s that provide for new economic activities, decent job creation, entrepreneurship, and as such encourage the formalization and growth of micro-, small- and medium-sized enterprises that focus on the blue economy and promote sustainable tourism (SDG 8 targets to be addressed: 8.3 and 8.9).

- Goal 14: Life below water, the proposal centers on coral reefs and the blue economy. SDG 14 is severely underfunded and requires additional resources and innovative projects to safeguard biodiversity rich ecosystems and reef-dependent communities as found in Fiji. (SDG 14 targets to be addressed: 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.A, 14.B.)

- Goal 17: Partnerships for the goals is targeted through use of a blended financial instrument that promotes innovation and offers a unique public/private partnership, bringing together UN organizations, Member States, philanthropy (Prince Albert II of Monaco Foundation and Paul G. Allen Family Foundation), private investors (e.g., BNP Paribas, Althelia), nonprofit organizations (Blue Finance, WWF), and oceans-focused networks in which the UN is an active member or founder (for instance, ICRI and
ORRAA). (SDG 17 targets to be addressed: 17.1, 17.3, 17.7, 17.9, 17.15, 17.16, 17.17, 17.19.)

4.2 Expected SDG impact

Coral reef ecosystems provide important cross-cutting SDG co-benefits for local communities through entry points such as coral reef tourism, food security, shoreline protection, and human health and wellbeing. The JP will work to create a pipeline of investable deals/projects to accelerate flows of impact investment focused on protection and enhancement of the marine and coastal natural capital that plays a critical role in contributing to human rights and the SDGs. Specifically, the JP will help to underpin the human development challenge by working for and with women and men in reef-adjacent communities, as well as their right to a standard of living adequate for health and well-being, which will have an impact on Fiji’s achievement of SDGs 1, 2, 3, 5, 6, 8, 10, 11, 12 and 15 - in addition to the JP’s central SDGs of 14, 8 and 17.

5. Relevant objective(s) from the national SDG framework

Although the Government of Fiji is currently in the final phase of development of its National Ocean Policy, it currently does not have a dedicated strategic framework for coral reef conservation or the blue economy. The JP will work with Government to deliver on multiple key objectives set out in several of its cross-cutting SDG frameworks in order to sustain and harness the multiple benefits of healthy coral reef ecosystems for planet and people. This will be done through the following relevant plans and policies:

The 5-year National Development Plan (NDP) (2017-2021) for the Fisheries sector: The Government of Fiji strives to sustainably manage inshore fisheries through the further establishment of Marine Protected Areas (MPA) and other measures to provide for better catch management. The Government also continue to support the revitalization and conservation of mangroves and corals. To meet the increasing demand for fisheries product, private sector investments are supported in aquaculture projects through tax incentives, provision of juvenile fry and post-larva stocks, and research and extension services. Further, the June 2020 National Fisheries Policy will guide the development of sustainable fisheries which in turn will have a direct impact on the health of coral reefs. This JP contributes to the NDP through the establishment of and improvement of marine protected areas with effective management. The JP will develop of blue carbon credits, sustainable fisheries, and aquaculture products through the Special Purpose Entity (SPE) model and the Technical Assistance Facility (TAF).

National Climate Change Policy (2018–2030) (NCCP): A central policy instrument endorsed by the Fijian Government to protect Fiji’s development priorities from current, future and intergenerational climate change risks. The JP aims to channel finance to locally driven businesses and financial instruments that promote the resilience of coral reef ecosystems to climate change by mitigating local threats. By doing so, the important coral reef ecosystem services of shoreline protection, subsistence, and income from tourism and fishing will be safeguarded and enhanced, thus building the resilience of local communities that are most vulnerable to climate change.

In addition to the NCCP and the National Development Plan, the Fiji National Biodiversity Strategy and Action Plan 2017–2024 (NBSAP) is a national policy document recognized under the Environment Act 2005. The NBSAP (2017–2024) seeks to strengthen the sustainable use, management and protection of the country’s terrestrial, freshwater and marine biodiversity. The JP was developed with the NBASAP principles in mind. This includes community
participation and ownership, ecosystem-based management, managed and protected areas, gender mainstreaming and equality, and financial stability and accountability.

6. Trans-boundary and/or regional issues

More than 60% of coral reefs in the South Pacific are under immediate and direct threat (WRI, 2018). Some 3 million people in the region depend directly on coral reefs for food and income, making these populations particularly vulnerable to reef-loss (‘poverty trap’). Coral reefs also provide vital shoreline protection from wave action to low-lying communities at risk of coastal flooding, this ecosystem service is becoming critical in the context of accelerating climate change.

The Fiji economy, like many Pacific SIDS, is projected to record an historic economic contraction of 15% in 2020 because of the impact of the COVID-19 pandemic. Challenges, such as debt sustainability stress, high dependency on tourism, limited natural resources and climate disaster risks are common across the Pacific SIDS and are exacerbated by the impact of COVID-19.

Recently the concept of the “blue economy” is being explored as an economic force for development in SIDS. As defined by the Word Bank the blue economy is the “sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem.” Developing the blue economy is a promising avenue to “build back better” the economies of Pacific SIDS.

As highlighted in UNDP’s discussion paper on financing the SDG’s in the Pacific, “the challenge is to identify (catalytic) investment opportunities, new and innovative investments in the blue economy as well as opportunities for established industries to transition to more environmentally sustainable practices.” To address this challenge, the Government of Fiji has established the Drua Incubator during its COP23 presidency; a think tank and incubator housed under the Ministry of Economy, which is mandated to operate as a regional body to promote the development of innovative climate finance projects with an aim to replicate and scale to other Pacific island countries.

UNDP’s “Building Back Blue” aims to provide technical and financial assistance to support the development of a blue economy investment portfolio and promote regional South-South knowledge sharing and blue economy investment matchmaking.

The relatively rich biodiversity of Fiji’s Great Sea Reef (known locally as Cakaulevu) and other coral reefs, paired with Fiji’s relatively strong capacity to develop a pipeline of revenue generating projects make it the ideal candidate to serve as a regional financial hub for coral reef conservation and development initiatives. This JP can showcase the success of blended finance to leverage private and public investment and engagement in the blue economy. A regional hub in Fiji will share expertise and lessons learned from this JP with other South Pacific SIDS so they also harness the potential of their burgeoning blue economies.
C. JOINT PROGRAMME DESCRIPTION

1. Baseline and Situation Analysis

1.1 Problem statement

Fiji is a biodiversity hotspot for corals in the South West Pacific, with diverse reef formations estimated to cover approximately 6,704 km$^2$ (GCRMN 2018). Fiji’s coral reefs are generally in an above-average state compared to the global average, with the latest estimates from the GCRMN (2018) report on the status of Pacific coral reefs showing 50% live coral cover (above the global average).

Fijian society is especially intertwined and interlinked with these ecosystems. Coral reefs are the most exploited marine ecosystem in Fiji, providing food security for households from artisanal fisheries as well as income from tourism businesses. Fiji’s island communities often rely on small-scale commercial and subsistence fishing with about 75% of the dietary protein coming from the ocean (GCRMN 2018). The major source of the county’s foreign income is tourism, with most tourist activities concentrated on beaches and coral reefs. Fisheries is the third largest natural resource sector, contributing an estimated USD 65.7M to the GDP in 2015 (FAO). A study on the Vatu-i-Ra Seascape by Wildlife Conservation Society, estimates the value of recreational services provided by coral reefs throughout Fiji in 2013 to be between USD 79.7M and 377M (WCS). Additionally, Fiji’s coral reefs and mangroves provide critical shoreline protection services, protecting infrastructure and people’s livelihoods from storms, large waves and erosion.

However, Fijian coral reefs, their biodiversity and the ecosystem services they provide are at risk. The main drivers of coral degradation identified in Fiji are the compounded effects of local impacts from overfishing and coastal development along with climate change stressors (reefresilience.org). Two thirds of Fiji’s reefs are being threatened by local activities, with pollution, eutrophication and coastal development threatening coral reefs near urban centers (UNEP-WCMC, 2015). Other reported threats include destructive fishing methods, coral harvesting for the curio and live aquarium trade, and degradation due to climatic or natural events (often exacerbated by human activity) including cyclones, coral bleaching and predator outbreaks such as crown-of-thorns starfish. Further, uncontrolled waste management including dump expansion are leading to direct mangrove forest loss in Fiji, additional areas of mangrove forest around dumps have begun to degrade. The toxicity of run-off from Agricultural fertilizers is also having continued deleterious effects on the coral ecosystem in Fiji (WWF 2019, University of Newcastle Australia 2019).

Urgent financial resources are required to pursue active adaptation strategies to save the reefs from climate change and multiple local anthropogenic threats. Well managed and financed Marine Protected Areas (MPAs) and blue economy projects are the cornerstones of international efforts to “replenish biodiversity and nourish the growing human population” (IUCN, 2018). Benefits that flow from improved marine ecosystems include enhanced food supply and fishing incomes for coastal communities, opportunities for nature tourism businesses, shoreline protection and greater resilience to climate change (and contribute to SDGs no 14, 1, 5, 8 and 13). Despite the commercial viability of blue economy initiatives with positive impact on coral reefs, neither public nor private funding is invested in adequate sums.

Conservation projects, particularly around marine ecosystems, are not attracting impact capital at the same pace as the rest of the impact investment market (GIIN, 2018), largely
due to a shortage of investment-ready projects and organizations developing future opportunities, private sector perceived risk of investing in blue natural capital and the resulting high interest rates to get blue economy businesses operationalized. Development finance is a scarce and precious resource, so the mobilization of additional funds from commercial investors into marine conservation is indispensable for meeting the financing needs of the 2030 Agenda.

1.2 Related interventions

The following interventions have closely linked objectives. Close collaboration and alignment with the relevant stakeholders involved has been established during the development of this JP and will continue in the implementation phased through strategic partnerships:

Great Sea Reef Resilience Programme

In 2017, WWF-Pacific and the WWF Landscape Finance Lab launched, with various Fijian government ministries and other partners, the Great Sea Reef Resilience Programme, which aims to ensure that the Great Sea Reef and coastal ecosystems are healthy and resilient to a changing climate. To do so, the initiative is focusing on: 1) holistic land and marine use planning, ecosystems management and climate buffering; 2) developing and nurturing existing financial systems for sustainable natural regenerative production and practices with market outcomes; and 3) designing and strengthening systems for removal of primary wastes and pollution. This work led to the initial pipeline of projects developed by Matanataki, a local investment manager, proposed under the JP Outcome 2.

GEF 5 STAR Fiji Ridge to Reef

The Fiji GEF 5 STAR R2R project’s objective is to preserve biodiversity, ecosystem services, sequester carbon, improve climate resilience and sustain livelihoods through a ridge-to-reef management of priority water catchments on the two main islands of Fiji. It is expected to bolster Fiji’s national system of MPAs through an enhanced, representative and sustainable system of LMMAs. This initial work will be supplemented by co-management SPE model proposed under the JP Outcome 1.

My Fiji Shark Initiative

My Fiji Shark is a conservation initiative created by Beqa Adventure Divers with support from UNDP. Revenues generated from 'My Fiji Shark' will be used to fund research, purchase research materials, create new shark conservation and inshore fisheries management programs and build an independent Shark Lab to conduct in-country shark conservation research. This initial work will be supported by the JP’s Output 1.2.

Governance for Resilience (Gov4Res)

UNDP, through the Governance for Resilience (Gov4Res) Project, works with Pacific island governments to ‘risk-inform’ development financing and planning mechanisms so that countries can better ‘leverage’ development financing for climate-resilient development across national, sectoral and sub-national levels. This project is supporting the set up of a centralized Public Project Development Unit (PDU). The JP will complement this work through establishment of a Private Technical Assistance Facility to incubate and provide blended finance solutions to initiatives with a positive impact on coral reefs.

Building Back Blue

This proposal for UNDP’s RFF financing intends to identify financing options to inform a blue COVID-19 recovery and aims for improved innovation and investment in sustainable blue economic activities in the Pacific. To address this challenge this proposal intends to
provide technical and financial assistance to the Drua Incubator which was established by the Government of Fiji during its COP23 presidency. Housed under the Ministry of Economy, the incubator is mandated to operate as a regional body to promote the development of innovative climate finance projects with an aim to replicate and scale to other Pacific island countries. This JP will cooperate with this initiative from the MoE specifically to scope for pipeline, the JP with a focus on private sector and the MoE on public sector.

1.3 SDGs and targets

SDG 14 ‘Life Below Water’ outlines several targets that, if achieved, will benefit coral reefs and the hundreds of millions of people who rely on them. SDG 14 targets are there to reduce marine pollution; regulate harvesting of fish; end overfishing; increase economic benefits to SIDS and LDCs through the sustainable use of marine resources, aquaculture and tourism; conserve 10% of coastal and marine areas and strengthen the resilience of ocean ecosystems.

Beyond SDG 14, coral reef conservation efforts can offer opportunities to make headway on other SDGs by conserving and reinforcing ecosystem services. Participation in coral reef conservation and restoration can fortify the commitments made by Member States, financial institutions, and philanthropic partners to mobilize resources for the 2030 Agenda for Sustainable Development.

In addition to SDG 14, this JP’s focus on coral reef conservation and resilience through partnerships (SDG 17) and will include progress towards a minimum of seven (7) other SDGs. The JP is addressing cross-cutting issues by increasing fisheries production and provision of protein and incomes (SDG 1&2); it also aims to reduce poverty (SDG 1) by increasing fisheries production and provision of protein and incomes in traditional and non-traditional areas and will strive towards achieving gender equality (SDG 5 and 10) via the promotion of jobs and training with a specific focus on women and girls. Well managed MPAs and new reef-positive businesses will allow for local job creation for women and men (SDG 8 and 10). They will also improve the health of natural ecosystems and protect coastal communities from climate change derived high energy events (SDG 13) and by building partnerships with local and international NGOs, additional financial resources and technology will be mobilized (SDG 17).

A common framework for measuring baseline conditions and impacts will be developed in the early stage of this project. It is recommended that ecological, social and financial impacts will be measured following ACF International Guidelines and IFC performance standards, which are supported by robust science certified by UNEP. Ecological impact will fall under the headings of: Ecosystem Integrity e.g. coral abundance and diversity indicator and # hectares under improved management and species protection e.g. critical habitat protected (ha) and change in abundance of critically important species. Social impacts will include: Livelihoods and Wellbeing (e.g. Reduced poverty) Sustainable Enterprise (e.g. New businesses created) and Inclusivity (job creation for women). Financial impacts will be based on benefit flows to local stakeholders (e.g. revenues generated by sale of carbon credits or community-led MPA management activities for example).

Please see the figure below to see the how Coral Reefs are linked to other SDGs and targets.
2. Programme Strategy

2.1 Theory of Change

Problem statement
Coral reefs face extinction as climate change impacts accelerate and marine conservation initiatives are not attracting impact capital at the same pace as the rest of the impact investment market.

Causes and drivers
- Immediate causes – Unsustainable and damaging practices by communities and businesses (overfishing, coastal development, agricultural run-off, pollution, etc.)
- Underlying causes – Climate change leading to extensive coral bleaching
- Structural causes – Shortage of investment-ready projects, private sector perceived risk of investing in blue natural capital, high interest rates.

Pathway to Change
IF the JP deploys grants to catalyze Fijian private sector and conservation actor capacity, THEN local actors will have the resources and skills to develop reef-positive businesses, financial instruments and policies. IF bankable projects for investment are created and IF the JP de-risks early-stage investments with guarantees and concessional loans, THEN there will be private sector investment in businesses and financial instruments that address coral reef degradation drivers and provide economic opportunities for local communities. IF coral reef degradation drivers are addressed, THEN coral reef ecosystems and the people who rely on them will be healthier and more resilient to the impacts of climate change.

Detailed outcomes, outputs and activities are found in Annex 8.
Logic of the intervention

The JP will target the structural causes hindering public and private investment into reef-positive initiatives. The JP will use concessional capital, performance grants, fundraise, work with government to create a policy and financial environment that incentivizes private sector engagement in marine conservation and establish a robust M&E framework to monitor impact. The JP is structured with the following interventions:

1. Establishment of a blended finance facility that uses catalytic and development finance to mobilise commercial impact finance into Marine Protected Areas (MPAs). The facility will aggregate investments into Special Purpose Entities (SPEs) that will effectively protect, manage and monitor Locally Managed Marine Area (LMMA) networks of priority coral reef sites in Fiji (Outcome 1). Due to limited self-financing capacities, MPAs and LMMAs often lack the resources to adequately protect, manage and improve coral reef ecosystems. To address this issue, the SPEs will generate revenue to fund their management role by catalyzing new and existing reef-first businesses within and around the LMMAs. To attract early private sector investment into the pool of the SPEs, the JP will set-up a blended finance facility aggregating 2 initial SPEs and will provide grants, public investment, concessional loans and loan guarantees to de-risk the private impact investments. The JP partner Blue finance currently has 2 SPE projects close to investment readiness and 5 other SPE projects in its pipeline for the management of 30 LMMAs. An anchor impact
The investor has already been confirmed (the Sustainable Ocean Fund, Mirova-Althelia with US$1.4M soft committed). Mirova-Althelia and Blue finance have demonstrated the viability and benefit of this kind of blended finance facility in the Dominican Republic where development and philanthropic finance was used to mobilize commercial finance towards sustainable development (US$3M in total with projected positive impacts for 800,000 ha marine habitats and 18,000 households).

(2) **Leverage Private investment for two initial pipeline deals (Outcome 2).** Poor waste management and eutrophication by agriculture synthetic fertilizer are two primary drivers of degradation for Fijian coral reefs. To address these issues, the JP will support a) the operationalization of the waste management and agriculture sector by providing concessional capital and b) a sanitary landfill and fertile factory that locally produces non-synthetic fertilizer. The two-pipeline project design are mature but the perceived risk of investing in these initiatives has delayed their implementation. The JP will help leverage the early investment capital by providing concessional subordinate (1st loss) debt and grant funding for impact management and local organizational support.

(3) **Establishment of a gender-responsive Technical Assistance Facility to catalyze private sector investment into reef-positive businesses (Outcome 2).** The JP partners Matanataki and Blue finance currently have 20+ projects in their pipeline, but projects require assistance in developing a financial and policy enabling environment. The TAF will create a portfolio of investments ready businesses, reducing the transaction costs and risk profile to make the portfolio of reef-positive businesses more attractive to private investors and thus allowing the TAF to scale-up implementation.

(4) **Develop a financing strategy for Government of Fiji focused on protecting coastal ecosystems and investment in the blue economy.**

(5) **Develop an M&E framework for the socio-economic, management and ecological impacts measurement of project activities on a yearly basis led by a group of environmental experts coordinated by UNEP.** The indicators for monitoring and evaluation will be developed by UNEP and serve as the framework to judge the impact of businesses and activities.

### 2.2. Proposed intervention (max 4 pages, including graphic)

The JP targets to invest the Joint SDG Fund financing in three high-impact priority deals, develop in addition a pipeline through a private technical assistance Facility and deploy number of targeted Technical assistance supports over a 4-year period by UNDP and UNEP.

The investment solutions such as performance grants, concessionary loans and de-risking will finance the selected transactions and will be implemented by UNCDF as the UN agency which can structure and offer loans and guarantees to the private sector to meet development objectives.

**Transaction #1: Blended finance facility for effective management of LMMA networks**

(For detailed information on this transaction, refer to Annex 9)

This transaction will co-finance the development of a blended finance facility for effective management of LMMA networks.
The JP will invest in an aggregation of Special Purpose Entities (SPEs) formed by local communities, local NGO partners and Blue finance. SPEs will develop eco-tourism facilities and blue carbon solutions for the sustainable financing and effective management of LMMAs. Members of the SPEs have a recognized long term management lease for MPAs. The SPEs are expected to contribute to the following MPA activities: Monitoring marine habitats, Improvement of ecosystems, Community engagement, Community livelihood enhancement, Zonation and compliance, Support to tourism activities, Maintenance and Management. The viability and benefit of this kind of blended finance facility has been demonstrated in the Dominican Republic where development and philanthropic finance was used to mobilize commercial finance towards sustainable development (US$3M in total with projected positive impacts for 800,000 ha marine habitats and 18,000 households).

The JP will upscale the approach through structuring a blended finance facility for 30 LMMAs projects by 2030 (US$10M target), accelerating the short-term investment readiness of a pipeline of 10 LMMAs projects (US$3.1M target, 2 SPEs, Phase 1) and bringing the wider pipeline to market.

The facility will yield both development and commercial returns. By 2030, expected positive outcomes of the facility and the MPA projects include (i) protecting 30.000 Ha of coral reef ecosystems from local threats, (ii) improving economic opportunities and food security for > 40.000 people from vulnerable coastal communities through sustainable fisheries (food and income), new income generating activities and nature tourism, (iii) increasing resilience to climate change, through shoreline protection for coastal communities and enhancement of carbon sinks, (iv) mobilizing >US$6M towards natural resource management.

Investment projects are being structured and implemented by Blue finance, a non-profit JP partner specialized in developing impact investment solutions for MPAs globally.

Phase 1: In South-West of Viti Levu (Fiji main island), the projects are in a semi-mature stage with: design work already completed for investment in 10 LMMAs through 2 SPEs; relevant structuring arrangement underway and local stakeholders actively involved in execution. The 10 LMMAs project is expected to be investment ready by late 2021 (US$3.1M target). Projects have been developed in strong collaboration with local partners and communities with a proven track-record in marine conservation and community enterprise. The JP will start with a US$1.4M transaction aggregating the 2 SPEs with a target to leverage US$1.7M from impact investors and the private sector in 2021.

An anchor impact investor has already been confirmed (the Sustainable Ocean Fund managed by Mirova-Althelia with US$1.4M soft committed) as well as private sponsors (US$0.3M).

Critical revenues for LMMAs will be generated through tangible business models based on wildlife eco-tourism enterprises, high-tech visitor centre, nature fees and mangrove conservation. Revenue generation generated by the 10 LMMAs is expected to be more than US$2M p.a. for both MMA management and investor returns.

Phase 2: The approach is scalable with an aim of 20 additional MMAs by 2025 (Phase 2) for a US$7M facility. Pipeline development will be achieved through scoping, technical assistance and training to upskill the social entrepreneurship skills of local stakeholders to implement business models (e.g. marketing, strategic planning, management and conservation). Currently Blue finance has pre-identified over 30 MMA projects (mainly in North-West of Viti-Levu and in Vanu Levu). The projects are being selected in collaboration with Government and local stakeholders based on ecological, social and business criteria. Investment design activities will be completed during 2021 with investment readiness expected by 2022. Whilst the initial sectoral focus will be revenue streams associated with tourism and ecosystem
service payments (particularly blue carbon), other sectors capable of driving sustainable income into MPAs can readily be bundled within the structure of site-level initiatives. A financial support facility will be created by UNCDF to provide concessional capital and other blended finance from the GFCSR investment window managed by Mirova and GCF through a project sponsored by BNP Paribas.

(detailed in Annex 9).

**BLENDED BLUE FINANCE FACILITY FOR FIJI LMMA: US$10M**

The transaction will blend catalytic capital, development finance, commercial debt instruments and loan guarantees. It will allow for the mobilization of commercial finance towards sectors that would traditionally not be considered commercially attractive. It will provide an opportunity for a commercial partner (SOF Althelia) to acquaint themselves with quality standards in unfamiliar markets.

**Transaction #2: Western Sanitary Landfill**

This transaction involves the establishment of a sanitary landfill with simultaneous establishment of Regional Transfer stations and second phase Materials Recycling Facility. Sanitary landfill network of refuse transfer stations and GPS-tracked trucks in the first stage, with progressive build-in of a materials recovery facility and ancillary recycling and upcycling businesses. The venture will lay the foundation for large scale recycling which currently does not take place in the Pacific region. (More details about this investment can be found in Annex 10)

Western Division (second largest of four provinces) is served by a 16ha open dumpsite with no sanitary engineered landfill or leachate control and is situated on mangrove. Western division is adjacent to the Great Sea Reef, hosting 700k tourists annually. The Western Landfill initiative is of political importance with improved environmental outcomes and consistent with the Fijian Environmental Act. The Landfill will serve as a platform for regional hub and/or other waste businesses (material recovery & recycling, upcycling). It will be constructed and operated by the only company with in-country experience: HG Leach with 15 years DBO&M experience at the Naboro Landfill, Suva, Fiji.
The business will generate revenues from gate fees, premium gate fees and service fees to producers of waste (households and businesses) for whom the collection services are provided.

The financing package has been structured based on the financial model developed by the sponsors to the transaction. The transaction requires both a subordinated debt tranche (approx $2.5m), and a liquidity support facility ($1m) in the case of periodic, delayed or lower than projected financial flows from the Local Authorities will make up the predominant gate fee revenue. This allows the traditional commercial infrastructure financiers (IFC, ADB, AIFFTP) to provide sufficiently well-covenanted senior debt ($4m) and provides SOF / Althelia with an acceptable market return for its equity position (c. $5.5m). Due to the complexity and time to financial close a portion of funds is set aside for project development to make sure the development is continued and well managed, thereby reducing the risk of not reaching financial close.

Transaction #3: Fertile Factory
This transaction will establish locally produced non-synthetic fertiliser that can service significant local demand and create ecosystem benefits across the sugar industry. Currently the industry utilises nonorganic fertiliser which is subsidised by the government. The toxic run-off from this fertiliser has been shown to have ongoing and long duration deleterious effects on the coral reef area where this run-off is concerned (in particular the Driketi river entry point).

This business has established a proprietary formula for the production of a cost competitive locally produced non-chemical fertilizer, which when paired with farmer training, can significantly increase yields, soil quality and contribute to reef health:
1. Land based pollution (siltation and nutrient fertilizer runoff) pose a significant risk to reefs around Viti Levu and Vanua Levu)
2. Deforestation and agricultural conversion close to watersheds are major drivers of siltation
The Fertile Factory transaction will be funded by using UNCDF concessional subordinated debt to crowd in the commercial debt which is to be provided by the SOF / Althelia. The subordinated interest rate will allow the project to have sufficient cash flows to service the senior debt and also provide just sufficient equity return to make the project viable for the equity sponsors.

**Transaction #4: Technical Assistance Facility**

This intervention focused on the establishment of a Technical Assistance Facility. The facility will be managed by Matanataki a local private investment manager for all blue economy projects and by Blue finance, a global investment developer for all new LMMA projects. Supported by UNCDF, the objective of this intervention is to develop a pipeline of investment ready reef-positive sustainable businesses with an emphasis on employing local community members, especially women and youth. Pipeline development will be achieved through scoping, technical assistance and training to upskill local businesses operating in the blue economy on social entrepreneurship, sustainable business and financial management. Currently Matanataki has pre-identified over 30 projects with an investment need of over USD75M. The fertile factory and sanitary landfill stem from this pipeline. (For more details on Matanataki and their pipeline, refer to Annex 11)

The TAF will focus on improving the readiness and the financial structuring of those businesses in order to make them attractive to impact investors. A financial support facility will be created by UNCDF to provide concessional capital and other blended finance from the GFCR investment window managed by Mirova (Potentially $26-30M) and GCF through a project sponsored by BNP Paribas ($10M) in support for the pipeline developed by the TAF and Blue finance.

Specific activities include to take lead on structuring the finance transactions for this facility: deal screening, term sheet negotiation, due diligence, financial modeling and analysis, investment structuring and risk mitigation, manage the approval process, including presentation of deals to credit committee, proper management and execution of all investment legal documents, management and follow up on repayments and collections,
monitor on-going financial and operational performance of investments, analyze and monitor risks and trends in the portfolio, manage restructurings and workouts.

**Additional Transformative Intervention:**

**Develop financing strategy for Government of Fiji focused on protecting coastal ecosystems and investment in the blue economy.**

The recently published Fiji Climate Finance Snapshot 2016 to 2019 highlighted that there are "few public policies aimed at protecting coastal ecosystems and few cost estimates for adaptation in the blue economy, making it difficult to accurately assess the additional levels of funding needed to enhance resilience in this sector". This intervention will use the analytical framework of UNDP’s Development Finance Assessment 3.0 (DFA) applying a modular framework to assess financing options and to inform the design of a financing strategy to mobilize resources, manage risks, such as debt sustainability, and achieve development targets linked to a sustainable blue economy in line with coral reef conservation objectives. These efforts will support the government in launching its Blue Town initiative with revenue streams for conservation impact.

**Establish recognition, rewards and monitoring systems to incentivize the private sector to act sustainably.**

The JP will support the development and promotion of a government incentive scheme to attract additional investment in the blue economy. Regulations, subsidies, and other incentives can attract private sector investment. These can include reductions in duty and VAT, or offering accelerated depreciation, tax credits, biodiversity offsets and other incentives could be used to encourage investments in protection of coastal eco-systems and the associated blue economy. This activity will support the Government of Fiji with the development and promotion of such an incentive scheme.

### 2.3 Leverage potential

The JP will allow for the mobilization of commercial finance towards sectors that would traditionally not be considered commercially attractive. It will provide an opportunity for commercial partners to acquaint themselves with quality standards in unfamiliar markets. Summary of the leveraging expected by the Joint SDG Fund Contribution – Overall:

<table>
<thead>
<tr>
<th>Co-financing by the Global Fund for Coral Reefs Grant window (initial public and private donors are Germany, the Prince Albert II of Monaco Foundation and the Paul G Allen Family Foundation) See support letter in Annex</th>
<th>USD 5,340,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Impact Investment by the Althelia- Mirova Sustainable Ocean Fund, at individual deal level (LMMA, Waste &amp; Fertile Factory transactions) See the support letter in Annex</td>
<td>USD 4,700,000</td>
</tr>
<tr>
<td>Potential GCF Concessional loans mobilized by BNP Paribas (2022-2030) – concept note under development with the support of UNDP and SystemIQ</td>
<td>USD 13,300,000</td>
</tr>
<tr>
<td>Add. Potential Impact Investment by the GFCR Investment window (2022-2030). This dedicated investment vehicle is being established by Mirova with the support of BNP Paribas. As part of the Global Fund for Coral Reef launched in September 2020. See the support letter in Annex</td>
<td>USD 26,600,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>USD 60,000,000</td>
</tr>
<tr>
<td>Overall co-financing ratio (1: Total/SDG Fund Contribution)</td>
<td>1:10</td>
</tr>
<tr>
<td>Joint SDG Fund 5.34M/ Private Ratio 40M (13,3M+26,6M)</td>
<td>1:8</td>
</tr>
</tbody>
</table>
Per deal:

Transaction 1 LMMA leveraging Ratio: 1/2.5
- Joint SDG Fund dedicated budget: $0.7M
- Co-financing GFCR: $0.7M
- Private impact investment: Senior debt $1.4M, Capital $300k

Transaction 2 Waste Facility Leveraging Ratio: 1/3
- Joint SDG Fund dedicated budget: $3.7M
- Private impact investment: Equity $5.5M, Senior Debt $4M, Mezzanine Debt $1M
- Public Investment: $1M

Transaction 3 Fertilizer Factory Leveraging Ratio: 1/1.25
- Joint SDG Fund dedicated budget: $0.8M
- Private impact investment: $0.8M Debt, Cash Equity $300K

Intervention 4 TAF Leveraging Ration: 1/20
- Joint SDG Fund dedicated budget: $1.4M
- Private impact investment: $26.6M
- Add Public Investment: $10M

The direct leverage multiple obtained with the UN SDG Fund budget (USD 5.3m) is USD 54.7M, which includes a USD 4.7m contribution from the GFCR and an additional USD 13.3m contribution from the Sustainable Ocean Fund on the first 3 projects in the deal pipeline: LMMA/SPE, the Waste Management Facility and the Fertilizer Factory. Based on the Technical Assistance Facility pipeline a potential additional financing of USD 10M Concessional loans from the GCF through BNP Paribas and USD 26.6M Private impact investment by the Mirova GFCR Investment Window. The brings the overall leverage to 1:10.

2.4 Value add
UNDP, UNEP and UNCDF are a powerful combination of UN agencies that can create an enabling environment for policy, financial frameworks and environmental safeguards and monitoring. UNCDF has a set of unique instruments that allow a blended finance solution that can unlock private sector investments. UNEP's wide network of coral reef experts provides the JP with credible oversight of monitoring practices and impact measurements. UNDP enables integrated solutions for SDG achievement, has a long history in Fiji and has successfully worked closely with the UNCDF since 2003 in Fiji through various joint projects. The coordinating role of UNCDF and UNDP in this JP has already helped to mobilize private sector developers (e.g. Matanataki, Blue finance), financiers (e.g. Althelia/Mirova), civil society actors (e.g. WWF and GGGI) and other UN agency initiatives such as the GFCR.

Partnering with Matanataki provides the JP with a strong starting point through the already identified pipeline. Additionally, the partnership with Blue Finance brings the rare expertise in co-management agreements for developing revenue generating and bankable MPAs. The convening and financial capacity of UNDP and UNCDF respectively are crucial to reduce the implementation period. Paired with UNEP’s expertise in monitoring and measuring impact, the JP will have the capacity to ensure progress is made towards the objectives of the ToC.

2.5 Innovative nature
The JP’s innovative nature stems from its unique public-private partnerships that brings together a local investment manager and conservation actors, financial institutions (Althelia and BNP Paribas through GFCR), the local government and other UN funds (GFCR). With these
joined resources, technical capacity and expertise, the JP can deploy innovative blended finance instruments to catalyze the private sector role in the relatively untapped blue economy sector.

UNCDF has a unique mandate within the UNDS that permits the agency to provide loans and guarantees to the private sector. These are innovative instruments, because they are not typically provided by public or private sector players in a financing structure. The JP’s approach is to target the highest leverage effect by taking the financial risk that the private sector cannot take, which in turn will lead to the impact outcomes as defined in the Theory of Change. This allows the JP to participate in providing recyclable, but higher risk capital to crowd in private sector investors to investments that would otherwise be too risky. The specific innovations for this proposal are as follows:

**Sanitary landfill and waste management:** the risks the JP covers are 1. the ability to ensure timely payment by local municipalities to meet debt service timelines, 2. The ability of the waste stream volumes to meet debt service levels. The first risk is covered by a liquidity support facility which covers late or underpayment by the municipality, thereby keeping the private debt providers whole and avoiding any short-term default. The second risk is overcome providing subordinated debt.

**LMMA:** The LMMA structure is a unique blended finance structure that allows the financiers of the MPA activities to take levels of risk based on their risk profile. Here the JP provides first loss capital to the structure to crowd in commercial funding. The first loss is subordinated to the extent that it can be considered equity from a capitalization ratio calculation point of view (in the eyes of the commercial funders). It has a grace period which corresponds to the ramp up period of the business activities, and it also has a longer tenor than the commercial debt, allowing the ‘tail risk’ to be taken by UNCDF rather than the commercial lender.

**Fertilizer Factory:** the JP will provide debt in a subordinated structure to allow the private sector financing to be able to be provided with an appropriate risk / return profile.

2.6 Results
The success of the JP’s outcomes relies on the ability to leverage public and private investment to blue economy projects (Joint SDG Fund Outcome 2), an undervalue sector with the potential to make great strides towards SDG in Pacific SIDS. The targeted leveraging ratio is 1/10 as described in previous sections. The additional specific results at outcome and output level are the following:

**Key outcomes and outputs:**
**Outcome 1: Protection and effective management of Fijian priority coral reef sites and climate change-affected refugia are sustainably financed.**

**Outputs:**
1.1 Increased area of climate refugia and priority sites designated as MPAs or LMMAs
1.2 Established SPEs financed by revenue generation activities within and around LMMAs and a blended finance facility with high leverage potential for the private sector
1.3 Strengthened management, enforcement and monitoring systems of LMMAs by SPEs
1.4 Established coral reef and ridge to reef conservation legal and regulatory frameworks to promote protection and mitigation of local threats
Transaction relevant to Outcome 1 - Transaction #1: SPEs for effective management of LMMA networks

**Short-term outcomes (1-4 years)**
- 30 MMAs effectively managed and progressing towards their financial sustainability for 30,000 ha of coral reef
- Blended finance facility set-up with a US$10M target to aggregate investments in LMMA
  - Initial returns on investment in at least 10 MMAs
- Creation of +100 community jobs benefiting large number of women (e.g. resource monitoring, eco-tours, animal care taker) within LMMA Network.
- Providing food security and incomes for >6,000 fisher households

**Long-term outcomes (10 years)**
- Increased Financial/Blue Economy Impact: sustainable fisheries, MPA management is self-financed and gender responsive
- Improved economic opportunities and food security for vulnerable coastal communities (approx. 30,000 people from fisher households benefitted from increased catch productivity, circa 300 new tourism jobs
  - Enhance climate change resilience benefitting approx. 10,000 households protected from coastal erosion
- Increased conservation Impact: Biomass of fish inside MMAs >4000g per standard fish survey and proportion of hard coral inside MMAs >25%

Outcome 2: Transforming the livelihoods of coral reef-dependent communities

**Outputs:**
1. Established Technical Assistance and Financial Support Facility, managed by Matanataki a local investment manager, for blue economy projects and Blue finance, a global investment developer for LMMA projects.
2. Mobilized public and private investment in priority sustainable initiatives related to addressing coral reef degradation drivers (western sanitary landfill, fertile factory)
3. Strengthened and harmonized policies, strategies, plans and financing from the government of Fiji for improved environmental biodiversity protection thresholds.
4. Established recognition, rewards and monitoring systems to incentivize the private sector to act sustainably.

Transaction relevant to Outcome 2 - Transaction #2: Western Sanitary Landfill

**Short-term outcomes (1-4 years)**
- A number of temporary local jobs to be created (to be determined on final assessment of EPC arrangements)
- The establishment of an ESG methodology linking avoided waste to landfill to coral reef protection

**Long-term outcomes (10 years)**
- 100,000 MT MSW p.a. redirected, GHG Reduction 30,000 Mt p.a.
- Avoided c.0.5ha p.a. mangrove forest loss
- Fish Stock: On a 1000ha area (Vunato) the increase expected at 560MT
- Avoided tourism loss of valued at c. USD1bn p.a.

Transaction #3: Fertile Factory

**Short-term outcomes (1-4 years)**
- A number of temporary local jobs to be created (to be determined upon final business planning)
The establishment of an ESG methodology linking avoided runoff from agricultural chemical fertiliser in the Sugar Industry to coral reef protection

**Long-term outcomes (10 years)**
- 4,100 MT p.a. of non-synthetic fertilizer produced resulting in
- 3,020 ha of coastal / waterways sugar cane farmland serviced
- 6,600 MT p.a. net CO2 emissions mitigation from composting
- Increased Dreketi River water quality (Nitrate, Phosphorus, Solids)
- Improved health of at least 8,000ha marine area

**Transaction #4: Technical Assistance Facility**

**Short-term outcomes (1-4 years)**
- TAF is established and operational managed by Matanataki
- 4 pipeline projects are further developed and investment ready

**Long-term outcomes (10 years)**
- 15+ pipeline projects are developed and investment ready

**Additional transformative results:**
- Established M&E framework approved by UNEP for environment and socio-economic monitoring (1-4 years)
- Established financing strategy for Government of Fiji focused on protecting coastal ecosystems and investment in the blue economy (1-4 years)
- Established government incentive scheme to attract additional investment in the blue economy (1-4 years)
- 5 coral reef and ridge to reef conservation related resolutions, declarations and laws passed (10 years)

**Accountability for specific results:** UNDP will play a convening role and will coordinate the implementation of the project where it will systematically engage with the Government through its existing relationships to generate a private sector incentive scheme, new coral reef and ridge to reef resolutions and a financing strategy for protecting coastal ecosystems. Further UNDP will ensure supported transactions provide economic opportunities for women.

UNCDF will provide technical assistance for financial structuring gender responsive investments and deploy financial instruments such as guarantees and concessional loans to de-risk portfolios and attract private investment into the priority pipeline, TAF and SPEs.

UNEP will use its network of partners to provide technical assistance and capacity building from implementation of the M&E framework for environmental and socio-economic indicators.

Matanataki’s role will be to manage the TAF and build a pipeline of gender sensitive investment proposals through identification and capacity building of investment-ready blue economy and sustainable businesses in Fiji.

Blue Finance’s role will be to improve technical quality, and strengthen environmental and social impacts, enabling the investment project to meet the Fund and impact investor investment criteria as it related to the SPE model of the LMMA networks.

### 2.7 Gender and human rights plan

Gender equality is a fundamental human right and a necessary foundation for a peaceful, prosperous and sustainable world. However, gender inequality remains one of the most pervasive forms of discrimination in all development settings. While gender inequalities can
affect anyone, impeding global progress towards achieving sustainable development, it is women who face the most discrimination.

Gender equality and the empowerment of women and girls are central to the 2030 Agenda for Sustainable Development and all 17 of the Sustainable Development Goals (SDGs). Gender equality is its own development goal (SDG 5) and is reflected in 45 targets and 54 gender-specific indicators of the SDGs. Achieving these targets and closing the gender gaps will therefore create a multiplier effect across all SDGs and accelerate their achievement.

This JP will deploy the expertise and reach of UNDP, UNEP and UNCDF to remove structural barriers to women’s economic empowerment; promote women’s participation and leadership in all forms of decision-making; and strengthen gender-responsive strategies in tackling the combined nature and climate crisis that threatens to foreclose future sustainable development in Fiji.

Fiji is a Party to the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW). The Constitution makes provision for gender equality and is one of a small handful of constitutions globally that provides explicit protection from discrimination on the basis of sexual orientation and disability. Fiji’s constitution is also the only one in the Pacific region that expressly prohibits indirect discrimination, including on the basis of gender. In respect of Fiji’s national and international commitments, in order to support gender equality and the empowerment of women, this JP will include activities that will address any gender gaps regarding access to and control over natural resources, as well as strengthen the participation of women in decision-making processes and enhance their income-generating potential.

Specifically, through the creation of the TA facility the JP will specifically address the following recommendations from the observations from the fifth periodic report for Fiji by the Committee on the Elimination of Discrimination against Women - CEDAW/C/FJI/CO/5 (CEDAW 2018).

It will also address more generally from the observations from the Human Rights Council in the Report of the Working Group on the Universal Periodic Review – Fiji - A/HRC/43/8 (UPR 2019). Moreover, the TA and blended finance facilities under this JP screen the pipeline at an early stage to ensure that any potential investment projects do not violate UNCDF’s Environmental, Social and Governance (ESG) principles as stipulated in its Loan and Guarantee Policy.

The JP’s gender strategy will ensure an inclusive approach throughout the project and the results framework will include indicators and set targets that reflect balanced social and economic benefits. The M&E plan to be developed will also ensure adherence to gender-sensitive indicators.

<table>
<thead>
<tr>
<th>List of marginalized and vulnerable groups</th>
<th>Dedicated Outcome</th>
<th>Dedicated Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women and girls</td>
<td>Cross-cutting Outcome 1 and 2</td>
<td>1.3, 2.1 And 2.4</td>
</tr>
</tbody>
</table>

2.8 Progress

To date progress is presented per the four principle transactions:

**Transaction #1: SPEs for effective management of LMMA networks**
• Completed feasibility assessment for Viti Levu of viability of ecotourism, sustainable fisheries and blue carbon (see Annex 9);
• Stakeholder engagement (Government, NGOs, local communities)

Transaction #2: Western Sanitary Landfill
• High level EPC costing and quote process completed by Leach
• Logistics feasibility completed
• Initial Financial model completed by Ikigai
• Government engagement commenced
• Project planning and development timeline established
• Reef study completed
• High-level GHG study completed
• See Annex 12.1 for environmental and impact data

Transaction #3: Fertile Factory
• Local raw material assessment study completed
• Initial Financial model completed Sponsors
• Project planning and development timeline established
• Proprietary organic fertiliser rights and testing completed
• Founder Equity commitment established
• River run off study completed
• High level GHG study completed
• See Annex 12.2 for environmental and impact data

Transaction #4: Technical Assistance Facility
• Pipeline identification and execution (implementing partner Matanataki has identified 8 projects ready for investment, and 19 in incubation); (see Annex 11)

2.9 Sustainability

The initial transactions have been financed in a way to ensure financial sustainability with the minimum public funds applied to each project to achieve this. The JP itself will also use funds of the Joint SDG Fund to supply the necessary immediate seed funding to build a pipeline with short to medium term for the remainder of the development pipeline. This will unlock additional funds from the Sustainable Ocean Fund and with a long-term view for a bigger role and portfolio funded by the GFCR and other private sector players.

The JP fits into the larger vision for funding of coral reef preservation and restoration across the Pacific. This is an initial pipeline that serves as a proof of concept for future other programmes. The Joint SDG JP is a catalytic project. The long-term objective is to use this JP as a predecessor to larger GCF funded programmes (Concessional Loans under submission by BNP Paribas, and a WWF submission under the Reef Rescue initiative), which will achieve the same objective by scaling up the private sector partnership facility, assuring long term sustainability of the programme.

In addition, the nature of the financial instrument support through the UNCDF’s loans and guarantees, provides revolving funds that can be re-used within the same vehicle for similar reef and blue economy thematic investments.
2.10 Replicability

Both the JP and the underlying investments are targeted for their ability to be demonstration interventions for the region and for conservation business models elsewhere in the world.

**LMMA:** Initial sites for replicates in Fiji have already been pre-identified on the south and west coast of Viti Levu (from Lautoka to Suva) and part of the Mamanucas, the north coast of Viti Levu (from Ba to Korovou) with Ovalau, and the south of Vanua Levu with Taveuni, and more remote islands. The overall design and structure of the LMMA project and its investment pipeline is readily transferable to other LMMAs in Fiji and to other LMMAs in the Region (mainly Vanuatu, Salomon is., PNG) and globally (Indonesia, Philippines, Indian Ocean, Caribbean). Blue Finance already works in the Caribbean and SE Asia with a significant pipeline of potential investment projects in LMMAs; similarly, several partners with extensive marine programmes and capacity to support site level development in Fiji have confirmed their support. The same applies with respect to the facility and investor partners; for example, the Sustainable Ocean Fund of Mirova-Althelia is seeking to replicate the investment in other locations.

**Sanitary Landfill and Waste Management:** The sanitary landfill project applies a private public partnership model which can be a demonstration partnership model and can potentially be used as a case study for government, civil society, local authorities and the UNDS elsewhere in the world.

**Fertile Factory:** The Green Waste is based on a technology that is successfully demonstrated in Fiji can be rolled out to numerous other island nations that have sugar cane as a major part of their economy. It is a proprietary technology which can be applied using the approach to the market being developed in Fiji.

The development pipeline includes a number of technologies which are being trialed in Fiji (coral growth, sea wall and plastic recycling), which have significant scaling potential as well see the details in the annex 11.

3. Programme implementation

3.1 Governance and implementation arrangements

The programme will be a joint programme, designed around the guidelines provided in the UN guidance note on joint programmes.

A Steering Committee will oversee the overall implementation of the programme, which will be chaired by the UNRCO and shall meet no less than twice per calendar year and more frequently if necessary.

The three primary governance and management roles of each of the other members of the Steering Committee are reflected below:

- UNCDF, UNDP and UNEP: take on an executive role to ultimately ensure accountability for the implementation of the programme;
- Fiji Ministry of Economy: the senior user role, to ensure that the outputs produced meet the needs of the end-users; and
Joint SDG Fund Secretariat and the Global Fund for Coral Reefs Global Team: the senior supplier role, to commit resources and to monitor that the outputs produced are achieving the intended objectives within design, cost and time parameters.

The Steering Committee is responsible for providing guidance and strategic direction to the Programme, and for approving the annual work plan (including budgets revision up to 25%). It is also tasked with recommending for approval to the UNCDF Investment Committee all investments through grants, loans and guarantees, and ensuring efficient use of all resources.

At the level of the JP interventions, there will be a programme management team responsible for the day-to-day management and implementation of each of the interventions and to drive the overall performance of the Joint Programme. The team will be constituted by key resource people from all project implementing partners. The team reports to the JP steering committee through UNDP action as convening agent.

While the objective is to keep the governance arrangement of the Joint Programme as lean as possible, the Steering Committee could be assisted by a technical advisory group, made up of independent, technical experts drawn from various organisations in topical areas directly relevant to the investments. The terms of reference for a technical advisory group could be developed and approved by the Steering Committee at the start of implementation of the programme. In addition, Althelia/Mirova as the SOF and the GFCR Investment window asset manager will be invited to participate in the Steering Committee meeting as partners with no voting right in order to establish a strong coordination between the public and private investments.

The JP team will be under the lead of a UNDP coordinator and supported by technical experts from UNCDF and UNEP and operating from the regional UN Multi-Country Office in Suva, Fiji. Financial and administrative management support will be provided by UNDP.

### 3.2 Partnerships and stakeholder engagement

<table>
<thead>
<tr>
<th>Stakeholder name</th>
<th>Role of stakeholder in structure</th>
<th>Level of engagement /support to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Economy</td>
<td>The Climate Change and International Cooperation Division of the Ministry of Economy is the lead Government partner in this proposal and will act as the primary conduit for government engagement for all initiatives and investments.</td>
<td>The MoE has supported the proposal development team in organizing various stakeholder consultations and alignment meetings with other ministries.</td>
</tr>
<tr>
<td>Matanataka</td>
<td>Matanataka’s role, as a partner of WWF and the Great Sea Reef Resilience Programme, will be to support building a pipeline of gender sensitive investment proposals through identification and capacity building of investment-ready blue economy and sustainable businesses in Fiji.</td>
<td>Support in developing the Landfill and Waste Mgt project as well as the Fertile Factory project.</td>
</tr>
<tr>
<td>Blue Finance</td>
<td>Blue Finance builds and structures the pipeline of bankable MPAs in Fiji. Bf will design business models and build local capacities for Special Purpose Entities for MPA management and revenue generating activities. Business models are based on</td>
<td>Overall support to the development of the proposal and more specifically the design and financial structuring of the LMMA project</td>
</tr>
<tr>
<td>Locally Managed Marine Areas (LMMA) Network</td>
<td>The Locally Managed Marine Areas (LMMA) Network supports sustainable management of the marine areas in the Pacific. In Fiji it has been working closely with 466 communities across islands encompassing Marine Protected Areas under traditional leadership. Support in identification of the two initiatives included in this proposal.</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>GFCR Global Team</td>
<td>Reporting focus as well as longer-term grant and investment capital support for existing new initiatives that contribute to coral reef conservation, restoration and resiliency. Support in identification of partners, overall strategic vision during proposal development and organizing investor pitch.</td>
<td></td>
</tr>
<tr>
<td>Sustainable Ocean Fund (Althelia Mirova)</td>
<td>Sustainable Ocean Fund has provided soft commitments to pursue investment opportunities in the current pipeline and is working closely with Blue Finance and Matanataki on other potential opportunities. SOF has been in regular contact with the project sponsors or the 3 identified projects, a number of the development projects, Blue finance, Matanataki, the GFCR and UNCDF and is an active partner in developing the Fijian Coral Reef investment ecosystem.</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3 Monitoring, reporting, and evaluation

Reporting on the Joint SDG Fund will be results-oriented, and evidence based. Each PUNO will provide the Convening Agent with the following narrative reports prepared in accordance with instructions and templates developed by the Joint SDG Fund Secretariat:

1. **Annual narrative progress reports**, to be provided no later than one (1) month (31 January) after the end of the calendar year, and must include the result matrix, updated risk log, and anticipated expenditures and results for the next 12-month funding period;

2. **Mid-term progress review report** to be submitted halfway through the implementation of Joint Programme²; and

3. **Final consolidated narrative report**, after the completion of the joint programme, to be provided no later than two (2) months after the operational closure of the activities of the joint programme.

The Convening/Lead Agent will compile the narrative reports of PUNOs and submit a consolidated report to the Joint SDG Fund Secretariat, through the Resident Coordinator.

The Resident Coordinator will be required to monitor the implementation of the joint programme, with the involvement of Joint SDG Fund Secretariat to which it must submit data and information when requested. As a minimum, joint programmes will prepare, and submit to the Joint SDG Fund Secretariat, 6-month monitoring updates. Additional insights (such as policy papers, value for money analysis, case studies, infographics, blogs) might need to be provided, per request of the Joint SDG Fund Secretariat. Joint programme will allocate resources for monitoring and evaluation in the budget.

Data for all indicators of the results framework which will be shared with the Fund Secretariat on a regular basis, in order to allow the Fund Secretariat to aggregate results at the global level and integrate findings into reporting on progress of the Joint SDG Fund.

² This will be the basis for release of funding for the second year of implementation.
PUNOs will be required to include information on complementary funding received from other sources (both UN cost sharing, and external sources of funding) for the activities supported by the Fund, including in kind contributions and/or South-South Cooperation initiatives, in the reporting done throughout the year.

PUNOs at Headquarters level shall provide the Administrative Agent with the following statements and reports prepared in accordance with its accounting and reporting procedures, consolidate the financial reports, as follows:

- Annual financial reports as of 31st December each year with respect to the funds disbursed to it from the Joint SDG Fund Account, to be provided no later than four months after the end of the applicable reporting period; and
- A final financial report, after the completion of the activities financed by the Joint SDG Fund and including the final year of the activities, to be provided no later than 30 April of the year following the operational closing of the project activities.

In addition, regular updates on financial delivery might need to be provided, per request of the Fund Secretariat.

After completion of a joint programme, a final, independent and gender-responsive\(^3\) evaluation will be organized by the Resident Coordinator. The cost needs to be budgeted, and in case there are no remaining funds at the end of the joint programme, it will be the responsibility of PUNOs to pay for the final, independent evaluation from their own resources.

The joint programme will be subjected to a joint final independent evaluation. It will be managed jointly by PUNOs as per established process for independent evaluations, including the use of a joint evaluation steering group and dedicated evaluation managers not involved in the implementation of the joint programme. The evaluations will follow the United Nations Evaluation Group’s (UNEG) Norms and Standards for Evaluation in the UN System, using the guidance on Joint Evaluation and relevant UNDG guidance on evaluations. The management and implementation of the joint evaluation will have due regard to the evaluation policies of PUNOs to ensure the requirements of those policies are met and the evaluation is conducted with use of appropriate guidance from PUNOs on joint evaluation. The evaluation process will be participative and will involve all relevant programme’s stakeholders and partners. Evaluation results will be disseminated amongst government, development partners, civil society, and other stakeholders. A joint management response will be produced upon completion of the evaluation process and made publicly available on the evaluation platforms or similar of PUNOs.

The socio-economic, management and ecological impacts of project activities will be monitored on a yearly basis by a group of environmental experts coordinated by UNEP. Indicators for monitoring and evaluation will be developed by UNEP, in consultation with the experts, to assess the social and ecological impacts of project activities. Examples of indicators to be used are listed in the table below, and will include a balance of ecological, socio-economic and ecosystem management indicators. Baselines for each indicator will be measured at the beginning of the project, and progress against each indicator will be measured on a yearly basis through on-the-ground surveys of target ecosystems and related communities. UNEP will work with scientific groups and non-governmental organizations that

\(^3\) How to manage a gender responsive evaluation, Evaluation handbook, UN Women, 2015
Examples of indicators to be monitored to evaluate project impacts

<table>
<thead>
<tr>
<th>Ecological</th>
<th>Socio-economic</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of live coral cover</td>
<td>Income per household</td>
<td>Area of Locally Managed Marine Areas</td>
</tr>
<tr>
<td>Area of live mangrove cover</td>
<td>Fish catch per unit effort</td>
<td>Number of management plans</td>
</tr>
<tr>
<td>restored/protected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of live seagrass cover</td>
<td>Gender engagement in natural resource management decision-making</td>
<td>Volume of wastewater treated</td>
</tr>
<tr>
<td>restored/protected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish biomass and diversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomass and diversity of rare or endangered species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonnes of carbon dioxide sequestered</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A baseline report on the status of these indicators will be produced by UNEP in Year 1 of the project, and each year a report will be produced by UNEP on progress made against each indicator. The monitoring and evaluation reports will provide an opportunity to reflect on the achievements of the projects and to provide recommendations for actions if any indicators are moving in the wrong direction or if targets are not being achieved. Drivers of change for indicators will also be identified, so as to provide guidance to actions that can influence the drivers for positive change.

3.4 Accountability, financial management, and public disclosure

The Joint Programme will be using a pass-through fund management modality where UNDP Multi-Partner Trust Fund Office will act as the Administrative Agent (AA) under which the funds will be channeled for the Joint Programme through the AA. Each Participating UN Organization receiving funds through the pass-through has signed a standard Memorandum of Understanding with the AA.

Each Participating UN Organization (PUNO) shall assume full programmatic and financial accountability for the funds disbursed to it by the Administrative Agent of the Joint SDG Fund (Multi-Partner Trust Fund Office). Such funds will be administered by each UN Agency, Fund, and Programme in accordance with its own regulations, rules, directives and procedures. Each PUNO shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the Administrative Agent.

Indirect costs of the Participating Organizations recovered through programme support costs will be 7%. All other costs incurred by each PUNO in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs.

Funding by the Joint SDG Fund will be provided on an annual basis, upon successful performance of the joint programme.

Procedures on financial transfers, extensions, financial and operational closure, and related administrative issues are stipulated in the Operational Guidance of the Joint SDG Fund.

PUNOs and partners must comply with Joint SDG Fund brand guidelines, which includes information on donor visibility requirements.
Each PUNO will take appropriate measures to publicize the Joint SDG Fund and give due credit to the other PUNOs. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, PUNOs, the Administrative Agent, and any other relevant entities. In particular, the Administrative Agent will include and ensure due recognition of the role of each Participating Organization and partners in all external communications related to the Joint SDG Fund.

3.5 Legal context

<table>
<thead>
<tr>
<th>Country</th>
<th>UNDP</th>
<th>UNCDF</th>
<th>UNEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td><strong>Standard Basic Assistance Agreement (SBAA), 25th Feb 2019</strong></td>
<td>N/A covered under UNDP SBAA</td>
<td>N/A covered under UNDP SBAA</td>
</tr>
</tbody>
</table>
## D. ANNEXES OF THE JOINT PROGRAMME TEMPLATE

### Annex 1. List of related initiatives

<table>
<thead>
<tr>
<th>Name of initiative /project</th>
<th>Key expected results</th>
<th>Links to the JP</th>
<th>Current status</th>
<th>Lead organization</th>
<th>Other partners</th>
<th>Budget and funding source</th>
<th>Contract person (name and email)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji Ridge to Reef</td>
<td>To preserve biodiversity, ecosystem services, sequester carbon, improve climate resilience and sustain livelihoods through a ridge-to-reef management of priority watersheds in the two main islands of Fiji.</td>
<td>Marine Protected areas, community led eco-tourism initiatives, partnerships with adjacent hotels for protection of Coral Reefs, same partnerships (Ministry of Env, Fisheries), NGOs</td>
<td>Project is currently being implemented &amp; will be completed in October 2021</td>
<td>UNDP &amp; Ministry of Environment</td>
<td>Ministry of Fisheries, ministry of iTaukei Affairs, FLMMA, USP Institute of Applied Science, Conservation International, WWF,</td>
<td>USD7.4m Funding from Global Env Facility (GEF)</td>
<td>Winifereti Nainoca <a href="mailto:winifereti.nainoca@undp.org">winifereti.nainoca@undp.org</a></td>
</tr>
<tr>
<td>Great Sea Reef Resilience Programme</td>
<td>Aims to ensure that the Great Sea Reef and coastal ecosystems are healthy and resilient to a changing climate.</td>
<td>The JP leverages much of the foundational work from this initiative and works closely with its core partners Matanataki and</td>
<td>Launched in 2017 and under implementation</td>
<td>WWF</td>
<td>Althelia and Matanataki</td>
<td>?</td>
<td>Francis Areki fareki@wwf pacific.org</td>
</tr>
<tr>
<td>Name of initiative /project</td>
<td>Key expected results</td>
<td>Links to the JP</td>
<td>Current status</td>
<td>Lead organization</td>
<td>Other partners</td>
<td>Budget and funding source</td>
<td>Contract person (name and email)</td>
</tr>
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</tr>
<tr>
<td>Pacific Island Oceanic Fisheries Management 2</td>
<td>The project supports Pacific Small Island Developing States (SIDS) in meeting their obligations to implement and effectively enforce global, regional and sub-regional arrangements for the conservation and management of transboundary oceanic fisheries thereby increasing sustainable benefits derived from these fisheries.</td>
<td>Althelia for its implementation</td>
<td>Being implemented and expected to complete in 2021</td>
<td>UNDP</td>
<td>FAO</td>
<td>USD 10m Funding from Global Env Facility (GEF)</td>
<td>Floyd Robinson <a href="mailto:floyd.robinson@undp.org">floyd.robinson@undp.org</a></td>
</tr>
<tr>
<td>My Fiji Shark</td>
<td>My Fiji Shark is a conservation initiative created by Beqa Adventure Divers with support from UNDP. Revenues generated from 'My Fiji Shark' will be used to fund research, purchase research materials, create new shark conservation and inshore fisheries management programs and build an</td>
<td>UNDP</td>
<td>UNDP finalized project, but initiative is still ongoing, managed by Beqa Adventure Divers</td>
<td>Beqa Adventure Divers, South Pacific Tourism organization (SPTO), Shark Marine Reserve, GoF - Department of Fisheries</td>
<td>Beqa Adventure Divers</td>
<td><a href="mailto:adventuredivers@connect.com.fj">adventuredivers@connect.com.fj</a></td>
<td></td>
</tr>
<tr>
<td>Name of initiative /project</td>
<td>Key expected results</td>
<td>Links to the JP</td>
<td>Current status</td>
<td>Lead organization</td>
<td>Other partners</td>
<td>Budget and funding source</td>
<td>Contract person (name and email)</td>
</tr>
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</tr>
<tr>
<td>independent Shark Lab to conduct in-country shark conservation research.</td>
<td>independent Shark Lab to conduct in-country shark conservation research.</td>
<td>The JP will complement this work through establishment of a Technical Assistance Facility to incubate and provide blended finance solutions to initiatives with a positive impact on coral reefs.</td>
<td>Under implementation 2019-2022</td>
<td>UNDP</td>
<td>Government of Fiji – Ministries of Economy and Rural and Maritime Development</td>
<td>USD 10.4m</td>
<td>Moortaza Jiwanji moortaza.jiw <a href="mailto:anji@undp.org">anji@undp.org</a></td>
</tr>
<tr>
<td>Governance for Resilience (Gov4Res) Project, works with Pacific island governments to 'risk-inform' development financing and planning mechanisms so that countries can better 'leverage' development financing for climate-resilient development across national, sectoral and sub-national levels. In Fiji it is working with the MoE to set up a centralized Project Development Unit (PDU). The PDU will eventually work with non-government stakeholders to facilitate blended financing and explore opportunities to both pilot and scale up projects and programmes.</td>
<td>Governance for Resilience (Gov4Res) Project, works with Pacific island governments to 'risk-inform' development financing and planning mechanisms so that countries can better 'leverage' development financing for climate-resilient development across national, sectoral and sub-national levels. In Fiji it is working with the MoE to set up a centralized Project Development Unit (PDU). The PDU will eventually work with non-government stakeholders to facilitate blended financing and explore opportunities to both pilot and scale up projects and programmes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of initiative /project</td>
<td>Key expected results</td>
<td>Links to the JP</td>
<td>Current status</td>
<td>Lead organization</td>
<td>Other partners</td>
<td>Budget and funding source</td>
<td>Contract person (name and email)</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
| Building Back Blue         | This proposal for UNDP’s RFF financing intends to identify financing options to inform a blue COVID-19 recovery and aims for improved innovation and investment in sustainable blue economic activities in the Pacific. To address this challenge this proposal intends to provide technical and financial assistance to the Drua Incubator which was established by the Government of Fiji during its COP23 presidency. Housed under the Ministry of Economy, the incubator is mandated to operate as a regional body to promote the development of innovative climate finance projects with an aim to replicate and scale to other Pacific island countries. | This JP will cooperate with this initiative from the MoE specifically to scope for pipeline, the JP with a focus on private sector and the MoE on public sector. | Awaiting internal approval from UNDP | UNDP | UNCDF, Government of Fiji – Ministry of Economy | USD 1.5m | Kevin Petrini
kevin.petrini@undp.org
Bram Peters
bram.peters@uncdf.org}
Annex 2. Results Framework

2.1. Targets for Joint SDG Fund Results Framework

Set targets in the tables below, if relevant

Joint SDG Fund Outcome 2: Additional financing leveraged to accelerate SDG achievement

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1: Ratio of financing for integrated multi-sectoral solutions leveraged in terms of scope&lt;sup&gt;4&lt;/sup&gt;</td>
<td>13.4M 10M 26.6M</td>
</tr>
<tr>
<td>2.2: Ratio of financing for integrated multi-sectoral solutions leveraged in terms of scale&lt;sup&gt;5&lt;/sup&gt;</td>
<td>1M 1.7M 1M 1M</td>
</tr>
</tbody>
</table>

Joint SDG Fund Operational Performance Indicators

- Level of coherence of UN in implementing programme country<sup>6</sup>
- Reduced transaction costs for the participating UN agencies in interaction with national/regional and local authorities and/or public entities compared to other joint programmes in the country in question
- Annual % of financial delivery
- Joint programme operationally closed within original end date
- Joint programme financially closed 18 months after their operational closure
- Joint programme facilitated engagement with diverse stakeholders (e.g. parliamentarians, civil society, IFIs, bilateral/multilateral actor, private sector)
- Joint programme included addressing inequalities (QCPR) and the principle of “Leaving No One Behind”
- Joint programme featured gender results at the outcome level
- Joint programme undertook or draw upon relevant human rights analysis, and have developed or implemented a strategy to address human rights issues
- Joint programme planned for and can demonstrate positive results/effects for youth
- Joint programme considered the needs of persons with disabilities
- Joint programme made use of risk analysis in programme planning
- Joint programme conducted do-no-harm / due diligence and were designed to take into consideration opportunities in the areas of the environment and climate change

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<sup>4</sup>Additional resources mobilized for other/additional sector/s or through new sources/means

<sup>5</sup>Additional resources mobilized for the same multi-sectoral solution.

<sup>6</sup>Annual survey will provide qualitative information towards this indicator.
### 2.2. Joint programme Results framework

<table>
<thead>
<tr>
<th>Results / Indicators</th>
<th>Baseline</th>
<th>2021 Target</th>
<th>2022 Target</th>
<th>2023 Target</th>
<th>2024 Target</th>
<th>Means of Verification</th>
<th>Responsible partner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1: Protect priority coral reef sites and climate change refugia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Area of new climate refugia and priority sites designated as MPAs or LMMAs</td>
<td>0</td>
<td>9000</td>
<td>15000</td>
<td>25000</td>
<td>30000</td>
<td>Coral Reef ecosystems areas under MPA official designation and active management</td>
<td>Blue Finance</td>
</tr>
<tr>
<td>1.2 Coral and fish species richness in MPAs</td>
<td>Actual species richness = 100</td>
<td>100</td>
<td>105</td>
<td>110</td>
<td>120</td>
<td>Fish surveys campaigns. E.g., photography, hydrophones, tagging, acoustics, artificial substrata, light-traps, hook and line, and live-traps</td>
<td>Blue Finance</td>
</tr>
<tr>
<td>1.3 Number of coral reef and ridge to reef conservation related resolutions, declarations and laws passed</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Annual review of how many laws / regulations have been retained or reasonably updated since implementation</td>
<td></td>
</tr>
</tbody>
</table>

---

Coral Reef ecosystems areas under MPA official designation and active management.
<table>
<thead>
<tr>
<th>Results / Indicators</th>
<th>Baseline</th>
<th>2021 Target</th>
<th>2022 Target</th>
<th>2023 Target</th>
<th>2024 Target</th>
<th>Means of Verification</th>
<th>Responsible partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 MtCO2e per year sequestered through protection and/or restoration of threatened mangrove and seagrass ecosystems</td>
<td>Baseline = 100</td>
<td>100</td>
<td>100</td>
<td>110</td>
<td>120</td>
<td>Annual survey of mangrove and seagrass biomass</td>
<td></td>
</tr>
<tr>
<td>1.5 Management Effectiveness of MPAs</td>
<td>Initial METT score per MPA</td>
<td>1 MPA with METT score &gt;60</td>
<td>2 MPAs with METT score &gt;70</td>
<td>3 MPAs with METT score &gt;70</td>
<td>4 MPAs with METT score &gt;70</td>
<td>Independent assessment of “Management Effectiveness Tracking Tool” (METT) for MPA management</td>
<td></td>
</tr>
</tbody>
</table>

**Outcome 2: Transform the livelihoods of coral reef-dependent communities**

<table>
<thead>
<tr>
<th>2.1 Number of locals/entrepreneurs and women employed in businesses with a positive impact on coral reefs</th>
<th>Tbd</th>
<th>Tbd</th>
<th>Tbd</th>
<th>Tbd</th>
<th>Tbd</th>
<th>Reporting from supported businesses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 Increased private investment in sustainable initiatives and blue economy SMEs related to Coral Reefs</td>
<td>Tbd</td>
<td>Tbd</td>
<td>Tbd</td>
<td>Tbd</td>
<td>Tbd</td>
<td>Reporting from Althelia / Matanataki</td>
<td></td>
</tr>
</tbody>
</table>
## Results / Indicators

<table>
<thead>
<tr>
<th>Results / Indicators</th>
<th>Baseline</th>
<th>2021 Target</th>
<th>2022 Target</th>
<th>2023 Target</th>
<th>2024 Target</th>
<th>Means of Verification</th>
<th>Responsible partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 Water quality and reduction of nutrient inputs</td>
<td>100</td>
<td>100</td>
<td>105</td>
<td>110</td>
<td>120</td>
<td>Periodic sampling</td>
<td></td>
</tr>
<tr>
<td>2.4 Number of TAF incubated blue economy SMEs that become investment ready</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>Reporting from Matanataki</td>
<td></td>
</tr>
<tr>
<td>2.5 Number of new government strategies and plans to support financing for improved marine biodiversity protection and the blue economy</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Reporting from UNDP and MoE</td>
<td></td>
</tr>
<tr>
<td>2.6 Number of new government incentives to support financing for improved marine biodiversity protection and the blue economy</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>Reporting from UNDP and MoE/Invest Fiji</td>
<td></td>
</tr>
</tbody>
</table>

## Annex 3. Gender Marker Matrix

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Score</th>
<th>Findings and Explanation</th>
<th>Evidence or Means of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>N°</td>
<td>Formulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Context analysis integrate gender analysis</td>
<td>2</td>
<td>The gender analysis has also included an assessment of the intersecting risks women face, including disability, age and vulnerability to climate risks where data is available. Unreliable and limited sex-disaggregated data remain key evidence.</td>
</tr>
</tbody>
</table>
challenges. However, the proposal is contributing to Fiji National Development plan/SDG national development targets, which informs Voluntary National Reviews where gender data and along with analysis is presented. ProDoc context analysis and Outcomes 1 & 2 is built on WWF/Matanataki, a partner of WWF and the Great Sea Reef Resilience Programme (GSRRP), which is building a pipeline of gender sensitive investment proposals some of them are highlighted in the proposal.

Reviews presentation reports to the High Level Political Forum in New York.

GSRRP program/Matanataki investment pipeline

| 1.2 | Gender Equality mainstreamed in proposed outputs | Gender equality and gender responsive budgeting is mainstreamed across the outputs in line national development plans and priorities where SDG indicators have been aligned and mainstreamed and this proposal is linked to the Fiji National Development Plan.

UNDP is also supporting development of the national SDG financing strategies which will help to reduce the gender gaps in existing financing system, specifically including the hardest to reach / poorest women with intersecting risks and vulnerabilities – those with disability and facing high levels of poverty and vulnerability to climate risks,

Participatory consultations held during the proposal development included all levels engaging a wide range of stakeholders including civil society actors representing women, youth and people with disability.

Data on gender inequality across the lifecycle (e.g. national and sample surveys such as participatory gender audits, MICS, DHS, and LF) and include intersecting inequalities such as disability to inform decisions on GEWE strategies.

Specific attention will be given to ensure that women and people with disabilities are included in the entire joint programming. |

End of project report and evaluation VNR reporting by the countries M&E reports

| 1.3 | Programme output | Both the output indicators proposed are gender-sensitive. |

Regular M&E reports
<table>
<thead>
<tr>
<th>Indicators measure changes on gender equality</th>
<th>UNCDF has tools and guidance notes to provide technical assistance and for financial structuring and gender responsive investments,</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 PUNO collaborate and engage with Government on gender equality and the empowerment of women</td>
<td>The proposal was developed engaging national women machineries, Ministry of Women and women's rights-based organizations and CSOs</td>
</tr>
<tr>
<td></td>
<td>In the development of the proposed project, PUNOs have consulted with at least two government agencies that fosters gender equality within the current proposed project. The National Women’s Machinery participated in program consultations for the context analysis, strategic prioritization, implementation, M&amp;E.</td>
</tr>
<tr>
<td>Number of consultations with women’s councils</td>
<td>Gender component included in the training / capacity building of Government members</td>
</tr>
<tr>
<td>2.2 PUNO collaborate and engages with women’s/gender equality CSOs</td>
<td>In the proposal, UNDP together with UNEP will use its network of partners to provide gender responsive technical assistance in the following areas:</td>
</tr>
<tr>
<td></td>
<td>• Awareness and advocacy in conservation and management and Women’s Economic Empowerment.</td>
</tr>
<tr>
<td></td>
<td>• Strengthening community-based MPA management with gender empowerment as a priority;</td>
</tr>
<tr>
<td></td>
<td>• Conserving traditional knowledge by adapting it with modern technologies using locally available resources.</td>
</tr>
<tr>
<td>Project M&amp;E reports</td>
<td>Number of GEWE CSOs</td>
</tr>
<tr>
<td></td>
<td>Number of consultations with GEWE CSOs</td>
</tr>
<tr>
<td>3.1 Program proposes a gender-responsive budget</td>
<td>Given the current demographic, political, social and economic landscape in the islands, it is expected that Gender equality and women empowerment (GEWE) would absorb at least 20-30% of the funds for a variety of initiatives.</td>
</tr>
<tr>
<td>Women/Girls Population baseline as of 31 July 2018 in FIJI is 49.1%</td>
<td>Project M&amp;E reports</td>
</tr>
<tr>
<td>Total scoring</td>
<td>2.3</td>
</tr>
</tbody>
</table>
## Annex 4. Budget and Work Plan

### 4.1 Budget per UN DG categories

<table>
<thead>
<tr>
<th>UNDG BUDGET CATEGORIES</th>
<th>UNDP</th>
<th>UNCDF</th>
<th>UNEP</th>
<th>TOTAL USD</th>
<th>TOTAL % by UNDG category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Joint SDG Fund (USD)</td>
<td>GFCR (USD)</td>
<td>Joint SDG Fund (USD)</td>
<td>GFCR (USD)</td>
<td>Joint SDG Fund (USD)</td>
</tr>
<tr>
<td>1. Staff and other personnel</td>
<td>211,799</td>
<td>211,799</td>
<td>200,997</td>
<td>200,997</td>
<td>103,333</td>
</tr>
<tr>
<td>2. Supplies, Commodities, Materials</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Equipment, Vehicles, and Furniture (including Depreciation)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Contractual services</td>
<td>304,000</td>
<td>304,000</td>
<td>375,000</td>
<td>75,000</td>
<td>200,000</td>
</tr>
<tr>
<td>5. Travel</td>
<td>31,000</td>
<td>31,000</td>
<td>16,000</td>
<td>16,000</td>
<td>31,000</td>
</tr>
<tr>
<td>6. Transfers and Grants to Counterparts</td>
<td>-</td>
<td>-</td>
<td>3,447,000</td>
<td>3,503,000</td>
<td>-</td>
</tr>
<tr>
<td>7. General Operating and other Direct Costs</td>
<td>40,000</td>
<td>40,000</td>
<td>10,000</td>
<td>10,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Total Direct Costs</td>
<td>586,799</td>
<td>586,799</td>
<td>4,048,997</td>
<td>3,804,997</td>
<td>354,333</td>
</tr>
<tr>
<td>8. Indirect Support Costs (Max. 7%)</td>
<td>41,076</td>
<td>41,076</td>
<td>283,430</td>
<td>266,350</td>
<td>24,803</td>
</tr>
<tr>
<td>TOTAL Budget</td>
<td>627,874</td>
<td>627,874</td>
<td>4,332,427</td>
<td>4,071,347</td>
<td>379,137</td>
</tr>
</tbody>
</table>
4.2 Budget per SDG targets

The core theory of change supports investments in the conservation of coral reefs including harmonization of the policies that govern public and private finance in protection and restoration of coral reef using a holistic framework, i.e. conservation and alternative livelihoods. New resources will be mobilized, to increase impact investments and public and private financing.

<table>
<thead>
<tr>
<th>SDG TARGETS</th>
<th>%</th>
<th>Total (USD)</th>
<th>GFCR</th>
<th>Joint SDG Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SDG 1.a and SDG 1.b</td>
<td>10%</td>
<td>1,003,866</td>
<td>469,922</td>
<td>533,944</td>
</tr>
<tr>
<td>5 SDG 5.5</td>
<td>5%</td>
<td>501,933</td>
<td>234,961</td>
<td>266,972</td>
</tr>
<tr>
<td>8 SDG 8.3, SDG 8.5 and SDG 8.9</td>
<td>10%</td>
<td>1,003,866</td>
<td>469,922</td>
<td>533,944</td>
</tr>
<tr>
<td>10 SDG 10.b</td>
<td>5%</td>
<td>501,933</td>
<td>234,961</td>
<td>266,972</td>
</tr>
<tr>
<td>14 SDG 14.1, 14.2, 14.3, 14.4, 14.5, 14.7</td>
<td>60%</td>
<td>6,023,195</td>
<td>2,819,533</td>
<td>3,203,663</td>
</tr>
<tr>
<td>17 SDG 17.1 and 17.3</td>
<td>10%</td>
<td>1,003,866</td>
<td>469,922</td>
<td>533,944</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>10,038,659</td>
<td>4,699,221</td>
<td>5,339,438</td>
</tr>
</tbody>
</table>
4.3 Work plan

Acknowledging that the below workplan is difficult to read, please click on the xls icon below to open the associated xls sheet.

<table>
<thead>
<tr>
<th>Output</th>
<th>Unit of achievement</th>
<th>Time frame</th>
<th>PLANNED BUDGET</th>
<th>Overall budget description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2021</td>
<td>2022</td>
<td>2023</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fijian (USD)</td>
<td>UNDP (USD)</td>
<td>Total Cost (USD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QR</td>
<td>QR</td>
<td>QR</td>
</tr>
<tr>
<td><strong>Output 1.1:</strong> Increased area of new climate refugia and priority sites designated as MPAs or LMMAs</td>
<td>Activity 1.1.1: LMMA screening, feasibility study and selection of priority sites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output 1.2:</strong> Established SPEs and related management activities for the LMMAs facilitated through enabling environment to support SPEs and their activity planning</td>
<td>Activity 1.2.1: Investment readiness of the SPEs for engagement in Sustainable Reserve Finance (Successor planning for SPE commercialization)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output 1.3:</strong> Strengthened management, enforcement and monitoring systems of LMMAs by SPEs</td>
<td>Activity 1.3.1: LMMA screening, feasibility study and selection of priority sites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output 1.4:</strong> Established coral reef and ridge to reef ecosystems in priority MPAs and LMMAs</td>
<td>Activity 1.4.1: Support for the development of comprehensive local marine protected area management plans, training and planning of</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Outcome 2: Transforming the livelihoods of coral reef-dependent communities

**Output**

<table>
<thead>
<tr>
<th>Unit of Activities</th>
<th>Time Frame</th>
<th>Overall budget description*</th>
<th>UNDP (USD)</th>
<th>Total GEF Fund (USD)</th>
<th>Total Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output 2.1: Established Technical Assistance Facility, managed by local investment and social entrepreneurship organisations supported by UNCDF to develop a pipeline of investment-ready projects and sustainable business opportunities</strong></td>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of TAF/ incubated firms managed by UNCDF and UNEP supporting blue economy projects</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of TAF/ incubated firms managed by UNCDF and UNEP supporting biodiversity offsets and other incentives</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of TAF/ incubated firms managed by UNCDF and UNEP supporting marine biodiversity projects</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output 2.2: Strengthened and streamlined policies, strategies, plans and financing from the Government of Fiji for improved environmental biodiversity protection</strong></td>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of new economic development zones (EDZ) established in Coral Seas</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of FDAs managed by NMB under the Fiji Blue Economy Fund</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output 2.3: Established recognizability, resilience and monitoring systems to facilitate the private sector to act sustainably</strong></td>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of new environmental protection zones (EPZ) established in Coral Seas</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of sustainable benefit agreements established in Coral Seas</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLANNED BUDGET**

<table>
<thead>
<tr>
<th>UNDP (USD)</th>
<th>Total GEF Fund (USD)</th>
<th>Total Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,007</td>
<td>536,199</td>
<td>543,199</td>
</tr>
</tbody>
</table>

**Implementation partners involved**

- UNDP
- UNEP

**Overall target/s**

- Transforming the livelihoods of coral reef-dependent communities

**Annual target/s**

- Target 1: Established Technical Assistance Facility, managed by local investment and social entrepreneurship organisations supported by UNCDF to develop a pipeline of investment-ready projects and sustainable business opportunities

**Unit of activities**

- Management and Operations
- Communications and Learning
- Evaluation

**GFCR (USD)**

- Q1
- Q2
- Q3
- Q4

**List of activities**

- Target 1.1: Developed a promotional strategy and marketing plan to reach potential investors and stakeholders, especially women and youth

**Overall budget description**

- The budget covers the set up and management of an investment and social entrepreneurship support facility, initiatives to identify and incubate business opportunities, business advisory, aggressive marketing and promotion to attract investment, development of financial products and incentives, regulatory and risk management and financial structuring. Technical assistance includes activities to help business in setting up management and financial structures, as well as training.

**Time frame**

- Q1
- Q2
- Q3
- Q4

**Implementing partners involved**

- UNDP
- UNEP

**Annual target/s**

- Target 1: Established Technical Assistance Facility, managed by local investment and social entrepreneurship organisations supported by UNCDF to develop a pipeline of investment-ready projects and sustainable business opportunities

**Unit of activities**

- Management and Operations
- Communications and Learning
- Evaluation

**GFCR (USD)**

- Q1
- Q2
- Q3
- Q4

**List of activities**

- Target 1.1: Developed a promotional strategy and marketing plan to reach potential investors and stakeholders, especially women and youth

**Overall budget description**

- The budget covers the set up and management of an investment and social entrepreneurship support facility, initiatives to identify and incubate business opportunities, business advisory, aggressive marketing and promotion to attract investment, development of financial products and incentives, regulatory and risk management and financial structuring. Technical assistance includes activities to help business in setting up management and financial structures, as well as training.

**Time frame**

- Q1
- Q2
- Q3
- Q4

**Implementing partners involved**

- UNDP
- UNEP

**Annual target/s**

- Target 1: Established Technical Assistance Facility, managed by local investment and social entrepreneurship organisations supported by UNCDF to develop a pipeline of investment-ready projects and sustainable business opportunities

**Unit of activities**

- Management and Operations
- Communications and Learning
- Evaluation

**GFCR (USD)**

- Q1
- Q2
- Q3
- Q4

**List of activities**

- Target 1.1: Developed a promotional strategy and marketing plan to reach potential investors and stakeholders, especially women and youth

**Overall budget description**

- The budget covers the set up and management of an investment and social entrepreneurship support facility, initiatives to identify and incubate business opportunities, business advisory, aggressive marketing and promotion to attract investment, development of financial products and incentives, regulatory and risk management and financial structuring. Technical assistance includes activities to help business in setting up management and financial structures, as well as training.

**Time frame**

- Q1
- Q2
- Q3
- Q4

**Implementing partners involved**

- UNDP
- UNEP
**Annex 5. Risk Management Plan**

The following potential risks faced by this Joint Programme have been identified in the table below.

The programme management will continue to assess and document the levels of risk throughout the programme implementation at the end of Year 1 in order to evaluate and revise the risks and mitigation strategy as appropriate.

<table>
<thead>
<tr>
<th>Risks</th>
<th>Risk Level: (Likelihood x Impact)</th>
<th>Likelihood:</th>
<th>Impact:</th>
<th>Mitigating measures</th>
<th>Responsible Org./Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contextual risks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global or domestic climate, economic and/or fiscal shocks will divert government and PUNO attention and priority away from the JP.</td>
<td>Medium</td>
<td>2</td>
<td>3</td>
<td>Discussions and negotiations with government and implementing partners on flexibility of implementation. Assessment and revisions of the programme in response to any relevant changes in the implementing environment.</td>
<td>UNDP</td>
</tr>
<tr>
<td>Risks from COVID 19 leads to unfavorable investment climate</td>
<td>High</td>
<td>4</td>
<td>4</td>
<td>This is a global pandemic and will be managed as per the WHO/IMF, National Government and Central bank policies. However, the project, if approved, contributes in mitigating climate change, building household level resilience through adoption and expansion of sustainable development practices, adaptation of indigenous knowledge with modern technologies, mobilization of additional resources for financing sustainable practices in fisheries, tourism, forestry, ocean and reef management enabling</td>
<td>UNDP</td>
</tr>
</tbody>
</table>
| Risks                                                                 | Risk Level: (Likelihood x Impact) | Likelihood: Certain - 5  
 Likely - 4  
 Possible - 3  
 Unlikely - 2  
 Rare - 1 | Impact: Essential - 5  
 Major - 4  
 Moderate - 3  
 Minor - 2  
 Insignificant - 1 | Mitigating measures                                                                 | Responsible Org./Person |
|----------------------------------------------------------------------|-----------------------------------|---------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|
| Risks                                                                 | Risk Level: Certain - 5  
 Likely - 4  
 Possible - 3  
 Unlikely - 2  
 Rare - 1 | Impact: Essential - 5  
 Major - 4  
 Moderate - 3  
 Minor - 2  
 Insignificant - 1 | Mitigating measures mobilization of green finance which will help to create new jobs and open options for the diversification of livelihoods opportunities in the targeted communities. In this context, this project, if approved would contribute in COVID 19 recovery as more than 80% of the population in Fiji live in and around coastal areas and depend on the oceans for livelihoods and food security. | Responsible Org./Person |
<p>| Climate investment risk                                              | High                              | 3                                                 | 3                      | The impacts of climate change pose a direct threat to coastal tourism infrastructure and livelihoods. However, this risk is also a direct incentive for all female and male local stakeholders to invest in the protection and enhancement of the natural coastal protection provided by the coral reefs, mangroves and seagrass beds, and this will be used to leverage local support for the projects. | UNDP and UNCDF   |
| Risk of major natural disaster in the project area delaying progress and/or damaging/destroying the reef. | High                              | 4                                                 | 3                      | This risk is difficult to mitigate and may in fact jeopardize the site if the reef is destroyed. We will raise this risk in discussions with women and men in reef-adjacent communities, the tourism industry and the government to put cultural and financial backstops into place early, as well as to support physical barriers to protect the | UNDP            |</p>
<table>
<thead>
<tr>
<th>Risks</th>
<th>Risk Level: (Likelihood x Impact)</th>
<th>Likelihood: Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare - 1</th>
<th>Impact: Essential - 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1</th>
<th>Mitigating measures</th>
</tr>
</thead>
</table>
| Pandemic affecting MPA revenues from tourism sector. During recovery period post Covid-19 | High                              | 4                                                                    | 3                                                                    | The recovery period has been estimated for the different MPA sites. The recovery period is the period before tourism visitation becomes stable again. Our mitigation relies on the following aspects:  
  • The SPE business model does not rely on any revenues from user fees paid by tourists until end 2021. That is expected to leave adequate time for the sector to fully recover. The working capital comes from the blended up-front financing.  
  • Past extreme events (e.g., Hurricanes in the region) have proven the resilience of the sector with a quick recovery after the crisis. This is even more visible for all-inclusive hotels, dominant in Fiji.  
  • Diversified sources of revenues are developed in each pilot sites and will limit exposure to this risk (e.g. Blue carbon, fishery/aquaculture licenses, reefs which may be available in high risk areas. Additionally, UNCDF is already working on a new programme initiative, the Pacific Insurance and Climate Adaptation Programme, to specifically address this risk and will align their work with this initiative. |

The present Covid-19 context has an important impact on tourism sector due to the drop in the visitations.
<table>
<thead>
<tr>
<th>Risks</th>
<th>Risk Level: (Likelihood x Impact)</th>
<th>Likelihood:</th>
<th>Impact:</th>
<th>Mitigating measures</th>
<th>Responsible Org./Person</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Certain - 5</td>
<td>Essential - 5</td>
<td>biodiversity credits, nature based solutions) • Insurance companies have been contacted to develop a business interruption coverage insurance for our MPAs. The objective is to cover critical operational expenditures (i.e. staff, surveillance &amp; compliance) during up to 6 months. The insurance will be triggered by any extreme events (e.g. climate, health, political) affecting regular MPA revenue streams. High level estimates of premium costs (less than US$8k p.a.) are acceptable. • Investors have been contacted since the Covid-19 crisis and have confirmed their support to the project. They have confidence in the resiliency of the tourism sector and at any rate, have a loan guarantee in case of default of payments.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Likely - 4</td>
<td>Major - 4</td>
<td>Working in partnership with government; investment in coordination mechanisms and establishment of national steering committee; local, regional and international partnership strategy, and communication strategy developed.</td>
<td>UNDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Possible - 3</td>
<td>Moderate - 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unlikely - 2</td>
<td>Minor - 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rare - 1</td>
<td>Insignificant - 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Programmatic risks**

Political opposition, coordination gaps and overlaps in mandates and programs. Risks could arise from fiscal austerity drives proposed by IFIs or from internal non-alignment between GoF ministries or agencies | Medium | 2 | 3 | Working in partnership with government; investment in coordination mechanisms and establishment of national steering committee; local, regional and international partnership strategy, and communication strategy developed. | UNDP |
<table>
<thead>
<tr>
<th>Risks</th>
<th>Risk Level: (Likelihood x Impact)</th>
<th>Likelihood:</th>
<th>Impact:</th>
<th>Mitigating measures</th>
<th>Responsible Org./Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional risks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR related risks arising from the lack of skilled and qualified potential female and male local employees to work on the programmes and manage the project.</td>
<td>Medium</td>
<td>3</td>
<td>2</td>
<td>Given the nascent local capacity and limited financial expertise. The risk will be mitigated through a combination of working with existing locally embedded initiatives and blended finance training for women and men, as well as trainings with municipal and national government counterparts on these new finance instruments.</td>
<td>UNDP and UNCDF</td>
</tr>
<tr>
<td><strong>Fiduciary risks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unintended effects on costs and prices, project cost over-runs, misutilization of funds or resource</td>
<td>Low</td>
<td>1</td>
<td>2</td>
<td>Careful financial planning, milestones and reporting developed to ensure financial</td>
<td>UNDP, UNCDF and UNEP</td>
</tr>
<tr>
<td>Risk arising from lack of awareness of and resistance to nature-based financial products among women and men in communities, impacting the ability to work on the reef issues.</td>
<td>Medium</td>
<td>3</td>
<td>2</td>
<td>In case one of the investments would fall through as a result of this risk (e.g. Landfill or LMMA) the funds originally allocated for this investment would flow into the TA and Blended Finance Facility (activity 2.1.1 and 2.2.3)</td>
<td>UNDP</td>
</tr>
<tr>
<td>Risk arising from scarcity of investor capital, including domestic investors' lack of familiarity with blended financing structures.</td>
<td>Medium</td>
<td>2</td>
<td>3</td>
<td>Risk will be mitigated through ongoing community impact and public awareness campaigns targeting women/girls and men/boys, and stakeholder meetings at the community-level with participation of women and men.</td>
<td>UNCDF</td>
</tr>
</tbody>
</table>

*Note: Likelihood and Impact scales are as follows:
- **Likelihood:** Certain - 5, Likely - 4, Possible - 3, Unlikely - 2, Rare - 1
- **Impact:** Essential - 5, Major - 4, Moderate - 3, Minor - 2, Insignificant - 1
<table>
<thead>
<tr>
<th>Risks</th>
<th>Risk Level: (Likelihood x Impact)</th>
<th>Likelihood: Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare - 1</th>
<th>Impact: Essential - 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1</th>
<th>Mitigating measures</th>
<th>Responsible Org./Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>capture at national or sub-national levels</td>
<td></td>
<td></td>
<td></td>
<td>accountability and accurate expenditure throughout the programme. Programme manager in place to oversee the functioning of the JP.</td>
<td></td>
</tr>
<tr>
<td>Risk of capital loss for investors</td>
<td>Moderate</td>
<td>3</td>
<td>3</td>
<td>Prospective investors should have the ability to understand the risks involved as well as sufficient financial means to bear the loss of their investment. Additionally, losses may be mitigated by financial instruments, such as guarantees brokered through the Global Climate Fund and deployed by UNCDF.</td>
<td>UNCDF</td>
</tr>
</tbody>
</table>
Annex 6. Communication plan

1) Overall narrative of the joint programme
With support from the UN Joint SDG Fund a new initiative from UNDP, UNCDF and UNEP will support investments in the coral reefs and the blue economy of Fiji.

The programme seeks to create an enabling financial environment and build capacity within Fiji’s local private sector and local communities that depend on the country’s coral reefs. This with the objective to mobilize private and public investment capital for initiatives that have a positive impact on Fijian coral reefs and the communities that rely on them. With the support from the programme a pipeline of bankable projects will be developed through a blend of technical assistance, performance-based grants and concessional capital for de-risking. Projects will leverage finance from private investors and other financing facilities.

2) Strategic approach to key audiences
The JP has several diverse key audiences for its work. For each of these audiences a different communication approach will be required. In order for the JP to be successful it is recognized that there is a need to build strong partnerships across government ministries and departments, but also with civil society, NGO’s operating in the climate change space, donors, regional bodies, local communities, fishing and agricultural sector, scientists and last but not least investors and the private sector (e.g. tourism and farmers). This is reflected in the various activities from the JP as described in more detail in annex 8 below. Although the approach for each of the investments will vary, overall similar type of public relations approaches for each of the key audiences can be identified as follows:

<table>
<thead>
<tr>
<th>Audience</th>
<th>Primary approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>GoF</td>
<td>Advocacy through stakeholder consultation meetings and one-on-one engagements with relevant ministries and other government agencies. Most notably MoE, Fisheries, Local Government, Environment, Rural and Maritime Development, Waterways and Environment, Agriculture, Tourism Fiji and Invest Fiji.</td>
</tr>
<tr>
<td></td>
<td><em>Note: the MoE will serve as the primary conduit for the JP’s relationships with the GoF.</em></td>
</tr>
<tr>
<td>Civil Society, NGO’s, Scientists</td>
<td>Advocacy through regular stakeholder consultations with relevant NGOs and scientists working with the LMMAs and working in coral reefs related sectors.</td>
</tr>
<tr>
<td>Local communities</td>
<td>Active community engagement with local communities engaged in fishing and agricultural production in and around the selected LMMAs</td>
</tr>
<tr>
<td>Private sector</td>
<td>Scoping pipeline through promotion and direct engagement with local entrepreneurs as well as “blue economy” entrepreneurs from overseas looking to invest in Fiji</td>
</tr>
<tr>
<td>Investors</td>
<td>Promotional marketing communication in the investor community</td>
</tr>
</tbody>
</table>

3) Objectives of strategic communication plan
Below the key objectives of the strategic communication plan and associated indicators:

1) Raise awareness among entrepreneurs and local communities in Fiji about the TA and Blended Finance Facility and the support this can provide them to convert their ideas
and plans into concrete bankable blue economy projects, as well as the support to connect them with private investors.
- RMF Indicator: 2.4 Number of TAF incubated blue economy SMEs that become investment ready

2) Showcase the pipeline of bankable projects to donors, investors and other relevant stakeholders and raise awareness about the investment opportunities in Fiji’s Blue Economy to attract additional financial resources.
- RMF Indicator: 2.2 Increased private investment in sustainable initiatives and blue economy SMEs related to Coral Reefs

3) Provide visibility for the Joint SDG Fund and the Global Fund for Coral Reefs as enablers that unlock private capital for one of the most under-invested SDGs: SDG 14 Life Below Water.
- Communications related indicators that will be tracked and reported to the Steering Committee include, but are not limited to:
  - number of visits to the website;
  - number of tweets/Facebook/LinkedIn posts and statistics on number of followers/shares etc;
  - media articles, media mentions and other websites that carry information (number and type of publication);
  - production of written promotional material (brochures, information booklets, newsletter etc.);
  - number of events and workshops on the Technical Assistance and Blended Finance Facility (incl data on attendance).

4) Main activities
The JP’s communications officer will arrange for quarterly meetings with the core JP staff from UNCDF, UNDP and UNEP to monitor progress of the implementation of the Communications Strategy. This will also be reflected in the reports to the Steering Committee of the JP. The effectiveness and efficiency of the JP’s communications will be assessed during the mid-term and final evaluations of the JP.

Below the list of activities, which are subject to change once the communications and outreach strategy has been developed.

<table>
<thead>
<tr>
<th>#</th>
<th>Activity</th>
<th>Timeline</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development of a communications and outreach strategy with dedicated sections on two key audiences: Investors and donors, Private sector, local communities and NGOs that may benefit from the TA facility</td>
<td>July 2021</td>
<td>UNDP Communications Officer, with support from UNCDF and UNEP</td>
</tr>
<tr>
<td>2</td>
<td>Website developed and social media accounts created</td>
<td>July 2021</td>
<td>UNDP Communications Officer, with support from UNCDF and UNEP and input from JP</td>
</tr>
</tbody>
</table>
### 3 Development of a quarterly newsletter

- **Development of a quarterly newsletter**
- **July 2021**
- UNDP Communications Officer, with support from UNCDF and UNEP and input from JP partners e.g MoE, Matanataki and Blue Finance

### 4 Development of marketing and promotional material for prospective investors as well as for private sector and local communities

- **Development of marketing and promotional material for prospective investors as well as for private sector and local communities**
- **Oct 2021**
- UNDP Communications Officer, with support from UNCDF and UNEP and input from JP partners e.g MoE, Matanataki and Blue Finance

### 5 Organization of blue economy incubation and acceleration events to bring together local aspiring and successful entrepreneurs in the blue economy to share lessons and to create visibility for the TA and Blended Finance Facility

- **Organization of blue economy incubation and acceleration events to bring together local aspiring and successful entrepreneurs in the blue economy to share lessons and to create visibility for the TA and Blended Finance Facility**
- **June 2021**
- **June 2022**
- **June 2023**
- Matanataki, in collaboration with UNDP Communications Officer and with support from UNCDF and other partners

### 6 Organization of three online investment match-making events to bring together leading investors with our key partners to present the investment opportunities developed under the TA facility.

- **Organization of three online investment match-making events to bring together leading investors with our key partners to present the investment opportunities developed under the TA facility.**
- **Feb 2022**
- **Feb 2023**
- **Feb 2024**
- UNDP Communications Officer in collaboration with GFCR, Althelia and Invest Fiji, with support from UNCDF and UNEP and input from JP partners e.g MoE, Matanataki and Blue Finance

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**Annex 7. Learning and Sharing Plan**

1) **Strategic approach to learning and sharing**

Although the JP will develop a full-fledged learning and sharing plan in its first year of implementation it is acknowledged that a strong emphasis will be placed on participatory approaches to learning and knowledge-sharing. This includes the creation of opportunities for all partners to share experiences, stories and lessons learned from the JP, with a focus on the use and impact of the TA and blended finance facility as well as on the application of environmental impact measurement. Therefore, the JP will provide structured avenues for learning and knowledge-sharing, including through dedicated communities of practice, participation in relevant regional and global knowledge networks, and conferences, symposia, roundtables and workshops that will be carried out to share information and lessons learned.

The JP will also organise its own annual online knowledge-sharing and learning event for implementing partners to share their experiences and learnings with a regional and global audience.

2) **Objectives of learning and sharing**

The main strategic objective of the learning and sharing plan are as follows:

1. To increase the effectiveness and efficiency of the JP implementation:
   a. UNDP, UNCDF and UNEP as well as their implementing partners can build on successes and learn from mistakes

   Measure through: number of knowledge-sharing and learning events, number of attendees and affiliation
b. UNDP, UNCDF and UNEP as well as their implementing partners are well connected with local, regional and global networks of experts that have relevant information on the same thematic areas.

Measure through: number of communities of practice established, number of members and level of activity; participation in relevant national and international networks and meetings (online and in person);

3) Main activities

<table>
<thead>
<tr>
<th>#</th>
<th>Activity</th>
<th>Timeline</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development of a learning and sharing plan in collaboration with all relevant stakeholder audiences as outlined in annex 6 communications plan</td>
<td>July 2021</td>
<td>UNDP, UNCDF and UNEP</td>
</tr>
<tr>
<td>2</td>
<td>Integration/alignment of plan with communications plan</td>
<td>July 2021</td>
<td>UNDP Communications Officer, with support from UNCDF and UNEP and input from JP partners e.g MoE, Matanataki and Blue Finance</td>
</tr>
<tr>
<td>3</td>
<td>Set up of local communities of practice and link with global networks on specific thematic topics; e.g. blended finance for blue economy investments, environmental impact assessments for businesses,</td>
<td>Aug 2021</td>
<td>UNDP Communications Officer, with support from UNCDF and UNEP and input from JP partners e.g GFCR, Althelia, Matanataki and Blue Finance</td>
</tr>
<tr>
<td>4</td>
<td>Annual online knowledge-sharing and learning event.</td>
<td>Nov 2021</td>
<td>UNDP Communications Officer, with support from UNCDF and UNEP and input from JP partners e.g MoE, Matanataki and Blue Finance</td>
</tr>
</tbody>
</table>
<pre><code>                                                                                                                                     | Nov 2022      |                                                                            |
                                                                                                                                     | Nov 2023      |                                                                            |
</code></pre>

The JP management will ensure that the overall learning and sharing plan will be assessed on its effectiveness and efficiency through the mid-term and final evaluation of the JP.
Annex 8: Detailed Outcomes, Outputs and Activities

Outcome 1: “Protection and effective management of Fijian priority coral reef sites and climate change-affected refugia are sustainably financed.”

LMMAs in Fiji are small and fragmented, undermining their capacity to effectively manage the protected areas. Resources from the Joint SDG Fund will support the establishment of SPEs that aggregate management responsibilities for LMMAs and provide technical assistance to make the LMA networks financially viable. Below, a graphic describing the Blue Finance Association’s (Blue Finance) blended finance model that will be deployed in Fiji.

Output 1.1 Increased area of climate refugia and priority sites designated as MPAs or LMMAs

**Activity 1.1.1: LMMA screening, feasibility study and selection of priority sites**

The project, spearheaded by Blue Finance, will identify projects based on ecological, legal, management and business criteria through desk study and preliminary consultations with local stakeholders. Priority MPA(s) will be selected in collaboration with Government and UNDP partners. A scoring decision tool describing the rationale for site prioritization will be shared with participating sites. The priority sites will be selected in agreement with participating stakeholders (inception meeting in the selected site). The scoring tool used has three major components – Impact Feasibility, Legal Feasibility, and Business Feasibility with a total of 54 indicators.

**Activity 1.1.2: Design of the LMMAs high-level business plan and set-up of the Special Purpose Entities (SPEs - co-management body for the LMMAs)**

Business plans for the nature tourism enterprise, nature fee solutions, digital visitor center and other tourism facilities will be developed. Plans will include aspects of the marketing approach, business model, detailed budgets of the management plan activities (Capex and Opex), financial strategy and de-risking aspects. Plans will be developed in consultations with local stakeholders. This also includes the design of realistic revenue strategies based (at minima) on nature fees, eco-tourism activities such as eco-dive and innovative visitor centre. A coalition of local stakeholders (e.g. NGOs, associations, cooperatives, foundations) will be proposed to become members of the SPE. Proper due diligence will be conducted beforehand on stakeholders.

**Activity 1.1.3: Design of the blended finance solution and fundraising**

This activity will cover the design of the strategy for the investment vehicle, including aspects of governance of the SPE, business model, legal approach, potential commercial investors and de-risking aspects. The investment proposal will be co-funded by this JP, the Global Fund for Coral Reefs (GFCR) and investment from the SOF (Althelia-Mirova). The investment proposal will be presented to an additional pool of investors & donors with the objective to blend donations, concessionary loans and impact investments. Other related activities that will be covered are: Funder mapping, facilitate introductions and meetings with funders and investors and development of pitch material.

**Activity 1.1.4: Stakeholder engagement and advocacy**

To ensure alignment with all the various stakeholders involved a consultation process will be organized with the support of UNDP with stakeholders from central, province and local governments, tourism industry, fishing sector, local communities and other public institutions.

Output 1.2 Established SPEs financed by revenue generation activities within and around LMMAs and a blended finance facility with high leverage potential for the private sector
Activity 1.2.1: Investment readiness of the SPEs for investment in Korolevu-i-wai MMA, and Shark Reef Marine Reserve (Business planning and SPE incorporation)

Technical Assistance will be provided by Blue Finance and UNCDF for the incorporation of the SPEs and for the development of the business plans of the Special Purpose Entity (SPE) including: Design and development of the revenue collection mechanism, visitor center feasibility analysis, marketing and communication plan of the SPE; communication elements, image design, media strategy, partnerships, planning and budget.

Activity 1.2.2: Environmental readiness of the SPEs for investment in Korolevu-i-wai MMA, and Shark Reef Marine Reserve

Development of environmental & social planning of the Special Purpose Entity (SPE), including preliminary compliance and enforcement plan of the MPAs, first-year work plan of the SPE, support to the Management plans and Marine Spatial Plans of the MPAs. This will be developed in collaboration with SPE members and selected tourism stakeholders.

Activity 1.2.3: Concessional debt and other blended finance instruments to the SPE for investment in Korolevu-i-wai MMA, and Shark Reef Marine Reserve

Provision of assistance and support to the investors during the overall investment analysis process. This includes preparation of a data-room to support investor and lender due diligence, negotiation of deal structure, financing terms and conditions and supporting project team in responding to due diligence enquiries. Providing advice on relevant financial regulations and ethical investment. This also includes the creation and provision of a blended finance facility, which includes concessional debt and performance-based grants.

Output 1.3: Strengthened management, enforcement and monitoring systems of LMMAs by SPEs

Activity 1.3.1: Project Management Office for the SPEs and capacity building to upskill SPEs and LMMAs on social entrepreneurship and sustainable business management

The PMO entity for the SPEs will ensure management focus on strategy execution: project planning and reporting, resource forecasting, facilitate & ensure communication to key stakeholders (UNDP support for government outreach), alignment of interrelations between activities, management of project risks.

Activity 1.3.2: Performance indicators for the SPE and Environmental and Social Action Plan (ESAP)

This activity entails the development of Key Performance Indicators (KPIs), result metrics and Environmental and Social Action Plan (ESAP) for the SPEs. These will be developed in collaboration with SPE members and government agencies then reviewed and certified by UNEP.

Output 1.4: Established coral reef and ridge to reef conservation legal and regulatory frameworks to promote protection and mitigation of local threats

Activity 1.4.1: Support the development of a comprehensive legal framework for establishment, management and financing of MPAs

In 2005, the Government of Fiji committed to protecting at least 30% of Fiji’s marine areas using ‘comprehensive, ecologically representative networks of MPAs, which are effectively managed and financed’. This activity covers a review of the existing legal and regulatory framework on MPA’s and the financing thereof and defines a clear set of recommendations to support the development of a comprehensive legal framework for the establishment, management and financing of an effective network of MPAs in Fiji which is based on science and suited to the Fiji context. UNDP and UNEP will collaborate with the Fijian government to build the legal framework for protection of marine areas. The framework will serve to...
facilitate the replication of the SPE co-management agreement model for other MMAs in Fiji.

**Introduction and background information on the activities related to Outcome 2: “Transforming the livelihoods of coral reef-dependent communities”**

To achieve Outcome 2, the JP will require co-financing from the Joint SDG Fund and the GFCR to provide grants and concessional capital to develop the project pipeline and provide concessional capital to de-risk private sector investments.

**Output 2.1: Established Technical Assistance Facility, managed by local investment manager Matanatangi, supported by UNCDF to develop a pipeline of investment ready reef-positive sustainable businesses and projects with an emphasis on employing local community members, especially women and youth**

**Activity 2.1.1: Pipeline development through scoping, technical assistance and training to upskill local businesses operating in the blue economy on social entrepreneurship, sustainable business and financial management to build a portfolio of investment ready businesses and projects**

This output covers the set up and management of an origination and technical assistance facility, whereby origination activities include scoping, pre-selection, due diligence, community and other stakeholder engagement, business plan development, regulatory approvals and financial structuring. Technical Assistance covers activities and services to plug capacity gaps with respect to business development and planning, product development and access to market support, financial planning and management, as well as reporting.

**Activity 2.1.2: Technical assistance and training to upskill local businesses on methodology to measure, monitor and manage the environmental impact of their business operations**

This activity specifically focuses on improving the capacity of businesses that have received support and investment through this project to be able to understand the outcomes of the environmental impact assessments and going forward measure and manage the environmental impact of their operations. UNEP will support in the upskilling through training and technical assistance during implementation of each of the projects selected from the pipeline. Additionally, this activity will also cater for environmental impact assessments for each of the projects.

**Output 2.2: Mobilized public and private investment in priority sustainable initiatives related to addressing coral reef degradation drivers**

**Activity 2.2.1: Provide blended finance and technical support to unlock private capital for Fertile Factory**

To support the implementation and development of the Fertile Factory project, a blended finance facility will be created by UNCDF, combined with implementation and development activities, which cover product co-development and business planning, financial modelling, fundraising and product positioning with coastal based farmers. Additional implementation activities include, but are not limited to strategic business development, financing relationship management and impact measurement and reporting.

**Activity 2.2.2: Provide blended finance and technical support to unlock private capital for Western Landfill and Regional Transfer Stations project**

To support the implementation and development of the Western Landfill and Regional Transfer Stations project a blended finance facility will be created by UNCDF, combined with implementation and development activities, which cover preparation of waste audits and other technical reports, arrangements with Government of Fiji and other major clients,
landfill site selection and analysis, negotiation of construction and O&M contract with the operator, coordination of financing consortium and preparation of respective investor marketing materials, establishment of project SPV and contracting, oversight of the construction and O&M contract implementation, support with major contracts and ancillary businesses, financial and impact reporting.

**Activity 2.2.3: Concessional debt and other blended finance instruments to crowd in private sector capital for investment ready projects from developed pipeline under activity 2.1.1**

A financial support facility will be created by UNCDF to provide concessional capital and other blended finance from the GFCR and GCF in support for the projects developed under activity 2.1.1. Specific activities include to take lead on structuring the finance transactions for this facility: deal screening, term sheet negotiation, due diligence, financial modeling and analysis, investment structuring and risk mitigation, manage the approval process, including presentation of deals to credit committee, proper management and execution of all investment legal documents, management and follow up on repayments and collections, monitor on-going financial and operational performance of investments, analyze and monitor risks and trends in the portfolio, manage restructurings and workouts.

**Output 2.3: Strengthened and harmonized policies, strategies, plans and financing from the government of Fiji for improved environmental biodiversity protection**

**Activity 2.3.1: Develop financing strategy for Government of Fiji focused on protecting coastal ecosystems and investment in the blue economy**

The recently published Fiji Climate Finance Snapshot 2016 to 2019 highlighted that there are “few public policies aimed at protecting coastal ecosystems and few cost estimates for adaptation in the blue economy, making it difficult to accurately assess the additional levels of funding needed to enhance resilience in this sector”. This activity will use the analytical framework of UNDP's Development Finance Assessment 3.0 (DFA) applying a modular framework to assess financing options and to inform the design of a financing strategy to mobilize resources, manage risks, such as debt sustainability, and achieve development targets linked to a sustainable blue economy in line with coral reef conservation objectives.

**Output 2.4: Establish recognition, rewards and monitoring systems to incentivize the private sector to act sustainably**

**Activity 2.4.1: Support the development and promotion of a government incentive scheme to attract additional investment in the blue economy**

Regulations, subsidies, and other incentives can attract private sector investment. These can include reductions in duty and VAT, or offering accelerated depreciation, tax credits, biodiversity offsets and other incentives could be used to encourage investments in protection of coastal eco-systems and the associated blue economy. This activity will support the Government of Fiji with the development and promotion of such an incentive scheme.

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Annex 9: SPEs for effective management of LMMA networks

OVERVIEW
The project will co-finance the development of eco-tourism facilities and blue carbon solutions for the effective management of Locally Managed Marine Areas.

The project will invest in an aggregation of Special Purpose Entities (SPEs) formed by local communities, local NGO partners and Blue finance. Members of the SPE have a recognised long term management lease for MPAs. The SPEs are expected to contribute to the following MPA activities: Monitoring marine habitats, Improvement of ecosystems, Community engagement, Community livelihood enhancement, Zonation and compliance, Support to tourism activities, Maintenance and Management.

Critical finance will be generated through wildlife eco-tourism enterprises, digital visitor centre, nature fees and mangrove conservation. For all of them, the capacities of the SPE team to implement the mechanisms will be strengthened. In particular, social entrepreneurship skills (e.g. marketing, strategic planning, management and conservation) will be prioritized. Project will contribute to sustainable financing of community conservation efforts, coral reef protection and economic development opportunities for vulnerable coastal communities. The project’s design addresses the global challenge of degradation of marine and coastal natural capital and will drive a transformation in the management effectiveness of existing MPAs in Fiji. A pipeline of >30 potential opportunities has been identified in the Country, and MPAs will be selected with Government based on the positive ecological and social impacts that can be achieved. Whilst the initial sectoral focus will be revenue streams associated with tourism and ecosystem service payments (particularly blue carbon), other sectors capable of driving sustainable income into MPAs can readily be bundled within the structure of site-level projects.

The project will start with a US$3M facility aggregating 2 SPEs managing 10 LMMAs with a target to unlock US$1.7M from impact investors and the private sector by 2021 (Phase 1). The approach is scalable: 10 MMAs invested by 2021 with an aim of 30 MMAs by 2025 (Phase 2) for a US$10M facility.

The facility will yield both impact and commercial returns through:
1. An Investment facility providing financing for SPE’s up-front capital needs (vessels, infrastructure, equipment, etc.) through:
   - Series-A debt (with different IRR objectives) from impact investors, asset managers and family offices. The Sustainable Ocean Fund (Althelia/Mirova) will act as the main anchor investor with US$1.4M soft committed to the Facility for the first 10 LMMAs.
   - Concessionary loans from UNSDG fund (through UNCDF) and GFCR for US$0.7M
2. Performance grants linked to MPA management effectiveness and KPIs from UNSDG fund (through UNCDF) and GFCR for US$0.4M
3. Grants from UNSDG fund (through UNDP): US$0.2M. The facility will provide technical assistance during the pre- and post-investment phases to improve quality in the design and execution of the projects, strengthen environmental and social positive impacts, reduce risks and enable the projects to meet the investor’s criteria.
4. Equity (in kind and in cash) from the local sponsors: US$0.3M
5. De-risking partners providing loan guarantees to mitigate credit risk. One potential de-risking partner is USAID, through its first loss guarantee facility, which Althelia-Mirova
secured for both the Sustainable Ocean Fund and the Land Degradation Neutrality Fund. SIDA - Guarantee Units has also been approached.

5. Revenues (more than US$2M p.a.) to be generated by the SPEs (for both MPA management and investor returns) via a range of sustainable and tangible finance tools including statutory fees paid by visitors and sales of blue carbon credits (detailed below in the financial model chapter).

Financial mode:

THE INVESTMENT PROPOSAL
The investment will start with a US$3M facility aggregating 2 projects co-managing 10 LMMAs. The investment will co-finance the development of eco-tourism facilities and blue carbon solutions for the effective management of Locally Managed Marine Areas (LMMAs).
The 10 LMMAs are located in the South West of Viti Levu, Fiji main island. They are located in the Coral Coast, one of the main touristic zones in Fiji. 9 LMMAs belong to the Korolevu-i-wai district (‘KiW LMMA network’) and 1 LMMA (the ‘Shark Reef Marine Reserve’) belongs to the Galoa village. They are half-way (100 km, 2 hours drive) between Nadi and Suva, the two main urban centres of the island with airports.

Project area consists of 6 traditional coastal villages, numerous settlements and residential areas with 1000 residents. Hotel & Accommodation facilities are well developed with 300+ hotel rooms.

Figure 6: Korolevu-i-Wai MPAs (map source: Google earth)

SHARK REEF MARINE RESERVE-SERUA

Figure 7: Shark Marine Reserve (map source: Google earth)

CO-MANAGEMENT ENTITIES & IMPLICATED PARTNERS
2 co-management entities have a recognized long term management lease for the 10 LMMAs: the KOROLEVU-I-WAI District Environment Committee since 2002 and the Shark Reef Marine Reserve (SRMR) Management Committee since 2014.

Beqa Adventure Divers (BAD) belongs to the SRMR Management Committee. BAD is a private, for-profit company that has been entrusted by Fiji Government in a ground-breaking PPP with the day-to-day monitoring, management and also enforcement of the SRMR. BAD is a multi-awarded world-renown, for-profit marine conservation project that is specialized in shark conservation, research and ecotourism, and operates a dive shop in Pacific Harbour, Fiji with a turnover >US$0.8M p.a. BAD is supporting and participating in several NGOs such as Mangroves for Fiji and My Fiji Shark Initiative.

Coral Coast Conservation Center is a Fiji-registered Charitable Trust with the mission to promote the management, conservation and sustainable development of Fiji’s natural resources through integrated research, education, income-generating and capacity building initiatives. CCCC’s founder members have been working with the KiW District Environment Committee since its creation.

A Special Purpose Entity will be created for the K-i-W LMMA network. The K-i-W LMMA SPE will be non-profit, non-stock company with the unique purpose of channelling the revenues linked to nature fees, ecotourism enterprise and blue carbon credits to the co-management entity. The SPE will receive the blended finance solution for the up-front capital needs. The board is comprised of members from the district environmental committee, CCCC and Blue finance.

Advisory committees formed by Government, academic, NGOs, tourism, fishers and civil society will provide guidance to the SPE.

Blue finance acts as the project developer improving technical quality and enabling the investment project to meet the UN SDG Fund and investor’s criteria.

**REVENUES**
Annual revenues for both projects are above US$2M p.a.

The business model is based on generating revenues from (i) improvements to marine biodiversity and visitor’s experience and (ii) conservation and restoration of mangroves.

SPE k-i-W and BAD will concentrate efforts on the following primary revenue sources:

- Nature fees paid by stay-over visitors, divers, snorkelers and other users in the K-i-W LMMAs;
- Shark eco-dive fees paid by divers in the SRMR;
- Digital visitor center ‘Sea Sensorium’ with a scientific base with lodging capacities;
- Sea-safari tours and other eco-tourism activities;
- Sales of blue carbon credits from mangrove restoration (feasibility in progress)

In the industry of tourism, SPE k-i-W fit as a provider of marine scenic beauty and act as an intermediary between nature ecosystem services and tourism businesses.

In 2018, approximately 200 000 visitors were hosted in the resorts in the LMMA perimeter in Korolevu-i-Wai. 30% of these visitors directly enjoyed the marine biodiversity diving or snorkelling in the LMMA and 30% enjoyed the beaches and other water sports. In 2019, approximately 10 000 divers have directly enjoyed the sharks and other marine in the SRMR.
In K-i-W, none of these visitors are paying nature fees or user fees due to lack of implementation and adequate regulations and it is proposed to implement a system of nature pass system with hotels and service providers. Local partners have received official confirmation from Hotel&Tourism association as well as from the dive-shop association to implement (non- statutory) user fees with their clients if adequate value for money is provided to their clients.

In SRMR, BAD has been servicing approx. 10,000 tourists and conducted approx. 400 dive courses in 2018 for an annual revenue >US$800k. Nature fees have been implemented by BAD and paid by their divers. Fees are redistributed to the LMMAs, to the NGO My Fiji Shark Initiative and to the NGO Mangroves for Fiji since 2014. Revenues redistributed have been above US$100k p.a.

The Sea Sensorium© visitor centre is a highly engaging journey through the coral reef ecosystems getting visitors in touch with fascinating marine life in new and exciting ways. The Sea Sensorium’s high-tech interactive experiences will challenge visitors to use all of their senses.

The center, approx. 800m² is designed as a walk-through experience with capacity for 50 persons. The center will serve also as a Coral Reef Education and Research Center. A second key feature of the facility would be a meeting hall / classroom area where a range of educational programs and activities could take place including live presentations, trainings and workshops, and group discussions/meetings. This meeting/classroom area would cater for 30-50 people maximum and would be used to conduct a range of revenue generating activities as well as be used for conducting local trainings, meetings, and capacity building programs. There is potential to generate supporting revenue through grants for projects that would involve the use of the facilities.

Several locations, both close to main tourism hubs, are being considered with initial negotiations on the way.

Annual revenues for both projects are above **US$2.2M p.a.**
Annual revenues from statutory and non-statutory fees (US$7 per user in average) paid by 40 000 divers and snorkelers as well as 20 000 day-tour passengers are expected to be close to **US$0.6M p.a.** This includes the fee paid by divers and snorkelers to access MPA underwater attractions (e.g. wreck, special events). These revenues will add to the incomes produced by BAD: **US$0.8M p.a.** and enhanced by the investment.

Initial projections for the visitor centre highlight annual incomes close to **US$0.8M p.a.** for up to 40k visitors per year (10% of the annual visitors plus school visits). Incomes are expected from entrance fees (US$15 per adult in average) and purchases of food and commodities (US$10 per person in average). The visitor centre specifications will be detailed during the first 6-month of activity of the SPE.

Annual incomes from the sale of blue carbon credits are estimated at **US$40k p.a.** Mangroves inside and outside the MPAs sum 80 ha. BAD is currently engaged in a Blue Carbon Resilience Project to pilot 5ha of mangrove restoration. Estimates are based on conservative assumptions of market price (US$15 per tCo2eq on the voluntary market), carbon sequestration (in average 1000t/ha) and project costs (US$5 per tCo2eq).

The main activities of the LMMAs include improvement of coral reef health (mainly through sustainable fishery and tourism as well as water quality improvements), compliance to regulations, community engagement and livelihood enhancement.
COSTS
The annual operating costs of the LMMAs, the visitor centre and BAD eco-dive company are estimated at US$1.9M p.a. approx.

Main activities include Community Development & Engagement, Biodiversity Conservation & Science, Sustainable Revenues, Management & Infrastructure and Law Compliance.

The main costs are personnel costs (almost 45% of the total Opex), communication & education and Sanctuary enforcement.

The management team will include 20 permanent staff. The Project Management Office (PMO) will be provided by the Blue finance expert team, in order to ensure a management focus on strategy execution, revenue generation and entrepreneurial capacities.

INVESTMENT
The up-front investments for both projects are estimated at US$3M

They include:
- US$0.6M for the purchase of the physical assets of the k-i-w LMMAs such as vessels, moorings, equipment, underwater facilities, etc. and preliminary studies
- US$1.7M for the design and development of the ‘Sea Sensorium’ digital visitor and educative center (approx. 800m2 with high-tech interactive experiences)
- US$0.5M for the purchase of the physical assets of the SRMR and BAD such as vessels, moorings and tourism facilities
- US$0.2M as working capital (corresponding to the period of preliminary activities without incomes).

The investment will be spread over a 3-year period and will depend on milestones such as implementation success of the fees and LMMA management effectiveness.

POSITIVE IMPACTS
Environmentally, the investment will contribute to an improvement in coral reef ecosystem health (trophic structure, biodiversity, resilience) as well as mangrove recovery. Live coral cover, mangrove habitat areas, fish population density and diversity are often used as indicators.

Socially, the investment will have a direct impact on the local economy. More specifically, local communities of small-scale fishers will benefit annually from increased fishery productivity. New jobs with small-scale eco-tourism activities will also be enhanced in the MPAs.

Project will contribute to SDGs nº14, 1, 8, 13, 14 and 17 (Life below water, No poverty, Decent work, Climate action, and Partnerships for the goal). The main targeted SDGs are as follows:

- Goal 8: ‘sustained, inclusive and sustainable economic growth’ is targeted specifically through the promotion of and investment in LMMA’s and SPE’s that provide for new economic activities, decent job creation, entrepreneurship, and as such encourage the formalization and growth of micro-, small- and medium-sized enterprises that focus on the blue economy and promote sustainable tourism (SDG 8 targets to be addressed: 8.3 and 8.9).

- Goal 14: ‘life below water’ is the clearest, as the proposal centres on coral reefs and the blue economy. SDG 14 is severely underfunded and requires additional resources and innovative projects to safeguard biodiversity rich ecosystems and reef-dependent

Financially, the project will generate RoI for debt investor above 7% (no currency risk accounted) and will contribute to the financial sustainability of the MPA.

Figure 8: Potential location for the Coral Coast Conservation Center ‘Sea sensorium’

Figure 9: Illustrative design for the Coral Coast Conservation Center ‘Sea sensorium’
Figure 10: Tourism facility design for the eco-dive activities

LMMA PROJECT CONTEXT

General context
The 10 LMMAs are located in the South West of Viti Levu, Fiji main island. They are located in the Coral Coast, one of the main touristic zones in Fiji. 9 LMMAs belong to the Korolevu-i-wai district (‘KiW LMMA network’) and 1 LMMA (the ‘Shark Reef Marine Reserve’) belongs to the Galoa district. They are half-way (100 km, 2 hours drive) between Nadi and Suva, the two main urban centres of the island with airports.

Project area consists of 6 traditional coastal villages, numerous settlements and residential areas, and coastal tourist developments ranging from 300+ hotel rooms from resorts and boutique hotels.
The community population of the study sites are close to 1000 residents with a mean household size of 5.1 persons (Narsey et al., 2010) (generally an extended family). On the Coral Coast numerous settlements of people largely employed in the tourism industry have multiplied the resident population. Most of the villages have a young age structure (an 40% approximate is aged less than 19 years) and only 10% aged over 60 years (Fiji Islands Bureau of Statistics, 2010). The Household Incomes and Expenses Survey (Narsey, 2006; Narsey et al., 2010) indicates clearly that the incomes are dominated by Home Consumption, Casual Wages and Agricultural Business, while for some families incomes are dominated by Permanent Income and Commercial Business. Subsistence production (e.g. food, firewood, house building materials) is present and the majority of the households are engaged in the sale of agricultural products, fish and handicrafts.

The HIES estimated the average income of rural households in Fiji to be around €540 per household per month. This revenue is equivalent to $880 in International dollars when applying PPP and Geary–Khamis dollar conversion. Approximately 36% of this income comes from subsistence production (Narsey, 2006; Narsey et al., 2010). For villages on the Coral Coast or close to Suva, this percentage should be minimized due to employment in hotels providing monetary income to buy goods. For example, in Muaivuso, a study (Beukering et al., 2007a) identified that a majority (70%) of the households own a television and 30% receive a remittance. On the other side, some specific studies (Comley, pers. comm.) on mining sites show that, even when receiving salaries, many families still rely heavily on subsistence production.

Apart from tourism, land owning clans (who are also the traditional fishing right owners) in the Korolevu-i-wai district also derive income from forestry activities conducted on their land, and much of the inland areas of watersheds in the district are planted with pine and mahogany, some of which is currently being harvested (Bonito et al., 2012). The income distribution measured through the population Gini coefficient is 0.439 and reflects differences between rural and urban households and between richest and poorest households. Fiji has significant inequalities in wealth. In 2005, more than 30 per cent of the population in rural areas was below the national poverty line (Narsey et al., 2010).
The most notable differences with Vanuatu are the level of household expenditures and the existence of an important tourism sector.

Table 5: Socio-ecological context of the villages (descriptions in the text)

| Source of data (if no specified: field data) | Resident population: field direct observations of the number of households * average size of household (5,1 person, (Narsey et al., 2010)); Average household expenditures and non-monetary incomes: the results come from the household surveys conducted in 2009 ); Areas of reef fishing ground and MPAs : Millennium Coral Reef Mapping Project (Andréfouët et al., 2005) and direct observations. |

Tourism context

In the studied villages, community-based ecotourism activities through guesthouses, cultural tours and snorkelling tours are poorly developed. Some initiatives have been tried in the last 5 years but most of them have failed for reasons different from market potential. Only one village (Votua) presently features accommodations for rural tourism (10 beds). The activities correspond to visits coming from the hotels to spend some hours in the village. A fee is paid to village for each visit. When the snorkel tours were undertaken in the LMMA, a fee was charged to visitors to get inside the LMMA with a guide.

On the Coral Coast and outside of the village context, tourism developments range from 300+ room resorts to small, boutique resorts and backpackers hotels. In the selected perimeter, a total of 1300 beds in 4 resorts are present. The resorts have developed a classic 3S (Sea, Sand and Sun) tourism market strategy. Several activities are proposed covering terrestrial and marine leisure pursuits. Trekking, visit to waterfalls, mountain climbing and horseback riding are the most common on the land-based activities. For the marine side, the tourists can choose between scuba diving, snorkeling in front of the hotel (in a delimited perimeter with the option to rent gear), organized snorkeling trips inside and outside of MPAs using a boat, glass bottom boats and sport fishing.

Two diving clubs have been located within the studied part of the Coral Coast. They are based inside the hotels and form part of the bundle of activities proposed to the guests. They offer a total capacity of 40 divers per day with 3 boats. The main sites are close to the hotels and channels (less than 30 min). More than 50% of the dives correspond to first dive certification.
One diving club in Suva has been identified to dive occasionally in the Navakavu reefs with a 20-person boat capacity.

Figure 2: Distribution of tourism value added generated by marine ecosystems in Korolevu-i-Wai and Navakavu. Total is US$ 9.3 M.yr⁻¹

Ecological context
The Coast is characterized by fringing reefs with shallow intertidal platforms up to 700 m wide that are separated by a series of deep-water channels located at the discharge points of rivers. The reefs are composed of coral, rubble, sand, and algal flats interspersed with moats and tidal channels. The dominant reef geomorphologic type is the ocean and the intra-seas exposed fringing reef, Outer barrier reef complex and Fringing reef of coastal barrier reef complex (corresponding to the classes identified by the Millennium Coral Reef Mapping Project, (Andréfouët et al., 2005)). Other formations include Coastal-fringing patch.

The Korolevu-i-Wai district covers ~9km² of fringing reef area. Fore reef areas have a well-developed reef crest that extends down to ~5-8m depth and then drops steeply to 40m+ along most of the reef; only a few reef areas have terraces or moderate fore reef slopes below the reef crest zone. Back reef areas consist of shallow (<4m depth) moat platforms ranging from ~450 to 750m in width and separated by a series of deep-water channels located at the discharge points of rivers. Corals from four families (Acroporidae, Faviidae, Pocilloporidae, and Poritidae) are the most abundant.

Ecosystem Services Provided
The Korolevu-i-wai customary fishing ground provides a suite of benefits to the adjacent coastal community. These ecosystem services include3, but are not limited to:

- Subsistence fisheries that support villages and settlements in and around the Korolevu-i-wai district (~428 households);
- Commercial fisheries that, while generally conducted on a small-scale, are comparable to subsistence fisheries in terms of harvested resources;
- A cultural / bequest value to the Vanua Davutukia of Korolevu-i-wai and Koroinasau;
- Critical coastal protection to more than 428 houses and 80,000 m² of tourism buildings; and
- Reef associated tourism activities including over 400 coastal tourist rooms, SCUBA diving (2 operators), snorkeling, glass bottom boat tours (3 operators), game fishing (7 operators), and other marine-related tourism operations.

In 2013, environmental economists undertook a study to estimate the value of the above listed ecosystem services provided by the coral reef ecosystem that comprises the Korolevu-i-wai customary fishing ground using biological and socio-economic data collected in 2011 and 2012. Pascal and Seidl (2013) report a total estimated value of ecosystem services
provided by the Korolevu-i-wai coral reef of US$12.2 million (~FJ$20.5 million) per annum. Reef associated tourism activities accounted for roughly 80% (~FJ$16 million) of the value, coastal protection accounted for ~14% of the value, and subsistence and commercial fishing combined comprised only ~4% of the value of ecosystem services provided annually.

**Baseline data**

A benthic monitoring campaign, a target fish population’s census and an herbivore algal assay comparing sites with and without LMMA and conducted in the Korolevu-i-Wai district gave us some ideas of the ecological impacts of MPAs (Bonito et al., 2012). In the same way, an assessment of catch per unit effort (as a proxy for fish abundance), fish biomass per unit effort and percentage of potentially reproductive fish was compared to adjacent fished areas (Clements et al., 2012). Both studies have shown clear evidence of the ecological impacts of MPAs on habitats and fish populations inside the boundaries of the LMMA. The main results found are:

![Figure 3: Mean Hard Bottom Composition by Protection Status, Site and Zone (NPMPA stands for Non-permanent Marine protected area and CCA for crustose coralline algae). Extracted from (Bonito et al., 2012)](image-url)

**Baseline fish**

![Baseline fish biomass graph](image-url)

- **FISHED**
- **MPA**
- **NPMPA**
Baseline herbivore fish
Herbivore assays conducted in 2010 and 2011 clearly show that herbivore on the five common species of brown algae used in the assays was significantly greater in the MPAs than in the fished areas with more than 80 of the algae being consumed at some LMMA sites while little to no algae were consumed at the fished sites.

Baseline invertebrates
Results indicate that there are two species that clearly dominate the harvest: Tripneustes gratilla (common name: cake urchin; Fijian: cawaki) is the most harvested species (35% of households consider this to be their most frequently harvested product from the iqoliqoli) and the second-most is Lethrinus harak (Blackspot emperor).

Community-based LMMA in Fiji
Today Fiji is facing challenges such as (i) increased fish demand from human population growth (planned to increase by 50% by 2030 with projected food requirements well in excess of what coastal areas are currently likely to produce without significant improvements in management and productivity) (Bell et al., 2009) (ii) the rapid introduction of market economy with its associated rural migration, loss of traditional customs and urban poverty (Cinner and Aswani, 2007), (iii) a small island context with limited economic options (Beukering et al., 2007b) and, (iv) potential climate change effects on their coral reef ecosystems services (Baker et al., 2008; Knowlton, 2000). These challenges are reinforced by the fact that national budgets are usually small and face considerable demands to meet human development priorities such as health, education and food production.

As a result, local populations and local governments would greatly benefit from improved understanding of the means to manage marine resources sustainably with inexpensive and strong performing tools. For some actors, Community Based Management (CBM) approach is now proposed as the main basis for securing the well-being of both reefs and communities of most of the Pacific Islands (Johannes, 2002; Johannes and Hickey, 2004; Tawake and Aalbersberg, 2002; UNEP, 2004). CBM starts from the basic premise that people have the innate capacity to understand and act on their own problems (Ruddle, 1994). Essentially, CBM builds on what the community thinks and allows each community to develop a management strategy that meets its particular needs and conditions. Its approach is people-centred and driven by consensus. The core of CBM is community organization, where empowerment is a primary concern. The management is carried out primarily by the community through the relevant user groups and also involves appropriately the locally and nationally institutional and private stakeholders.

Management rules such as fishing closure, temporary bans, size restriction, gear controls can be very diverse and some of them are still based on Traditional Ecological Knowledge (TEK) (Cinner and Aswani, 2007; Johannes, 1998, 2002). In recognition of these characteristics a regional term has been adopted since 2000, Locally Managed Marine Area or LMMA.

Community-based Marine Protected Areas (MPAs) have experienced an impressive development during the last decade in Fiji (Aalbersberg et al., 2005). They usually form a part of a larger management scheme named Marine Managed Area (MMA) and more than 250 documented MMAs now exist in Fiji (Govan, 2009). An MMA is defined as an area of near-
shore waters and coastal resources that is largely or wholly managed at a local level by the coastal communities, land-owning groups, partner organizations, and/or collaborative government representatives who reside or are based in the immediate area (Govan, 2009).

Tourism context in Fiji
The tourism industry is integral to Fiji’s economy, but Fiji’s tourism demand is concentrated in three countries. Australia, New Zealand, and the United States make up 74% of Fiji’s tourist demand. Tourism is generally regarded as a luxury good, so its consumption is closely tied to discretionary income. Fiji experienced downturns in the tourism market as a result of poor economic performance in other countries and future tourism demand will depend on future economic performance of those key countries going forward. Australia’s economy was in recession in the early part of 2011, the United States economy is stagnating, and only New Zealand’s economy has been growing.

The government of Fiji can maintain the economic success of the fishing and tourism industries by conserving the natural resources that are so important to the continued success of each industry. One way this can be done is by incorporating the value of nature into national accounting and decision frameworks so that the economic contribution of nature is clearly known. If the value of nature is recognized and emphasized, decision makers can use that information to ensure nature remains a productive asset of the national economy. (Verdone and Seidl, 2012b)
**Annex 10: Western Sanitary Landfill**

This project involves the establishment of a sanitary landfill with the simultaneous establishment of Regional Transfer stations and second phase Materials Recycling Facility. Sanitary landfill network of refuse transfer stations and GPS-tracked trucks in the first stage, with progressive build-in of a materials recovery facility and ancillary recycling and upcycling businesses. The venture will lay the foundation for large scale recycling which currently does not take place in the Pacific region.

Western Division (second largest of four provinces) is served by a 16ha open dumpsite with no sanitary engineered landfill or leachate control and is situated on mangrove. The Western division is adjacent to the Great Sea Reef, home to Fiji’s second, third, fourth and fifth largest cities, as well as hosting 700k tourists annually. Western Landfill is a coordinated, safe, efficient, best practice solid waste management for western Viti Levu, Fiji of political importance with improved environmental outcomes and consistent with the Fijian Environmental Act. The Landfill will serve as a platform for regional hub and/or other waste businesses (material recovery & recycling, upcycling). It will be constructed and operated by the only company with in-country experience: HG Leach with 15 years DBO&M experience at the Naboro Landfill, Suva, Fiji.

The business will generate revenues from gate fees, premium gate fees and service fees to producers of waste (households and businesses) for whom the collection services are provided. The outcomes from the project are expected to be:

6. 100,000 MT MSW p.a. redirected, GHG Reduction 30,000 Mt p.a.
7. avoided c.0.5ha p.a. mangrove forest loss
8. Fish Stock: On a 1000ha area (Vunato) the increase expected at 560MT
10. USD10m leveraged from the private sector
The sanitary landfill project is a complex and longer-term proposition, and its planning and execution timeline is set out below:

A Sanitary Landfill with 5 satellite Refuse Transfers Stations (RTS) and transport between the RTSs and Landfill is the first step, to contain the problem quickly and effectively, providing the basis for materials recovery and other economic opportunities.
Coordinated action between government agencies will be required with leadership from a Project Working Group.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Potential Role</th>
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<tbody>
<tr>
<td>Ministry of Local Government</td>
<td>• Own the project (potential governance structure including councils)</td>
</tr>
<tr>
<td>Municipal Councils</td>
<td>• Collection and (partial) transport</td>
</tr>
<tr>
<td></td>
<td>• User fees collection</td>
</tr>
<tr>
<td></td>
<td>• Awareness</td>
</tr>
<tr>
<td>Prime Minister’s Office</td>
<td>• Oversee coordination between Government Ministries, Departments and Agencies</td>
</tr>
<tr>
<td>Ministry of Economy</td>
<td>• Engage PPP Unit and form a Project Working Group</td>
</tr>
<tr>
<td></td>
<td>• Tax free zone</td>
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<tr>
<td></td>
<td>• Allocate ECAL</td>
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<tr>
<td></td>
<td>• Import duty / fiscal duty concessions</td>
</tr>
<tr>
<td>Ministry of Lands and Mineral Resources</td>
<td>• Contribute land</td>
</tr>
<tr>
<td>Ministry of Waterways and Environment</td>
<td>• Regulate and enforce Environmental Management Act</td>
</tr>
<tr>
<td>Investment Fiji</td>
<td>• Accompany international investors to set up investments in Fiji</td>
</tr>
<tr>
<td>FRCS</td>
<td>• Assist in reducing tariffs and duty on imported equipment</td>
</tr>
</tbody>
</table>

Note: A financial structure without contribution of land by GoF is feasible and interest from investors (i.e. Althelia) for such a financial structure has been confirmed.
Annex 10: Fertile Factory (Green Waste to organic fertiliser)

This business will establish locally produced non-synthetic fertiliser that can service significant local demand and create ecosystem benefits across the sugar industry. Currently the industry utilises nonorganic fertiliser which is subsidised by the government. The toxic run-off from this fertiliser has been shown to have ongoing and long duration deleterious effects on the coral reef area where this run-off is concerned (the Dreketi river entry point).

This business has established a proprietary formula for the production of a cost competitive locally produced non-chemical fertilizer which, when paired with farmer training, can significantly increase yields, soil quality, and contribute to reef health:

11. Land based pollution (siltation and nutrient fertilizer runoff) pose a significant risk to reefs around Viti Levu and Vanua Levu

12. Deforestation and agricultural conversion close to watersheds are major drivers of siltation

13. Fiji's geology provides fragile and thin topsoil. This is often offset by unsustainable chemical fertilisation which destroys the microbiological life responsible for building humus and topsoil.

14. A cost competitive locally produced non-chemical fertilizer paired with farmer training can significantly increase yields, soil quality, and contribute to reef health.
Expected impact from the project is as follows:

- 4,100 MT p.a. of non-synthetic fertilizer produced resulting in
  - 3,020 ha of coastal / waterways sugar cane farmland serviced
  - 6,600 MT p.a. net CO2 emissions mitigation from composting
  - Increased Dreketi River water quality (Nitrate, Phosphorus, Solids)
  - Improved health of at least 8,000ha marine area

**Annex 11: Brief description of current investment development pipeline to be included in the Technical Assistance Facility managed by Matanataki**

Matanataki is a Fijian development and management advisory, working with blue and green businesses and investors to catalyse high impact investments which address the acute nature of climate change and bring rapid solutions for the conservation and regeneration of land and seascapes.

Matanataki combines the expertise, commitment and experience of four partners: Landscape Finance Lab, Ikigai Advisors, Ennovent and The Earth Care Agency. Together these partners bring a shared vision to empower business and industry to regeneratively contribute towards climate resilience, food security and the building of community wealth.

Matanataki’s first facility is the Great Sea Reef Development Facility, which will channel impact investment into Fijian businesses in support of the goals of the Great Sea Reef Resilience Programme, a land and seascapes programme driven by WWF Pacific.

Below an overview of the Matanataki’s current “hard” pipeline with a high level overview of 21 of its most promising businesses and projects for investment. Matanataki continues to provide technical assistance and capacity building support. The pipeline projects are in different stages and grouped in different sectoral categories.
Waste & Plastics Management

**Surf-focused Upcycling Start Up**
This well known ocean-focused conservation organisation is seeking to create high value upcycled plastic items sold with a “story”, such as surfboard fins and other surfing paraphernalia made from plastic waste collected from one of the best surf breaks in the world. Expansion plans include container-sized manufacturing units on outer islands for communities to process their own plastic waste and earn money from what they produce.

<table>
<thead>
<tr>
<th>Investment need</th>
<th>USD0.5m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Impact</td>
<td>Amount of pollution prevented</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Sustainable enterprises created, jobs created, jobs supported are held by women</td>
</tr>
</tbody>
</table>

**Farmer Cooperative-owned Composting Company**
This project will create value added, organic certified fertility products from animal manure and green waste otherwise destined for landfill. Farmers will have access to competitively priced fertility products which will both feed their crops and condition their soils.

<table>
<thead>
<tr>
<th>Investment need</th>
<th>FJD1.1m</th>
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<tbody>
<tr>
<td>Key Impact</td>
<td>Amount of pollution prevented</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Sustainable enterprise created, jobs created, area under improved management for conservation</td>
</tr>
</tbody>
</table>

**Industrial Plastic and glass Upcycling**
This experienced plastic waste collector and trader plans expand its business into upcycling. Products under consideration include agricultural fenceposts, jetty planks, pothole fillers and bollards made of upcycled plastic, glass aggregate made from grinding glass bottles, and glass kitchen bench tops. New technologies will be introduced via a JV with a NZ partner.

<table>
<thead>
<tr>
<th>Investment need</th>
<th>USD0.5m</th>
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<tbody>
<tr>
<td>Key Impact</td>
<td>Amount of pollution prevented</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Change in enterprise viability, jobs created</td>
</tr>
</tbody>
</table>
Sustainable Fisheries

Supply Chain Company for Community Produced Bèche-de-mer

This company provides sea cucumber farming infrastructure and ranching expertise to communities and purchases sustainably produced and monitored bèche-de-mer at fair prices for sale at an in country auction house, which communities co-own. This PPP will bring international ranching and hatchery expertise to communities in partnership with a government-owned hatchery.

Sustainable Tilapia Aquaculture Farming and Processing Facility

This experienced project developer is establishing a sustainable Tilapia production and basic processing facility. The developer is contributing an existing land plot and a feasibility study is under way.

<table>
<thead>
<tr>
<th>Investment need</th>
<th>USD2.95m</th>
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<tbody>
<tr>
<td>Key Impact</td>
<td>No of threatened species</td>
</tr>
<tr>
<td>Key Impacts</td>
<td>Area of production in new iSeal certification, sustainable enterprises created, area under improved management for conservation, jobs created</td>
</tr>
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<table>
<thead>
<tr>
<th>Investment need</th>
<th>USD5m</th>
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</thead>
<tbody>
<tr>
<td>Key Impact</td>
<td>Area of production in new iSeal certification</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Sustainable enterprises created, jobs created, perceived community well being</td>
</tr>
</tbody>
</table>

Community-based edible oyster farming with ready markets into Asia

This company is establishing a community outgrower scheme farming edible oysters for the Asian market. The Private Public Partnership will facilitate real and tangible progress towards achieving Sustainable Development Goal 14 to “conserve and sustainably use the oceans, seas and marine resources for sustainable development.

<table>
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<tr>
<th>Investment need</th>
<th>TBC</th>
</tr>
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<tbody>
<tr>
<td>Key Impact</td>
<td>Sustainable enterprises created or supported</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Area under improved management for conservation, area of production in new iSeal certification, jobs supported are held by women, change in enterprise viability</td>
</tr>
</tbody>
</table>
**Tropical Species Aquaculture Business**
This business consists of a hatchery and farm producing multi-species fish and shellfish for ornamental and food security purposes. The sustainable business model includes working with communities towards environmentally responsible practices for obtaining food fish fingerlings for grow out and restocking. Collection of fertilised eggs from the wild and culturing of fish occurs with almost zero impact on wild populations.

<table>
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<tr>
<th>Investment need</th>
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<tbody>
<tr>
<td>Key Impact</td>
<td>No of threatened species</td>
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<tr>
<td>Other Impacts</td>
<td>Area of production in new iSeal certification, Sustainable enterprises created, jobs created, perceived community well being</td>
</tr>
</tbody>
</table>

**Women-focused Seaweed and Marine Food Products**
This family-owned start up produces edible seaweed and other marine products, working primarily with women in island communities, creating beautifully packaged value added products for the international market.

<table>
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<tr>
<th>Investment need</th>
<th>USD0.5m</th>
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</thead>
<tbody>
<tr>
<td>Key Impact</td>
<td>Sustainable enterprise created</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Improved species status, area of habitat restored, area under improved management for conservation, CO2 reduction against baseline</td>
</tr>
</tbody>
</table>

**Woman-owned Artisan Fruit-based Popsicle Company**
This micro enterprise is impacts both the sustainable fisheries and regenerative agriculture spaces. The ice pops are handmade using coconuts, fresh fruits, produce, and spices - organic wherever possible. The company is exploring the use of community-farmed carrageenan (marine algae) as an option for locally sourced and processed plant-based stabilizer to increase the shelf life and longevity of the ice pops instead of using an imported alternative.

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<th>Investment need</th>
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<tbody>
<tr>
<td>Key Impact</td>
<td>Sustainable enterprise supported</td>
</tr>
<tr>
<td>Other Impacts</td>
<td>Jobs supported are held by women, area of production in new iSeal certification</td>
</tr>
</tbody>
</table>
Community-based Shrimp Farming
This experienced international prawn farmer seeks to establish a cyclone resilient (tank based) shrimp aquaculture training farm, and two small holder pilot farms (one high risk, one low risk) as a first stage in an outgrower scheme producing Pacific White Shrimp at scale for local consumption. Currently Fiji imports FJD 25m annually of shrimp, and this project seeks to capture this market and use surplus for export.

Coastal restoration

Land-based Coral Reef Restoration Company
This company restores threatened reefs by growing resilient corals on land, transplanting them into degraded sites in the Caribbean, and is targeting expansion into Fiji. Its clients include resorts/ ecotourism operators, government, marine park managers, communities, corporations and foundations.

Eco-engineered Marine Habitat Enhancement
This company manufactures industrial-sized blocks which can be placed along seawalls (e.g. port and marina infrastructure) and out to sea where offshore infrastructure is built. These blocks increase local sea life, provide coastal protection from erosion, serve as anti-trawling devices and act as static shellfish and seaweed farming boosting marine biodiversity. The blocks are made from recycled materials.
### Regenerative Agriculture

**NZ-Fiji JV producing plant-based medicines to fight antibiotic resistant trains of Urinary Tract Infections (UTIs)**

This NZ-based start up is looking to partner with Fijian pharmaceutical labs and organic certified growers to produce a scientifically validated ginger-based UTI medicine.

<table>
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<tr>
<th>Investment need</th>
<th>TBC</th>
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</thead>
<tbody>
<tr>
<td><strong>Key Impact</strong></td>
<td>Area of production under new iSeal certification</td>
</tr>
<tr>
<td><strong>Other Impacts</strong></td>
<td>Area of habitat restored, jobs created or supported, jobs supported are held by women, area of improved management for conservation</td>
</tr>
</tbody>
</table>

**Medical kava company in transition to organic**

This Australian stock exchange-listed company has a vertically integrated supply chain including a nucleus farm in Fiji which is in transition to organic. The company is focussed on expanding the distribution of kava throughout the western markets to provide a natural alternative to anti-anxiety medicines such as Xanex and Valium. Upcoming outgrower schemes will require that suppliers farm according to rigorous a regenerative agriculture model which will be audited.

<table>
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<tr>
<th>Investment need</th>
<th>USD5m</th>
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<tbody>
<tr>
<td><strong>Key Impacts</strong></td>
<td>Area of production under new iSeal certification</td>
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<td>Area of habitat restored, jobs created or supported, area of improved management for conservation</td>
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</tbody>
</table>

**Remote Island Community-owned Coconut Oil and Surfboard Wax Business**

This community business was founded in 2015 and is owned by 43 families on a remote Fijian island. It is the first iTaukei (indigenous Fijian) association to achieve world recognised certifications (USDA NOP, EU Organic and ISO 22000). In 2019 the group added surfboard wax to their Virgin Coconut Oil product line. They aim to launch the all-natural wax with a well known surf brand at the Tokyo Olympics 2021.

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<td><strong>Key Impact</strong></td>
<td>Perceived community well being</td>
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<td><strong>Other Impacts</strong></td>
<td>Jobs supported are held by women, change in enterprise viability, change in household income, area of habitat restored, area of production in new iSeal certification</td>
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**Women-focused Beeswax Production**

This group is seeking funding to establish a legal entity, and build a basic processing facility where women can come together to process wax to supply the Remote Island Community-owned Coconut Oil and Surfboard Wax Business above.

**Investment need** | USD0.1m  
---|---
**Key Impact** | Perceived community well being  
**Other Impacts** | Change in enterprise viability, change in household income, area of production in new iSeal certification

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**Renewable Energy**

**Small island hybrid floating and rooftop solar systems**

This Austrian start-up develops floating solar platforms for offshore PV and has successfully demonstrated the technical and economic viability of its solar systems in the Maldives. The company seeks to expand to Fiji, which has more than 90 off-grid hotel which rely mainly on diesel generation for electricity. This expansion will also involve implementing a marine conservation strategy. Current ideas include using offshore mooring infrastructure as a fish aggregating device, vertical ocean farming and coral reef restoration.

**Investment need** | TBC  
---|---
**Key Impact** | Amount of pollution prevented  
**Other Impacts** | Improved species status, jobs created, CO2 reduction against a baseline

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**The world’s first zero liquid discharge, solar desalination**

This company has created the world’s first solar-thermal desalination technology, with zero liquid discharge. Harnessing solar power to purify tough and inconsistent water types this company’s solution uses optimized solar energy to sustainably produce clean water which has a carbon footprint of 1g of CO2/L. There is also potential to disrupt water bottling industry which unsustainably relies on PET.

**Investment need** | TBC  
---|---
**Key Impact** | Perceived community well being  
**Other Impacts** | Jobs created, sustainable enterprise created
**Information Technology**

**Blockchain-based traceability platform for sustainable production**
This business offers a market-based transparency solution to verify, trace and communicate sustainable production. It aims to deploy the solution in Fiji’s longline tuna fishing industry and pilot a tailored solution for small-scale operators within Fijian coastal fisheries targeting threatened species such as kawakawa (grouper; *Epinephelus* sp.), donu (coral trout; *Plectropomus* sp.) and urakula (golden rock lobster; *Panulirus penicillatus*).

**Impact measurement reporting platform**
Historically measuring impact has been a significant challenge for businesses due to a lack of data, capacity, investment, cost and best-practice. This cloud-based platform enables organisations to measure, manage and communicate financial and non-financial outcomes, linking desired behaviours with validated outcomes to measure impact daily and in real time.
Eco-Tourism

Eco-tourism business with a core mission to conserve and regenerate the local catchment area
Fiji’s first templated ocean-agri-leisure business, designed to address the special needs of environmentally conscious visitors to pristine travel destinations, through provision of key tourism services and activities based on a “pay to-play-and-protect” user pay model which can be replicated in tropical reef destinations around the world.

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<td>Area under landscape management, area of habitat restored, area of natural habitat, improved species status, change in household income, amount of pollution prevented</td>
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<tr>
<td>Other Impacts</td>
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Annex 12: Additional Impact and Environmental Data

12.1 Sanitary Landfill
Impact on coral reefs
A study conducted by WWF has established a baseline for fish abundance and coral cover in front of the largest dump site. The projected impact is based on the difference between this baseline and the statistics of a pristine exosystem. However, there is no baseline estimate for the smaller municipal dump sites. The WWF study is not yet finalised as it requires input from the Ministry of Fisheries, however we have provided the draft for reference.

Summary of impacts

- Reduce marine pollution: 100,000 MT MSW p.a. redirected to sanitary disposal site
- Protect Coastal Ecosystem: avoid c.0.5ha p.a. mangrove forest loss, cumulative Mangrove loss and pollution have degraded area of some 1000 ha
- Increase Fish Stock: On a 1000ha area (Vunato) the increase expected at 560MT
- Avoided tourism loss of valued at c. USD1bn p.a. Western Division is adjacent to the Yassawa and Mananuca islands
- Private Sector Finance of c.$10m leveraged
- GHG Reduction of 30,000 Mt p.a. (conservative estimate based on GIZ evaluation)

Data from the existing sanitary landfill suggests almost half of the waste reaching landfill could be recoverable (Leach and co 2019).
The Vunato dumpsite, situated on a mangrove, exemplifies the ecosystem degradation caused by the lack of sanitary engineering. The dump has expanded over more than 2 decades causing substantial environmental damage and increased coral reef degredation.
**Coral reef health**
Coral reef surveys were conducted at one ecological site (see above) adjacent to the waste site on September 24, 2019 by WWF, University of the South Pacific, and Ministry of Fisheries.

**Benthic habitat health**
Reef condition was poor, with low visibility and high coverage of easily disturbed silt. At 1 m depth, the seabed was covered with algae and occasional small branching Acropora corals. The quantitative ecological survey at 9 m depth identified 51% of the seabed as covered by sand and silt, 45% by broken up coral rubble, and only 4% by live hard coral cover. This coral community included colonies of branching Acropora and sub-massive Pocillopora and Porities. WWF surveys of the Great Sea Reef conducted at 73 sites during 2019 estimate average regional hard coral cover at 34%. The reefs adjacent to the Lautoka Waste Site were the most degraded, with the lowest cover of any sites surveyed during the 2019 WWF Great Sea Reef survey. The high sedimentation on the reef is likely caused in part by the extensive mangrove loss and degradation associated with the adjacent waste dump site.

**Fish abundance and biomass**
Fish abundance and biomass were low on the reef adjacent to the waste site. The density of fish larger than 10 cm in length was only 23 individuals/ha, and average biomass was 45 kg/ha. These values were amongst the lowest recorded on the Great Sea Reef, which had an average fish density of 59 individuals/ha and biomass of 440 kg/ha. Globally, healthy reefs in the absence of fishing have approximately 1,000 kg/ha, which helps to maintain ecological functions, and near-pristine remote reefs have biomass up to 1,900 kg/ha. The fish community was dominated by butterflyfish, with no commercially important species observed, and low numbers of functionally important herbivores present.

**Environmental pollution**
Chlorophyll-a and particulate organic carbon are both indicators of pollution, with greater concentrations indicating more pollution in coastal waters. WWF sourced satellite timeseries environmental data from NOAA for a marine site adjacent to the waste dump (Fig. 1). Both chlorophyll-a and particulate organic carbon are highly seasonal adjacent to Lautoka (Fig. 5). However, there has been a slight increase in peak concentrations of chlorophyll-a in recent years.

**Conclusion and recommendations of the study**
These results show extensive mangrove forest loss and degradation associated with the Vunato Dump, alongside degraded and sedimented coral reefs. The dump has expanded over the past two decades, and if allowed to continue to operate, it will cause substantial further environmental damage to this coastal area. We expect this to include further mangrove loss and increased coral reef degradation. No assessments of heavy metals, persistent organic pollutants, or other hazardous chemicals have been conducted to date adjacent to the waste site or in the adjacent coastal area. We recommend that these surveys be conducted as a priority. Given the lack of regulations governing the waste site, it is likely that substantial toxic pollution exists.

We highly recommend investment for a long-term solution to waste, such as a sanitary landfill following the best practice waste management guidelines on a new site inland.

**Other impacts:**
- Waste diverted: this is part of the project preparation work to establish the baseline for current waste generation and collection in the Western Division. While we have statistics and a good understanding of the waste generation from Naboro landfill...
(Central Division) which is c. 0.7 kg/day/person we will need an external study confirming this and providing investors with comfort.

- GHG avoided: we have used a publicly available tool to estimate the CO2 emission reduction from diverting future waste to sanitary landfill. This will need to be confirmed by a specialist during project preparation. GHG emissions of the existing dump sites will continue unless the sites are rehabilitated. While not part of the project as described we were assured that there is a solution and a market to finance rehabilitation with CO2 certificates – this could be an ancillary project.

- Jobs: Phase 1 (landfill) will create jobs, however not on a large scale. These jobs will include:
  - Landfill operation personnel (low double digits)
  - Transport (low double digits to operate a fleet of 7 trucks)
  - RTS operation is likely to provide employ the same personnel currently operating the dump sites

Outcomes

- The most evident outcome will be a working system for sanitary waste disposal (measured in amount of waste going through gate)
- Second a system for capturing and transporting municipal waste (measured as the coverage ratio of estimated waste generation)
- Lastly waste stream analysis should estimate the amount of waste reaching the ocean and accordingly capture in sanitary disposal sites will have as an outcome of reduced locally caused marine debris
12.2 Fertile Factory – Green Waste Project
The Environmental Impact expectation has been developed based on the research performed on the Dreketi River which has been found to be causing most of the turbidity in the Marine Area and the close relationship of that turbidity on coral and algal cover (Full details on the Ramsar site here: https://rsis.ramsar.org/RISapp/files/RISrep/FJ2331RIS_1802_en.pdf).

Dreketi river is the primary cause of turbidity!
Relationship of turbidity to coral cover and algal cover:

Figure 4. Turbidity estimates from the Bayesian model predict (A) silt cover (zero inflated log-linear model), (B) cover of sediment-sensitive scleractinian coral genera (linear model fit with logit transform) and (C) algal cover (zero inflated logit model). Lines show model fits, where a solid line is statistically significant (p < 0.05). Dashed lines in (A,B) give 95% confidence intervals.

The Dreketi river enters the ocean at the edge of Qoliqoli Cokovata Ramsar Site
Targeting critical agricultural production alongside Dreketi river, the main outcome will be a regenerated ecosystem at the mouth of the Dreketi river with additional benefits to land-based ecosystems (especially soil).

Detailed assessment and measurement methodology will be developed as part of the TA during the JP.
Dear Bram,

PS is yet to endorse the support letter – there are some changes that we are working on. Should be able to send this across by Monday.

Thanks,

Kushaal Raj
Ocean Specialist | Climate Change & International Cooperation Division (CC&ICD)
Ministry of Economy | Level 8 East Wing, Ro Lalabalavu House | P O Box 2212 Government Buildings, Suva, Fiji.
Phone: (679) 3307 011 | Ext: 382117 | DID: 3221217
Email: kushaal.raj@economy.gov.fj | Web: www.economy.gov.fj

For more information visit www.carefiji.digitalfiji.gov.fj
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Miranda Turaganivalu
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