



ANNUAL NARRATIVE REPORT:
Terumbu Karang Sehat Indonesia
June – December 2022

Report submitted by:

Conservation International (CI)

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Programme Overview

Programme Title & Project Number	Programme Duration
<p>Programme Title: Terumbu Karang Sehat Indonesia (TKSI)</p> <p>Programme Number: 131252</p>	<p>Start Date: June 2022</p> <p>End Date: December 2029</p>
Programme Location	Co-recipient Organisation/s and Implementing Partners
<p>Country/ies: Indonesia</p> <p>Priority Coral Reef Site/s:</p> <ol style="list-style-type: none"> Bird's Head Seascape (West Papua and South-West Papua Provinces) East Sumba (Sumba Timur), Sumba Island (East Nusa Tenggara Province) 	<p>Co-recipient Organisation/s: N/A</p> <p>Implementing Partner/s:</p> <p>Lead Implementation Partner: Yayasan Konservasi Cakrawala Indonesia (YKCI)¹ is responsible for programmatic and strategic direction for Indonesia-based activities.</p> <p>Research Co-Implementers:</p> <ul style="list-style-type: none"> State University of Papua (UNIPA) will be responsible for monitoring and evaluation in the BHS. Nusa Cendana University (UNDANA) will be responsible for East Sumba baseline socioeconomic assessment. Artha Wacana Christian University (UKAW) will be responsible for baseline ecological assessment. University of Mataram (UNRAM), with technical guidance of Cargill, Inc. will be responsible for seaweed disease and climate resilience research. <p>Finance & Investment:</p> <ul style="list-style-type: none"> Conservation International Ventures LLC (CIV) is responsible for investment pipeline incubation and concessional financing. Microfinance Innovation Centre for Resources and Alternatives (MICRA Indonesia) is responsible for

¹ Yayasan Konservasi Cakrawala Indonesia (YKCI) is a newly established independent Indonesian non-governmental foundation (Yayasan) formed in connection with the previously reported transition of CI's Indonesia country programme. YKCI will act as CI's main partner in Indonesia and will operate in a manner similar to other CI affiliates, e.g., South Africa and Brazil. As the main partner of Conservation International in Indonesia, Konservasi Indonesia developed a strategy and business plan to ensure continued strategic and programmatic alignment with Conservation International.

	<p>conducting a micro-finance landscape assessment for the BHS.</p> <p>Community Partners:</p> <ul style="list-style-type: none"> - Blue Abadi Fund/Kehati will be responsible for convening a Papuan Advisory Council. - EON Engineering is responsible for the final design of the Raja Ampat Mooring Buoy system. <p>MPA Management Authorities:²³</p> <ul style="list-style-type: none"> - Raja Ampat MPA Management Authority - Bomberai MPA Management Authority - National MPAs Management Authority, MMAF⁴ - Nusa Tenggara Timur Provincial Conservation Board (Dewan Konservasi Perairan Provinsi NTT)
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Total Approved Budget	
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Total GFCR Budget:	\$3,000,000
Convening Agent:	\$3,000,000
UNCDF Blue Bridge:	N/A
Co-Recipient:	N/A

Total Approved Co-Financing:		
Co-Funder 1: CI Ventures LLC	\$1,500,000	Activity 4.2.2.
Co-Funder 2: Margaret A. Cargill Philanthropies	\$500,000	Activity 1.1.1., 2.1.1., 2.1.2
Co-Funder 3: Private Donors	\$200,000	Activity 1.1.2, 1.1.3, 2.3.1
Co-Funder 4: Cargill, Inc. (Anticipated)	\$125,000	Activity 3.1.2
Co-Funder 5: IKI Somacore (Anticipated)	\$ 499,836	Activity 3.2.1, 3.2.2

GFCR Preparatory Grant Awarded:	YES
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Programme-Level Indicators	Targets	2022 Progress
Reef Fish Biomass	Fish biomass of key functional groups is stable across the Bird's Head Seascape MPA network.	Reef fish biomass baseline assessment was planned at the end of 2022 for several sites in BHS and East Sumba. Due to timing and seasonal conditions, some of the activities had to be

² Public MPA Management Authorities referenced here as per GFCR guidance but are not expected to receive GFCR funding administered by the Convening Agent.

³

⁴ In connection with this programme, YKCI leadership have previously engaged with both the MMAF and East Nusa Tenggara Marine Affairs and Fisheries Department (DKP NTT). Given the geographic overlap between CI and TNC programme interests in East Nusa Tenggara / Savu Sea, formal joint engagement with the National MPA Management Authority in Kupang and the NTT Provincial Conservation Board is planned as part of programme commencement.

	% increase in biomass for selected reef fish families in East Sumba. ⁵	shifted to the first half of 2023.
Live Coral Cover	<p>Live coral cover is stable across the BHS MPA network.</p> <p>% increase [or no net loss] in live coral cover associated with addressable acute threat abatement.⁴</p>	<p>Live coral cover baseline assessment was planned at the end of 2022 for several sites in BHS and East Sumba. Due to timing and seasonal conditions, some of the activities had to be shifted to the first half of 2023.</p> <p>60-70% live coral cover in East Sumba is initial data collected by contracted university that need to be crosschecked.</p>
Proportion and Area (Ha) of reefs in associated ecosystems with effective management	40% (approximately 107,000 hectares) of priority coral reef ecosystems in the BHS are under more effective protection and Management. ⁶	[% and area (in hectares) of reefs with effective management to date] Progress is not yet defined since the research is still on going.
Investment capital leveraged	USD \$73 million	<p>Total: \$500,000</p> <p>CI Ventures: Fund-Level:⁷ \$-- Portfolio-Level:⁸ \$500,000</p> <p>Other:</p>
Grant co-financing leveraged	USD \$2,325,00	<p>Total: \$[2,200,000]</p> <p>CI-US: \$[•]</p> <p>CI Ventures: \$1,500,000</p> <p>KI: \$[700,000]</p> <p>Anticipated - USD 499,836 million (IKI Somacore – Solution for Marine and Coastal Resilience in the Coral Triangle)</p>
Beneficiaries	100,000	<p>Total Beneficiaries: 91 (40 women)</p> <p>CI Ventures Investments: Direct:⁹ 15 (5 women) Indirect:¹⁰ 76 (35 women)</p> <p>Other:</p>

⁵ Target metrics to be revised based on updated baseline assessment in initial programme phase

⁶ The BHS has a total of 266,924 ha coral reefs. In phase 1, the programme aims to increase capacity and revenue sources of the Bomberai MPA Authority (BLUD) which manages 6 MPAs covering 25,821 ha of coral reefs (~10% of total BHS reefs). In the second phase, the programme aims to increase capacity and revenue sources of the Cenderawasih Bay National Park Authority, which manages the National Park covering ~80,000 ha of coral reefs (~30% of total BHS reefs). If the debt swap goes through for Blue Abadi as proposed in a separate connected proposal, then the Raja Ampat MPA Management Authority (BLUD) would also have increased capacity and revenue, adding an additional 8% of the BHS reefs under improved protection.

⁷ Fund-Level Leverage: Non-GFCR fund capitalization secured

⁸ Portfolio Leverage: Transaction level co-financing mobilized from third-party investors

⁹ CI Ventures - Direct Beneficiaries: Direct full-time equivalent employees

¹⁰ CI Ventures – Indirect Beneficiaries: Inclusive of direct suppliers and individuals receiving training and technical assistance by portfolio enterprises

		At this project preparation stage, the project focuses on studies, thus no data yet on number of beneficiaries
Coral-positive Enterprises	At least 10 businesses are incubated in BHS. # of enterprises supported in East Sumba will be defined by the end of this phase	Total Enterprise Investments: ¹¹ 1
Livelihoods Impacted	304 jobs created in BHS. The number of jobs created in East Sumba will be defined by the end of this project preparation stage.	CI Ventures: 15 FTEs (incl. 5 women) Other: At this project preparation stage, the project focuses on studies, thus no number yet defined on livelihood impacted.

¹¹ Total Enterprise Investments: Transactions executed and disbursed during the reporting period



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● Executive Summary

Conservation International's ("CI") Global Fund for Coral Reefs (GFCR) program in Indonesia seeks to promote inclusive, equitable, and coral reef-positive economic development and investment actions that are aligned with national and subnational marine conservation and sustainable development policy objectives. In close partnership with local implementing partner, Yayasan Konservasi Cakrawala Indonesia (hereinafter, "Konservasi Indonesia" or "KI"), the CI GFCR program in Indonesia identified two initial coral reef ecosystem priorities: 1) the Bird's Head Seascape (BHS) in South-West Papua and West Papua Provinces¹²; and 2) Sumba Island in East Nusa Tenggara Province. The BHS represents 75% of the world's known species with over 600 species of hard coral and 1,850 species of reef fish and has some of the highest levels of endemism globally. Within the BHS, the highest diversities have been recorded in Raja Ampat, the Fakfak-Kaimana coast (Bomberai), and Cenderawasih Bay.¹³ In contrast to the BHS, Pulau Sumba (Sumba) has been the subject of lower levels of conservation investment. A main island encompassed within both the Lesser Sunda Seascape (LSS) and Savu Sea Marine National Park (Savu Sea TNP); Sumba exhibits a disproportionately high degree of coral diversity relative to its coral extent: nearly one-third of Indonesia's 569 coral species are found within Sumba waters.¹⁴

In the BHS, the program explores the impact of tourism on the MPA of Raja Ampat that has the best-in-class management model. Further we are working to determine how to replicate this success in other regions in Fakfak-Kaimana MPAs. In Sumba, the programme seeks to leverage strong government and local industry support in seaweed and other favorable enabling conditions to collaboratively design, pilot, and implement reef-positive blue economic development models that generate significant reef conservation outcomes alongside sustainable livelihood development pathways that can be replicated at a provincial-scale.

The primary focus of this initial 18-month phase of the CI GFCR program in Indonesia is to conduct a series of baseline assessments and develop enabling conditions to address key ecological, biological, and socio-economic data gaps and inform program design and target setting. In East Sumba, two studies—the biological and socio-economic baseline studies of seaweed industry in East Sumba—are in the final stages, while four more studies are on-going. These studies' results will help us design and formulate the next phases of GFCR. From the two nearly completed studies, we have found that the seaweed industry in the area has huge impacts on the community and positive impact to coral reefs. Several challenges remain, and interventions should thoughtfully be designed to upgrade the industry into sustainable practices. Seaweed farming has become the main livelihood for many people in the province. According to our studies, it has minimum negative impact to coral reefs and helps reduce pressure from fishery exploitation in the area. Furthermore, it is one industry that promotes nearly equal participation from women along the supply chain. From farming to distribution and financing, women's representation is nearly as high as that of men.

In West Papua, our second program site, GFCR has supported data collection through routine ecological data monitoring on the status of the reefs in two MPAs in December 2022. Data is collected in a rotational pattern in the BHS because of the sheer number of sites. Socio-economic data will be

¹² In November 2022, through the Law No. 29/2022, a new province South-West Papua was formed taking several regencies in West Papua to be part of the new province. Raja Ampat was one of the regencies included in South-West Papua.

¹³ <https://www.sciencedirect.com/science/article/pii/S0025326X12003451>

¹⁴ Monitoring Kondisi Terumbu Karang Dan Ekosistem Terkait di Kabupaten Sumba Timur - Jakarta: COREMAP CTI LIPI 2018, p. 34, <http://indocoasting.id/pages/output-report?action=preview-pdf&id=77>



completed in May 2023 and will be used as baseline data for the GFCR BHS baseline. The program is also focusing on assessing existing tourism policy and practices, including developing a tourism spatial plan to guide future investments and ensure they are coral positive. The tourism study helps compare different typology of sites in Raja Ampat—comparing overcrowded and less popular tourist destinations—to understand how tourism has affected the environment (including coral reefs) and their carrying capacity. Another ongoing activity is securing the enabling conditions for a mooring system to eliminate anchor damage on some of the world’s most biodiverse reefs. These 18 months will be dedicated to building enabling conditions for BLUD Bomberai to establish sources of revenue stream which will allow the organization to sustainably manage the MPA in Kaimana and Fakfak. These activities will result in outputs to inform the local and national government in formulating the policies in support of sustainable tourism and MPA management in BHS.

The biological baseline study in East Sumba helps identify suitable locations for seaweed aquaculture within the region. The study shows that the areas in East Sumba are still ideal for seaweed cultivation with the optimum temperature, salinity, pH, and other biological parameters. Coral covers in most of those areas are in good condition. Most of the farmers use the off-bottom method on sand substrate instead of on coral. The seaweed farming activities decrease the pressure on near shore coral since most of the activities were conducted in seaweed farming instead of on the coral reefs (such as coral cleaning). By developing successful and sustainable seaweed aquaculture practices that do not interfere with reefs, we are shifting the economic focus from these coral-destructive practices to practices that provide local incomes without damaging reefs. The study also outlines several farming practices that could be improved to reduce negative impact to coral reefs and the ocean such as replacing plastic materials.

More importantly, the study identifies the underlying problem in the industry: the lack of quality seedlings. The seaweed industry's socio-economic study calculates its importance in numbers and its social impacts, such as high gender inclusion. The KI team and partners have shared the studies with relevant stakeholders and local governments. The results were well received, and inputs have been incorporated. To support the issue with seedlings, another study is searching for disease and climate resistant strains from the wild seaweed in several parts of Indonesia. The study involves collaborations and exchange with experts in South-East Asia. The results will recommend certain seaweed seedling strains, which have high productivity, thus reducing pressure on coral reefs.

In Papua, the Raja Ampat Mooring System (RAMS) has finished the identification of mooring points and the first half of surveying these points. At the same time, the tourism regulatory and spatial planning study completed its first round of surveys and came back with information on the much-needed MPA management financing. Assistance in the formulation of Governor’s regulations to support the management of MPA in Fakfak – Kaimana has started and hopes it will pave the way towards replicating the gold-standard MPA management in Raja Ampat.

Conservation International Ventures (CIV) has signed several investment agreements and mobilized USD 500,000 through equity investment. We are collaborating with The Nature Conservancy-YKAN on how to coordinate our GFCR programs, especially in supporting their Coral Reef Financing Facility. The team has curated several businesses that have no or positive impact to coral reef or those that support reef-positive industries, reducing pressure to fisheries and coral reefs.

Through a series of studies, analysis, and consultations conducted this year, the project’s key impact areas include the availability of updated and consolidated baseline data and information, which are

essential in building enabling conditions for investments in the project sites and identifying and building engagement with partners who will play key roles in the next phases. These results give us guidance on the design of the next phases of the programs.

Several key tasks for the next phase of implementation include mobilizing larger investment portfolios into more-diverse investment pipelines, working on practical solutions to address national-level challenges of the lack of disease and climate-resistant seedlings, replicating effective and sustainable management of MPA models into other areas, and establishing mooring points to protect the reefs from the impact of tourism.

I. Programme Objectives

OUTCOMES

- **Outcome 1 – Protect BHS:** The funding gap to effectively protect the globally significant coral reef and associated ecosystems in the BHS MPA network is significantly reduced.
- **Outcome 2 – Transform BHS Ecotourism:** Culturally appropriate, reef-positive economic development and livelihood initiatives are cultivated in the BHS, in and around the MPA network, with an initial focus on ecotourism, thus reducing the rates of poverty and food insecurity and creating jobs for local reef-dependent communities, while incentivizing continued coral-reef conservation.
- **Outcome 3 – Enhanced Economic Resilience through Reef-Positive Seaweed Development:** Enhanced economic resilience for Sumba Island communities and reduction or avoidance of adverse impacts to coral reefs through development and expansion of sustainable, equitable and coral reef-positive seaweed mariculture industry livelihood alternatives.
- **Outcome 4 – Transform Access to Financing for Reef-Positive Enterprises:** Reduced barriers to financial access for reef-positive micro, small and medium enterprises.

OUTPUTS

- **Output 1.1 - MPA Financing:** Increased, diversified, and more sustainable revenue sources that support MPA management in priority MPAs in the BHS through: (a) coral reef focused debt for nature swap for the Blue Abadi Fund; and (b) replication of relevant MPA governance and financing models first piloted in Raja Ampat.
- **Output 2.1 - Responsible Ecotourism Growth:** The anticipated growth of ecotourism in the BHS is thoughtfully planned, geographically dispersed, and well-managed, ensuring sustainable ecotourism grows in such a way that reduces impact to coral reefs and maximizes benefits to local communities while incentivizing continued conservation.
- **Output 2.2. – Inclusive Tourism Development Support:** Equitable access to financing and technical support for micro, small and medium reef- positive eco-tourism enterprises are increased, with a specific focus on Papuan and women-led enterprises and sustainable enterprises at risk of COVID-caused bankruptcy.
- **Output 2.3 – Ecotourism Threat Reduction:** Direct impacts of the ecotourism industry on coral reef ecosystems in the BHS, including from anchor damage, plastic waste and wastewater are reduced.
- **Output 3.1 – Evidence-Based Frameworks for Reef-Positive Seaweed Sector Development.** Foundational research to guide near-term reef-positive mariculture siting and growing practices and long-run disease and climate resilience.
- **Output 3.2 – Roadmap for Investment in Reef-Positive Seaweed Development:** Roadmap and strategy for blended investment in reef-positive seaweed industry and livelihood development.



- **Output 4.1. – Pipeline of Reef-Positive Investment Opportunities in Priority Sites:** Geographically, strategically, and thematically aligned investment opportunities are identified in Priority sites.
- **Output 4.2 – Investment Mobilization:** Mobilization of initial portfolio of reef-positive investments in GFCR Priority Areas and sectors.

PRIORITY SECTORS AND FINANCIAL INSTRUMENTS TO ADDRESS IDENTIFIED DRIVERS OF CORAL REEF DEGRADATION

- **Outcome 1-** focuses on generating diversified **MPA revenue streams** to ensure the continued effective co-management and enforcement of the MPA network in perpetuity, including a reef-focused **debt for nature swap** and the replication of **use and/or access-fee based revenue models** in other MPA sites within the BHS.
- **Outcome 2** - focuses on transforming **ecotourism** in and around BHS MPAs through **grant-based enabling investments** in **technical assistance, training, and seed support** for local reef-positive ecotourism enterprises.¹⁵
- **Outcome 3** - includes a combination of **enabling grant investments** in foundational research and **industry investment readiness** activities antecedent to concessional private debt and equity seed investment in sustainable, reef-positive seaweed sector development and enterprise and **livelihood alternatives in Sumba**.¹⁶
- **Outcome 4 - Outcome 4** encompasses the Grant Window-funded **concessional debt and/or equity investments** to be deployed through CIV in furtherance of the program investment objectives in the BHS and Sumba.

II. Programme Implementation & Results

A. Programme Results Overview

Outcome 1 - Protect BHS

As noted above, Outcome 1 focuses on reducing existing funding gaps associated with effective protection of the globally significant coral reef and associated ecosystems in the BHS MPA network. The program activities described below are described under program **Output 1.1.** and are intended to contribute toward Outcome 1 through increased, diversified, and more sustainable revenue sources that support MPA management in priority MPAs in the BHS:

Debt-for-Nature Swap

Following delays in bilateral negotiations between the Government of Indonesia and the U.S. Government—represented by USAID and the U.S. Department of the Treasury—a potential debt-for-nature swap under the U.S. Tropical Forest and Coral Reef Conservation Act (TFCCA) program has gained traction. CI and The Nature Conservancy (TNC), together with our respective Indonesian counterparts, KI and YKAN, have been supporting negotiations and coordination between the US and Indonesian Governments. KI-YKAN-USAID's first coordination meeting took place on March 10, 2023, at KI's office discussing on several scenarios the debt swap funding

¹⁵ with a primary focus on opportunities that promote equity and economic inclusion for Papuans and women while addressing direct tourism activity threats to the coral reefs

¹⁶ Outcome 3 investments are intended to create the enabling conditions for future larger-scale commercial investment by the GFCR Equity Fund or other private investment.



amounts, disbursement areas, as well as potential fund managers and key stakeholders. Currently, the debt swap transaction is targeted at USD 18 million, inclusive of USD 3 million in co-financing provided through the GFCR. The key milestone for this activity is the agreement signing between the U.S. Treasury and the Government of Indonesia by September 2024.

Bomberai BLUD Capacity Building and Sustainable Financing

By establishing itself as a BLUD (Public Service Agency), Bomberai MPA management body—which manages MPAs in Fakfak and Kaimana Regencies—will be able to seek funding from external sources as well as manage government funding. It will also ensure that revenues (e.g., retribution) generated from activities in the area will be managed by and channeled to provincial activities. Since its preliminary approval and establishment in 2021, Bomberai BLUD has received technical assistance from KI to reach its goal in a sustainable management of MPAs.

The Bomberai MPA Management Unit was inaugurated as a BLUD in October 2021 through a West Papua Governor’s Decree. Governors’ Regulation No. 20 was issued in May 2022 to strengthen its management and governance, including a Standard Operating Procedure (SOP). Together with West Papua Governors’ Regulation No. 3/2021 on financial Management of BLUD MPA Management Unit in West Papua, the Bomberai MPA Management Authority is fully eligible to receive non-government funding. During this reporting period we supported the Bomberai MPA Management Unit to apply for a grant from the Blue Abadi Fund. The BLUD received an approval for a grant of Rp 1,911,000,000 (approximately US\$ 127,000) from the Blue Abadi Fund to continue the joint community patrols and management of the MPA from May 2023-February 2024. The Bomberai BLUD will need regular access to funds, and we plan to help them secure the needed funds through this GFCR program.

BLUDs need to continue to develop regulations to achieve maximum flexibility potential. This flexibility in financial management will stem from implementing healthy business practices to improve services to the community without profit orientation, promote general welfare, and educate the community. Healthy business practices are achieved by carrying out organizational functions, based on good management principles, in the context of providing quality and sustainable services. BLUD Bomberai needs at least eight more Governor’s Regulations to ensure its management. Several priority governor regulations that need to be developed by BLUD are (1) BLUD revenue sources including Environmental Service Tariffs, (2) BLUD Strategic Plans, (3) BLUD Minimum Service Standards and (4) Remuneration. KI is supporting the development of a governor’s regulation on BLUD sources of revenue including environmental services fees. The BLUD also receives additional support from other initiatives and programs such as USAID-Kolektif Project—a biodiversity protection program through the MPA management effectiveness—starting in 2023. TNC-YKAN, as one of the lead implementers of USAID-Kolektif, is also a co-convening agent of GFCR that helps leverage BLUD management and GFCR program coordination.

KI organized several stakeholders’ consultations in support of the issuance of the Governor’s Regulation on BLUD sources of revenue. At the national level, in the annual Minister of Maritime Affairs and Fisheries (MMAF) coordination meeting, Marine Protected Areas (MPA) financing through a fisheries utilization fee was discussed. Unfortunately, government officials concluded that this idea required a feasibility study, since no conservation area had used this model before. Discussions regarding funding for this conservation area were then carried out with the Marine and Fisheries (Department (DKP) of West Papua Province in October 2022. DKP decided to apply the financing model that was conducted in Raja Ampat, from tourist entrance fees and non-binding party grants. Developing several additional funding sources, such as fisheries utilization fees and other services,

are not recommended because there are no regulations for legal basis or examples of implementation. Further discussions included BLUD UPTD. According to Elly Awe, Head of the UPTD BLUD, they did not have sufficient independent funds to carry out the effective management of the Bomberai MPA and had hoped for assistance from KI. He said that for the 2022 budget year, the West Papua DKP is still prioritizing Raja Ampat for funding so that the allocation of funds to the Bomberai MPA is extremely limited to fuel for several patrol activities. As result, discussions were directed to exploring the amount of environmental services fees and tariffs that the MPA management body in Fakfak-Kaimana should impose on users. The regulation also outlines several business opportunities that will help finance MPA management and the operation of the BLUD.

During this reporting period, we explored BLUD's potential revenue sources. The Minister of Maritime Affairs and Fisheries (MMAF)'s regulation states that the MPA Management Unit should seek income from entrance fees for tourism, education, and research. Learning from Raja Ampat, an MPA BLUD sources of income can only come from entrance fees and/or third-party grants. Other sources of income, such as fisheries utilization levies or other businesses, have never been developed or implemented by any MPA BLUD in Indonesia. With its current condition, the most feasible step for Bomberai BLUD is to copy Raja Ampat's model for revenue: entry tariffs. With GFCR money, KI helped the provincial government to produce the first draft of the Governor's Regulation in June 2023 on revenue streams from entrance fees for tourism, education, and research. A lot of resources—especially financial resources—are needed in producing a Governor's Regulation. With current capacity levels, the provincial government is relying on third-party support. This has resulted in the progress being slow, as third-party support takes time to reach its optimum level.

Outcome 2 - Transform BHS Ecotourism

To achieve this outcome, program outputs and activities are oriented toward: 1) sustainable management of tourism growth as Raja Ampat is getting the ever-increasing fame as a tourist destination (**Output 2.1.**); 2) pathways for increasing equitable access to financing and technical support for micro, small, and medium reef- positive eco-tourism enterprises focusing on the indigenous people of Papua and women-led enterprises and sustainable enterprises at risk of COVID-caused bankruptcy (**Output 2.2.**); and 3) strategies to mitigate the direct impacts of the ecotourism industry on coral reef ecosystems in the BHS, including from anchor damage, plastic waste and wastewater pollution (**Output 2.3.**).

Responsible Ecotourism Growth

After experiencing a decline in the total number of visits due to the Covid-19 pandemic, tourist visits—both foreign and domestic—are slowly recovering to pre-pandemic levels. Increasing the number of visits should not have a negative effect on the environment, especially on the condition of coral reefs which are the icon of ecotourism in Raja Ampat.

The GFCR provides strong support for the importance of growth in coral reef-friendly tourism. This was conveyed by KI in the GFCR Kick Off program at the Raja Ampat Tourism Office in August 2022. During the kickoff, which was attended by the Head of the Tourism Office and his staff, KI explained in depth the Raja Ampat Spatial Plan and Raja Ampat Mooring System programs. The Regional Government of Raja Ampat said that the government needed support to make policies and regulations for tourism development and community assistance. Blooming crown of thorn, increasing algae population and changing the color of the waters to become greener are indicators of decreasing water quality in several places in Raja Ampat. This condition occurs due to household waste from tourism business actors (homestays, resorts and liveboards, etc.) that are dumped into



the sea. The discussion during the kickoff identified violations of MPA zoning regulations and the occurrence of tourism practices that were not environmentally friendly, such as stamping on corals, catching biota (a tourist attraction), crowded diving in one spot, throwing anchors on corals and vandalism. This threatens the health of coral reefs on a large scale. As result, the government began cooperating in spatial planning for tourism development, standardizing homestays, increasing public awareness by reactivating Tourism Awareness Community Group, creating communication materials, developing codes of conduct, studying, and implementing carrying capacity, training for local guides, improving the system monitoring, controlling, and supervising tourism activities, enforcing sanctions for violations of regulations.

An ongoing study in Raja Ampat focusing on tourism spatial planning is being conducted to determine how to best improve legislation, and through comprehensive analysis, and stakeholder consultations. The first survey findings were presented by the research team on March 6, 2023, to stakeholders. The survey results provide a public tourism typology model, leading to a series of public consultations to gauge the aspirations of the stakeholders to the Raja Ampat tourism. The overall goal of this study is to identify areas for potential tourism expansion while ensuring that heavily visited areas are well-managed and maintained, without additional pressures from increasing tourism. Coral reefs are critical to Raja Ampat tourism as most tourists visit to enjoy the underwater beauty. Results from the study will give the local government the technical guidelines and references for the tourism spatial plan and management and the draft for a spatial plan regulation. Outputs from these processes will be presented to the national government in June 2023 for further policy coherence and obtain national support to the Raja Ampat tourism spatial plan and management.

Raja Ampat Mooring System

To minimize the damage to coral reefs—especially from liveaboard boats that swarm in Raja Ampat—a mooring system is needed. This system will allow the boat crew to anchor the boats safely to a mooring point instead of on the coral reefs. To date, all mooring points have been identified, and further surveys are needed for each mooring location. Currently there is no government policy that regulates the mooring system in Raja Ampat. A draft of governor regulation will be produced to regulate and enforce a mooring system in this area.

As an initial step, the local government has set up a working group to speed up the implementation of this project and policy. The work will then be communicated to several national government institutions: ministries (Transport, Tourism, and Coordination Ministry of Maritime Affairs and Investment) to gain their attention and participation. This activity's objective is to ensure the sustainability of the mooring management by developing a business and financial plan. Managing stakeholders' expectations and balancing important needs such as the costs of instalment, the amount users will pay, and management of the funds collected are especially important. A business plan—which will be developed in this phase—is crucial.

At this inception phase, our GFCR activity also focuses on preparing a draft for Governor's Regulation as a legal basis to the mooring initiative. The Governor's Regulation will oversee the management of the mooring system including—among others—monitoring, enforcement, fees and tariffs, distribution of revenues and impact to the stakeholders, especially the community. BLUD will have an operational agreement with PT EON—a private entity that executes the mooring system implementation. GFCR investment will be channeled through PT EON because BLUD cannot take debt investment and the investment will be used for maintenance, monitoring, and repair. Our activity also explores the various schemes of giving back the revenue to the community. Until the



investment reaches a break event point, the payback to the community will be in the form of capacity building and education activities to help the community understand the importance of RAMS and coral reef protection. At the same time, other incentives for the community will be explored, including giving work training and employment.

Outcome 3 - Transform Seaweed Development

The communities of East Sumba are among Indonesia's poorest and most climate vulnerable. The regional economy and employment in East Sumba are dominated by agriculture including a mix of water-intensive industrial crops (e.g., sugar cane), rainfed crops, and livestock. Trends toward more frequent and increasingly severe droughts have had devastating impacts on the local economy, livelihoods, and food security. It has caused local communities to use marine resources in coral reef areas, increasing the pressure on the reefs. Seaweed farming is seen as a coral friendly mariculture in East Sumba. Most farmers use the off-bottom method on sand substrate instead of on coral, which is considered a coral friendly activity.

The development and expansion of seaweed mariculture in East Sumba has been identified by the Indonesian Government as a promising pathway for local economic and livelihood diversification and resilience. Since 2010, East Sumba has benefitted from national and subnational government support and investment to establish itself as a regional seaweed aquaculture industrialization hub. Today, an estimated 3,438 households in East Sumba are actively engaged in seaweed cultivation. East Sumba seaweed production accounts for 2,158,903 metric tons or 13.80% of the total seaweed produced in NTT Province.

Most farmers use the off-bottom method on sand substrate instead of on coral in farming, which is coral friendly. The seaweed study by Universitas Kristen Artha Wacana also confirmed this condition. However, the seaweed mariculture is not 100% coral friendly since the farmers still use plastic ropes and plastic bottles for buoys. These plastics, if detached, can cause damage to the corals if entrapped in the reef structure and consumed by sea life. There is no alternative yet for plastic use, although the study suggests better-quality plastic ropes could be used.

With 583.70 of the 600 hectares designated for seaweed cultivation currently being utilized, future production growth will require expansion of seaweed farming areas. According to the East Sumba Regency Fisheries Service, the current cultivation footprint represents just 1.46% of the total 41.026 hectares of potential cultivation area in East Sumba waters.

Recognizing the climate resilience and sustainable development potential of seaweed mariculture for the communities of East Sumba, the proposed GFCR program interventions are designed to **support national and local seaweed sector development ambitions ensuring the protection of coral reef and seagrass ecosystems and biodiversity (Outcome 3 – Transform Seaweed Development)**. To ensure that interventions and investments are rooted in the best available science and evidence-based practices, Phase I program activities were focused on: 1) **local bioecological and socioeconomic baseline assessments** intended to: (a) address fundamental science, data and information gaps related to coral reef-macroalgae farming interactions, including direct and indirect physical and bioecological risks to coral reefs posed by seaweed mariculture; and (b) build a more robust understanding of the human and socioeconomic dimensions and industry and market factors that influence seaweed cultivation and management behaviors in East Sumba Regency; and 2) supporting **research on systemic industry risk factors critical to industry sustainability and resilience** in East Sumba, NTT Province, and nationally.

East Sumba Bioecological and Socioeconomic Baseline Assessments

During the Reporting Period, baseline bioecological and socioeconomic baseline studies were started by Indonesian academic institutions Nusa Cendana University (UNDANA) and Artha Wacana Christian University (UKAW), respectively. Final draft versions of both assessments were received in January 2023 and will be submitted as part of the next reporting period once reviewed and finalized.

The foregoing assessments have yielded valuable ecological and socioeconomic context and information regarding local seaweed cultivation practices, value chains, and livelihoods within East Sumba Regency including **new insights into seaweed mariculture-coral reef interactions and impacts** derived from primary data collection from a sample of 170 active seaweed cultivators across the top three seaweed-producing districts in East Sumba (select insights as follows):

- While most growers seek to avoid or minimize direct impacts to coral reefs and other sensitive habitat (seagrass beds), **more than one-third (31.76%) of seaweed farms have some direct impact to coral reef substrate** through the placement of ropes or anchoring stakes.
- Increased **incidence of seaweed disease (ice-ice) in some locations has resulted in observed clearing of seagrass and coral reef habitat** as growing areas are relocated.
- Improper management of **plastic material used in seaweed cultivation (e.g., ropes, bottles/floats) and post-harvest activities (e.g., nets, tarp) pose risks to coral reefs**, however, more than 80% of respondents report efforts to reuse plastic materials where possible.

Seaweed Sector Resilience Studies

In addition to the local baseline assessments referenced above, seaweed resilience research is being undertaken by regional consortium of leading research institutions including the University of Mataram (UNRAM) in Indonesia, the University of Philippines, and University of Malaya (Malaysia). The objective of the current study is to identify native, disease resistant wild seaweed strains with high cultivation potential—a key strategy for addressing issues of declining seaweed quality, productivity, and increased disease incidence facing seaweed producers in East Sumba, East Nusa Tenggara province, and nationally. To date, the research team has completed sample collection and DNA analyses from the first of three regional sampling sites. The results of the current study will identify one or more candidate seaweed strains with potential for future propagation and distribution in East Sumba nurseries for local farmers. Beyond potential industry and economic implications, **other research into seaweed sector resilience addresses the coral reef protection and conservation objectives of the GFCR by mitigating risks associated with coral and other sensitive habitat clearing due to disease (see above) and reinforcing sustainable seaweed mariculture as a viable, low-ecological impact livelihood alternative** to more ecologically adverse activities.

Together, the research activities are expected to contribute toward the development of 1) Evidence-Based Frameworks for Reef-Positive Seaweed Sector Development (Output 3.1.); and 2) a Roadmap for Investment in Reef-Positive Seaweed Development (Output 3.2.). In which these outputs are intended to strengthen the foundation for a more holistic set of seaweed related program interventions and investments that promote cultivation practices that avoid adverse impacts to coral reefs and more strongly align reef protection and economic incentives.

Outcome 4 - Transform Reef-Positive Enterprises Through Access to Finance

Program interventions associated with Outcome 4 are focused on the incubation and acceleration of coral reef positive enterprise investments in Priority Sites through Conservation International Ventures (CI Ventures), an impact-first investment vehicle managed by CI.

Establishment of Dedicated GFCR Indonesia Investment Window

During the reporting period, programmatic activities to establish a dedicated GFCR Indonesia investment window within CI Ventures were undertaken. Due to the timing of final administrative matters associated with the closing of CI international operations in Indonesia and the establishment of an affiliate agreement with Konservasi Indonesia, the timing of formal legal due diligence associated with CI Ventures activities in Indonesia (primarily concerning direct investments in Indonesian firms)¹⁷ and hiring of Indonesia based personnel were delayed until early 2023. As of this writing, local counsel RFPs have been issued and personnel related matters have been addressed.

Investment Pipeline Scoping & Development

During the reporting period, preliminary scoping and identification of prospective blue economy investments was undertaken for both initial Priority Sites. Preliminary pipeline scoping activities included a combination of site-based and remote (desktop and network based) scoping through targeted events including:

- **Indonesia Seaweed Investment Forum and Festival (Surabaya, Indonesia | November 2022)** jointly organized by the Directorate General for Product Competitiveness, Ministry of Marine Affairs and Fisheries and Konservasi Indonesia. Further, involvement included local, regional, and international industry representatives, academic institutions, public trade and investment promotion agencies, and private investment representatives including Deliberate Capital (representing both the Meloy Fund and GFCR), CI Ventures, and Hatch Blue.
- **Hatch Blue x CI Ventures Asia Region Women in Ocean Food Innovation Studio (Bali, Indonesia | November 2022)** convened a cohort of 10 women-led enterprises from across Southeast Asia, advancing ocean sustainability innovations (<https://www.hatch.blue/innovation-studios#wiof>). The cohort included multiple Indonesian startups and other regional companies with current or potential enterprise engagements in Indonesia relevant to GFCR program objectives (see Appendix X).

In connection with preliminary scoping, intentionally broad sectoral eligibility criteria were applied with the goal of identifying the broader investment opportunity landscape. For both the Bird's Head Seascape and East Sumba, enterprises within the following sectors, industries, and supply chains were evaluated:

- MPA related coastal and marine tourism
- Marine and coastal fisheries and aquaculture
- Circular economy solutions addressing marine and coastal pollution and waste

Preliminary scoping activities were focused on prospective investees with direct operations (i.e., physical operations and assets) in Priority Sites and enterprises with current or potential supply chain linkages to Priority Sites and eligible sector activities and enabling and/or supporting products,

¹⁷ Note that these matters do not affect the ability of CI Ventures to invest in enterprises with holding companies and/or subsidiaries registered outside Indonesia



services, or technologies. Results of preliminary scoping activities indicate that while the current pipeline of “shovel-ready” investment opportunities in Priority Sites is limited, there is strong demand and potential to support the transition of existing firms toward more sustainable, coral positive business operations. There is even further potential to leverage program investments to strengthen integration and alignment of prospective investees with GFCR program objectives.

An initial pipeline of prospective opportunities along with a brief assessment of GFCR program relevance and alignment is being submitted along with this Report as a separate attachment. **Note that due to the existence of Confidentiality and Non-Disclosure Agreements with prospective investees, information contained in the Pipeline Report should not be publicly disclosed, circulated, or disseminated unless otherwise authorized in writing by Conservation International Ventures LLC.**

Investment Mobilization

During the Reporting Period, CI Ventures executed an initial USD 500,000 SAFE investment in Seadling Pte. Ltd. (). Seadling Pte. is a Singapore registered seaweed biotechnology startup headquartered in Malaysia that formulates plant-based pet nutritional products utilizing sustainable, traceable, and socially responsible seaweed material. GFCR impact alignment and other additional details regarding this investment are presented in Section G. Case Studies.

B. Monitoring and Evaluation

Program Monitoring & Evaluation Framework

KI's internal readiness to build the M&E (monitoring & evaluation) system for this project (Terumbu Karang Sehat Indonesia) was marked by the on boarding of the Safeguards and Monitoring & Evaluation Manager on December 2, 2022. The draft of M&E framework was completed in January 2023. The M&E defines the key aspects of what will constitute as performance under this GFCR Project. Further, it describes the basic principles by which M&E activities will take place, the types of information to be compiled and utilized to improve performance, and a general approach to the implementation and management of M&E. The Theory of Change for the TeKSI (Terumbu Karang Sehat Indonesia) project can be found in annex 1, whereas the full document for the M&E framework can be found through the dedicated [link](#).

Site-Specific Baseline Assessments; Framework Inputs

During the reporting period, baseline socio-economic and ecological data collection and assessment in East Sumba was conducted by the University of Nusa Cendana (UNDANA) and Artha Wacana Christian University (UKAW), respectively. The primary objectives of these data collection and baseline assessments were to inform the design of future seaweed-related program interventions, identify key seaweed cultivation and coral-reef exposures and impacts and associated coral risk management strategies, and provide key baseline information that can be integrated into the Program Monitoring & Evaluation Framework. The studies also recommend several approaches to farming practices that are more environment- and reef-friendly. These approaches include replacing plastic materials with local natural and sustainable materials, such as coconut tree-based products.

The findings of the UNDANA study confirmed that the seaweed business has bright prospects in the East Sumba district. UNDANA's findings were confirmed by UKAW's findings that the water conditions in East Sumba are suitable for seaweed cultivation. In addition, it was found that the

condition of coral cover continues to be good. Only one site was found where the coral reef was damaged.

Lessons learned focus on the dynamics of working with three local universities on seaweed studies and building capacity. The two universities have completed the studies successfully, including the methodology used and quality of the reporting. An improvement needed in the work, including the required analyses, was that the analysis was not included, and the report produced was more of a scientific paper rather than a consulting report. KI organized a workshop with the two universities to refine their report and discuss findings to meet the quality expected. The following are a few concerns from the consultants, before our workshop:

- Discrepancies between findings and recommendations or recommendations that are not supported by the findings.
- Recommendations are not as sharp and need more explanation on substantial matters.
- Some findings or recommendations are presented in more qualitative terms such as "good", or "prospective" without mentioning more concrete estimates that can be quantified in tons, percentage, or hectares.
- Analysis of the impact of a policy on seaweed business is not sharp and relevant, for example, the analysis of the Governor's Regulation on Seaweed business in NTT Province is still quite weak.

To help consultants be more detailed in submitting data, KI provided templates in excel files to be completed by consultants (UNDANA and UKAW). The templates helped most consultants to report more accurately.

In collaboration with the State University of Papua (UNIPA), KI has conducted several Reef Health Monitoring (RHM) in 74 data collection points in Raja Ampat areas in December 2022. This activity bears the participation of several key stakeholders, namely YKAN and MPA management authority (BLUD Raja Ampat). Out of the 74 points, 56 points were found in two MPAs—30 in *Fam Islands* and 26 *Misool*. Meanwhile, 13 control sites and 4 control sites were included in the two locations, respectively. UNIPA is still processing the data for analysis.

C. Protected Areas Management Effectiveness

Conservation Area Management Effectiveness Evaluation (EVIKA)¹⁸ is used to assess MPA management effectiveness and improve management quality, performance quality, and planning quality. EVIKA was enacted by Decree of Director General of Marine Spatial Management MMAF No 28/2020. The status of EVIKA which is assessed based on the weight and score of each indicator consists of: (1) Minimum Managed: The area design and management process has been implemented but more efforts are still needed to achieve management objectives; (2) Optimally Managed: Management functions have been running adaptively and several management objectives have been achieved; (3) Sustainably Managed: the community benefits from protected and

¹⁸ EVIKA consists of 4 criteria, 24 indicators, and 3 statuses. The criteria and indicators measured in this evaluation are: (1) Input Criteria: Area Status, Zoning Plan, Management Plan, Human Resources, Budget, Facilities and Infrastructure; (2) Process Criteria: Standard Operational Procedures for Management, Monitoring, Outreach, Partnerships, Monitoring of Regional Resources, Facilities and Infrastructure Management, Licensing and Community Empowerment; (3) Output Criteria: Controlled Utilization, Threats, Level of Compliance, Community Knowledge, Community Empowerment, Data and Information; (4) Outcome Criteria: Conservation Target Conditions, Core Zone Conditions, Socio-Economic Conditions and Community Participation

sustainable management of the area. Since 2021 MMAF implementing EVIKA annually to MPAs that has been legalized by MMAF.

Our priority sites in East Nusa Tenggara are in the national park of Savu Sea and the lesser Sunda Seascape. The studies conducted in several locations in East Sumba will help inform a more suitable utilization of MPAs, including activities that will reduce pressure to the fish resources. This will improve the management effectiveness of the Savu Sea Marine National Park (measured by EVIKA). The EVIKA for Savu Sea MPA assessments were conducted in August 2021 and August 2022. The EVIKA score for Savu Sea Marine National Park were 54.46 and 74.72 respectively (out of 100) putting the Park under *Optimally Managed* category. Some recommendations to increase the management effectiveness score for Savu Sea Marine National Park are strengthen partnerships, compile routine CPUE (Catch Per Unit Effort) and MSY data for capture fisheries and aquaculture for management needs, provide biophysical/socioeconomic data and information to the public on a regular basis, analyze the impact of MPA benefits on resources and society.

Meanwhile in Papua, the study on managing tourism growth in Raja Ampat and the mooring system set up helps MPA management body and the stakeholders to manage MPA effectively. In Bomberai, where BLUD manages Fakfak MPAs and Kaimana MPAs, the effort to replicate the sustainable management of the provincial business arm (BLUD) indicates there is the willingness in improving the effectiveness of MPA management. Improvements can be achieved by envisioning its operation to a more successful effective management of MPA. This is reflected in the increase in EVIKA scores from 2021 and 2022 at the Raja Ampat MPA and Fakfak MPA. EVIKA's scores for the Raja Ampat MPA in 2021 and 2022 are 83.78 and 88.04, respectively. Therefore, the status of the Raja Ampat MPA has increased from "Optimally Managed" to "Sustainably Managed."

The recommendations for the Raja Ampat MPA, based on EVIKA, are to encourage new jobs and increase the income of communities around the MPA and increase community outreach programs for increased community participation in MPA management. Status improvement occurred in the Fakfak MPA from Minimally Managed to "Optimally Managed" with score increases from 40.62 to 50.26. However, challenges occurred in the Kaimana MPA. Although BLUD status was granted to Kaimana with a status of "Optimally Managed," BLUD does not have enough revenue from the third parties' grant to conduct biophysical and socio-economic monitoring. The budget is only sufficient for MPA patrol and enforcement program. Kaimana MPA Management Unit relies on UNIPA to conduct biophysical and socio-economic surveys. Nonetheless, UNIPA has limited funding from Blue Abadi Fund which cannot cover Kaimana MPA. This contributes to the EVIKA score for Kaimana MPA to slightly decrease from 51.41 to 50.26.

KI's close relationship with the provincial government plays a significant role in the effectiveness of MPA management in BHS. This is reflected by the effectiveness scoring improvement for most of the sites. The assessment also shows that there is room for improvement in empowering the MPA management unit to increase funding sources to effectively manage their MPAs.

D. Enabling Policy Environment

In East Sumba, the results of the study have been communicated and shared with the local government and other stakeholders including farmers' representatives and the private sector. The findings and recommendations will be analyzed by the government to help formulate the relevant policy and regulatory framework that will help the seaweed industry. The current Governor's Regulation on the obligation to process seaweed before exporting out of the province has given the

advantage to two local processing companies. However, it poses a few issues with some stakeholders, such as farmers with lower quality seaweed who find difficulty in accessing the market. The study could be one of the science-based evidence that could help the government in issuing further policies.

Meanwhile, in Papua, RAMS will be introduced to the national government so that the local government gets the needed support and commitment from Jakarta. The tourism spatial plan and draft tourism regulation to be handed over to the government are a part of enabling environment contribution. The *Bomberai* BLUD technical assistance to the issuance of the Governor's Regulation on effective MPA management is a showcase of commitment in KI's effort in setting up the enabling policy environment.

E. Complementary Initiatives

- Lautan Sejahtera (Ocean for Prosperity) – is a 5-year loan, \$210 million (USD) programme from the World Bank to the Indonesian government on coral reef, livelihood and MSME (Micro, Small, and Medium Enterprises) support, and blue finance activities. The focus areas are Fishing Management Areas 714, 715, and 718 in parts of TKS locations including MPA network in Savu Sea. It is to start around Mid-2023. Lautan's core activity is coral reef protection—similar to our GFCR work. They also have a sustainable finance component and support access to finance and market for Micro, Small, and medium enterprises. This is also in line with our investment mobilization activity. TKS has reached out to the World Bank and the executing entity within MMAF to ensure collaboration and synergy in activities.
- USAID Ber-IKAN – is a 5-year development work in sustainable fisheries funded by USAID. Its priority areas are FMA 715 (South-West and West Papua are part of) and 711. The program focuses on better fisheries management, small-scale fisheries, private sector engagement, and endangered species protection. TKS is starting coordination with Ber-IKAN to work together on the private sector and investment mobilization for sustainable businesses. Ber-IKAN is also interested in supporting Bomberai BLUD.
- TNC/YKAN GFCR – as a co-convening agent, TNC has just recently received its GFCR proposal approval. Geographically, the Savu Sea area is the only site shared by TNC and CI, but the planned Coral Reef Funding Facility could coordinate with other activities. Support for Bomberai BLUD could be a repeat of TNC/YKAN-CI/KI's success story after the joint work in establishing Raja Ampat BLUD. TKS has initiated several meetings and shared resources on the planned seaweed work in Savu Sea.
- Blue Halo S – is CI/KI's flagship program focusing on production and protection. Funded by the Green Climate Fund, the program envisages a grant facility and blue bond issuance as a blended financing to run and set up conservation areas and help the blue economy. TKS's reef-positive investment mobilization will be replicated to Blue Halo S location. Already some potential GFCR investment pipelines on ecotourism are being explored in Blue Halo S sites in Nias, North Sumatra by Pegasus investment.

F. Indicator-Based Performance Assessment (Logical Framework)

OUTCOME	OUTPUT	TARGET INDICATORS (BY PROGRAMME CLOSE)	BASELINE MEASUREMENT (YEAR COLLECTED)	BASELINE SOURCE / COLLECTION METHOD	MILESTONE AS OF DECEMBER 2022	REMARKS
Outcome 1: Protect BHS effectively conserved and managed (GBF)]	Increased, diversified, and more sustainable revenue sources that support MPA management in priority MPAs in the BHS through: (a) coral reef focused debt for nature swap for the Blue Abadi Fund; and (b) replication of relevant MPA governance and financing models first piloted in Raja Ampat	<ul style="list-style-type: none"> - \$73,000,000, -Live coral cover within BHS MPA network - The biomass of key functional fish group is stable within the BHS MPA network. • 6 MPAs with increased revenue streams 	<ul style="list-style-type: none"> • 0 • 36% • 517 kg/ ha (in BHS) 	<ul style="list-style-type: none"> • Bank record, financial statements • Reef monitoring and baseline • BLUD Financial record 	<ul style="list-style-type: none"> • Engagement with USAID and other partners has been started. • building out the sustainable financing plan and mechanisms for Bomberai MPA management Authority 	<p>KI-YKAN-USAID's first coordination meeting took place on 10 March 2023 at KI's office discussing on several scenarios the debt swap funding amounts, disbursement areas, as well as potential fund managers and key stakeholders.</p> <p>Associated SDG: Goal#14. Protecting BHS could contribute to conserve and sustainably use the oceans, seas, and marine resources for sustainable development</p>
Outcome 2: Transform BHS Ecotourism	Output 2.1: Responsible ecotourism growth: # of local sustainable jobs created (% for indigenous Papuans; % for women)]	<ul style="list-style-type: none"> • 60-70% 	<ul style="list-style-type: none"> • 60-70% 	<ul style="list-style-type: none"> • Ecology baseline 2022 • Source B • Source C 	<ul style="list-style-type: none"> • No net loss • 	Describe relevant activities undertaken and/or progress achieved. Include list of relevant SDGs #s
	Output 2.2: [90% reduction in # of times liveaboard dive vessels anchor on coral reefs per year]	<ul style="list-style-type: none"> • 90% reduction of times liveaboard 	<ul style="list-style-type: none"> • 40 	<ul style="list-style-type: none"> • Raja Ampat district government 	<ul style="list-style-type: none"> • • 	SDG Co-benefit: SDG#14: Life Below water
	Output 2.3: [% increase [or no net loss] in live coral cover associated	<ul style="list-style-type: none"> • 60-70% 	<ul style="list-style-type: none"> • 60-70% 	<ul style="list-style-type: none"> • Ecology baseline survey 2022 • Reef monitoring 	<ul style="list-style-type: none"> • no net loss 	SDG Co-benefit: SDG#14: Life Below water

	with addressable acute threat abatement]					
Outcome 3: Enhanced Economic Resilience through Reef-Positive Seaweed Development	Output 3.1: At least 104 jobs created/maintained in MPA management (100% for indigenous Papuans)	<ul style="list-style-type: none"> At least 104 jobs created/maintained in MPA management 	<ul style="list-style-type: none"> 0 	<ul style="list-style-type: none"> Social economy survey 2022 	<ul style="list-style-type: none"> Situation analysis 	SDG Co-benefit: SDG#8: Decent work and economic growth.
	Output 3.2: At least 200 local sustainable jobs created/maintained in ecotourism (>75% for indigenous Papuans; >50% for women)	<ul style="list-style-type: none"> At least 200 local sustainable jobs 	<ul style="list-style-type: none"> 0 	<ul style="list-style-type: none"> Social economy survey 2022 	<ul style="list-style-type: none"> Survey or study stage 	Situation analysis SDG Co-benefit: SDG#8: Decent work and economic growth. SDG#5: Gender equality
	Output 3.3# of local sustainable jobs created (disaggregated by gender, Indigenous status)	<ul style="list-style-type: none"> Number of jobs created in East Sumba will be defined by the end of this project preparation stage 	<ul style="list-style-type: none"> 1,165 	<ul style="list-style-type: none"> East Sumba MMAF office 	<ul style="list-style-type: none"> Survey or study stage 	SDG Co-benefit: SDG#8: Decent work and economic growth
	Output 3.5. # of community members with greater income from sustainable seaweed mariculture value chain participation	<ul style="list-style-type: none"> Number of jobs created in East Sumba will be defined by the end of this project preparation stage 	<ul style="list-style-type: none"> 1,165 	<ul style="list-style-type: none"> East Sumba MMAF office 	<ul style="list-style-type: none"> Survey or study stage 	Identify locations that are suitable for seaweed development. Engagement with seaweed processors SDG Co-benefit: SDG#8: Decent work and economic growth
Outcome 4: Transform Access to Financing for	Output 5.1. At least 10 reef-positive business incubated (>50% Papuan owned)	<ul style="list-style-type: none"> 10 	<ul style="list-style-type: none"> 0 	<ul style="list-style-type: none"> Project proposal Investment Blueprint/proposal 	<ul style="list-style-type: none"> Engagement with potential business Field Visit 	Field visit had been conducted to a seaweed company based in

Reef-Positive Enterprises						Indonesia. 6 companies have been. SDG Co-benefit: SDG#8: Decent work and economic growth
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G. Reef Positive Solution Case Studies

GUIDANCE

In 1-2 pages for each individual case study in the tabular format below, provide narrative stories of individual reef-positive solutions, including successes, best practices, and lessons learned through implementation. Feature *all* solutions supported by the programme. The objective is to highlight a concrete example with a story that has been important to the Programme during the reporting period. Annex / link supporting documents, including photos with captions, news items etc.

To recall, a GFCR Financing Solution is an initiative implemented using funds from the GFCR that attracts reef positive (sector) investments and/or generates sustainable revenue streams in line with the GFCR’s blended finance investment principles and objectives. A GFCR Financing Solution is most likely to align with one or more programme outputs. Reflecting a concrete operational blended finance mechanism or investment, as opposed to an activity or output undertaken to enable GFCR interventions (such as policy development or capacity building).

Case Study #1	
Programme Solution	Linked Programme Output/s
<p>In December 2022, Conservation International Ventures executed a seed round investment in Seadling Pte. Ltd., a Singapore registered seaweed biotechnology company that is pioneering industry best-in-class practices for sustainable, equitable, coral-reef positive seaweed sourcing in Southeast Asia. While SEADLING has historically concentrated sourcing and upstream value chain activities in Malaysia (Sabah), the Company’s near-term growth plans include expansion to Indonesia beginning in 2024. SEADLING has identified a series of ten prospective sites in Indonesia, which it will be conducting scoping and due diligence activities on in 2023 including sites within the Bird’s Head Seascape and Sumba Island. Additional sites of potential overlap with YKAN program priorities. SEADLING has already demonstrated a commitment to promoting sustainable, equitable, seaweed value chains. In connection with the GFCR, we seek to strategically leverage the Company’s established environmental and social management best practices—including those specific to reducing and avoiding harmful impacts of seaweed cultivation to coral reefs, seagrasses, and other marine ecosystems and biodiversity—and value chain partnership to advance GFCR program outcomes.</p>	<p>Output 3.1 – Evidence-Based Frameworks for Reef-Positive Seaweed Sector Development Output 3.2 – Roadmap for Investment in Reef-Positive Seaweed Development Output 4.1. – Pipeline of Reef-Positive Investment Opportunities in Priority Sites Output 4.2. – Reef-Positive Investment Mobilization</p>

Case Study #1	
Location(s) Implemented	Implementing Partner/s
During the target investment return horizon (2024 – 2027), one or more sites within the Bird’s Head Seascape, East Sumba, or future approved GFCR Priority Sites identified by Conservation International / Konservasi Indonesia and/or Co-Convening Agents (YKAN).	Financing Transaction: Co-investment by AgFunder GROW Impact Fund (and undisclosed angel investors) Investment Implementation: SEADLING Pte. Ltd.
Driver/s of Degradation	Target Stakeholder/s or Beneficiary/ies
<ol style="list-style-type: none"> 1. Damage and/or degradation from installation of seaweed anchoring stakes, lines, or other implements in or above coral reefs. 2. Clearing of coral reef substrate for seaweed cultivation 3. Financially viable livelihood alternative to fishing 	<p>[Define the stakeholder group/s being targeted by the solution and quantify (e.g., number of households) where possible. Provide a breakdown by key demographic groups such as gender, youth, and indigenous peoples as appropriate]</p> <p>19 seaweed farming households currently supported, 114 individuals. These households are primarily part of the Bajau community. Seadling employs members of various cultural backgrounds, including Bajau, Suluk, Sungai, Bugis, Bidayah, and Kadazan.</p>
Actual Result/s to Date	
<p><i>[At the outcome / output level, detail the observable changes that occurred so far because of the solution. Describe the activity/ies undertaken to achieve these changes.]</i></p> <p>The SEADLING seed investment closed in December 2022, and has allowed the team to begin setting up a small seaweed purchasing team in Semporna, the major farming town, to expand the number of seaweed farmers that they work with directly. This team will be fully operating by June. They have provided training around ‘environmental best-practices’ for 20 farmers and estimate this has led to improved management practices for farms covering 44 hectares and shallow seas near critical coral reef ecosystems (near Sipadan). A more comprehensive reporting of best practices and lessons learned will be included in subsequent progress reporting.</p>	
Expected Results and Outlook	
<p>INVESTMENT OVERVIEW</p> <div style="display: flex; align-items: flex-start;">  <p>In late December 2022, CI Ventures executed its first investment under the GFCR program in SEADLING Pte. Ltd. (https://www.seadling.com/), a Singapore registered seaweed biotechnology company headquartered in Malaysia (hereinafter, “SEADLING” or the “Company”). The USD 500,000 investment by CI Ventures is part of a USD 1 million in seed round financing joined by the AgFunder GROW Impact Fund and other undisclosed angel investors. Proceeds from seed financing will be used to expand manufacturing of their flagship SEADLING Pet® probiotic and nutritional supplements and expand Indonesia seaweed sourcing, including from GFCR program site priorities.</p> </div> <p>COMPANY OVERVIEW</p> <p>Founded in 2018, SEADLING is a pioneer and emerging leader in high quality seaweed-based functional feed ingredients, nutritional additives, and supplements for household pets and other</p>	

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animals. Through seaweed innovation, SEADLING's mission is to foster growth of a sustainable seaweed industry that promotes positive environmental, economic, and social balance and improves the livelihoods of local farming communities.

SEADLING currently employs a staff of 15 FTEs. Persons identifying as female account for 33% of the Company's total employees (5/15) and 50% of its senior management team (2/4). The Company is led by Founder and Managing Director Simon Davis, an Australian national with more than a decade of experience operating wellness businesses in Southeast Asia and an additional 6+ years of seaweed industry experience in Indonesia and Malaysia. Since 2021, Simon has served on the Board of Advisors for the Safe Seaweed Coalition. Simon is joined on the senior management team by: [Birdie Scott Padam Ph.D.](#), Head of Product R&D; [Melania Lynn Cornish, MSc.](#), Head of Cultivation; and [Al Jeria Abdul](#), Head of Sustainability.

IMPACT CASE & GFCR ALIGNMENT

Since its establishment, SEADLING has demonstrated a deep commitment to sustainable, equitable, and socially responsible seaweed sourcing and trade. While we view SEADLING's overall business model and strategies as being strongly aligned with the overarching environmental and social impact objectives of both CI Ventures and the GFCR program, the Company's primary impact value proposition is primarily focused on its upstream value chain activities:

Geographic Alignment

While SEADLING has historically concentrated its sourcing and upstream value chain activities in Malaysia (Sabah), the Company's near-term growth plans include expansion to Indonesia beginning in 2024. Consistent with its strategies of sourcing from farming networks legally operating within and around MPAs, SEADLING has identified a series of ten prospective sites, which it will be conducting scoping and due diligence activities on in 2023. Of the list of candidate sites being evaluated, at least one occurs within the Bird's Head Seascape and one to two on Sumba Island. An additional [two] sites occur in areas of potential overlap with YKAN program priorities. The timing of SEADLING expansion is ideal and provides both CI and its key implementing partners KI and YKAN opportunities to strategically engage and co-design potential integration with SEADLING and local government and community partners in connection with GFCR activities in Indonesia.

Strategic Alignment

The SEADLING business model and investment objectives are strongly aligned with the programmatic objectives of both the GFCR and YKAN programs in Indonesia with respect to coral positive seaweed sector development and investment in East Nusa Tenggara Province. There are also potential future opportunities for integration into other CI / KI and YKAN site-based strategies:

Outcome 1 – MPA revenue stream diversification in the Bird's Head Seascape: As indicated in our initial proposal, a key program priority is the replication of MPA business and revenue models across the Bird's Head Seascape. While tourism has remained a key revenue driver in Raja Ampat, there is a documented need to explore other potential revenue sources for other GFCR priority MPA sites, such as Fakfak and Kaimana with lower levels of tourism activity. Although the current phase of GFCR programming has concentrated seaweed-related interventions in East Sumba / NTT Province, commercial seaweed cultivation is already occurring in both Raja Ampat and Fakfak that could represent an important revenue diversification and local economy resilience strategy in the future. In

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both instances, seaweed sector development has already been identified by provincial and regency government authorities as a priority “non-deforestation commodity” as part of green economy and “conservation province” investment ambitions, particularly in the Fakfak Regency.

Outcome 3 - Sustainable, reef-positive seaweed sector development and enterprise and livelihood alternatives in Sumba. There are three main pathways through which our investment SEADLING is expected to contribute to Outcome 3: **FIRST**, in the immediate term, SEADLING has agreed to share knowledge, resources, and materials relevant to the development of Output 3.1. (Evidenced Based Frameworks for Reef-Positive Seaweed Development) and Output 3.2. (Reef-Positive Investment Roadmap). SEADLING sources its raw seaweed material through a contract farming scheme that engages experienced, independent farmers who agree to comply with SEADLING sourcing requirements which include binding prohibitions on the establishment and cultivation of seaweed in coral reef, seagrass, and other sensitive habitats. Further prohibitions include provisions related to marine biodiversity protection, cultivation and post-harvest plastic waste mitigation, and responsible labor practices. **SECOND**, to ensure seaweed inputs meet its robust quality, sustainability, and social responsibility requirements, SEADLING has invested in strategic integration of key upstream capacities including seed banks and hatcheries. This integration is in partnership with leading research institutions to cultivate native seaweed strains selected based on functional properties, growth rates, and disease resistance. In connection with its Indonesia expansion, SEADLING will replicate this approach, co-locating seedbank, and hatchery operations near cultivation sites. **THIRD**, SEADLING presents new and potentially higher-value market / market diversification opportunities that can incentivize coral-reef positive cultivation practices, particularly among local small-scale farmers able to produce high-quality raw material production.

Stakeholder Testimonials

[Provide anecdotes and/or quotes from community members and other stakeholder group/s that have been positively affected by the solution. Upload and link high quality images where possible]

See supporting media below.

Related Initiatives

[Describe the synergies achieved by the solution by collaborating with other reef positive initiatives locally or regionally.]

Seadling is collaborating with local Non-Governmental Organization (NGOs) to organize an awareness workshop to analyze human behavior and attitudes towards farming operations that are more environmentally friendly.

ReefCheck Malaysia: A marine conservation workshop was designed specifically for seaweed farmers in Kg. Baru- Baru, on the west coast of Sabah, Borneo as part of an impact program collaboratively organized with SEADLING. This

Co-Financing and Capital

[Indicate, if any, the amount of grant co-financing and/or investment capital secured for this specific solution in local currency and current USD equivalent. Further, provide the current revenue generated by the solution and the target revenue of the solution]

Grant Co-Financing: USD ---
Investment Co-Financing: USD 500,000 in SAFE investment
Revenue: USD ---

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<p>workshop is focused on coral reef and sea turtle protection.</p> <p>Founder, Simon Davis, is on the advisory board of the Safe Seaweed Coalition, an international organization formed to promote responsible growth of seaweed aquaculture.</p>	
Best Practices and Lessons Learned	
<p>[What did the Convening Agent (and/or other partners) learn from this situation that has helped inform and/or improve Programme (or other) interventions?]</p> <p>The SEADLING seed investment closed in December 2022. We will be using our investment into SEADLING as a learning opportunity for further developing a robust impact monitoring framework, based on target GFCR outcomes and continued discussions with the company. Gracie White, Investment Officer for the SEADLING transaction, has taken on a board observer role to remain up to date on all company activities. A more comprehensive reporting of best practices and lessons learned will be included in subsequent progress reporting.</p>	
Links to supporting media	
<p>[Upload and link pictures and videos of ecosystem, communities, supported businesses, key stakeholders. Strive to provide a variety of shots– e.g., extreme close-ups, close-ups, mid shot, long shot, staged shots, and action shots. Landscapes, portraits, etc. Strive to provide good images of the people that have provided quotes.]</p> <p>Link to Photos: https://www.dropbox.com/scl/fo/vcfubwbbloy6b7wigo9ew/h?dl=0&rlkey=i4d8m34b9r7rfz86j78zxadwt</p>	

H. Gender Mainstreaming

Conservation International and its primary implementing partner, Konservasi Indonesia, apply a Rights-based Approach (RBA) on gender equity principles throughout each project. The RBA is a conceptual framework based on international human rights standards and intended to promote and protect human rights. The purpose of RBA is to identify and rectify the inequalities at the core of the development problem and to rectify the processes of discrimination and unequal distribution of power that impedes progress in the development process. Through the RBA approach, a programme or project is designed to eliminate or at least mitigate the impediments to the implementation of existing exclusions and discriminations. The RBA gives equal consideration to both the achievement of development goals and the processes used to accomplish them. The RBA processes must ensure that all stakeholders can participate and be included. As part of CI’s existing RBA to conservation, CI staff has identified gender as a critical component of the overall strategy to protect human rights and ensure equitable participation and decision-making by stakeholders at all scales in our project activities. Both men and women encounter constraints based on gender to varying degrees in our site, national and international level work. If unaddressed, these constraints can cause delays or impediments to achieve CI’s global mission.

To implement RBA, the following initial steps were conducted:

1. During the situation analysis, identify the causes of the problem, who is affected by the problem, and who is part of the cause.
2. Identify the main rights holders and duty bearers, and the role they will play in the project or programme.

This technical analysis includes a situation analysis that provides information regarding the current social and economic environment. The situation analysis is a crucial starting point for assessing the availability of data and information on gender, as well as persistent patterns of gender relation, discrimination, exclusion, impunity, and powerlessness, to identify the legal and societal constraints. In this respect, existing government legislation, policies, documents, projects, research, literature, and NGO (nongovernmental organization) activities need to be reviewed from a gender perspective.

The baseline study carried out by UNDANA in East Sumba and UNIPA in BHS focus on:

- o Collecting and analyzing sex-disaggregated data;
- o Surveying quantitative and qualitative information and indicators on gender;
- o Identifying the root causes of problems
- o Assessing and addressing diverse needs based on gender;
- o Identifying ways to ensure equal gender participation in all project activities.

Data, disaggregated by sex, and where possible, by age and location would facilitate the assessment by helping to identify the disadvantaged groups and allowing for comparisons. This is important because there might be wide differences between women and men in terms of opportunities, resources, and activities. These differences can also occur within the same sex, which can affect the project's implementation.

The collection and analysis of sex-disaggregated data is also necessary for monitoring and evaluating the project's impacts on the population and gender disparities at large. Sex-disaggregated data should be collected and analyzed, as much as possible, in all relevant areas, including, for example, family assets and income.

Monitoring and evaluation are critical components of implementing the gender mainstreaming strategy and RBA. It is critical to ensure that the monitoring and evaluation criteria include gender and RBA as specific issues. Furthermore, using a participatory evaluation method helps ensure that women and men, as well as diverse groups in society, contribute equally. To ensure gender equality can be mainstreamed, there are two important steps taken:

1. Ensure that outcomes, outputs, and indicators are gender-sensitive and are rooted in RBA
2. Ensure that the project document is adapted to the results of the situation analysis

Based on the results of a socio-economic study conducted by UNDANA and field observation by KI, it was found that in terms of gender mainstreaming, seaweed businesses in East Sumba have shown some gender equity. Men and women have proportional roles in the seaweed farming cycle (almost 50:50). For example, women tie seaweed seedlings to lines, and/or harvest seaweed. Women also have access and control over the seaweed harvest or revenue from selling seaweed. However, the study highlights existing gaps including limited access to finances, financial literacy, and asset ownership for women.

Meanwhile in Raja Ampat and BHS, the natural beauty of Raja Ampat and BHS provides great opportunities for the people of Raja Ampat and BHS to engage in tourism-related businesses. There are several businesses that can be undertaken by local people ranging from selling food, beverages,

handicrafts, renting diving equipment, or renting out home stays. These are small, family-owned businesses.

The community is completely dependent on natural resources, both from sea and land, through daily consumption and small-scale economic businesses. The division between roles of men and women can also be seen in these activities. In General, women use row boats to fish in waters near the village or collect marine products at low tide, which is called *ba meti* (gleaning). Men tend to go further into sea with motorized boats. Collecting garden products such as coconut and sago is carried out by both men and women. While the tourism sector provides women with a sizeable role, including the making and selling souvenirs and managing homestays. However, when men start to take control of these enterprises, business grows but women are no longer in a position of leadership.

In terms of decision-making, village meetings are still attended exclusively by men, particularly when making decisions on natural resource management. Natural resource management includes community surveillance for MPAs, which is also performed by men. However, in one of the Raja Ampat MPAs, Fam Islands, the MPA authority formed a women’s patrol team that occasionally joins the routine patrols, although the program is led still by men.

Through partner programs and capacity building in Raja Ampat, Konservasi Indonesia has started conducting environmental educator training of trainers for women to deliver environmental education materials in local villages and schools. Likewise, KI is collaborating with several partners to facilitate snorkeling and diving training for women, aiming to provide opportunities for women to get to know the underwater world, have skills and access to become tour guides and coral health monitoring officers. Most importantly, these opportunities foster an understanding and appreciation for the underwater realm.

Unfortunately, these activities are still limited compared to the population and the size of the Raja Ampat area. Regardless, we continue to promote future investments and programs that build the visibility and participation of women in natural resource management and coral-positive businesses.

Sample Gender Action Report

Linked Programme Outcome	Objective	Action	Indicator	Milest one – 2022	Remarks
Outcome 1: Transform BHS Ecotourism	Culturally appropriate, reef-positive economic development and livelihood initiatives are cultivated in the BHS, in and around the MPA network. There is an initial focus on ecotourism, thus reducing the rates of poverty and food insecurity and creating jobs for local reef-dependent communities, while incentivizing continued coral-reef conservation.	Create pathways for increasing equitable access to financing and technical support for micro, small and medium reef- positive eco-tourism enterprises focusing on the indigenous people of Papua and women-led enterprises and sustainable enterprises at risk of COVID-caused bankruptcy.	At least 200 local sustainable jobs created/main tained in ecotourism (>75% for indigenous Papuans; >50% for women).	0	During this reporting period, the project is still conducting an analysis about gender empowerment in the tourism sector.

III. Programme Governance & Management

A. Programme Governance

There have been no material changes to the program governance structure and functions as outlined in the approved funding proposal.

The operations of the project are led by regional teams. The project site in East Sumba is part of KI's Sunda Banda region and the implementation is led by the Sunda Banda Director. Sites in West Papua and Southwest Papua are led by the Papua Director. The GFCR project lead is coordinating the project at the two sites while the program director is overseeing the project, providing strategic support and alignment with national initiatives. A dedicated M&E (monitoring & evaluation) team is assigned to build M&E framework and lead project monitoring. The program structure is outlined in annex B.

A biweekly call, led by the GFCR project lead, occurs as an opportunity for sharing updates, coordinating planning, and discussing action items needing to be accomplished. A monthly meeting has been organized by the CI team for regular updates, to align planning with the CI Venture team, and discuss challenges in the implementation process. Coordination with the GFCR team is conducted via email exchange and meetings at ad hoc.

We have close coordination and collaboration with the government, particularly with the local government (provincial, regency, districts, and village government). The government bodies have become partners and beneficiaries of some of our activities, such as in formulating regulatory frameworks. TKS shares regular updates with the relevant government bodies. Our main partner is the marine and fisheries office at the provincial and regency level while at the national level, we work with DG Marine Spatial Management of the Ministry of Marine Affairs and Fisheries.

B. Programme Management

Although the program was first scheduled to commence in March 2022, most program establishment and mobilization activities were initiated closer to June 2022. As a result, a no-cost extension of the initial phase of the program was requested through December 31, 2023, to fit in the 18-month period.

Key Program Management Personnel

As of January 2023, Konservasi Indonesia finalized the recruitment and hiring of key program management to join existing program personnel in the Bird's Head Seascape including:

Rudyanto, Sunda Banda Regional Director, was hired in June 2022 to oversee Konservasi Indonesia programmatic activities in the Sunda Banda region which includes Bali, Lesser Sunda (including GFCR program activities in East Sumba), Maluku, and North Maluku islands. Rudyanto ("Rudy") brings more than 30 years of conservation experience spanning forestry, wetlands, and marine ecosystems, having previously worked for Wetlands International - Indonesia Programme, BirdLife International - Asia Division, The Nature Conservancy, RARE, GIZ, and several conservation projects under USAID. He has a bachelor's degree in biology (animal ecology) from Padjadjaran University, Bandung, West Java



and a master's degree from Graduate Research Center of Environment Development and Policy, University of Sussex UK with scholarship from The British Chevening Award.

Ahmad Baihaki, Sustainable Seascapes Program Director, went through the recruitment process in 2022 and joined Konservasi Indonesia in early January 2023 and oversees the Global Fund for Coral Reefs and Blue Halo S. Following 20 years in the EU technology, finance and consulting sectors, Ahmad ("Aki") returned to Indonesia to lead Global Fishing Watch's engagements with the Indonesian Government to combat IUU (Illegal, Unreported, and Unregulated) fishing. Prior to joining Konservasi Indonesia, Aki served as Senior Oceans Specialist at the World Bank, where he oversaw a portfolio of oceans and blue economy sustainable investment initiatives in Indonesia. **In his current capacity, Aki is the primary KI focal point for GFCR programmatic engagements.**

Supriyono, Safeguard and Monitoring Evaluation Manager, is a professional in monitoring, evaluation and learning with sixteen years' experience specializing in project design, monitoring and evaluation and project cycle, and capable of leading project delivery/ implementation. He has rich experiences on the design, project delivery, monitoring and evaluation of donors funded programs (DFAT, The World Bank, and Millenium Challenge Account). Supri has advised a variety of NGOs (non governmental organizations), grantees, implementing partners or government partners on the project design, implementation, monitoring and evaluation, with an emphasis on maximizing intended outcomes and developmental impact.

Program Workplan/Budget

Beyond the overall adjustment in the Phase I timeline noted above, there were no significant changes to the approved program key activities, outputs, or work plans during the reporting period. However, there have been recent discussions regarding the shifting of activities associated with Output 2.2. – Inclusive Tourism Development Support for future program periods. The approved workplan and budget under Output 2.2. includes a single activity related to the procurement of a preliminary microenterprise and microfinance assessment in West Papua by MICRA Indonesia in the amount of USD 14,282. While the intent of this output remains relevant, the Program team has decided to refocus resources and efforts on other major program initiatives underway in the Bird's Head Seascape (e.g., tourism master planning, TFCA debt swap, MPA business model replication, and mooring system development) and East Sumba, and will revisit this activity in future periods.

During the reporting period, an opportunity to launch the Blue Halo S,¹⁹ a national-scale marine ecosystem blended financing initiative together with the Government of Indonesia emerged. Co-sponsored by the Coordinating Ministry of Maritime Affairs and Investment and Ministry of Maritime Affairs and Fisheries, the Blue Halo S was designed to promote integrated marine protection and sustainable ocean development in Indonesia in furtherance of Indonesia's MPA Vision

¹⁹ Blue Halo S is an initiative currently under preparation stage funded by the Green Climate Fund in collaboration with the Government of Indonesia. Its "protection and production" theme focuses on the protection of marine ecosystems (mangrove, seagrass, and coral reefs) to support the production in the blue economy (sustainable fisheries, blue carbon, ecotourism) in the western coast of Sumatera. Announced at the G20 in November 2022, the program has just started its Project Preparation Facility in March 2023 and is expected to finish the preparation in the next 18 months. The planned 5-year project envisions similar concept of blended financing with grant facility and private sector investment through blue bond creation.

of 10% marine protection by 2030 and 30% by 2045. The Blue Halo S was successful in securing USD 1.5 million in Project Preparation Facility (PPF) funding from the Green Climate Fund (GCF) and was successfully launched and announced at Oceans 20 (an official side event to the G20 Summit held in Bali, Indonesia, in November 2022).

The Blue Halo S was originally designed to be piloted in Fishery Management Areas (WPP) 714 and 715 adjacent to the Bird’s Head Seascape to promote synergies with our existing GFCR program. However, the specific geographic priorities were revised by the Government to focus on WPP 572, an area in the Indian Ocean coast of Sumatra in Western Indonesia. The proposed Blue Halo S pilot area includes four “resilient reef” systems identified by the Bloomberg Vibrant Oceans initiative including at Aceh, Simeulue to Nias, Mentawai Islands, and the Sunda Strait (see map inset).



Given the alignment and synergistic goals, objectives, and target outcomes of the Blue Halo S and GFCR, the significant political momentum generated by this initiative, the CI and KI teams seek to explore integration of the Blue Halo S pilot as an additional program and site priority under the GFCR in a future proposal.

C. Programme Operations

Human Resources

In addition to the Key Personnel described in the preceding section, we have new employees in the organization who started after the proposal submission. They could add value to this program but are not registered in the initial budget plan. It will be beneficial to include some of these new talents on the budget line.

Knowledge Sharing and Capacity Building

We share knowledge and assist in building the capacity of our stakeholders and partners. For example, with the three research institutions we worked with for the seaweed study, we hold workshops and provide feedback to help refine their studies. Their selection as research partners is built on the idea that we want to increase their capacity and give more opportunities to research and educational institutions outside Java Island that are behind in capacity.



Processes and Procedures

Other than our in-house processes, there are no additional processes or procedures developed, implemented, modified, or halted during the reporting period.

Systems and Technology

To overcome the different geo-location challenges, team members and partners spread in various parts of Indonesia and globally, use online collaboration tools (team chat, online repository, online meeting, etc.). These resources have been essential in accelerating our operations and help to reduce costs and carbon emissions by limiting travel to the sites when the online alternative is feasible.

Covid-19 Response

Our program started when the Covid-19 restrictions were eased. We have not been faced with difficulties rising from the pandemic impacts, although we are seeing some traces of impacts such as unemployment.

IV. Resource Mobilisation

A. Resource Mobilisation Efforts – Grants

Initial Resource Mobilization: As indicated in the Table on Page 2 of this report, USD 2,200,000 in grant co-financing was mobilized to support this program.

Reporting Period Resource Mobilization: During the reporting period, GFCR activities were primarily focused on essential program establishment, launch, and mobilization activities including: 1) engagement and socialization of the GFCR program with key public sector (national and local government ministries and agencies) and local community stakeholders; and 2) essential program administration and set-up activities, including recruitment and hiring of key program staff and procurement of approved services. The majority of program establishment and mobilization activities were completed as of the end of the current reporting period (December 2022). This has allowed both the CI and KI teams to concentrate on program implementation and fundraising as of January 2023.

As noted in the program Governance and Management section updates, a significant amount of time and resources during the reporting period were dedicated to the design and launch of the Blue Halo S initiative. CI and KI are exploring opportunities for integration of the Blue Halo S pilot as part of our GFCR program. Following its launch at the Oceans 20 event, the Blue Halo S has gained significant political momentum and funding interest. If the integration of this project is approved by the GFCR Board, we anticipate this initiative to support mobilizing significant grant co-financing toward GFCR aligned objectives.

A summary of GFCR program development and fundraising activities during the Reporting Period is presented below:

Outcome 1: **Indonesia-U.S. TFC Debt Swap:** During the Reporting Period, we received TNC's commitment of USD 1.5 million toward the required USD 3 million



contribution—of which we contribute the same amount. With the recent announcement of TNC’s GFCR program in Indonesia²⁰, we have initiated a discussion on potential collaboration on grants management. More comprehensive reporting on progress made since January 2023 will be provided in the next reporting cycle.

Exploration of PFP Opportunities with Enduring Earth: Preliminary exchanges with Jon Miceler (Enduring Earth) and CI Blue Nature Alliance colleague Chris Stone regarding exploration of Project Finance for Permanence (PFP) opportunities in West Papua have occurred. Discussions are temporarily on hold pending resolution of government redistricting efforts in the region.

Outcome 2: N/A

Outcome 3: N/A

Outcome 4: N/A

B. Resource Mobilisation Efforts – Investment

Reporting Period Resource Mobilization: In December 2022, CI Ventures executed an initial GFCR program investment. The USD 500,000 SAFE (Simple Agreement for Future Equity) investment by CI Ventures was part of a USD 1,000,000 financing round joined by AgFunder’s GROW Impact Fund and undisclosed angel investors.

C. Resource Mobilisation Efforts – Revenue

Reporting Period Resource Mobilization: No reportable program revenue was generated during the reporting period.

V. Communications and Visibility

A. Communications

Program communication is jointly managed by the CI/KI team with the help of a communication agency consisting of a team of consultants to support in producing several communication materials. In the last four months, the consultant compiled a communication strategy detailing communications objective, target audiences, key messages, and strategies to meet the goals. The document becomes the basis of all the productions of communications materials.

Gaining buy-in from and building engagement with national and local audience (governments, private sectors, civil societies, communities), communications started with the rebranding of the program to be more “Indonesia.” The communication agency supports the promotion of the program name, *Terumbu Karang Sehat Indonesia* (Indonesia Healthy Coral Reefs), *TekSI*²¹ in short. Further, the consultant developed a new logo with the design model more relatable to the eastern

²⁰ <https://globalfundcoralreefs.org/news/MonacoOceanWeek/>

²¹ Currently under our legal team consultation to ensure no infringement of copyright and other intellectual-property considerations



part of Indonesia, the working area of the program. Currently, the rebranding is in the process of legalization—which applies to the new logo, the program name, and the acronym. This may take a while since there are specific steps and procedures to follow.

Considering new generations as the main target for protecting coral reefs, the program utilizes social media platforms as one of the avenues to reach them. Instagram has been the primary channel for communication and engagement. A series of communication materials are being developed by the agency for this avenue.

In terms of publications and promotions, the program is developing a factsheet consisting of information about GFCR in Indonesia. The document will briefly mention the program and where it works. Further, a page under Konservasi Indonesia’s website is being developed. The contents are created to clearly inform the audience about the program. Engagement with media is not yet in process because many of the activities are still on-going.

During the Reporting Period, we identified the need for improved internal coordination, particularly with respect to investment activities undertaken by CI Ventures. The CI, KI, and CI Ventures teams have committed to more proactive engagement related to prospective future investments. This will ensure appropriate internal GFCR Program communications staff and GFCR (UNDP) communications colleagues are engaged in the review and release of communications and visibility of activities associated with GFCR related investments.

B. Visibility

External Media Coverage

No external media coverage in 2022.

Published Programme Content

TKSI has been active in promoting content through our social media channels on Instagram and Twitter—two top social media channels in Indonesia.

Event Features

No events occurred in 2022.

Primary Creative Assets

No activity conducted in 2022.

Reef Positive Solutions Case Studies

The case studies relevant to this project are:

- Reef Positive Mooring system (RAMS) in Raja Ampat
- Development of tourism spatial plan in Raja Ampat
- Capacity building of MPA management body (Bomberai) and building sustainable financing mechanism
- Improved practices in seaweed farming
- Solving seedling quality of seaweed to increase productivity

Speakers identified and featured as program Champions

No activity in 2022.

2023 Communications Strategy

TKSI started its communication strategy formulation in 2022 and finished early 2023. The communications strategy of TeSKI sent to KI internal staff and external partners for the first 18 months includes the use of strong and consistent key messages, appropriate communication tools, and effective strategies to outreach diverse target audiences in the working areas of TeSKI.

Communication aims to:

1. Garner attention from target audiences for the program and its offered solutions and to inspire amplification of support the overall ‘transformation’ goal;
2. Highlight the value of coral reefs and associated ecosystems to local people and economy, now and into the future, to support achieving project outcomes through suitable and credible information;
3. Demonstrate, using project examples and through a variety of communication channels, how embracing coral-positive solutions benefits local economies and sustains natural resources.

The following strategies will be carried out to achieve the communications aims. The KI team will be actively engaging with key stakeholders, through regular meetings, face-to-face, virtual meetings to inform about the project and gain support from them. Dedicated events will be organized specifically to publish and promote any important material to broader audiences locally, nationally and if possible, internationally. KI will coordinate and collaborate with media outlets (local, national, and international) to enhance and communicate the works and key messages of the project to transform attitude and behavior towards coral reefs. The publications will strengthen the use of social media platforms to deliver key messages to a wider audience. Finally, communications will develop stories from the fields, i.e., champions, through writings and video.

VI. Risk Management and Mitigation

<u>Anticipated Risk</u>	<u>Impact on Program</u>	<u>L</u>	<u>C</u>	<u>R</u>	<u>Options for Reducing the Risk</u>
Potential for lack of inclusiveness in project decision-making and governance	Project not inclusive, potentially discriminate a group of people	2	3	Medium	CI will include Indigenous Peoples’ representatives, leaders, and traditional authorities in decision-making around project activities. CI will further uphold non-discrimination in all actions, ensuring even hard-to-reach indigenous communities are engaged in project activities within their geography, with a priority focus on vulnerable populations and groups. CI will follow the principles of the Rights-based Approach to Conservation and Free, Prior and Informed Consent (FPIC).
Lack of intercultural and gender sensitive approaches to project activities	Exclusion to a group of people	3	3	Medium	CI will consult, train, and collaborate with traditional Indigenous leaders and local community representatives on the project activities to ensure the integration of culturally appropriate approaches and platforms to the project

					design. To ensure adequate engagement of women and marginalized groups, the project will actively engage women's groups in key activities. Any intercultural response should be gender-responsive and based on awareness of the diverse needs and roles of men and women in the community
The chance of gender-based violence (GBV) can be increased in traditional male-dominated sectors such as fishing/mariculture	GBV to women	2	3	Medium	Ensure that the Project's Grievance Redress Mechanism is designed to respond to project related GBV incidents. Research and become familiar with national laws and regulations related to GBV including victim's rights.
Changes in local or national leadership affect natural resources governance.	Changes in project direction	2	3	Medium	<p>CI will work closely with communities, municipal authorities, and national ministry focal points to advance both site-based and national objective under the Program.</p> <p>Changes in local leadership, where trust and relationships are already established, could result in changes to the project timeline.</p> <p>Changes in national leadership could require additional discussion and engagement with the government</p>
University of Papua (UNIPA) in Manokwari failed to provide timely evident-based data on social economy and coral reef health in BHS	<ul style="list-style-type: none"> Data flow from field delayed or slow respond Lack of evident for tactical and strategic decision making 	2	4	Medium	<p>More proactive and supportive M&E (monitoring & evaluation) processes from M&E Unit</p> <p>Effective monitoring on the time frame of data collection</p> <p>Perform regular monitoring visits</p>
Farm level Seaweed production disruption such as uncertain seaweed yield	Income or livelihood of farmers affected	3	4	High	<p>Provide new strain of seaweed that adaptable to climate change and local ecology.</p> <p>Establish seaweed strain nursery to ensure availability of high-quality seaweed strain</p>
Lack of political and logistical support from Local government of	The effectiveness of BLUD in providing services and supervision of the MPA area is less effective if it is not	3	4	High	<p>Advocate local government and local parliament about the importance of regulation umbrella to support BLUD.</p> <p>Coordinate with relevant local</p>

Raja Ampat to BLUD	accompanied by the authority and political and logistical support from the local government.				government offices (OPDs) to establish The Governor's Regulation development working group
Lack of capacity for BLUD to manage MPA effectively	BLUD is unable to monitor and enforce regulations within MPA zones, increase public awareness of conservation, encourage sustainable tourism activities, and increase economic benefits generated through conservation efforts for local communities. The threats to coral reef can re-emerge very quickly without sustained effective MPA enforcement.	3	4	High	Hiring professional non-state civil servants in line with organizational needs. Build networking and cooperation with relevant organizations to tap external support. Provide capacity building effort for BLUD staff or its volunteers on how to manage MPA effectively
Amount of revenue (\$) generated from sustainable financing streams (user fees, reef insurance, blue carbon, etc.) and reef-positive businesses is below target	Lack of ability for BLUD or business to manage MPA effectively Decrease the ability of BLUD to conduct routine patrol or appropriate services. Lack of ability BLUD to hire and pay competent staff	3	4	High	Lack of ability for BLUD or business to manage MPA effectively Decrease the ability of BLUD to conduct routine patrol or appropriate services. Lack of ability BLUD to hire and pay competent staff

L = Likelihood, C = Consequences, R = Rating

VII. Adaptive Management

West Papua province has officially split into two administrations or provinces, West Papua, and Southwest Papua. Therefore, the Birdsheed Seascape (BHS) is now under authority of these two provinces. In the context of this project, Raja Ampat regency represents the Southwest Papua province and Bomberai represents the West Papua. Due to this change, the issuance of policies relevant to this project might be delayed. The KI team has built coordination with the new government office while continuing engagement with existing government office to assess adaptation measurements needed for this project.

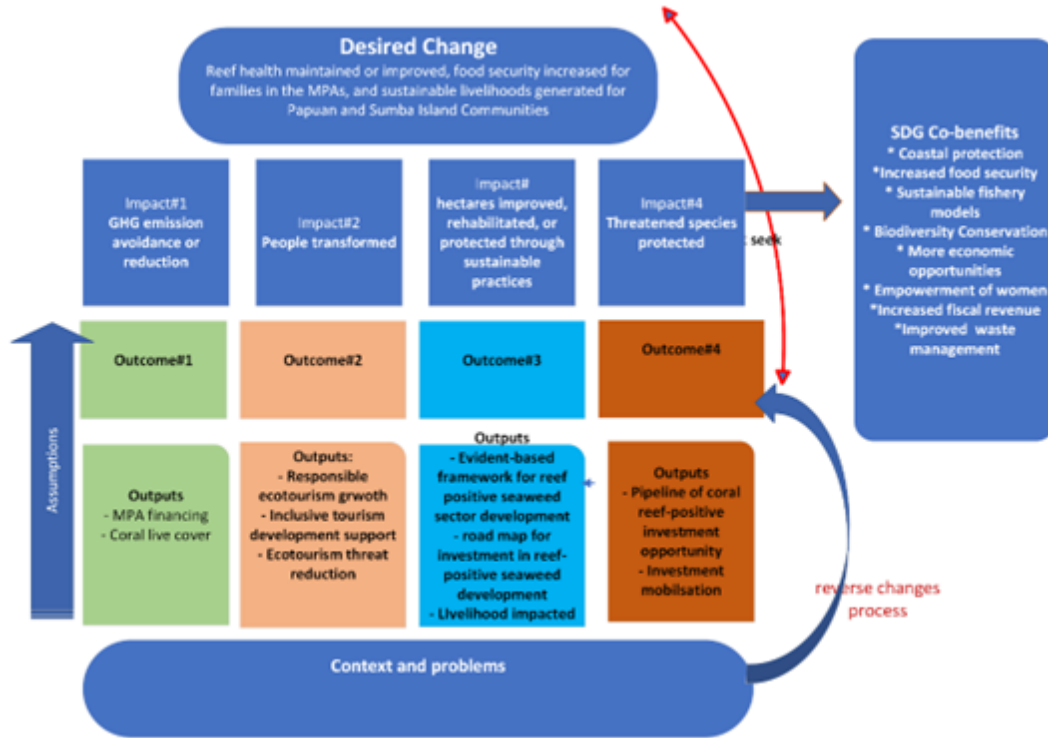
Availability of high-quality seedlings has been noticed as key factor to improve the productivity of seaweed in Indonesia. Problems with the lack of seedling quality is faced by most farmers in Indonesia.



Understanding this situation, KI and UNRAM agreed to expand the sources of seaweed seedling samples to provinces in Indonesia. The objective is to assess and identify more seaweed strains that are resilient to disease and climate change.

- Annexes

- Annex A: [Theory of Change for Terumbu Karang Sehat Indonesia]



- Annex B: [Program Structure/governance]

GFCR TEAM STRUCTURE

(Version 1.0, July 2022)

