



GLOBAL FUND FOR
CORAL REEFS

**ANNUAL NARRATIVE REPORT:
TERUMBU KARANG SEHAT INDONESIA**
January – December 2023

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 (TeKSI) Programme Number: 00131252</p>	<p>Start Date: June 2022 End Date: April 2024</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"> 1. Bird's Head Seascape (BHS), in Southwest and West Papua Provinces 2. East Sumba in East Nusa Tenggara Province 	<p>Co-recipient Organisation/s: N/A</p> <p>Implementing Partner/s:</p> <p><i>Lead Implementation Partner:</i> Yayasan Konservasi Cakrawala Indonesia (YKCI)</p> <p><i>Research Partners:</i></p> <ol style="list-style-type: none"> 1. Papua State University (UNIPA) 2. Nusa Cendana University (UNDANA) 3. Artha Wacana Christian University (UKAW) 4. Mataram University (UNRAM) 5. Hatch <p><i>Finance and Investment Partners:</i></p> <ol style="list-style-type: none"> 1. UNDP 2. Yayasan Konservasi Alam Nusantara 3. Mana Impact 4. Harapura Impact 5. Deliberate Capital 6. Mirova 7. Hatch Blue 8. USAID BERIKAN 9. USAID KOLEKTIF <p><i>Community Partners:</i></p> <ol style="list-style-type: none"> 1. Blue Abadi Fund/Kehati 2. EON Engineering <p><i>MPA Management Authorities:</i></p> <ol style="list-style-type: none"> 1. Raja Ampat MPA Management Authority 2. Bomberai MPA Management Authority 3. National MPAs Management Authority, MMAF 4. East Nusa Tenggara Provincial Conservation Board (Dewan Konservasi Perairan Provinsi NTT)

Total GFCR Budget: US\$ 3,000,000

Convening Agent: Yayasan Konservasi Cakrawala Indonesia (KI)/Conservation International (CI)

GFCR Preparatory Grant awarded for proposal development: Yes



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GLOSSARY

<i>Acronym</i>	<i>Definition</i>
BHS	Bird's Head Seascape
BKKPN	Balai Kawasan Konservasi Perairan Nasional / National Marine Conservation Area Agency
BLUD	Badan Layanan Umum Daerah / Regional Public Service Agency
CIV	CI Ventures LLC
CMMAI	Coordinating Ministry of Maritime Affairs and Investment
EVIKA	Evaluasi Efektifitas Kawasan Konservasi / Conservation Area Management Effectiveness Evaluation
FMA	Fisheries Management Area
GDI	Gender Development Index
Gol	Government of Indonesia
KI	Konservasi Indonesia
LSS	Lesser Sunda Seascape
MoEF	Ministry of Environment and Forests
MoHA	Ministry of Home Affairs
MPA	Marine Protected Area
NCE	No Cost Extension
RAMS	Raja Ampat Mooring System
SESP	Social and Environmental Screening Procedure
SME	Small and Medium Enterprises
TeKSI	Terumbu Karang Sehat Indonesia
TNP	Taman Nasional Perairan / Marine National Park

Executive Summary

Programme Overview

In the inception phase conducted between June 2022 and December 2023 (with a No Cost Extension until April 2024), KI focused on two priority coral reef ecosystems in: i) Bird's Head Seascape (BHS) in West Papua and Southwest Papua Provinces; and ii) Lesser Sunda Seascape, specifically in East Sumba Province. BHS was selected for its high marine species diversity with over 600 species of hard coral and 1,850 species of reef fish within its 225,000-ha area, while East Sumba covers the largest of Sumba MPAs zoned under the Sawu Sea TNP, with an estimated 80% of a total 19,248-ha of reef area¹, yet the conservation investment is lower compared to other locations. The Programme's theory of change is presented in Annex E.

Key Achievements in 2023

Phase 1 focused on conducting a series of baseline assessments and developing enabling conditions for further programme design and target setting. Sufficient capacity and capability for effective MPA management was prepared – including the exploration of diversified MPA funding, development of the sustainable financing mechanism, and local livelihoods' empowerment and collaboration – to ensure perpetuity of the reef protection strategy.

Solution 1 - Institutional capacity building for replication of MPA revenue model in Bomberai BLUD (Badan Layanan Umum Daerah/Public Service Agency) of BHS

KI supported capacity building for self-sustaining MPA management of the local authority through technical assistance to Bomberai BLUD in producing the draft Governor's Regulation on MPA management. KI was involved in negotiations and governance design of the Conservation Agreement with the US Treasury and GoI for a US\$30 million debt-for-nature swap, expected to be signed in 2024.

Solution 2 – Building responsible and inclusive tourism growth in BHS

A macro (regent-level) and micro (cluster-level) tourism spatial plan in Raja was produced, supporting the creation of Regent's Regulation on tourism management in the district including provisions of zoning and permitted area of development for the 15-years tourism development master plan. The produced spatial plan aims to reduce the direct impact of unsustainable and overcapacity tourism to coral reefs in Raja Ampat and triggers a distributed tourism growth that generates benefits to local Papuans in other areas and incentives support for the protection of coral reefs in the MPA network. This is utilized in locations with concentrated rapid growth of tourism business, such as Dampier Strait,

Solution 3 - Acceleration of design, engineering, and policy framework for Raja Ampat Mooring System (RAMS) in BHS

KI successfully conducted technical surveys and verifications in two locations for the RAMS pilot construction in Dampier Strait, as part of the total 113 identified potential points for RAMS development. A business model framework was developed to strategize the system's financial sustainability, where the user pay levy is expected to provide a sufficient revenue stream to enable operations and maintenance. The framework will also contribute to the financing of the MPA and investment for the next mooring systems construction.

Solution 4 - Build enabling conditions for blended financing of reef-positive seaweed industry and livelihoods in East Sumba

¹ Monitoring Kondisi Terumbu Karang Dan Ekosistem Terkait di Kabupaten Sumba Timur - Jakarta: COREMAP CTI LIPI 2018



Biological and socio-economic studies have been completed in East Sumba, assessing the current condition of seaweed cultivation activities and their impact to both the surrounding coastal communities and marine ecosystems. Further, the studies, a measured baseline numbers for the ecological indicators related to coral reef health and reef fisheries in the cultivation sites.

Solution 5 - Incubation of reef-positive ecotourism and seaweed industry investments

In 2023, CI Ventures LLC (CIV) achieved a total commitment of US\$1.3 million investments in Phase 1 to four reef-positive enterprises focusing on empowering ocean-based economic development with the expected disbursement period from April to June 2024. CIV coordinated with UNDP (Blue Finance Accelerator and AIS Blue Hub) to provide additional pipelines for reef-positive businesses.

Milestones for Next Year Implementation

The next programme period will focus on executing interventions with considerations to studies and stakeholder consultations undertaken during Phase 1. Details of Phase 2 plan and activities refers to the Replenishment Proposal provided as a separated document.

In Papua, KI will continue to strengthen the capacity of Bomberai BLUD and support the implementation of the financing plan, including the service tariff and debt-for-nature swap enactment. Enforcement of reef-positive ecotourism will be pursued through i) empowerment of community-led tourism business; ii) implementation of sustainable tourism practices through guidelines, training, and pilot ecotourism villages; and iii) operationalization of RAMS.

In East Sumba, KI will proceed to cooperate with BKKPN (Balai Kawasan Konservasi Perairan Nasional/ National Marine Conservation Area Agency) in Kupang – as the MPA management authority in Sawu Sea where East Sumba is located – through capacity building for the staff and reinforcement of seaweed cultivation in the area as part of the consolidated reef protection and livelihood development strategy. KI will create safeguards of reef-positive seaweed cultivation and production by taking lessons learned from East Sumba as the standards for larger-scale development. This correlates to the upcoming public-private collaboration between Gol and Sea6 Energy focusing on the growth of seaweed production for bioplastic and biofuel, taking place in Lombok Island (part of Lesser Sunda Seascape) starting next year.

With Gol's ambition to protect marine ecosystems and conserve 30% of the total MPA area by 2045, the Blue Halo S programme was launched during the G20 meeting in 2022 as an integrated production and protection approach for sustainable ocean management. Piloting in the western coast of Sumatra, Green Climate Fund had funded the feasibility study and proposal development for this programme. Considering its significance, this area is proposed to be included in Phase II of TeKSI's Solution 1 and 2 activities.

Reef-positive enterprises incubated are expected to double by the end of Phase 2, with the exploration of investment opportunities in more varied coral-positive businesses such as plastic/waste management, sustainable fisheries and aquaculture, and ecotourism.

I. Priority Sites (Phase I)

Priority Site #1 – Bird’s Head Seascape

MPA/LMMA/OECM	Area (ha)	Coral Reef Area (ha)	GFCR Solutions
Raja Ampat MPA	1,348,459	225,000	Solutions 2, 3
Bomberai MPA	846,611	25,821	Solutions 1, 2

Priority Site #2 – East Sumba

MPA/LMMA/OECM	Area (ha)	Coral Reef Area (ha)	GFCR Solutions
Sumba Strait	557,837	19,248	Solutions 4, 5

II. Partners

Co-implementer(s)

Name of Partner	Type	Activity or Solutions supported	Type of Agreement
Papua University	Research Institution	M&E activity coordination and implementation in BHS MPAs	Grant Agreement – Coral Health Monitoring Activities in Aquatic Conservation Areas in the Bird’s Head Seascape of Papua
Nusa Cendana University	Research Institution	Seaweed socio-economic baseline assessment/study in East Sumba	Service Agreement – Social Economic Baseline Study of Seaweed Industry in East Sumba, East Nusa Tenggara Province
University of Mataram	Research Institution	Seaweed disease and climate resilience research	Service Agreement – Research on seaweed disease and climate resilience to build resilient and competitive seaweed industry in East Sumba, East Nusa Tenggara Province
University of Kristen Artha Wacana	Research Institution	Seaweed biological baseline study in East Sumba	Service Agreement – Biological Baseline Study of Seaweed Industry in East Sumba, East Nusa Tenggara Province
Conservation International Ventures LLC	Financial Institution	Pipeline incubation and concessional financing	Priority funding for coral reef-friendly economic and livelihood development in BHS and East Sumba
Blue Abadi Fund/Kehati	CSO	Convene a Papuan advisory council, Kehati is the administrative organization for the Blue Abadi Fund and a partner in all Blue Abadi related activities	Assignment Letter – A representative from KI is assigned to be a member of the Governance Committee and Advisory Committee to contribute to govern the trust fund including selection of the grantee and BAF decision making
EON Engineering	Research Institution	Lead consultant for mooring study, construction, and development in Raja Ampat	Service Agreement – The West Papua Mooring System Design Development Consultant

Indonesia Ecotourism Network (Indecon)	Research Institution	Lead consultant for tourism spatial plan and technical document for tourism planning policy	Service Agreement – Raja Ampat Sustainable Tourism Spatial Plan Consultant
Hatch Blue	Research Institution	Lead consultant for seaweed resilience center	Service Agreement – Hatch Blue Holding Limited

Other Partner(s)

Name of Partner	Type	Activity or Solutions supported	Type of Agreement or Engagement
Raja Ampat MPA Management Authority (BLUD Raja Ampat)	Local government	Provincial entity responsible for patrolling and managing the Raja Ampat network of seven MPAs. A partner in all work relating to tourism and MPA management in Raja Ampat.	Active partners for the implementation of RAMS and implementation of sustainable tourism spatial plan in Raja Ampat MPA. Coordinate and communicate in implementation of RAMS in the two national MPAs of Raja Ampat.
Bomberai MPA Management Authority (BLUD Bomberai)	Local government	Provincial entity responsible for patrolling and managing the Fakfak-Kaimana network of six MPAs. A partner in all work relating to tourism and MPA management in Fakfak and Kaimana. Assist in understanding how to best fund the Bomberai MPA management.	Key entity in the implementation of entrance fees to MPA, development of tourism and fishery strategy, and facilitating the establishment of the tourism village pilot.
Kaimana Regency Government in MPA Bomberai	Local government	The Regency Government of Kaimana prioritized tourism and fisheries as a strategic program. The Kaimana Regency has six designated tourist villages within the Kaimana MPA.	Actively coordinate and communicate in tourism and fisheries management with the BLUD UTPD (Bomberai MPA Management Authority).
Provincial Government of East Nusa Tenggara (NTT), Department of Marine Affairs and Fisheries (DKP NTT)	Local government	Governance authority for marine affairs in East Nusa Tenggara waters. Lead agency for marine management, and fisheries and aquaculture activities in provincial waters.	Active coordination and communication to map investment patterns in seaweed development.
YKAN	NGO	Access to finance, co-financing, and investment pipeline sharing	The co-convening agent of GFCR in Indonesia, aligning on coral positive investments, where CIV investments would be available for YKAN potential pipeline, and financial facility that will be established by YKAN would support CIV and KI investments.
USAID Ber-IKAN	NGO	Pipelines sharing especially on sustainable fisheries businesses	Coordination on the formulation of Governor's Regulation (Pergub) to support the establishment and management of BLUD.

USAID Kolektif	NGO	MPA management body support, coral reef conservation works, coral monitoring	Coordination on site selection for coral reefs priority areas. Coordination on the formulation of Governor’s Regulation to support the establishment and management of BLUD.
Asian Development Bank	NGO	Blue Finance Accelerator programme (incubator)	De-risking through Asia-Pacific reef insurance programme.
UNIDO	NGO	Seaweed market access	Seaweed production manual and training, seaweed market access.
The World Bank	NGO	Incubator and business support, pipeline sharing and co-financing	MPA unit technical assistance.

Coordination, Lessons and Needs

KI ensured the scheduled study timelines were met and backlogs were resolved through regular meetings with research partners. For example, RAMS survey faced a problem where consultant survey approval was postponed due to an authority issue. KI then approached the CMMAI (Coordinating Ministry of Maritime Affairs and Investment) to ask for support in speeding up the administration. KI participated in discussions with other NGOs currently working in the same areas to work together in solutions implementation, such as with USAID Kolektif in supporting the additional regulations required in establishment and management of the Bomberai BLUD. Public and high-level consultations were conducted with local, provincial, and national government in alignment of regulations drafted for Bomberai MPA management and Raja Ampat tourism growth management. KI held several coordination meetings with partners; meeting with YKAN on March 22nd to align program planning, on July 4 -5th co-hosting the development partners meeting with WB, WWF, GEF, USAID, UNDP, etc., on 31st March to prepare international event (COP) and on December 21st to coordinate reef positive investments. Additionally, CI and TNC facilitated with the US and ID governments, regarding TFCCA debt for nature swap.

One of the main challenges in programme execution was the bureaucracy and communication processes with the governing authorities. With the release of Constitution No. 29 of 2022, regarding the establishment of Southwest Papua Province, several engagements with Raja Ampat government were delayed due to internal reporting and organizational structural changes, such as multiple stakeholder forums of investment pipeline for ecotourism activities which were rescheduled to Phase 2. In East Sumba, similar issues were encountered due to the different authorities involved in marine resources management, for instance the provincial authority handles the seaweed cultivation programme while coastal livelihood development welfare is supervised by the regency authority.



III. Programme Milestones

	Deliverables/Milestone	Target Date of Completion	Status	Milestone Remarks
OUTCOME 1	PROTECT BHS: The funding gap to effectively protect the globally significant coral reef and associated ecosystems in the Bird's Head Seascape MPA network is significantly reduced			
OUTPUT 1.1	MPA financing: Increased, diversified and more sustainable revenue sources that support MPA management in priority MPAs in the BHS through: (a) 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.			
	Activity 1.1.1 – Participate in the negotiations for a debt for nature swap and support the design of related governance and administrative components. If agreement is reached, co-invest in the debt for nature swap, thus closing Blue Abadi's financial gap in perpetuity.	No target completion date and budget under this activity	On track	Discussions between KI, Gol, and TFCCA was conducted in August 2023, agreeing to a total amount of US\$ 30 million debt-for nature swap. The expected signing of the Conservation Agreement in Q4 2024. Follow-up activities are scheduled to be implemented in Phase 2.
	Activity 1.1.2. – Develop a sustainable financing plan for Cenderawasih Bay National Park and an improved user fee mechanism to support park management costs.	No target completion date and budget under this activity	Revised	Due to the new regulation within MoEF on the requirement of MoU prior to any collaboration with partners, KI proposes to shift development to other priority locations (Lesser Sunda Seascape with BKKPN Kupang and Indonesian Eastern Indian Ocean Seascape – FMA 572 as Blue Halo S pilot sites). This proposal is described in the replenishment document.
	Activity 1.1.3 – Build the capacity of the newly established Bomberai BLUD to secure and manage sustainable financing for the Kaimana and Fak-Fak MPAs through a combination of sources.	Dec-2023	Achieved	KI developed a diversified sustainable financing plan for Bomberai BLUD – managing authority of Fakfak and Kaimana MPAs – through the implementation of a service tariff and formulating the legislation. The draft was finalized in December 2023, currently being reviewed in MoHA and will be ratified in Q1 2024. Follow-up activities are scheduled to be implemented in Phase 2.
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			
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.			
	Activity 2.1.1 – In partnership with the Raja Ampat Regency Government and West Papua government,	Dec-2023	Achieved	The Tourism Spatial Plan for Raja Ampat Regency had been completed in December 2023. Follow-up of the spatial plan will



	develop a Tourism Spatial Plan for Raja Ampat future tourism developments.			be completed in the next implementation period through Activity 2.1.4.
	Activity 2.1.2: In partnership with the Raja Ampat Regency Government and West Papua Government, draft comprehensive tourism management legislation for Raja Ampat.	Dec-2023	Achieved	Considering the study results from Activity 2.1.1, the draft of the tourism management legislation for Raja Ampat had been finished and submitted. It is currently undergoing review by the Regency Law Department and expected to be ratified in Q2 2024.
	Activity 2.1.3: Conduct community, government, and stakeholder consultations to generate and vet investment pipeline across all eco-tourism activities.	Dec-2023	Achieved	A meeting was conducted on October 12th 2023 inviting Head of Marine and Fisheries Affairs Agency of East Sumba Regency (DKP Sumba Timur), Head of National Marine Conservation Area Agency (BKKPN) Kupang, Head of Southeast Asian Regional Centre of Tropical Biology (SEAMEO BIOTROP), and member of Regional House of Representatives (DPRD) of East Sumba Yonathan Hani to discuss the continuation of reef-positive seaweed culture development in East Sumba and identify requirements to minimize the gap for investment eligibility.
	Activity 2.1.4: Once the Tourism Spatial Plan is complete (Activity 2.1.1), begin structuring a package of tourism infrastructure development investments and/or a plan for a sustainable resort investment for the GFCR Equity Fund.	No target completion date and budget under this activity	On track	This activity is on track as the tourism spatial plan study (Activity 2.1.1) has been completed and policy is undergoing review. Structure of the investment package will be developed in Phase 2 of TekSI, with assessing varied viable tourism services options (not limited to resorts) before committing for investments.
Output 2.2	INCLUSIVE TOURISM DEVELOPMENT SUPPORT: Equitable access to financing and technical support for micro, small and medium coral reef-positive ecotourism enterprises is increased, with a specific focus on Papuan and women-led enterprises and sustainable enterprises at risk of COVID-caused bankruptcy.			
	Activity 2.2.1: Explore demand, opportunities, and constraints to commercial microfinance access in West Papua. Assess the demand for commercial microfinance and needs for related technical assistance in West Papua with emphasis on Papuan and/or women-led microenterprises in the ecotourism sector.	Jun-2023	Revised	Upon consultation with partner, local government and field team, this activity was not considered as the priority programme in TekSI. However, in the next phase village-based enterprises (Bumdes) or local enterprises will be supported as part of the pilot implementation of local community-led reef-positive ecotourism management.
	Activity 2.2.2: Diversify BHS ecotourism SMEs by investing, via CI-Ventures, in a portfolio of diverse coral-positive small or medium enterprises in the eco-tourism industry, including structuring COVID recovery financial packages in exchange for reef-positive sustainability commitments.	Dec-2023	Revised (to be continued in Phase 2)	Phase 1 revealed the scarcity of ecotourism SMEs in BHS suitable for investment assessment. To tackle this challenge, in Phase 2, CIV will continue this activity with shifting its focus to engage enterprises beyond the BHS region, encouraging them to establish operations within the designated GFCR program area. At the same time, KI will also aim to build a village-based tourism village in Bomberai as detailed in revision of Activity 2.2.1 as an



				alternative approach in piloting sustainable tourism business and empowering coastal livelihood.
	Activity 2.2.3: Scope potential for establishing a tourism training center for BHS.	No target completion date and budget under this activity	On track	Scheduled to be implemented starting in Phase 2.
Output 2.3	ECOTOURISM THREAT REDUCTION: Direct impacts of the ecotourism industry on coral reef ecosystems in the Bird's Head Seascape, including from anchor damage, plastic waste, and wastewater, are reduced.			
	Activity 2.3.1: Develop a fully functional, legally mandated, and self-financing Raja Ampat Mooring System (RAMS).	Dec-2023	Achieved	Phase 1 focused on verifying potential RAMS locations, 113 mooring points were identified – 87 points eligible for liveboards and 26 points for yachts. In addition, two pilot points in Dampier Strait were surveyed and verified together with the local authorities. The design and construction of these two mooring pilots are on-going. A business plan had also been developed for the engineering design, expected cost, maintenance procedures, and initial market overview for implementing user pay system as the sustainable financing scheme for the RAMS itself and related MPA network.
OUTCOME 3	ENHANCED ECONOMIC RESILIENCE THROUGH REEF-POSITIVE SEAWEED DEVELOPMENT			
Output 3.1	EVIDENCE-BASED FRAMEWORKS FOR REEF-POSITIVE SEAWEED DEVELOPMENT. Foundational research to guide near-term reef-positive mariculture siting and growing practices and long-run disease and climate resilience.			
	Activity 3.1.1: Undertake East Sumba baseline biophysical, bioecological, and socioeconomic baseline assessments	Dec-2023	Achieved	Baseline assessments in East Sumba are completed. Bioecological research was undertaken around six seaweed cultivation locations in East Sumba. Two main results of the research, which will be used as baseline indicators are: i) the average life coral cover was 36.5% ; and ii) the coral fish class was found to be consistently low with a fish biomass average of 146.3 kg/ha. The socio-economic baseline assessment of East Sumba indicates potential for expanding the seaweed industry with regulatory support. Seaweed cultivation, which accounts for almost 20% of local employment, serves as the primary income source



				alongside other activities, with equal involvement from both genders as shown by a GDI of 0.73 .
	Activity 3.1.2: Support and advance seaweed disease and climate resilience research	Jun-2023	Achieved	Research conducted in Phase 1 discovered two new seaweed strains which are expected to be better suited for cultivation, and more disease- and climate-resilient . Follow-up activities, investing in the establishment of International Tropical Seaweed Resilience Institute (ITSRI), piloting climate resilient seedling hatchery, are scheduled to be completed in Phase 2.
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			
	Activity 3.2.1: Design and develop coral reef-positive seaweed investment guidance, and impact monitoring and assessment framework and tools.	Sep-2023	Achieved	In the inception phase, CIV had completed the first draft of reef-positive investment guidelines and criteria for various blue economy business lines (e.g. ecotourism, marine aquaculture, etc) , including the framework of assessing impact to the environment and livelihood development, measuring overall risk of the business, and monitoring the projected results. CIV Investment Guideline is provided as a separated document.
	Activity 3.2.2: Explore opportunities, and constraints to sustainable, coral-positive seaweed sector investment in Sumba and development of investment roadmap.	Sep-2023	Achieved	Included in the baseline assessment conducted in Activity 3.1.1 , opportunities, and constraints for reef-positive seaweed industry in East Sumba had been identified and will be taken into consideration in investment roadmap development . Follow-up activities are scheduled to be completed in Phase 2.
	Activity 3.2.3: Develop pipeline of SMEs within and across the seaweed value chain that have potential to deliver positive, quantifiable sustainable development, and livelihood benefits while reinforcing coral reef protection and conservation.	Dec-2023	Achieved	Output included in Activity 4.1.1 as per submitted workplan , refer to Annex I for pipeline information and details of Phase 1.
OUTCOME 4	TRANSFORM ACCESS TO FINANCING FOR CORAL-POSITIVE ENTERPRISES: Reduced barriers to financial access for coral-positive micro, small, and medium enterprises			
Output 4.1	PIPELINE OF CORAL REEF-POSITIVE INVESTMENT OPPORTUNITIES IN PRIORITY SITES: Geographically, strategically, and thematically aligned investment opportunities are identified in Priority site.			
	Activity 4.1.1: Develop pipeline of strategically and thematically aligned coral-positive investment opportunities in GFCR Indonesia Priority Areas.	Dec-2023	Achieved	Including outputs of Activity 2.2.2 and 3.2.3 , Throughout Phase 1, we have benefitted from Hatch & CI Ventures' co-hosted event "Women in Ocean Food", their relationship with UNDP for "Blue Finance Accelerator" and "AIS Forum" programs, among others from our network such as Deliberate Capital, to get a pipeline of



				total 18 companies. Selected companies proceeded to advance for investment as referenced in Annex I.
Output 4.2	INVESTMENT MOBILIZATION: Mobilization of initial portfolio of coral-positive investments in GFCR Priority Areas and sectors			
	Activity 4.2.1: Form, establish, and operationalize dedicated GFCR Indonesia investment window with CI Ventures.	Dec-2022	Achieved	CI Ventures has hired a local investment officer which has been on board since Jan 1 st , 2023 and also hired a local law firm for country legal due diligence for CIV operationalization in Indonesia. Relationships have been established with several development partners such as UNDP, USAID, YKAN, WB , among others with the prospect of taking part in the investment advisory committee .
	Activity 4.2.2: Capitalization of dedicated GFCR Indonesia investment window within CI Ventures.	Sep-2022	Achieved	CI Venture has established a special budget account specifically for Indonesia . Furthermore, an investment memorandum and agreement have been executed with Indonesian company , as a commitment to investing in and supporting local enterprises.
	Activity 4.2.3: Investment execution and portfolio management.	Dec-2023	Achieved	Seadling – an enterprise focusing on seaweed bioprocessing – was the first investee within the TeKSI programme, with a granted US\$ 500,000 investment funded by CIV as part of the initial commitment of joint investment with GFCR. Between April and June 2024, four companies (Jala, Wittaya, Sambung Asa, and Sejiva) will also be deployed for investment with total amount of US\$ 1,300,000 .

IV. Programme Progress Overview

A. Outcome and Output Progress and Challenges

Outcome 1 – PROTECT BHS: The funding gap to effectively protect the globally significant coral reef and associated ecosystems in the Bird's Head Seascape MPA network is significantly reduced

The focus of Phase 1 was on building the financial management capacity of the Bomberai BLUD, replicating Raja Ampat's user fee system to provide direct revenue, and supporting applications for grant funding from the Blue Abadi Fund, whilst exploring additional revenue generating models for Bomberai MPAs.

In this context, a first draft of the Conservation Agreement, with a commitment of US\$ 30 million has been submitted to the US Treasury and GoI in November 2023 and expected to be signed in September 2024. The Funding will be channelled through the Blue Abadi Fund, with TNC/YKAN as the potential partner for programme implementation.

The Governor's Regulations on Service Tariffs for visitors to MPAs under the Bomberai BLUD have been issued on 29 November 2023. The draft regulation proposes a fee of IDR 500,000/person/year (US \$33.3) for domestic tourists and IDR 1 million/person/year (US \$66.67) for foreign tourists. In addition to the user fee, the regulation proposes charges for facilities, equipment rental, and non-commercial interests including research and educational visits.

However, initial plan (Activity 1.1.2) to design a sustainable financing plan for Cenderawasih Bay National Park did not meet the expected result and will be proposed for revision in the next phase. This is due to the new regulation of MoEF, where a Memorandum of Understanding (MoU) is required for any collaboration with partners. KI had run a series of consultations with the national park authorities, yet the MoU between KI and the MoEF prior to commencing activities could not be achieved by the end of the inception phase because of bureaucracy processes in the government side. Hence, KI is proposing to shift geographic focus to extended areas of East Sumba within the LSS and the Blue Halo S pilot FMA 572 for Phase 2 to strengthen MPA management by establishing accountable MPA institutions with BLUD status.

In 2023, KI also collected data on the coral health status of two MPAs in Raja Ampat and four MPAs in Bomberai. The average live coral cover was found to be 32.08%-, or 3.92%-point decrease compared to the baseline data of 36% in the overall BHS area. During COVID-19, it was expected that the regional focus was shifted to implement countermeasures due to the pandemic, affecting the resources and budget allocated from the government for the reef protection programme. Reef fish biomass was 573,09 ± 188,24 kg/ha of key functional fish groups surveyed in Raja Ampat MPA; a 10.8% increment increase compared to baseline data of 517 ± 139kg/ha of average reef fish biomass in 2019. Meanwhile, TeKSI Phase 1 managed to maintain 122 sustainable local jobs from the capacity building of Bomberai BLUD as well as operationalization of Raja Ampat BLUD.

During Phase 1, three new laws were passed regarding the formation of new provinces in Papua. The easternmost region of Indonesia (previously split between Papua and West Papua) has now been divided into six provinces with the addition of South Papua, Central Papua, and Central Mountains Papua. Due to this provincial expansion, the project experienced delays due to lengthy bureaucratic processes related to administrative reform and limited time was available to conduct multi-stakeholder engagements. The effective operation of the Bomberai BLUD was therefore undermined and additional regulatory products

are required to build the Bomberai BLUD's self-financing capacity. KI will continue to work together with USAID Kolektif in this regard to support the development thereof and assist in the execution of user fee in Phase 2 of the programme.

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

Phase 1 focused on developing tourism spatial plans and accompanying legislation for Raja Ampat. Whilst undertaking surveys for the tourism spatial plan, it became apparent that tourism activities are highly concentrated within the Dampier Strait, which is resulting in negative impacts on the marine ecosystem, particularly coral reefs. Consequently, at the Regency level, the tourism spatial plan suggested recommendations to alleviate the pressure of tourism on the Dampier Strait. These include the proportionate distribution of tourism activities and key facilities to other sites within Raja Ampat that have similar special attractions. The utilization of undeveloped destinations such as Fam Islands and Waigeo, which have the potential to be promoted and marketed as tourist attractions.

At the village level, the tourism spatial plan identified three issues which might have a significant impact on tourism development planning and ought to be considered in future tourism planning, including:

1. the ecological carrying capacity of the tourism attraction sites, specifically in locations with rapid tourism growth (sampled in Arborek Village);
2. the limited infrastructure, facilities, and space to accept visitors in locations with potential for tourism development (sampled in Fam and Sohol Villages); and
3. the insufficiency of organizational and quality management of tourism sites (sampled in Piaynemo Village) where the availability of qualified human resources to manage tourism is significantly lacking, no partnerships and coordination between stakeholders exists, and there is no legal governance of management and monitoring in place.

In addition to the tourism spatial plan, KI supported the development of the Regent's Regulations on tourism management which have been submitted to the Regency's Law Department for review. The year of 2024 is an election year (presidential and legislative elections), making it difficult to determine when the review and approval process will be completed. However, regular consultations and meetings with government is occur with the expectation these regulations will be issued this year. These regulations include provisions pertaining to zoning, permitted areas of development and other considerations for Raja Ampat's tourism spatial plan.

In 2023, KI completed the identification of potential RAMS location, where 113 mooring points had been identified – 87 points eligible for liveaboards and 26 points for yachts – and two pilot points in Dampier Strait had been surveyed and verified together with the local authorities, awaiting the first construction in Q1 2024. A business plan has been developed for management, costs estimation, monitoring, and maintenance of the system.

In Phase 2, KI intends to set up 10 priority pilot points of RAMS while establishing a user pay system. This system will target different types of vessels, such as dive tourism boats and private yachts, to generate revenue for maintenance, spare part replacements, operational team support, and contribute to the financing of the MPA. By Year 3, the pay system is expected to be self-sufficient, reducing the impact of vessel anchoring on coral reefs in BHS and allowing for the expansion of RAMS installations in Phase 3.

During the survey phase, the Port Authority, Harbourmaster and Port Operator Unit (KUPP) and the Navigation District (Disnav) of Indonesia as the authorized government institution required the use of a specific tool (Hydros) to obtain the oceanographic data based on their standards. Unfortunately, the bureaucracy of renting the tool took exceptionally long and stalled the programme timeline, hence KI's consultant partner developed and applied an alternative approach by using a different tool accompanied by divers to subtract samples. Disnav and KUPP will conduct a further evaluation of this approach around 1-3 months after the installation of the RAMS in these pilot points. If the results are satisfactory and comply with their standards, KI will be granted permission to continue using this approach for other locations.

With the status of Southwest Papua as a new province, building awareness and continuing engagement with key government stakeholders will be prioritized in the second phase. This activity is critical to ensure government support and buy-in for the operation of RAMS.

Outcome 3 – ENHANCED ECONOMIC RESILIENCE THROUGH REEF-POSITIVE SEAWEED DEVELOPMENT

During Phase 1, baseline assessments and resilience studies were undertaken to build a more robust understanding of the biological, ecological, and human dimensions and industry and market factors that influence the seaweed industry and management thereof in the context of coral reef protection and conservation.

During field observation and consultations with local stakeholders, it is found that most existing seaweed farmers are fishermen who practice unsustainable fishing methods which result in damage to coral reef cover. A decline in fish production is one of the reasons why fishermen converted to seaweed cultivation and utilize reef-degraded coastal for the production areas. This shows a clear association of how supporting seaweed farmers could reduce threats to coral reefs as: 1) seaweed is a promising alternative livelihood that can replace destructive fishing; and 2) sustainable intensification will allow seaweed farmers to avoid cultivation in healthy reef ecosystems.

Research was undertaken on the condition of coral reef and reef fisheries around six seaweed cultivation locations in East Sumba (Kadahang, Purukambera, Walakiri, Warajangga, Tapil, and Kaliuda). The results of the research were as follows: i) the average life coral cover was 36.5%; ii) coral recovery potential ranges from 6.8% - 43.8%; iii) the health coral reef index is between 3 – 6; and iv) the coral fish class was found to be consistently low with a fish biomass average of 146.3 kg/ha. Furthermore, the resilience studies presented two new species of seaweed (*Kappaphycus sp. 1* and *Kappaphycus sp.2*), which will be further developed for their climate and disease resilience.

It is evident from the studies that East Sumba has a large opportunity to support diversified climate resilient seaweed species in meeting national and global demands by conserving and preserving economically important natural seaweed from the genera *Caulerpa*, *Ulva*, *Gracilaria*, *Sargassum* and *Halymenia*, while protecting the reef ecosystem. The studies further indicated that the initial projected yearly income for seaweed cultivation in East Sumba is around IDR 6 billion (approximately US\$ 400,000) – generated from the historical data in 2022 where production amount of dried seaweed of 307,695 kgs, selling value of IDR 21,000/kg, and estimated total seaweed cultivators of 3,438 households in 4 sub-districts. However, a decline in the quality of *Kappaphycus alvarezii* seaweed seed is detected, due to the vegetative propagation thereof for more than 20 years.

The baseline for East Sumba shows that the seaweed industry has the potential to be developed further, including through national and local regulations to support the investment, price, and value added of seaweed, which contributed 13.80% of dried seaweed production in NTT province and provided jobs for 19.37% of the total labor force. The GDI (Gender Development Index) of seaweed farming activities in East Sumba Regency reached 0.73, indicating equal access and contribution from both men and women. Seaweed cultivation is the primary source of income and additional sources of income include farming, fishing, trade, and teaching.

Furthermore, KI presented the results of studies to the national government, including the CMMAI. As a follow up, the Coordinating Ministry invited KI to join in a seaweed pilot project in collaboration with SeaEnergy, Mataram University and Indonesia National Research Agency (BRIN). The seaweed production is aimed for producing bioplastic and biofuel for supporting Indonesia energy transition target. The ministry seeks KI to be involved through conducting impact evaluations of this programme to the surrounding reef ecosystem and livelihoods, while supporting communities with reef positive seaweed production. This is a pivotal opportunity to merge the interests of the Gol to invest more in the development of the blue economy and meet our target of enhancing economic and livelihood resilience for local communities through a reef-positive seaweed industry. The activity will provide additional support for seaweed production in East Sumba.

Outcome 4 – TRANSFORM ACCESS TO FINANCING FOR CORAL-POSITIVE ENTERPRISES: Reduced barriers to financial access for coral-positive micro, small, and medium enterprises

In 2023, CIV committed US\$1.3 million in new investments across four reef-positive enterprises and established coordination with UNDP (Blue Finance Accelerator and AIS Blue Hub), Mana Impact, Harapura Impact, Hatch Blue, and Deliberate Capital to provide additional pipelines. In total, the pipeline consists of 18 enterprises that were identified for prospective reef-positive investment. Details of the enterprises are presented in Annex I.

All engaged enterprises were evaluated using CIV internal guidelines that were developed specifically to categorize and measure the impact of coral-positive business. The assessment is based on whether the business could incentivize or be a revenue generator for the protection of the coral reef ecosystem or provide management of a marine protected area or addressing the threat to the ecosystem from human economic activities by providing more sustainable alternatives or solutions to minimize threats.

Two key takeaways from Phase 1 include the limited number of local investible and eligible enterprises available for assessment and most potential entities being non-bankable. To address this issue, CIV pivoted to approach enterprises outside the BHS and East Sumba area and incentivize them to launch operations in the specified GFCR programme location. CIV will design a graduation approach to reach both the potential non-bankable and the bankable businesses within the priority areas to encourage and support local initiatives. This approach will be implemented in the second phase.

B. Monitoring and Evaluation

Monitoring and evaluation (M&E) activities during Phase 1 were focused on developing the monitoring framework through discussion with the project team, field visits, and consultation with the GFCR team. The development of the framework led to the creation of the M&E plan which was submitted for GFCR approval at the end of the inception phase, along with the results framework.

Baseline data for this project are from field data collection conducted by university partners who were leading the studies. The most critical lesson learned during the inception phase was ensuring all necessary data were included in the survey design. The research partner agreed with this assessment as a lesson learned and this was documented prior to the baseline study being conducted. During the socio-economic and biological assessment executed in East Sumba, the first draft of the survey report missed several important data points, leading to a second round of data collection and a longer process than initially anticipated.

KI's M&E team developed a system that enables monitoring and tracking progress against project work plan. Data were collected and recorded monthly in the Indicator Tracking Table (ITT) and reported in the internal KI project dashboard.

Target settings in Phase 1 had been defined specifically for the ecological indicators in BHS and financial indicators. As for the interventions implemented in East Sumba, targets had yet to be set up in Phase 1 due to unavailable baseline data. Details of the latest Results Framework are provided in Annex B.

C. Protected Areas Management Effectiveness

EVIKA is used to assess MPA management effectiveness and improve management quality, performance quality, and planning quality. EVIKA was enacted by the Decree of Director General of Marine Spatial Management MMAF Number 28 Year 2020. In this decree, the EVIKA score is assessed based on the weight and score of 24 indicators² and the statuses are classified as: i) Minimum Managed (<50%): The area design and management process has been implemented but more efforts are still needed to achieve management objectives; ii) Optimally Managed (>50%-85%): Management functions have been running adaptively and several management objectives have been achieved; and iii) Sustainably Managed (>85%): The community benefits from protected and sustainable management of the area.

In Raja Ampat, the EVIKA score has been steadily increasing over the past three years and staying in the 'Sustainably Managed' status, with the score of 83.78% (2021), 88.04% (2022) and 91.53% (2023) within 1,348,459 ha of area managed. In Phase 1 KI had produced the blueprint recommendations for Raja Ampat tourism spatial planning which was translated into the draft of Tourism Attraction Management. This draft is expected to contribute to the effectiveness of Raja Ampat MPA management going forward. Mini trainings on sustainable tourism and coral reefs were conducted as part of the socialization in 2023, inviting 83 people including local communities, tourism industry, and government staffs with 123 male and 60 female participants. The completed survey and business plan of RAMS and the awaited system construction in Phase 2 are expected to bring significant impact in reducing 90% of coral damage by vessel anchoring from the visiting live onboards and yachts.

In Bomberai, similar positive progress is seen from the EVIKA measurement in Fakfak and Kaimana. Both locations had successfully advanced their 'Optimally Managed' status with the score of 57.29% (Fakfak,

² 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

346,807 ha area managed) and 61.77% (Kaimana, 499,804 ha area managed) in 2023, a substantial increase compared to 50.26% score in 2022. KI supported improving the resources and capacity of Bomberai BLUD through several trainings on sustainable financing and MPA management, as well as assisting creation of service tariff and its governance in Bomberai. The ongoing negotiations of debt-for-nature swap is expected to be a stable financing source for the operational continuity and effectiveness in Bomberai MPA, supporting the local authority during the commencement and establishment of other revenue business models.

Our priority sites in East Sumba are part of the Sawu Sea MPA. The EVIKA score of this area is improving on a yearly basis, with 54.46% in 2021, 74.72% in 2022, and 88.52% in 2023, cementing the ‘Sustainably Managed’ status within the 3.3 million ha of area managed. Study results in biological, ecological, and socio-economic landscapes conducted in Phase 1 will sharpen the strategy of reef-positive seaweed industry development by reducing threats coming from non-standard seaweed cultivation processes and strengthening seaweed production as the core economic growth for the coastal livelihood in East Sumba.

D. Enabling Policy Environment

Two draft regulations and one business plan for RAMS were developed during Phase 1 of the programme, including the following:

1. *Regulation of the Governor of West Papua on Regional Public Service Agency Service Tariff of Regional Technical Implementation Unit for Kaimana MPA Management:* This draft regulation is a milestone continuing from MoHA in *Regulation of the Minister of Home Affairs No. 79 Year 2018 Article 83 Paragraph 6* mandating the Bomberai BLUD to levy fees for environmental service users in Kaimana and Fakfak MPAs. The formulated numbers were generated through a series of consultations involving a comparison study to Raja Ampat’s tariff system and a direct survey to gauge the Willingness to Pay (WTP) of visitors. The draft is expected to be ratified in January 2024 and targeted to be fully operationalized during Phase 2. The fee structure and amount will be reviewed every two years and implementation of this regulation should cover the annual expenditure of Bomberai BLUD operational activities (approximate IDR 2.42 billion) with 5-8% profit which can be invested for enhancement of reef protection and fisheries strategy.
2. *Regulation of the Regent of Raja Ampat on Tourism Attraction Management in Raja Ampat Regency:* This draft regulation complements the 15-years tourism development master plan stated in *Regulation of Raja Ampat Regency No. 6 of 2021* and the long-term spatial planning (2011-2030) stated in *Regulation of Raja Ampat Regency No. 3 Year 2012*. The draft is expected to be ratified in 2024 and KI will support its implementation in Phase 2 through multi-stakeholder discussions and development of guidelines for sustainable and responsible ecotourism business in the area along with the tourism spatial planning recommendations proposed from Phase 1.
3. *Raja Ampat Mooring System business plan:* Partnering with EON Engineering, KI identified the detailed plan and requirements of RAMS, including: i) design, engineering specifications, maintenance, and control procedures; ii) landscape of targeted users; iii) engagement strategy with local communities; and iv) expected total cost for construction. In Phase 2, KI will commence the pilot installation while continuing discussions with related stakeholders and set the trial period of RAMS usage to verify reliability of the system and test the targeted users’ willingness to pay.

In continuing the condition enablement of GFCR Solutions, four new regulatory frameworks are required to be developed in the following period, including: i) Fisheries, tourism, and reef protection strategy of the MPA local authorities; ii) Business model framework for community-based tourist village; iii) Sustainable financing mechanism of RAMS; and iv) Reef-positive seaweed seedling and cultivation governance.

E. Complementary Initiatives

Several complementary initiatives are identified and explored during Phase 1 of TeKSI as follows:

1. USAID Ber-IKAN is a 5-year development work in sustainable fisheries funded by USAID with total allocated grants of US\$ 2.3 million. Its priority areas are FMA 715, which includes Southwest and West Papua) and 711. The program focuses on improving fisheries management, empowering small scale fisheries communities, and protecting endangered species. TeKSI is starting coordination with Ber-IKAN to work together on the private sector and investment mobilization for sustainable businesses. Ber-IKAN is interested in supporting Bomberai BLUD.
2. USAID Kolektif collaborated with Kehati for a US\$ 126,700 grant with activities in Bomberai area focusing on: i) implementation of surveillance and law enforcement activities in Kaimana and Fakfak MPAs; ii) development of tourism entrance fee regulation in Kaimana and Fakfak MPA; iii) monitoring and development of Sasi (seasonal closure of a coastal area or certain marine biota from capturing that traditionally practiced by indigenous Papuan); and iv) operational support for Bomberai BLUD.
3. Lautan Sejahtera (Lautra) is a 5-year loan, US\$ 210 million programme from the World Bank to the Indonesian government on coral reef, livelihood and SME support, and blue finance activities. The focus areas are Fishing Management Areas 714, 715, and 718 in parts of TeKSI locations including MPA network in Sawu Sea. Lautra's core activity is coral reef protection. There is a sustainable finance component and support access to finance and market for MSMEs, aligned with our investment mobilization activity. TeKSI has reached out to the World Bank and the executing entity within MMAF to ensure collaboration and synergy in activities. Furthermore, we have engaged with the World Bank team specifically for the RAMS. The World Bank has been reviewing the business plan document made by the RAMS consultant, with the prospect that some of the RAMS work can be funded by the World Bank through LAUTRA at \$2 Million USD. The World Bank hosted a RAMS stakeholders meeting that convened the local stakeholders with the national government to discuss the implementation of RAMS.
4. UNIDO coordinates with their seaweed initiatives (SOP and training program). We have engaged with UNIDO facilitated by UNDP to discuss potential alignment and collaboration on our seaweed initiatives. UNIDO explained that they had a procedure and digital training program that can be used by KI TeKSI. This would be implemented in the second phase of the GFCR program since Phase 1 KI focused on baseline studies and has yet to implement any training.
5. 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. TeKSI's investment mobilization will be replicated to Blue Halo S locations, focusing on reef-positive ecotourism development in Nias and Mentawai as well as MPA management capacity building in North and West Sumatra.

F. Gender Mainstreaming

Several gender issues were initially raised in the project proposal, such as how gender mainstreaming in the policy of the Minister of Maritime Affairs and Fisheries Decree has proven to be effective and efficient in encouraging equal participation and access between men and women in cultivation and collection activities in coastal areas. The baseline analysis concluded that in the national and local government-level analyses, the GDI reached 1.0, indicating equal access, control, and participation between men and women. The policy is therefore deemed effective in encouraging gender equality and participation in coastal activities.

At the community level, the value of gender parity index (IPG) in family dependents from 0-6 people/family is relatively the same between men and women. It is alleged that women have been given equal opportunities and participation in seeking income outside the home (productive work) for the fulfillment of household and family economic needs. While the IPG value for dependents of > 6 people/family is 1.1, meaning that women play a more important role in bearing the needs of family members. While the GDI for dependents > 6 people/family = 1.1, meaning that women play a greater role in providing for the needs of family members. This is thought to be influenced by the belief that women are considered more responsible in taking care of the family (domestic work).

Specifically observed in the activities in East Sumba, women played significant and diverse roles in society, both in the public, domestic, and community sectors including caring for children, managing household chores, and running small businesses simultaneously. Furthermore, women have supported their families' financially during times of crisis by seeking additional income. Women play a crucial role in seaweed cultivation and processing, as well as in sustaining households in coastal communities. For example, women were actively involved in various stages of seaweed cultivation, contributing to 65%–70% of the process. They also participated in processing seaweed into various food products. Therefore, the role of women in coastal communities is vital and multifaceted, even though there is a perception that women are primarily involved in domestic tasks.

By continuing to engage women in project activities, the programme promotes gender equality by giving women access to financial resources and empowering women-owned businesses. The programme has yet to achieve any target related to gender mainstreaming due to the focus activities being baseline assessments and setting up an enabling environment, but specific indicators and action plan will be implemented in Phase 2 of TeKSI onwards (detailed in Annex G - Gender Action Plan).

V. Programme Governance & Management

A. Programme Governance

The execution of the TeKSI program is led by regional teams, the Sunda Banda Director leads intervention in East Sumba, while the Papua Director supervises interventions in West Papua and Southwest Papua. 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 team is assigned to build M&E framework and lead project monitoring.

For coordination, 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 KI management meeting is organized to align TeKSI with other programs in Indonesia. In addition, a monthly meeting has been organized by the CI team for regular TeKSI 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 ad hoc meetings .

Some of key decisions determined in these meetings include the need of capacity building for university partners involved in studies in East Sumba, the significance of conducting and consulting the results of studies to key stakeholders in East Nusa Tenggara, and the use of alternative survey tools for mooring system and establishing two mooring pilots. Prior to the decision of using alternative mooring survey tools, KI facilitated meetings between stakeholders at provincial and national levels for discussing the challenges.

During Phase 1, investments decisions still had been determined internally by the CIV investments committee. However, an essential foundational step had been created to establish an investment advisory committee from Indonesia stakeholders. On July 5th we convened several development partners namely USAID (KOLEKTIF & BERIKAN), World Bank (LAUTRA), YKAN, WWF, UNIDO and UNDP to share, streamline, and coordinate our works within the landscape. Following the meeting, KI met with UNDP to inform them about the committee and made an invitation for UNDP to be part of the committee. An essential partnership also has been forged with YKAN, local impact investors such as Harapura Impact, and Instellar to further advise and potentially be part of the committee. During the second phase the possibility of wider financial institutions in the country to be part of the committee will be explored and pursued.

B. Programme Management

Changes in program management were due to weather conditions, technical challenges in the field and government bureaucracy procedures. Collection of fish biomass data was conducted after the comprehensive seaweed ecological study due to weather conditions in East Sumba. Unavailable equipment for the survey at site has been another challenge for this study. The survey finally completed by Artha Wacana University with technical supports from KI team.

Activities planned for Cenderawasih Bay National Park were cancelled because of bureaucracy at the government level, where it is mandated to sign a separate MoU with MoEF. This process was different to past projects, where partners could collaborate directly with MoEF's technical implementation unit. Another bureaucracy process that caused delay in the project was the use of the tool for mooring surveys which required permits from different agencies.

The KI team attended COP28 in Dubai and presented in panel discussions Indonesia's blue economy target. The TeKSI program was highlighted in the sessions as a program seeking solutions for protecting coral reefs while empowering the local economy. Participation in COP was not in the initial plan, budget reallocation was completed to cover the costs in Dubai.

C. Programme Operations

Human Resources

It was planned that activities in East Sumba will be delivered by university partners with adequate supervision from the KI team. Preparing for and during the implementation of studies, the KI team noticed some gaps, including report writing. More KI staff than were planned were assigned to support university partners to fill technical gaps, report writing and engagement of local stakeholders.

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 opportunity 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 located 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.

VI. Resource Mobilisation

A. Resource Mobilisation Efforts - Grants

A total of US\$14,657,332 in co-financing funds were secured and utilized in support of TeKSI Phase 1 activities. The funds were received from 11 sources including donor agencies, philanthropies, and public funding institutions. The co-financing results in a 1:5 ratio of GFCR financing, contributing to positive progress towards the total programme target of achieving a 1:7 GFCR grant leverage. Four grants (US\$2,723,500) were raised after the commencement of TeKSI and the remaining funds were secured from complementary projects with earlier starting dates.

To commence the next phase of the programme, KI is anticipating an additional US\$78,750,000 co-financing from five co-financers. The largest co-financer being the GCF, which is the primary supporter of the Blue Halo S programme expected to start in 2025. Other sources are in the proposal development stage, with a total potential co-financing fund of US\$750,000. Details of the Grant Co-Financing are elaborated in Annex C.

B. Resource Mobilisation Efforts – Revenue Generation

As the inception phase focused on enabling conditions, laying groundwork policies, conducting feasibility studies, and measuring baselines, it is expected that there is no revenue currently generated from the activities and interventions implemented. Going into Phase 2, several revenue streams are anticipated to start contributing as follows:

1. Entrance fee levy in Bomberai MPA (projected annual revenue of IDR 2.61 billion/year)

2. Pilot village-based ecotourism businesses in Bomberai and Nias/Mentawai (revenue projection to be provided after business plan formulation in Year 1 of Phase 2)
3. RAMS user pays system implementation (revenue projection to be provided after business plan formulation in Year 1 of Phase 2)
4. Commercialization of seaweed quality seedling (revenue projection to be provided after business plan formulation in Year 1 of Phase 2, but estimated volume is 32,337 tons/year)
5. Community-led first-handling facilities in East Sumba and Lombok (revenue projection to be provided after business plan formulation in Year 1 of Phase 2)

C. Resource Mobilisation Efforts - Investment

As part of the committed funds to GFCR, CIV had deployed a US\$ 500,000 equity investment to Seadling - a Malaysian-based enterprise focusing in seaweed bioprocessing. Seadling is deemed as a clear fit for this funding, as they directly work to address drivers of reef degradation found in current seaweed farming methodologies, generate socio-economic benefits for farming communities, and scale their work broadly and rapidly – including into priority regions of Indonesia. Seadling is committed to support supplemental research activities, such as performing regular socio-economic farmer surveys, monitoring trends in bomb-fishing, and developing methods to measure local changes in biodiversity. This equity funding to Seadling is part of a US\$ 2 million round of fundraising involving other one lead investor and two co-investors.

Conventional coastal aquaculture methods can also endanger vital ecosystems like coral reefs, mangroves, and seagrasses, with waste from aquaculture directly harming coral reef health by reducing light penetration and triggering algal blooms. The Indonesian government's prioritization of shrimp expansion, including plans for a large-scale farm in East Sumba, poses a considerable threat to nearby coral reefs. Collaboration with initiatives like Jala and Wittaya - sustainable aquaculture companies - offers a chance to engage with the government and address environmental concerns related to such developments, hence CIV has also made an investment to these businesses with value of US\$ 500,000 and US\$ 350,000 respectively. The GFCR funding has been helpful for JALA to position themselves as a sustainable aquaculture company in their series A fundraising and to successfully secure 13.1 million USD. Among the investors are CIV partners Mirova and Deliberate Capital (known as the Meloy Fund). In parallel, CI Ventures wanted to showcase an alternative income source that is more reef positive to Sumba, by investing in two enterprises SAMBUNG ASA and SEJIVA. SAMBUNG ASA is a seaweed supply chain company that provides technical assistance and production input for smallholder's farm. SEJIVA is an ecotourism operator that provides travel packages with emphasize on environmental regenerative activities and experiences with local communities. Together with a local organization in Sumba (Tiera Sumba), they will establish a center in Puru Kambera that combines livelihoods training, coral restoration activities, and eco-tourisms with the local community. The value of investments being asked is up to US\$ 450,000 that will be used for the growth of both companies and specifically develop the project in Sumba, which will be replicable to similar initiatives across the priority areas.

While fundraising for the fund, CIV's Ocean investment window had secured US\$1.5 million from the Coca Cola Foundation to invest in mangrove positive business. This investment could directly support the coral positive investment as a supporting ecosystem network, reduce coastal threat to the coral reef ecosystem, and provide alternative sustainable livelihood.

VII. Risk Management and Mitigation

Social and Environmental Risks

During the 18-month inception phase, the regular monitoring conducted by the KI team did not find any significant impact or probability change that altered the risk rating from the previous Social and Environmental Screening Procedure (SESP) approved in the programme proposal. However, with the shift of scale from baseline studies and enabling conditions in Phase 1 to implementation in Phase 2, there are several considerable adjustments that will need to take place in the SESP, specifically in the focus of cultural heritage utilization (Risk #13 and #19) and impact of the project to indigenous people (Risk #15 and #16).

With the focus of developing and piloting the reef-positive tourism model previously mentioned in solution 2, there is a higher chance of commercialization exposure of the local culture which might result in a shift, mixing, partial, or complete loss of heritage and values. Due to this consideration, the significance ratings of Risk #13 and #19 are increased to Moderate and the impact value of Risk #19 is increased from two to three.

Related to the aim to pilot reef-positive tourism model, it is expected that the project will be located on lands and territories claimed by indigenous people (Risk #15) and will affect their natural resources and traditional livelihoods (Risk #16) throughout all the priority implementation areas. This is translated into a higher significance from Medium to High for Risk #15 and from Low to Moderate for Risk #16.

To mitigate these risks, measures will involve the creation of a local advisory council who will evaluate the tourism development ideas and enterprises incubated, with authority to veto any proposed investment that is deemed discriminatory for IPs. Furthermore, they will be able to advise on the provision of differentiated measures that ensure the inclusion and equitable access to benefits for vulnerable and marginalized male and female local community members.

Overall, the project risk level for Phase 2 is expected to stay at Moderate based on the SESP guidance, even with the changes involved in several topics mentioned above.

Programme-Level Risk Matrix

Risk management for Phase 2 will fully adopt the risk matrix identified in the original programme proposal, as there are no changes in programme-level interventions based on the inception phase review. However, there is an adjustment in the risk level of two existing risks:

1. Economic and social impacts of COVID-19 pose a risk to project delivery (Contextual Risk #7): The GoI revoked the status of Limited Activities Restriction on December 30th, 2022, and issued a presidential decree concerning of Determination of the End of the Status of the COVID-19 Pandemic in Indonesia on June 30th, 2023, consequently the identified risk level is changed from High to Low.
2. Uncertainty due to government shifts in priorities and policy changes (Institutional Risk #2): Government elections are scheduled to take place in Q1 2024, because of which, government priorities and policies might be affected. Hence, the identified risk level is adjusted from Low to High. This risk will be managed by engaging different level of governments in the project, maintaining key project engagement with important government staff members.

VIII. Lessons Learned & Adaptive Management

Technical issues arose during the survey process for potential RAMS locations. The standard procedure requires the use of a special tool (Hydros) owned by the Port Authority, Harbormaster and Port Operator Unit of Indonesia (Kantor Unit Penyelenggara Pelabuhan/KUPP). Unexpected setbacks occurred due to waiting for tool availability, delaying the project timeline by a couple of months. To catch up for the lost time, the survey team proposed an alternative approach using a different tool accompanied by divers to take the substrate samples. This approach was approved by KUPP with an additional monitoring period to evaluate the result and will be implemented during the surveys for the next locations.

Investment mobilization faced obstacles with CIV experiencing a narrow pipeline of appropriate candidates from locally established reef-positive businesses, due to most being non-bankable. To tackle this issue, CIV pivoted to approach enterprises outside the designated BHS and East Sumba areas and incentivized them to launch operations within the specified GFCR programme location. CIV will design a graduation approach and financial literacy training to tap into the potential non-bankable options in the next phase of implementation.

Budget reallocation was made for covering essential activities to ensure the quality of delivery in the field and collaboration of stakeholders for successful project implementation in Phase 1 and subsequent phases. Activities that required additional budget included the series of seaweed studies in East Sumba; building and strengthening collaboration with stakeholders at site, national and global levels; and production of communication materials.

The studies in East Sumba were delivered by our university partners including Mataram University, Artha Wacana Christian University and Nusa Cendana University. These universities have the technical capacity needed for the studies but their capacity for reporting and engaging other stakeholders was limited. KI assigned staff to train university partners on report writing and assisted them in consulting and disseminating the result of studies. In building partnerships with stakeholders, KI organized meetings in the field for consulting study results and gathering inputs for Phase 2, facilitating partner meetings in Jakarta for strengthening collaborations in the field and participating in global events such as COP28 for sharing best practices and lessons learned. Reallocation was also used for production of communication materials including newsletters, Instagram posts, a web page, video and organizing events which required more staff time than initially planned for in this project.

During 2023, 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 communications colleagues are engaged in the review and release of communications and visibility of activities associated with GFCR related investments.



Annex A – Data Update Excel File Guidance

Provided as a separate [document](#).

Annex B – Results Framework

Provided as a separate [document](#).



Annex C – Resource Mobilisation

Project Title	Co-Financer	Source Type	Co-Financing Type	Activity Related	Status	Period	Total Funding (US\$)
Mitigation, Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems	German Ministry for Environment	Public Funding	In-Kind		Secured	1 April 2019 - 31 August 2023	4,358,832
Improving effectiveness of Kaimana MPA	Walton Family Foundation	Foundation	True	Activity 1.1.3	Secured	1 July 2019 - 31 December 2022	1,500,000
Supports MPAs within the Bird Head Seascape	Sunbridge Foundation	Foundation	True	Activity 1.1.3	Secured	31 December 2019 - 30 June 2023	750,000
Support for Bird Head Seascape Program	Goldman Sachs Philanthropy Fund	Philanthropy	True	Activity 1.1.3, Activity 2.1.1, Activity 2.1.2	Secured	1 April 2020 - 30 June 2024	3,000,000
Strengthening of West Papua Forest conservation through innovative social forestry, policy, and environmental education	John Swift	Individual	In-Kind		Secured	23 December 2020 - 28 February 2024	750,000
Strengthening BHS Management and Catalyzing a Transboundary Nature Peace Park)	Margaret A Cargill Philanthropies (MACP)	Philanthropy	True	Activity 1.1.3, Activity 2.1.1, Activity 2.1.2	Secured	1 July 2021 - 30 June 2024	1,500,000
West Papua Conservation Program Support	Conway Leonard	Individual	True	Activity 1.1.3	Secured	1 October 2021 - 30 Sept 2024	75,000
Global Mangrove Alliance - Indonesia chapter	Wetland, Yayasan Lahan Basah	Foundation	True	Activity 1.1.3	Secured	1 September 2022 - 30 November 2023	103,500



Improve MPA management through integrating mangrove protection and conservation in Kaimana	Climate and Land Use Alliance (CLUA)	Foundation	True	Activity 1.1.3	Secured	1 January 2023 - 31 December 2023	100,000
The Crown Jewel of Papua: Ensuring Forest Protection and Establishing a Green Economy in the Bird's Head Landscape	Hempel Foundation	Foundation	In-Kind		Secured	29 March 2023 - 31 May 2027	2,020,000
Forest Positive Partnership, improved management of forest ecosystem in South Sorong, Southwest Papua	Hewlett Packard	Foundation	In-Kind		Secured	1 May 2023 - 31 January 2024	500,000
TOTAL SECURED							14,657,332
Forest Positive Partnership, improved management of forest ecosystem in South Sorong, Southwest Papua	Hewlett Packard	Foundation	In-Kind		Anticipated	March 2024 - February 2029	5,000,000
Strengthening resilience and sustaining biodiversity in the marine and coastal ecosystems and communities in selected (transboundary) seascapes of the Coral Triangle	German Ministry for Environment	Public Funding	True	Replenishment	Anticipated	April 2024 - December 2026	3,000,000
Empowering Stakeholder' collaboration to scale marine conservation for blue economy in BHS and TNP	Margaret A Cargill Philanthropies (MACP)	Philanthropy	True	Replenishment	Anticipated	July 2024 - June 2027	1,500,000
Consolidation and Expansion of BHS MPA Network	Sunbridge Foundation	Foundation	True	Replenishment	Anticipated	July 2024 - June 2027	250,000
Blue Halo S	Green Climate Fund	Public Funding	True	Replenishment	Anticipated	2025 - TBD	69,000,000
TOTAL ANTICIPATED							78,750,000
Establishment of MPA Wetar and Belu of Lesser Sunda Seascape	Rainforest Trust	Foundation	True	Replenishment	Sought	July 2024 - June 2027	750,000
TOTAL SOUGHT							750,000
GRAND TOTAL OF CO-FINANCING							94,157,332

Annex D – Communications and Visibility

Communications

Program communication is jointly managed by the KI team with the help of a communication agency consisting of a team of consultants to support in producing several communication materials. In 2023, the consultant compiled a communication strategy detailing communications objective, target audiences, key messages, and strategies to meet the goals. The document became the basis of all the productions of communications materials, including social media assets, videos, and publication material.

Gaining buy-in from and building engagement with national and local audience (governments, private sectors, civil societies, communities), the communication strategy started with the rebranding of the programme to be more “Indonesian.” The agency supported the promotion of the programme name, *Terumbu Karang Sehat Indonesia* (Indonesia Healthy Coral Reefs) or *TeKSI*’ in short. Furthermore, the consultant developed a new logo with the design model which was more relatable to the eastern part of Indonesia, the priority working areas of the programme. Currently, the rebranding is in the process of legalization—which applies to the new logo, the programme name, and the acronym. This may take a while since there are specific steps and procedures to follow.

Considering that new generations are a the main target for protecting coral reefs, during Phase 1 the programme utilized the use of social media platforms in reaching them. Instagram and LinkedIn have been the primary channels for communication and engagement and a series of communication materials have been posted on a regular basis.

In terms of publications and promotions, the program compiled dual-language communication material, consisting of information about TeKSI. The document will briefly mention the programme and where it works. A page under Konservasi Indonesia’s website is currently being finalized, where the tailored contents are expected to deliver clear understanding about the programme to the reader. In August 2023, two engagements with national media were successfully carried out involving a collaboration podcast with CNN Indonesia during the National Biodiversity Day and media coverage from nine online news channels on sustainable tourism consultation held in Raja Ampat, Southwest Papua.

External Media Coverage

In collaboration with CNN Indonesia, there was a 1-hour podcast, titled "[Menjaga Biru Laut Nusantara - Protecting the Archipelago's Blue Sea](#)". The podcast elucidated the TeKSI mission in safeguarding marine areas with governments, business entities, and communities to foster an ecologically sustainable economy. The discourse included ecological and biological details of coral reefs. Airing on August 30, 2023, more than 3,600 viewers watched the podcast which yielded a return of investment of IDR 525,000,000.

Online media coverages consist of:

- An Opinion Editorial, scribed by Meizani Irmadhiany, Senior Vice President and Executive Chair of Konservasi Indonesia, in Kompas, elaborates the mixed funding supported by Global Fund for Coral Reef, can be accessed in [this link](#).
- Nine online media news covered a “*Multistakeholders Consultation on Raja Ampat’s Assessment of Sustainable Tourism Spatial Planning*” event, which was held on August 31, 2023, in Waisai, Raja Ampat, Southwest Papua Province. Examples of media released can be accessed in [Link 1](#), [Link 2](#),

[Link 3](#), and [Link 4](#).

Published Programme Content

- KI's social media platforms (Instagram, Facebook, LinkedIn, and X) posted a total of 37 content items on coral reef ecosystems and reef positive impacts. The reach of each content varies between 3,000 to 28,000 with an average engagement is 110 to 900.
- Landing page of TeKSI is being finalized and the draft can be accessed through <https://www.konservasi-id.org/inisiatif-program-nasional/teksj>.

Event Features

- Three universities collaborated to present their studies, including Mataram University on seaweed cultivation, Nusa Cendana University on socio-economic, and Artha Wacana Christian on biology on mid-February 2023 in Kupang and Waingapu of East Nusa Tenggara,
- Another two dissemination events of Mataram University were on the results of "*Research on Seaweed Disease and Climate Resilience to Build Resilient and Competitive Seaweed Industry in Indonesia*" in Kupang, on August 28, 2023, attended by 54 attendees, and Waingapu, on August 31, 2023, attended by 43 attendees, both in East Nusa Tenggara Province,
- Multi-stakeholders Consultation on Raja Ampat's Assessment of Sustainable Tourism Spatial Planning in Waisai, Raja Ampat, Southwest Papua, on August 31, 2023, attended by forty-four participants,
- Participation in the Ministry of Marine Affairs' exhibition at the 11th National Conference on Management of Islets, Ocean, and Coastal Resources in Pontianak, West Kalimantan, on November 27-29, 2023, attended by almost 100 attendees,
- Coordinating Ministry of Maritime Affairs and Investment, GFCR, Green Climate Fund and Konservasi Indonesia participated in UN COP 28 on "Solutions Toolbox to Save Coral Reefs" on December 1, 2023, at the Ocean Pavilion, in Dubai, United Arab Emirates,
- On December 12, 2023, the first national coordination meeting for the Raja Ampat Mooring System (RAMS) was held in Jakarta at the World Bank office. The meeting was led by the South-West Papua provincial government, Raja Ampat regency government, Raja Ampat MPA management, and the RAMS working group, attended by almost 30 offline and almost 20 online invitees.

Primary Creative Assets

- Dual-language communication assets, specifically three videos (GFCR in general, GFCR in Sumba, East Nusa Tenggara, and GFCR in Raja Ampat, Southwest Papua), factsheet, poster, and brochure, to support program advocacy.
- Logo and Brand Guidelines and the philosophy is to convey the idea of maintaining a stable and healthy ecosystem for coral reefs and its inhabitants. The logo emphasizes the importance of protecting and preserving coral reefs, while also promoting sustainable and culturally appropriate economic development initiatives to improve the livelihoods of the local communities. Currently, the process of legitimation is on-going.

Speakers identified and featured as programme Champions

No activity in 2023.

2024 Communications Strategy

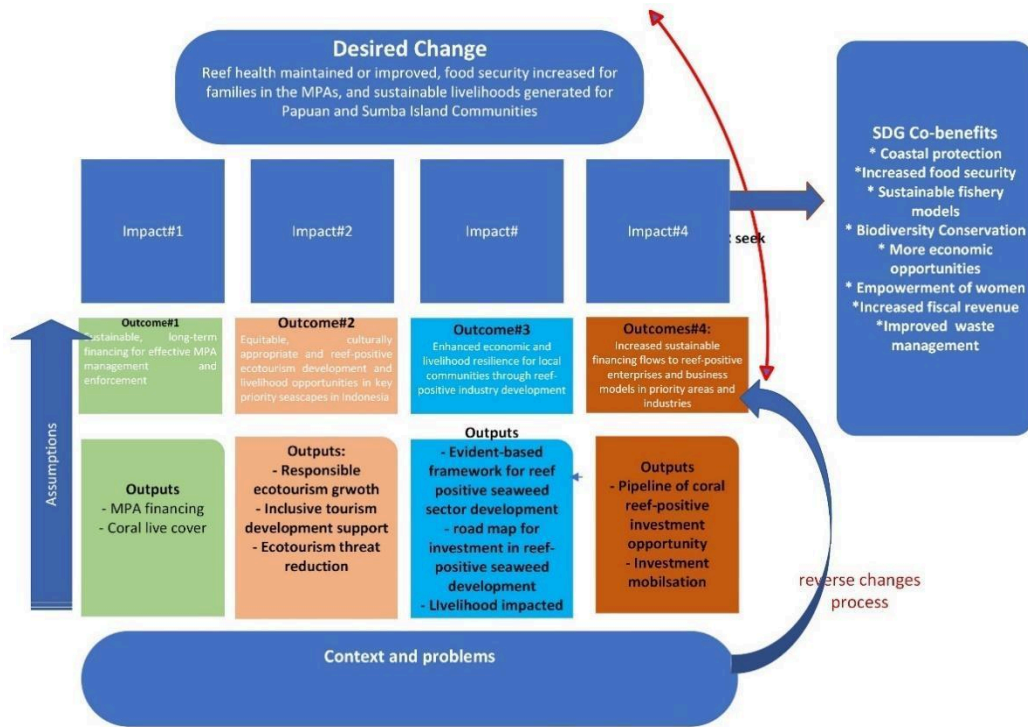
Robust publications will be undertaken to build awareness, knowledge and understanding of the implementations process, including enhance behaviour changes, especially for local community. The publications are also to promote good stories and lessons learned for international, national, and local public, involving media.

Communication aims to:

1. Garner attention from target audiences to inspire amplification of support the overall ‘transform’ goal, by using effective key messages,
2. Highlight the value of coral reefs and associated ecosystems in the Bird’s Head Seascape, Sumba Islands in the Lesser Sunda Seascape, and Indonesian Eastern Indian Ocean Seascape to relevant and strategic stakeholders, including local people,
3. Demonstrate, using project examples and through a variety of communication channels and assets, how embracing coral-positive solutions benefits local economies and sustains natural resources.

Communications team will support the engagement with key and strategic stakeholders to gain information and stories about the project updates and achievements. Dedicated and specific communications assets will be organized to publish and promote them to broader audiences locally, nationally and if possible, internationally, using one or more channel/s. The team will coordinate and collaborate with media outlets (local, national, and international) to communicate and publish the key essential and principal achievements based on TeKSI interventions to national and international public. Specifically for local community, in collaboration with project team, communication will convey crucial key messages of the project to transform attitude and behaviour towards coral reefs. The publications will strengthen the use of social media platforms to deliver key messages, and develop stories from the fields, i.e., champions, through writings and video.

Annex E – Terumbu Karang Sehat Indonesia: Theory of Change



Annex F – Grievance Mechanisms

Grievance mechanisms, also known as Grievance Redress Mechanisms (GRMs), are institutionalized processes designed to enable individuals or communities to raise complaints and achieve redress for services they should rightfully receive. The key elements of a grievance mechanism are:

1. **Grievance Identification:** The first step is to identify the grievance. This could be a complaint about a service, a violation of rights, or any other issue that the individual or community is facing.
2. **Grievance Tracking:** Once a grievance is identified, it needs to be tracked. This involves recording the grievance, tracking its progress, and ensuring that it is addressed in a timely manner.
3. **Redress Mechanisms:** These are the procedures used to resolve the grievances. They could involve mediation, negotiation, or even legal action. The goal is to provide a resolution that is satisfactory to the individual or community that raised the grievance.
4. **Flowchart of Key Processes and Procedures:** This is a visual representation of the steps involved in handling a grievance. It provides a clear path from the identification of a grievance to its resolution.
5. **Assigning Responsibilities:** Each step in the process needs to be assigned to a specific person or team. This ensures that there is accountability, and that each grievance is properly handled.
6. **Monitoring and Evaluation:** After the grievance is resolved, the process should be evaluated to see how it can be improved. This could involve getting feedback from the individual or community or analysing the process to identify any areas that need improvement.

Grievance's criteria and Identification

The grievance mechanism is designed to promote the fairness of the grievance process and its outcomes. They are often referred to as the “Effectiveness Criteria” for operational-level grievance mechanisms. The eight principles of effective grievance handling are:

1. **Legitimate:** The grievance mechanism should be trustworthy and accountable. It should be designed in a way that instils confidence in the stakeholders for whom it is intended. This includes being accountable for conducting the grievance processes fairly.
2. **Accessible:** The mechanism should be known to all stakeholder groups for whom it is intended. It should also provide adequate assistance for those who may face barriers to access, such as language barriers, physical disabilities, or a lack of internet access.
3. **Predictable:** The mechanism should provide a clear and known procedure with an indicative timeframe for each stage. It should also provide clarity on the types of processes and outcomes available and the means of monitoring implementation.
4. **Equitable:** The mechanism should ensure that aggrieved parties have reasonable access to sources of information, advice, and expertise necessary to engage in a grievance process on fair, informed, and respectful terms.
5. **Transparent:** The mechanism should keep parties to a grievance informed about its progress. It should also provide sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake.
6. **Rights Compatible:** The mechanism should ensure that outcomes and remedies accord with internationally recognized human rights.

7. Continuous Learning: The mechanism should draw on relevant measures to identify lessons for improving the mechanism and preventing future grievances and harms.
8. Based on engagement and dialogue, the mechanism should consult the stakeholder groups for whom it is intended in terms of its design and performance. It should focus on dialogue as the means to address and resolve grievances.

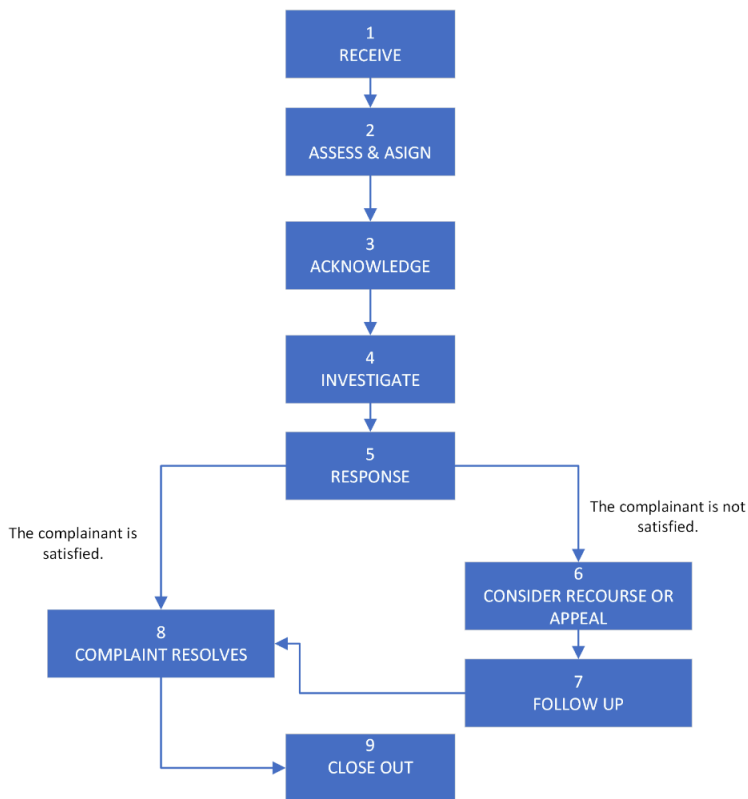
The potential grievances that beneficiaries and stakeholders might have in relation to a project are:

- a. Lack of information where the stakeholders may not be adequately informed about the project's objectives, progress, or outcomes.
- b. Lack of engagement, where the stakeholders may not be adequately involved in the project's decision-making processes.
- c. Lack of transparency and fairness, which may raise concerns about the transparency and fairness of how grants are administered.
- d. Adverse Effects on Communities that may have negative impacts on the communities and areas where it is implemented.
- e. Exclusion from Decision-Making Processes, certain groups may feel excluded from the project's decision-making process.
- f. Barriers to Accessing Sub-Grants, Women and other groups may face barriers to accessing the sub-grants.
- g. Unmet expectations, which are the results and outcomes of the project, may not meet the expectations of the stakeholders.
- h. Unfair competition There may be concerns about unfair competition among institutions in obtaining financial aid.
- i. Non-Compliance and Breaches, there may be non-compliance and breaches of policies and standards related to the Environmental and Social Management Framework (ESMF) and gender.
- j. SEAH Incidents and Gender-Related Grievances: Incidents related to sexual exploitation, abuse, and harassment (SEAH) and gender-related grievances, including gender-based violence, may occur.

The project's Accountability and Grievance Mechanism (AGM) is designed to address grievances related to project management and compliance with ESMF. These grievances will be addressed directly by the executing entities using the agreed mechanisms.

However, grievances related to SEAH and gender (including gender-based violence) should be referred to the Prevention of Sexual Exploitation, Abuse, and Harassment (PSEAH) mechanism.

Process and Procedure of Grievance Mechanism



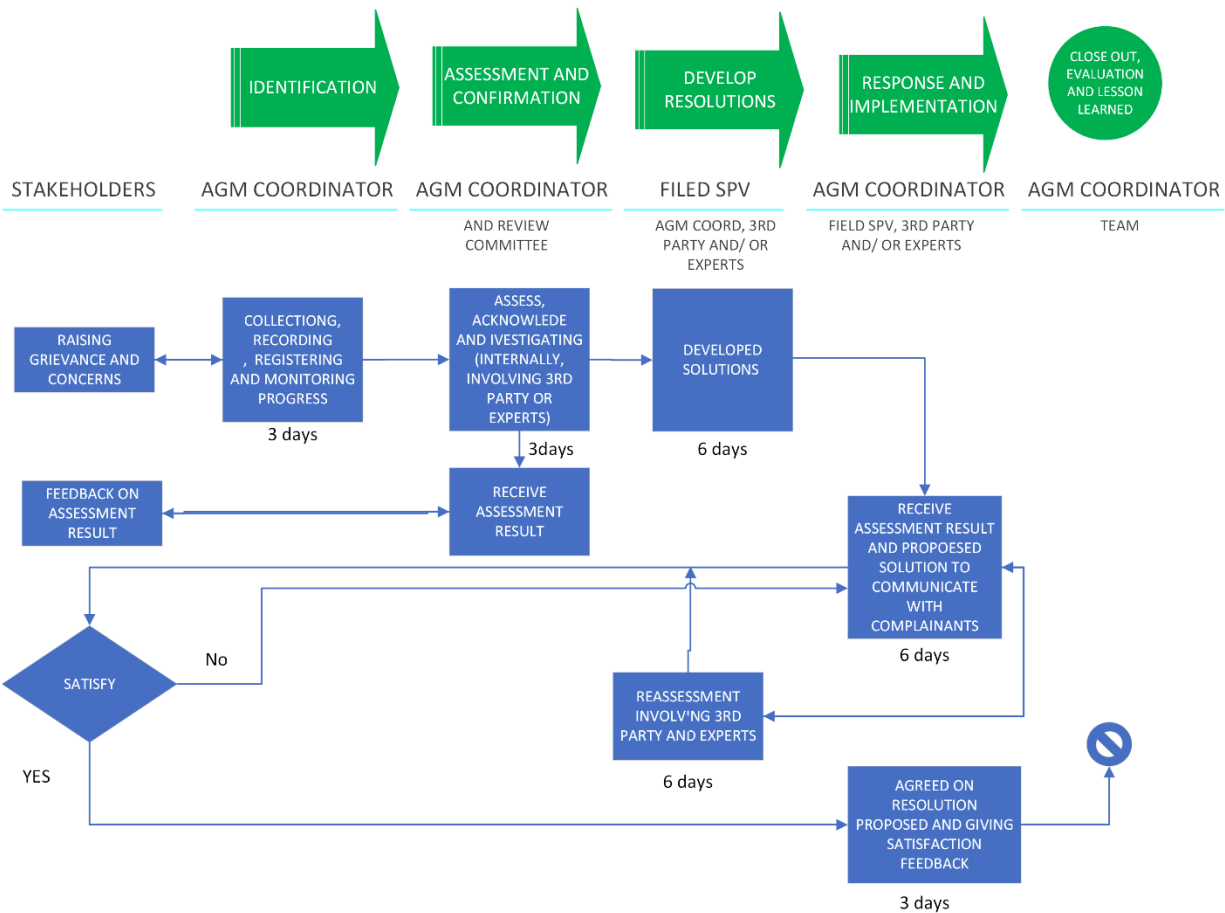
<p>1 Receive</p>	<ul style="list-style-type: none"> • Receive complaints at the central contact point. • Resolve low-severity complaints immediately. • Complaints submitted via culturally appropriate methods (e.g., email, in-person, telephone, convenient location in the community). • Record a complaint in the Complaints Register.
<p>2 Assess and assign</p>	<ul style="list-style-type: none"> • Assess the severity level. • Inform the field officer that a complaint has been filed. The field officer/grievance officer may need to collect basic information about the situation.
<p>3 Acknowledge</p>	<ul style="list-style-type: none"> • Acknowledge receipt of the complaint and explain the next steps. • The acknowledgement typically includes information about the next steps in the process, timelines, and contact details of the grievance officer. • Communicate the acknowledgement in an appropriate manner, e.g., a letter, telephone call or a copy of the grievance forms. • Document verbal or written acknowledgement in the Complaints Register
<p>4 Investigate</p>	<ul style="list-style-type: none"> • Seek to understand the complainant’s perception of the issue and what should be done about it. • Proceed to investigate the case circumstances, speaking with the parties involved, and conferring with relevant stakeholders.

	<ul style="list-style-type: none"> ● In complex cases, it is advisable to segregate responsibility for investigating complaints and authorizing remedies from the role of liaison with the complainant to avoid conflicts of interest. ● The investigation should determine: <ul style="list-style-type: none"> ○ factual basis and cause of complaint. Be sensitive to the potential for differences in the way ‘facts’ are perceived. ○ Key interests and concerns: What problem has the complainant described?
5 Response	<ul style="list-style-type: none"> ● Develop a provisional proposal that is reasonable and proportional to the grievance and takes account of any cultural norms. ● Develop potential options for resolution, which are developed in-house first, especially when the outcome might set a precedent or require a policy decision. ● Engage with the complainant to seek an acceptable solution. <ul style="list-style-type: none"> ○ Outline the investigation findings and proposed remedy. ○ It should be a two-way conversation. ○ If the complainant disagrees, try dialogue or problem-solving before appealing. ○ Escalating the issue to a more senior level ○ The final agreement should be specific, time-bound, and agreed upon by both parties. ● Include a monitoring plan if you are not self-executing.
6 Consider recourse and appeal	<ul style="list-style-type: none"> ● Is the complainant dissatisfied with the results or remedy? ● Recourse appeal/review options include: <ul style="list-style-type: none"> ○ Project Manager, Operational Manager, or Project Director to review the investigation or remedy. ○ Create a complaint review committee or elevate the issue to a review committee composed of senior managers or consisting of company and community representatives to consider whether additional reasonable actions are appropriate. ○ involve a credible, mutually agreed-upon third parties such as the village head, imam, Dusun, traditional leaders, subdistrict head, and related government institutions when appropriate to facilitate further dialogue and an independent external party to assess the grievance and propose an impartial resolution. ○ Establish a standing appeals committee jointly with the community.
7 Follow up	<p>Experience from the follow-up can be used to further refine the grievance handling process.</p> <p>Closing out the grievance occurs after the implementation of an agreed resolution has been verified.</p> <p>Parties may be requested to provide feedback about their level of satisfaction with the grievance handling process and the outcome.</p> <p>Although agreement is not reached, it is important to close the case, document the results, and request the parties’ evaluation of the process and its outcome.</p> <p>If the complainant is satisfied, close out the complaint.</p>

	<p>Ensure the resolution is documented, implemented, and legal. Confirm that the complainant is satisfied with the process.</p>
8 Complaint resolves successfully	<ul style="list-style-type: none"> ● Implement resolution. <ul style="list-style-type: none"> ○ Document implementation plan ○ Record in the Complaints Register ● Aim to reach a resolution that is satisfactory to both sides through discussion and dialogue.
9 Close out, evaluation and lesson learned	<ul style="list-style-type: none"> ● Monitor Outcomes: After the resolution has been implemented, it is important to monitor the outcomes. This involves tracking whether the resolution is effective in addressing the grievance. It could also involve monitoring satisfaction levels among those who raised the grievance. ● Close Out the Grievance: If the resolution has been successful, or if a decision has been made to close out the grievance for other reasons, the grievance can be closed out. This involves documenting the resolution and the outcomes and communicating the closure to all relevant parties. ● Evaluate: After the grievance has been closed out, the process should be evaluated. This could involve reviewing the steps that were taken, assessing whether the grievance mechanism was effective, and identifying any areas for improvement. ● Take Lessons Learned: The final step is to take the lessons learned from the process and apply them to future grievances. This could involve making changes to the grievance mechanism, providing additional training, or taking other steps to prevent similar grievances in the future.

Redress Mechanism

Redress mechanisms are processes used to resolve grievances that involve mediation from a neutral third party and facilitate communication between the disputing parties to help them reach a mutually satisfactory resolution. The negotiation dialogue between the disputing parties is intended to resolve points of difference and reach an agreement. Legal action to resolve grievances that breach the law and may be necessary to resort to legal action. These processes often involve third parties such as government officials, traditional leaders, religious leaders, women leaders, or experts. Their role is to provide valuable perspectives, mediate discussions, and help find solutions that are acceptable to all parties involved. The aim of redress mechanisms is to provide a resolution that addresses the grievance and is satisfactory to the individual or community that raised it.

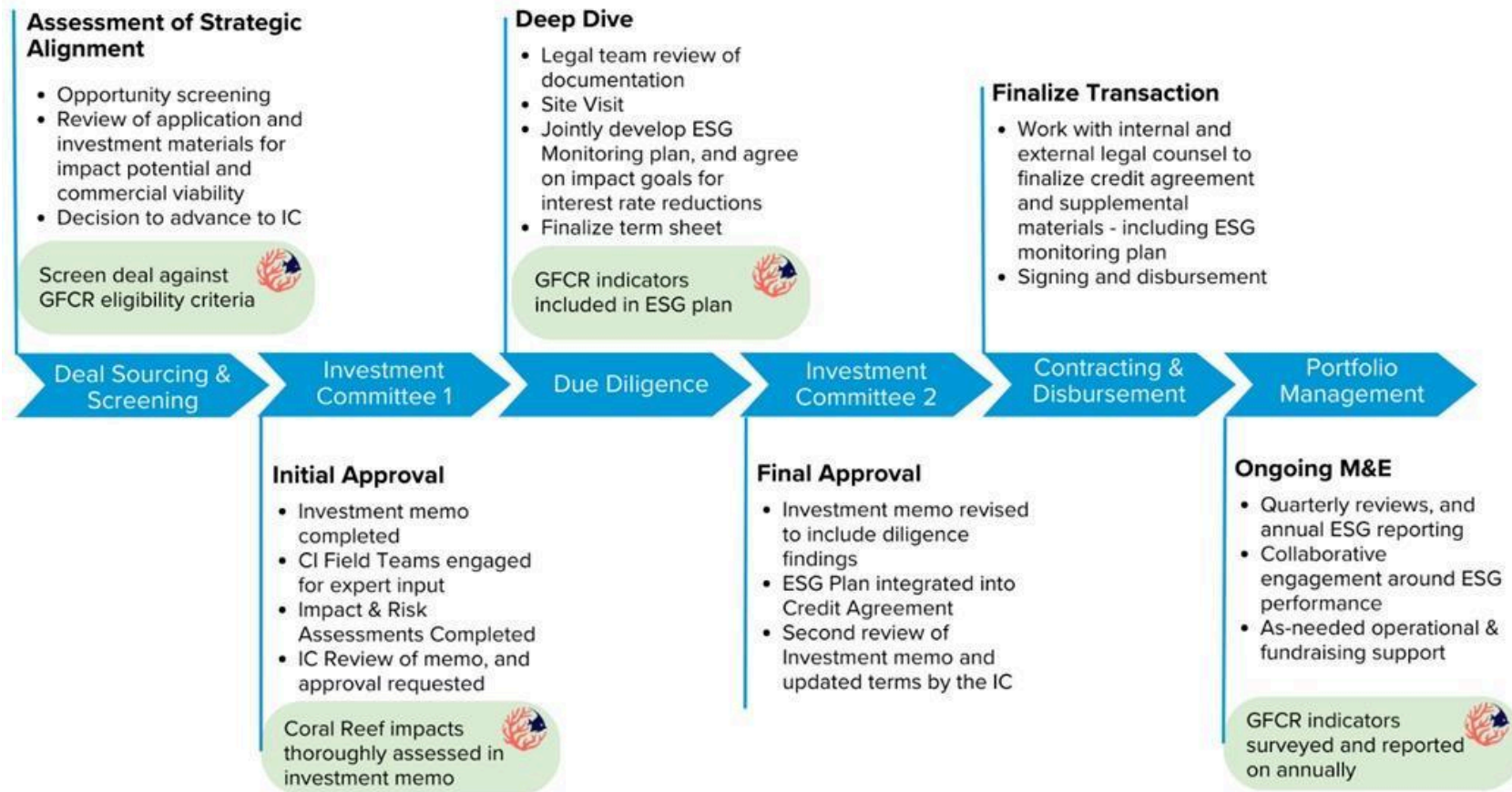




Annex G – Gender Action Plan

Objective Description	Action plan	Indicator	Milestones	Remarks
OUTCOME 1: PROTECT BHS				
Strengthen women's participation in MPA management and ensure plans are inclusive of the requirements and target participation.	<ul style="list-style-type: none"> Provide guidance on gender inclusion plan for MPA Bomberai Invite networks of local groups to help disseminate information and strengthen participation of women in communities, making information and communications materials appropriate and accessible 	# of women and men participate in training on financial management of Bomberai BLUD	Financial and MPA management capacity building and its implementation with inclusive gender.	In the pursuit of sustainable Marine Protected Area (MPA) Management ensure balanced gender representation. This includes equal involvement of all genders, with a particular emphasis on women's participation. The goal is to foster a safe and inclusive environment where everyone, regardless of their gender, feels valued and their voices are heard. This approach not only promotes gender equality but also contributes to the overall effectiveness and sustainability of MPA management.
OUTCOME 2: TRANSFORMED BHS ECOTOURISM; OUTCOME 3: ENHANCED ECONOMIC AND LIVELIHOOD RESILIENCE FOR LOCAL COMMUNITIES THROUGH REEF-POSITIVE INDUSTRY DEVELOPMENT AND OUTCOME 4: TRANSFORM ACCESS TO FINANCING FOR REEF-POSITIVE ENTERPRISE				
Enhance the active involvement of women in income-generating activities and guarantee that the strategies implemented meet their needs.	<ul style="list-style-type: none"> Develop attendance list that segregate by gender Develop invitation letter template that include women groups/enterprises Financial literacy training for women managing the village-owned enterprises and community businesses 	# of women and men participate in the trainings or capacity buildings, disaggregated by gender, vulnerable group, and indigenous people.	Balance portion of gender involvement of indigenous people and vulnerable people in capacity-building activities.	Advocating for an inclusive approach to economic activities, where women, indigenous people, and vulnerable groups are not just beneficiaries but active participants. the strategies that not only provide these groups with income-generating opportunities but also ensure that these opportunities are aligned with their specific needs and promote their active involvement. This approach is crucial for achieving economic empowerment and reducing vulnerability among these groups.
		# of Indigenous people obtained business opportunities and job creation disaggregated by gender.	Establishment of community businesses and job creation with gender inclusion, indigenous people, and vulnerable people.	
		# of women vulnerable people who obtained access to jobs created and business opportunities disaggregated by gender and sector.		
		# women-led businesses that can access financing.	Women led businesses obtained financial access to develop their businesses.	

Annex H – CIV Investment Process





Annex I – Reef-Positive Enterprises Pipeline Details

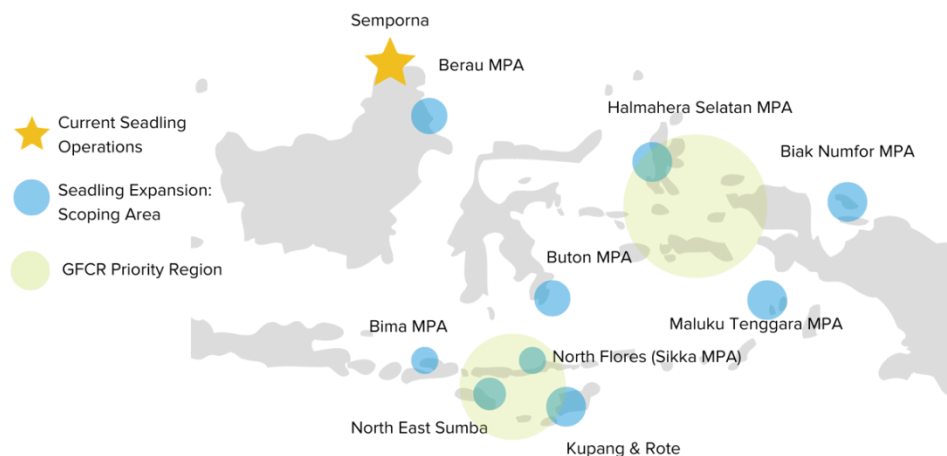
Overview						
Solution Name	Name of business	SEADLING	WITTAYA	JALA	SAMBUNG ASA	SEJIVA
Business Model Archetype	Refer to GFCR Investment Principle Archetypes	Sustainable fisheries and aquaculture	Sustainable fisheries and aquaculture	Sustainable fisheries and aquaculture	Sustainable fisheries and aquaculture	Eco-tourism
Investment Stage	Detailed reference in Annex H	Disbursed (portfolio monitoring)	Contracting	Contracting	Screening	Screening
Location	State the Priority Site and specific locality/MPA	Looking to expand to GFCR priority sites in the coming years	Looking to expand to GFCR priority sites in the coming years	Looking to expand to GFCR priority sites in the coming years	Sumba (Savu Sea MPA)	Sumba (Savu Sea MPA)
Implementing Partners	List the organisations that will provide technical assistance and support impact objectives – this can include the Convening Agent	CI, SAFE Seaweed Coalition, University of Malaya	KI, CI	KI, CI, BRIN, CMMIA	KI, MMAF, UNDP, CMMIA, FAO, WWF, Tiera Sumba	KI, Tiera Sumba
TA Financing Needed (US\$)	GFCR Grant financing that will be needed for Technical Assistance to increase reef-impact, community impact, and business viability	TBD	TBD	TBD	30,500 USD	TBD
Concessional Finance Needed (US\$)	GFCR Grant financing that will be deployed as a concessional loan or guarantee to build the financial track-record of the business	500,000 USD	350,000 USD	500,000 USD	250,000 USD	200,000 USD
Revenue Potential (US\$/yr)	Estimated annual revenue potential (projected for 2024)	US\$ 2,5 – 3 M	US\$ 2 – 4 M	US\$ 1 – 4 M (Net margin)	US\$ 50,000 – 100,000	US\$ 100,00 - 150,000
Investment potential (US\$)	Estimated investment capital that can be leveraged within 5 years	US\$ 15 - 20 M	US\$ 10 – 20 M	US\$ 20 – 50 M	US\$ 1 – 5 M	TBC

SEADLING

Seadling Pte. LTD. is a biotechnology company, with a mission of accelerating seaweed aquaculture as a planet-positive product with multiple high-value end uses in the functional food and feed space. Seadling, currently operating in Malaysia, pioneers new hatchery technology and proprietary fermentation processes. Seadling partners with small scale farming communities to provide their raw seaweed supply, using a contract farming model. Seadling supplies high-quality seed to farmers, supports the growing process, and offers a guaranteed buy-back of the product. This method gives Seadling oversight and control over the value chain and allows them to work closely with the local farming communities to continuously improve the quality and sustainability of farming practices. Seadling’s revenue in 2023 was US\$ 700,000 and is projected to get US\$ 2.5 – 3M revenue in 2024.

Through work with Seadling, we hope to address fundamental science, data and information gaps related to coral reef-macroalgae farming interactions and improve understanding of direct/indirect physical and bioecological risks to reefs of seaweed mariculture with the goal of promoting:

1. Cultivation practices that avoid reef damage;
2. Siting that avoids adverse impacts to coral reefs; and
3. Disease and climate resilience of wild and cultivated seaweed strains.



For CIV’s KPI tracking, Seadling will be initially targeting job creation and livelihood support (with a focus on gender equity), plastic reduction, and area under sustainable management. Additionally, through the Global Fund for Coral Reefs, if other sources of funding are secured, a study will be conducted with the Seadling team to measure the frequency of bomb-fishing in the region to compare against local seaweed prices and the total number of farmers in the area. With the help of an underwater acoustic device, we can detect and count the number of bombs detonated within a broad area. Our hypothesis is that a strengthened seaweed industry with stable prices above the minimum liveable wage will correspond to a decrease in bomb fishing within the same community.

WITTAYA

Wittaya Aqua is an aquaculture intelligence software developer that aims to optimise feed formulation and feeding practices through a data-driven approach, thereby improving production and supply chain efficiency. Wittaya’s software has been rolled out across 22 customers over a year, with an ARR of

\$250,000. We are using GFCR funding for this investment for a few key reasons. Wittaya is already operating in Indonesia, with sales to PT Kelman, a grouper farm in Bali PT Matahari Sakti, and a large feed mill in Surabaya. The management team is prioritizing their expansion, as the aquaculture industry in Indonesia is large, extremely fragmented, and growing rapidly with government backing. Aquaculture produces twice as much fish as wild-capture fisheries in Indonesia, and the sector grew about 16% per year from 2000-2019. The Indonesian government has set more ambitious growth targets through 2030 to combat malnutrition and stunting, aiming to triple aquaculture output.

Should the Indonesian Government be successful in pushing for rapid growth of the aquaculture sector, this growth (if reached through BAU farming practices) would carry severe environmental costs. A recent study from Arizona State University found that “mitigating both land-and sea-based human impacts, especially in terms of pollutants and overfishing, provides the coral reef ecosystems the best opportunity to persist under climate change.” While climate change is a main driver of reef degradation in the long run, “what we are putting into our waters from our shores is a huge driver that is immediately more actionable.” The paper looked at coral reef resilience after warming events, causing widespread bleaching. However, they found that the reefs with the least coral loss from heat were also the ones that experienced the lowest levels of run-off pollution.

A report by WorldFish made several recommendations for transforming the sector for improved nutrition and sustainability. The first one recommendation being “Lower FCRs for whiteleg shrimp, carp and tilapia by 20 percent by using better quality feeds, improved strains, better quality seed and better farming practices.” Farm-level data collected by WorldFish showed a yield gap among Indonesian farmers; “feed conversion ratios (FCRs) and productivity were often far from optimal and compared unfavourably with many neighbouring countries.” Wittaya can play a key role in improving resource efficiency across the sector and helping Indonesia meet production goals without sacrificing the environment. YKAN (Yayasan Konservasi Alam Nusantara, TNC’s main implementing partner in Indonesia and our co-GFCR Grantee), is also highly focused on improving aquaculture in Indonesia. We plan to work in partnership to utilize the various financing and technical assistance facilities that each organization has access to or expertise in.

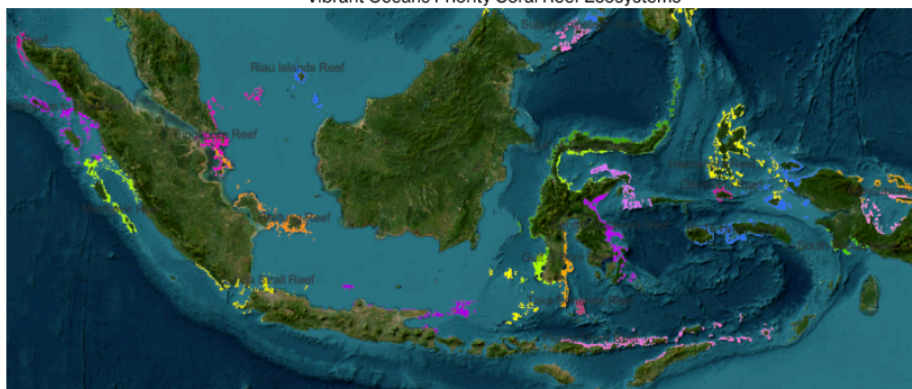
Based on a study conducted by Ottinger et. al (2022) aquaculture pond areas across SE Asia were mapped through satellite imaging.³ Indonesia was highlighted as a key region of dense pond area, above. In this figure, we can see the number of hectares used for aquaculture by district. Below, we have a map showing the Vibrant Oceans priority coral reefs, and a data layer showing the top identified threat to coral reef ecosystems. Areas with high aquaculture pond area are overwhelmingly classified as having nutrient overloading as the top ecosystem threat. While there are other contributing factors and these areas are often data limited, we can still reasonably assume that aquaculture plays a role in nutrient loading the coastal waters. Wittaya’s models suggest that each cycle per farm produces about 700-900 kg of nitrogen waste and 250-300 kg of phosphorus waste, and each farm has at least two cycles per year – adding up to 14,000-18,000 kg of Nitrogen and 500-600 kg of Phosphorus in effluent per year per farm. Wittaya is confident their platform can reduce this by 20%.

JALA

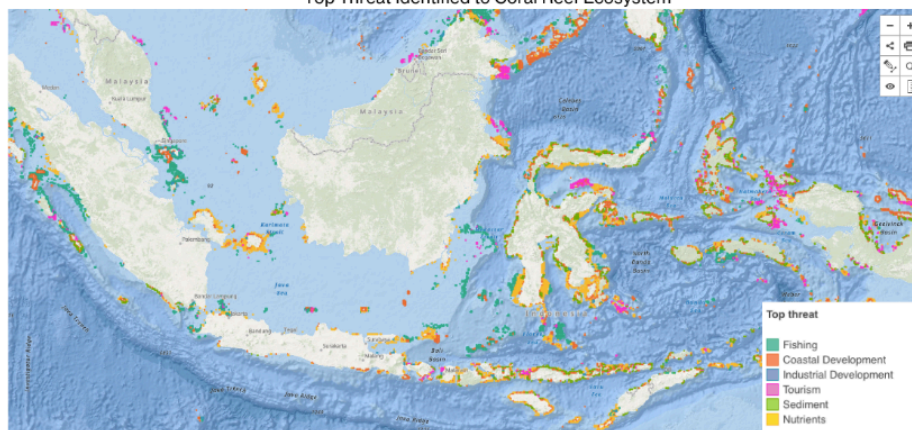
JALA is an innovative aquaculture technology start-up based in Indonesia. The JALA product ecosystem currently encompasses three distinct but integrated solutions which deliver value across multiple shrimp

³ Ottinger, M.; Bachofer, F.; Huth, J.; Kuenzer, C. Mapping Aquaculture Ponds for the Coastal Zone of Asia with Sentinel-1 and Sentinel-2 Time Series. *Remote Sens.* 2022,14,153. <https://doi.org/10.3390/rs14010153>

Vibrant Oceans Priority Coral Reef Ecosystems



Top Threat Identified to Coral Reef Ecosystem



industry supply chain segments. **JALA Insights** encompasses an integrated suite of JALA hardware and digital applications that includes: (a) IoT enabled water quality monitoring hardware (b) pond aeration solutions (c) digital applications for water quality predictive analytics, cultivation and harvest planning, farm inventory and financial management; and (d) lab services for disease detection and monitoring. **JALA Harvest (Trading Solutions)** encompasses: (a) a digital marketplace that connects shrimp farmers and buyers, provides digital product traceability, and facilitates safe payments and (b) offers invoice financing solutions for farmers in partnership with fintech companies. **JALA Farm** is a holistic farm management service wherein JALA enters into profit-sharing partnerships with farmers. JALA’s expanded product and service ecosystem has enabled the company to expand its customer and user base and its associated environmental and social impact, growing from 330 farmers in late 2018 to more than 12,412 farmers across all major shrimp farming regions in Indonesia in only 4 years. Between 2019 and 2020, JALA gross revenue increased nearly 9.5x, from US\$84,000 to US\$816,719 –an impressive achievement considering the significant challenges posed by the COVID-19 pandemic.

Business-as-usual coastal aquaculture often poses threats to the surrounding ecosystem, including coral reefs, seagrasses, mangroves, and other critically important habitats. A modelling study in Banyuwangi, Indonesia showed that one cluster of shrimp ponds can produce up to 1,900 tonnes per year of excess nitrogen (organic waste and minerals) that flows into nearshore waters. Excess nutrients lead to environmental degradation, in the form of eutrophication or other harmful algal blooms. For coral reefs in particular, light penetration is essential, so increased turbidity due to algal blooms is a death sentence. As such, excess waste from aquaculture is a direct threat to coral reef health and resilience.

The Indonesian government considers shrimp to be a priority commodity for expansion, as it has the highest export value of all the seafood products. To that end, the government set an ambitious target of increasing production to 2 million tonnes by 2024 – a 250% increase from 2021. To achieve this, the government is pushing to intensify production of traditional ponds (82.6% of all shrimp ponds) and build an integrated shrimp farm cluster. In one of the GFCR priority sites, East Sumba, the National Government of Indonesia has plans to develop a shrimp ‘mega farm’ and processing facility over 2000 Ha of land. This scale of new production poses a direct threat to nearby coral reefs of East Sumba. JALA is already providing support to the government on this ‘mega farm’ and is actively negotiating to use the Jala technical suite to support farm management.

YKAN (Yayasan Konservasi Alam Nusantara, TNC’s main implementing partner in Indonesia and our co-GFCR Grantee), is focused on improving shrimp aquaculture in Indonesia. We plan to work in partnership in this sector, and utilize the various financing and technical assistance facilities that each organization has access to or expertise in. This includes supporting the national mapping of aquaculture growth projections to identify key areas of overlap between wastewater runoff and coral reef ecosystems and replicating sustainable financing models for MPAs. We are exploring using profits from sustainable shrimp production (and the potential blue carbon credits from mangrove restoration) to go towards MPA management, such as monitoring and coral reef restoration. JALA is targeting to serve more than 37,000 farmers by 2027, grow JALA farms to 429 Hectares, and restore 115 Hectares of mangrove.

SAMBUNG ASA

Sambung Asa is a company which focuses on the upstream of seaweed industry in Indonesia. Sambung Asa collaborates with coastal communities, supporting them with better seeds and equipment to enhance farmers productivity, increasing their knowledge in seaweed cultivation, while also preserving the marine environment and actively participating in combating climate change by establishing sustainable seaweed farming. Furthermore, by promoting sustainable and responsible seaweed cultivation practices, coastal communities can significantly increase their income without resorting to activities that harm marine ecosystems and damage the coral reefs, such as trawling, bomb fishing, or potassium fishing. Sambung Asa implements a profit-sharing model with partner farmers, which has proven to establish a more sustainable and mutually beneficial business ecosystem. Also, they actively conduct research and development on cultivating species that are currently wild caught, namely *Ulva* (Sea Lettuce), *Caulerpa* (Sea Grapes) and *Palmaria* Sp. The demand for these species is increasing, and the purpose of this activity is not only to reduce overexploitation of natural grown seaweed to prevent extinction but also to increase the income of surrounding coastal communities. The role of seaweed as a bioremediator in shrimp and fishponds provides a wastewater management solution for aquaculture. With CI Ventures’ investment, Sambung Asa is aiming to expand their business to assist 300 Farmers with almost 1000 tonnes of production with 800,000 USD in revenue, located in two islands, Sumba and Liran.

Based on data from the Central Statistics Agency (BPS), the number of people that live under the poverty line in East Sumba Regency in 2022 reached 75.28 thousand people, which accounts for 28.22 percent of the population. This indicates that approximately 1 in 3 residents of East Sumba live below the poverty line. With nearly 70 percent of the population of East Sumba having a lower education level, it's evident that there may be significant limitations in their ability to produce goods or effectively utilize resources. A lower level of education can impact various aspects of individuals' lives, including their access to opportunities, skills development, and understanding of economic and social dynamics. Sambung Asa is looking to collaborate with Sejiva and local partners in Sumba (Tiera Sumba) to generate sustainable job



opportunities for communities, increase community income, reduce illegal fishing activities, and eradicate destructive fish bombing practices on coral reefs. Using a comprehensive approach such as:

- Seaweed Cultivation for Economic Empowerment: Seaweed cultivation projects are established in partnership with local communities. Through training, resources, and support, community members are empowered to participate in sustainable seaweed farming, thereby creating stable job opportunities and boosting income.
- Seaweed Processing Program: Training on seaweed processing is provided to the community, resulting in finished products such as soap, noodles, and chips. These products can be used as souvenirs or toiletry amenities in the tourism industry in Sumba, creating new job opportunities for local residents, including women.
- Community Education and Awareness: Outreach and educational programs are conducted to raise awareness about the environmental and economic benefits of sustainable fishing and farming practices. By engaging with communities, a culture of conservation and responsible stewardship of marine resources is fostered.
- Partnerships for Coral Reef Protection: Partnerships are established with organizations and institutions committed to coral reef conservation. Through collaborative efforts such as reef restoration pr

jects and marine protected area management, coral reefs are protected from destructive fishing practices like fish bombing.

SEJIVA

Sejiva is a regenerative travel provider based in Indonesia. Regenerative travel is an approach to tourism that aims to restore and enhance the destinations visited. This approach goes beyond minimizing negative impacts and seeks to leave a positive footprint. Regenerative practices are employed, allowing travelers to contribute actively to the well-being of local communities, natural resources, and cultural heritage. This involves supporting local businesses, artisans, and services, creating economic opportunities and empowering communities. A focus is also placed on conserving natural resources through reduced energy and water consumption, sustainable waste management, and ecosystem preservation. Cultural preservation is promoted by respecting and engaging with local traditions, supporting cultural initiatives, and celebrating indigenous knowledge. In summary, regenerative travel aims to create lasting social, economic, and environmental benefits for the places visited. The service product offered consists of educational trips, impact trips, and regenerative leadership. Educational Journeys offer students, teachers, and organizations in-depth experiences and knowledge about most relevant topics while sustainably exploring the fascinating archipelago of Indonesia. Impact Journey transforms leisure travel into regenerative experiences that create positive impacts for local communities and the environment. Regenerative leadership offers organizations and companies with knowledge on sustainability and its values, offering a unique team building experience. In 2024 the company is targeting \pm 300 bookings with estimated revenue US\$1 – 1.5M. Sejiva aims to establish, maintain, and grow regenerative centers in each destination, particularly in Sumba, which will be focusing on reef restoration.

The Savu Sea seascape has a vital marine ecosystem which serves as a habitat and migratory corridor for whales, dolphins, and turtles. It has at least 532 coral species identified, including 11 endemic species. However, there are existing threats from destructive fishing practices that need to be addressed. The center could provide a model solution and will be established in partnership with local partners (Tiera Sumba) and Sambung Asa. By promoting coral restoration effort, sustainable fisheries and aquaculture, and responsible marine tourism, can create economic opportunities for the local communities. The



proposed location is Puru Kambera in East Sumba. The center aims to provide training and capacity building programs for communities, establish sustainable fishing and cultivation practices, and restore 60,000 corals in five years. The center will serve as an operational base shared with Sambung Asa to streamline costs and enhance training programs for local communities in ocean conservation and sustainable production. Tiera Sumba, as a local partner, can facilitate all travel in Sumba Island and marketing partner for the coral restoration project.