

Blue Halo S - Blue Ecosystem Adaptation Mechanism (BEAM)

ANNEX 6(b): Environmental and Social Impact Assessment (ESIA) and
Environmental and Social Management Plan (ESMP)

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1. Introduction

1.1. Scope of The Environmental and Social Impact Assessment

The ESIA and ESMP covers identification, evaluation, and management of the potential environmental and social risks and impacts of *The Blue Halo S - Blue Ecosystem Adaptation Mechanism (BEAM)*. This assessment refers to the **CI Green Climate Fund's (CI GCF) Environmental and Social Management Framework (ESMF)** and the applicable Environmental and Social Standards (ESS); both serves as an operational tool to avoid, minimize, reduce or mitigate environmental and social impacts and risks as well as to increase the potential for developing outcomes of this project. The specific details and location of the project will be confirmed during project implementation. Therefore, a framework approach to project design was established as a guide for the overall management of environmental and social aspects. This ESIA was prepared as part of the requirements under the ESMF for project proposal development/appraisal.

1.2. Objectives

This ESIA and ESMP applies to all components and activities financed by the Project. The purpose of this ESIA and ESMP is to elaborate requirements, procedures and regulations related to environmental and social management of the project to ensure full compliance with the ESS by the project Executing Entity. In particular, the objectives of this ESIA include:

- i. To identify and assess the potential environmental and social impacts of the proposed project and activity and sub-activity typologies;
- ii. To establish clear standards, procedures, and methodologies as guidelines for environmental and social management that are proportional to risk classification according to the mitigation hierarchy. These include, among others: risk and/or impact avoidance, community participation and consensus building with potentially affect stakeholders, implementation of Good International Industry Practices (GIIP), information disclosure requirements, Grievance Redress Mechanism (GRM), risk monitoring, capacity building to relevant agencies and implementing agencies as well as stakeholders;
- iii. To define appropriate roles and responsibilities for risk management across implementing agencies and/or stakeholders and outline of monitoring and reporting procedures required for environmental and social management, including incident reporting;
- iv. As a guideline for the assessment of capacity needs, training needs, capacity building measures, and technical assistance required to implement this project and the relevant ESMF provisions and related instruments in a manner that is commensurate with the level of risk involved and enhances potential development outcomes; and
- v. As a guideline for budgeting and resource planning for the implementation of the ESIA and related instruments and other necessary measures to improve project development outcome.

1.3. Scope and Outline of The Document

This ESIA was prepared by Blue Halo S Initiative, consists of six chapters and appendixes:

- **Introduction** provides an overview of the ESIA, including the purpose, scope, rationale for this ESIA and its limitations, and provides information on the background of the project, its components and sub-components;
- **Project Description.** This section details the specific activities and expected outcomes of the Blue Halo S Initiative. It maps out the geographical scope, target groups, and ecosystems, providing a solid foundation for subsequent analysis of environmental and social implications.

- **Policy, legal and administrative framework elaborates the policy, legal, and regulatory framework** relating to this project and assesses the gaps between the legal framework and the ESS;
- **Baseline: Environmental and Social Conditions.** This chapter establishes the current environmental and social conditions within the project area. It serves as a reference point against which changes brought about by the project will be measured.
- **Environmental and social impacts/risks of the proposed project.** This section identifies and evaluates the potential environmental and social impacts and risks associated with the project. It considers the different phases of the project and the likelihood and severity of each potential impact.
- **Environmental and Social Management Plan.** Outlines strategies and actions to avoid, minimize, mitigate, or compensate for adverse impacts and enhance positive outcomes. It includes:
 - **Key Social and Environmental Impacts:** An analysis of the principal impacts and the feasibility of mitigation measures.
 - **Management Plan:** Specific management actions, responsible parties, timelines, and performance indicators for managing identified impacts.
 - **Project-level Accountability and Grievance Redress Mechanism:** A system for addressing concerns raised by stakeholders regarding project implementation or compliance with ESS.
 - **Stakeholder Engagement Plan:** A strategy for ongoing communication and consultation with stakeholders throughout the project lifecycle.
- **Annexes** provides relevant operational tools such as screening forms, guidelines and procedures to address key potential environmental and social risks and impacts identified during project implementation in accordance with the applicable ESS.

In addition to the Environmental and Social Management for the Project, a Stakeholder Engagement Plan (SEP), Gender Assessment and Action Plan, and Grievance Redress Mechanism (GRM) documentation has been prepared to support the preparation and implementation of the activities of the Project. These documents are essential tools for ensuring that a project is conducted in a socially and environmentally responsible manner, engages stakeholders effectively, promotes gender equality, and maintains a system for addressing concerns and grievances throughout its cycle. Those documents are used in conjunction with the ESIA and ESMP.

This document also provides the role of Conservation International Foundation (CI) and Konservasi Indonesia (KI), through its CI-GCF Agency, which will serve as the Accredited Entity (AE) for the Project. The CI-GCF Agency will be responsible for the overall oversight of this project, including technical, financial, and administrative monitoring and supervision (through reporting, audits, and annual site visits) and review and approval of the Executing Entity's (EE) annual workplans and budgets¹. CI-GCF will also be responsible for providing support, guidance and backstopping to the EE; monitoring of the achievement of Project results and Outputs; reporting to the GCF; and project closure and evaluation. CI-GCF Agency will conduct these responsibilities, and disburse GCF funds to the EE, in line with CI's Accreditation Master Agreement (AMA) with the GCF.

¹ This project adheres to CI-GCF policies and procedures, see: [CI-GCF Agency \(conservation.org\)](https://www.conservational.org/gcf/)

1.4. Limitations

This Environmental and Social Impact Assessment (ESIA) has been prepared to anticipate and guide the management of environmental and social risks potentially arising from the project's activities, which are subject to specification during the implementation phase. This plan will address specific environmental and social risks identified during project implementation's risk screening and assessment process. It ensures that sub-grant eligibility requirements are met for applications made through the grant facility. The ESIA establishes a set of roles, responsibilities, and operational directives for key implementing agencies and stakeholders. It provides a systematic approach to manage anticipated risks and impacts, ensuring adherence to environmental and social standards. The framework is designed to be adaptive, allowing for the integration of additional mitigation strategies within the planning stages of individual activities and sub-activities as required.

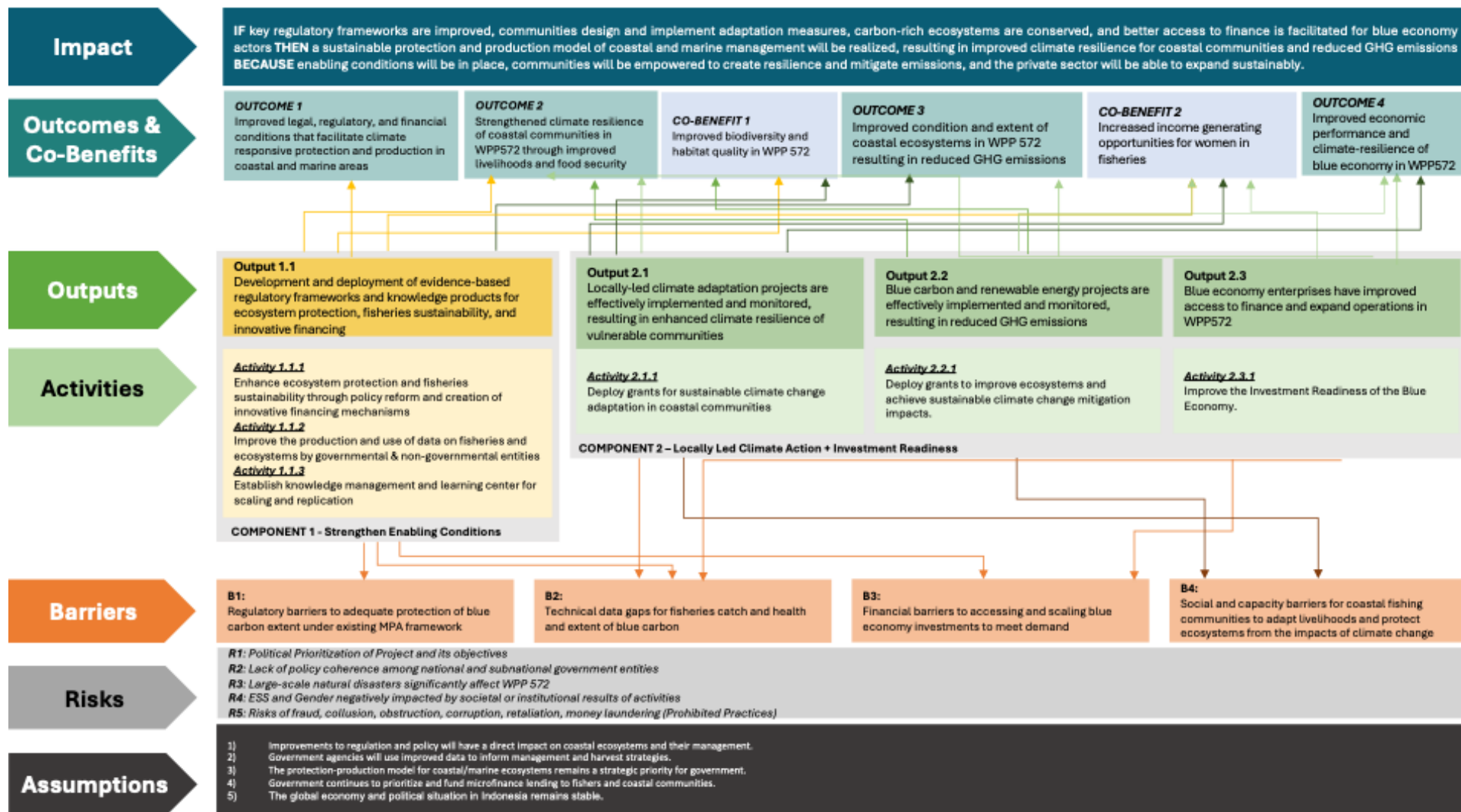
It is important to note that environmental and social safeguard (ESS) considerations are embedded within the grant application process and the eligibility criteria for sub-grants issued through the grant facility. This integration serves to uphold ESS principles from the beginning and streamlines the process by eliminating the need for individual Environmental and Social Management Plans (ESMPs) for each sub-grant. The processes for the screening of sub-projects, as detailed in Activity 6.1, are designated to ensure that all activities conducted under the auspices of the project align with established environmental and social safeguarding criteria. These processes are a testament to the project's commitment to environmental integrity and social welfare, thereby contributing to sustainable project outcomes.

2. Project Description

2.1. Theory of Change

The Blue Ecosystem Adaptation Mechanism (BEAM) Project addresses critical gaps in enabling conditions for blue investments and direct climate change interventions in Indonesia's Fisheries Management Area (WPP) 572. The project pioneers the Blue Halo S sustainable protection-production model, responding to climate pressures that threaten coastal communities, ecosystems, and the financial sector in one of Indonesia's most climate-vulnerable and under-invested marine regions.

BEAM comprises part of a larger vision, the Blue Halo S Platform, an integrated approach to ocean protection and blue economy financing for climate mitigation, climate adaptation, and robust ocean ecosystems. The vision driving the development of the Blue Halo S Platform includes both BEAM, with a GCF supported c. USD 25.5 million catalytic grant layer. The BEAM project's Theory of Change and project's paradigm shift are designed to create the enabling conditions and demonstrate the viability of the protection-production model.



2.2. Project Overview

The Blue Halo S - Blue Ecosystem Adaptation Mechanism (BEAM) Project addresses critical gaps in enabling conditions for blue investments and direct climate change interventions. The project pioneers the Blue Halo S sustainable protection-production model, addressing climate pressures that threaten coastal communities, ecosystems, and financial sectors in WPP 572. The BEAM project is underpinned by an ESIA and ESMP that ensures all activities align with environmental protection and social welfare standards.

BEAM's two-pronged approach includes strengthening regulatory frameworks for fisheries and ecosystems (Component 1), and providing grants for adaptation and mitigation, and investment readiness interventions (Component 2). The ESIA ensures that the project's interventions are not only effective but also equitable and sustainable, paying particular attention to the social dimensions of environmental management. The project supports the Indonesian government's goal of sustaining the blue economy as a pillar of national economic strategy. Within the ESIA, safeguards are set to manage potential environmental and social risks associated with these financial mechanisms.

A pilot protection-production model in WPP 572 will demonstrate the viability of blue investments, supported by the BEAM Grant Facility. The ESIA will guide the project to establish financial, regulatory, and restoration conditions critical for the long-term success of blue economy projects, incorporating innovative financing mechanisms including BLUD (Regional Public Service Agency) establishment for revenue retention, sustainable blue finance frameworks, and Public-Private Partnership structures for MPA management. BEAM's objective to deliver climate adaptation and mitigation services considers the immediate needs of local communities, establishing a robust regulatory and financial foundation. The ESIA plays a crucial role in ensuring these objectives are met while fostering sustainable investment in the blue economy and reinforcing natural capital.

Component 1 focuses on creating enabling conditions for ocean protection to providing technical assistance and capacity building activities to government and non-government beneficiary entities. The ESIA will ensure that environmental and social safeguards are embedded in these regulatory interventions.

Component 2 supports locally led climate action and investment readiness. Competitive subgrants will be provided through two grant windows: climate change adaptation and climate change mitigation. Eligible activities may include ecosystem restoration, sustainable fisheries and livelihoods, community-based MPA management, coastal waste management, and small-scale renewable energy. Investment-readiness activities are pre-identified technical assistance and research interventions and are not a separate competitive grant window. These activities will support blue economy enterprises, financial institutions, and relevant public agencies to improve access to finance and strengthen the enabling environment for sustainable blue economy investment.

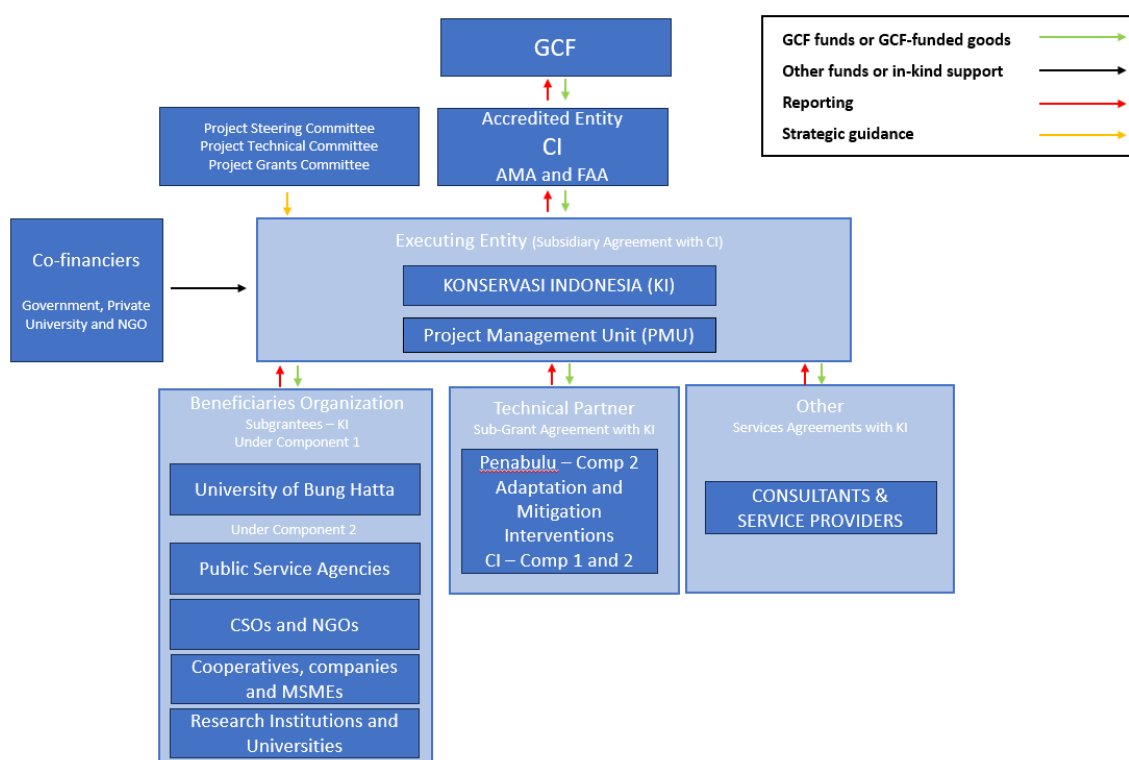
Konservasi Indonesia is the sole Executing Entity and will manage Project implementation, subgrants, safeguards compliance, monitoring, and reporting under the oversight of CI-GCF.

Windows 1 and 2 will directly support climate mitigation and adaptation projects. The Investment Readiness Window will enable blue economy enterprises, financial intermediaries, and relevant market stakeholders to create a conducive environment for marine conservation and sustainable blue economy development.

Konservasi Indonesia (KI) is an experienced programme delivery entity bringing expertise in environmental and social management, crucial for the ESMF's implementation. Their experience ensures that BEAM's objectives are achieved with consideration for environmental sustainability and social wellbeing. BEAM's executing entities will uphold the project's commitment to environmental integrity and social equity, ensuring that the blue economy thrives in harmony with the communities and ecosystems it supports.

2.3. Implementation arrangements

KI will provide GCF funding to procured parties (subgrantees and services providers) supporting project implementation in compliance with EE, CI, and GCF requirements for sub-awards. During identification and before entering into agreements, sub-grantees and services providers will undergo due diligence, and funds will be administered, in accordance with EE procedures as approved or modified by the AE to meet GCF requirements. KI will transfer GCF Funds to sub-grantees via subgrant agreements or the equivalent which outline activities, deliverables, timetable, monitoring, assessment, and compliance requirements. Service providers will be engaged using the procurement policies and procedures of each EE as approved or modified by the AE to meet GCF requirements.



2.4 Safeguards Appraisal and Approval

The PMU will conduct the administrative completeness and initial eligibility check for each grant application. Proposals that include excluded activities or Category A risks will not proceed. Eligible proposals will be screened using the ESS Screening Form. KI's Safeguards Specialist will confirm the risk category, identify applicable standards, and determine the required safeguards instruments and mitigation measures.

Applicants will prepare the required safeguards instruments, with KI support where needed. The Safeguards specialist will review them and recommend clearance, revision, conditions, or rejection. Only proposals that complete safeguards screening and required instruments will proceed to the Grant Committee for final review alongside the technical and fiduciary appraisal. Approved safeguards requirements will be included in the grant agreement. KI will monitor compliance, while CI-GCF may review the process as required.

3. Policy, legal and administrative framework

The activities of the Project will be carried out in accordance with the principles of sustainable development, including environmental, socio-cultural, and economic considerations, as well as health and safety in accordance with the laws and regulations of the Government of Indonesia, applicable the GCF's ESS and applicable Good International Industry Practice (GIIP) in this sector. Further assessment of the compatibility of the country framework with the requirements of the ESS is presented in this chapter along with the agreed measures to address potential legal and regulatory gaps.

3.1. The National Policy

This section describes the policies and regulations that were in effect in Indonesia at the time of the preparation of the ESIA, underlining the guidelines for managing the environmental and social impacts associated with the activities supported under Project. The relevant GoI policies categorized according to the GCF ESS are presented in **Table 1** below.

Table 1. National Regulation of Environmental and Social Management in the Fisheries and Marine Sector as of July 1, 2022

Topic	Regulation	Concerning
Assessment and Management of Environmental and Social Risks and Impacts	Law No. 6 of 2023	Job Creation: integrates environmental approval into risk-based licensing relevant to all grant-funded subprojects
	Law No. 27 of 2007 as amended and partially revoked by Law No. 1 of 2014	The Management of Coastal and Small Islands spatial suitability for MPA blue carbon and livelihood.
	Law No. 32 of 2009 as amended and partially revoked by Law No. 6 of 2023	Environmental Protection and Management
	Government Regulation No. 22 of 2021	The Implementation of Environmental Protection and Management
	Regulation of the Minister of Environment No. 16 of 2012	Technical guidance for Environmental Document Preparation Guidelines
	Regulation of the Minister of Environment and Forestry No. 4 of 2021	List of Businesses and/or Activities Required to Have an Environmental Impact Analysis (AMDAL) and Environmental Monitoring Efforts (UKL/UPL) or a Statement Letter of Ability in Environmental Management and Monitoring)
	Regulation of the Minister of Environment and Forestry No. 17 of 2012	Guidelines for Community Involvement in the Process of Environmental Impact Analysis (AMDAL) and Environmental Permits
Labor and Working Conditions	Law No. 6 of 2023	Labor provision under Job Creation law applicable to all grant recipients

Topic	Regulation	Concerning
	Law No. 1 of 1970	Occupational Health and Safety
	Law No. 24 of 2011	The National Social Security (BPJS), including establishing the obligation of employers to insure their workers with occupational accident insurance (BPJS Manpower)
	Regulation of the Minister of Manpower No. 5 of 2018	Occupational Health and Safety in the Workplace
	Regulation of the Minister of Manpower and Transmigration No. 1 of 1980	Occupational Health and Safety in Building Construction
Resource Efficiency and Pollution Prevention and Management	Government Regulation No. 22 of 2021	The Implementation of Environmental Protection and Management, including water quality protection and management, air quality protection and management, marine quality protection and management, as well as hazardous and toxic waste management
	Law No. 18 of 2008	Solid Waste Management, including guidelines for handling and managing solid waste, domestic waste, and non-hazardous and toxic waste (<i>Bahan Berbahaya dan Beracun, B3</i>)
	Law No. 7 of 2016	Protection and Empowerment of Fisher, Fish Farmers, and Salt Farmers
Community Health and Safety	Regulation of the Minister of Public Works and Public Housing No. 10 of 2021	Construction Safety Management System Guidelines
	Law No. 2 of 2012	Land Acquisition for Development for the Public Interest
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Law No. 5 of 1960	Basic Agrarian Principles
	Presidential Regulation No. 19 of 2021	Implementation of Land Acquisition for Development for the Public Interest
	Presidential Regulation No. 62 of 2018	Social Impact Handling in Land Acquisition Process for National Development Projects
	Regulation of the Head of the Land Service Office No. 3 of 2007	Land Acquisition Guidelines for the Implementation of Development in the Public Interest
	Regulation of the Minister of Marine Affairs and Fisheries No. 23 of 2016	Coastal Areas and Small Islands Zoning Plans (RZWP3K) are key for MPA and blue carbon activities
Biodiversity Conservation and Sustainable Management of Natural Resources	Law No. 45/ 2009, Law No. 31/2004	Sustainable Fisheries Management
	Law No. 5 of 1990	Conservation of the Living Natural Resources and Its Ecosystem
	Government Regulation No. 60 of 2007	The Conservation of Fishery Resources

Topic	Regulation	Concerning
	Regulation of the Minister of Marine Affairs and Fisheries No. 29/PERMEN-KP/2016	Guidelines for Fisheries Management Plans Development in the Field of Fishing
	Regulation of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia Nomor 93/PERMEN-KP/2020	Marine Tourism Villages
	Regulation of the Minister of Marine Affairs and Fisheries No. 24/PERMEN-KP/2016	Procedures for the Rehabilitation of Coastal Areas and Small Islands
	Regulation of the Minister of Environment No. 29 of 2009	Guidelines for Biodiversity Conservation in the Regions
Masyarakat Adat (Indigenous People)	The 1945 Constitution	The Highest Regulation of the Republic of Indonesia
	Law No. 1/2014 jo Law No. 27/2007 ²	Coastal Areas and Small Islands Management Plan
	Law No. 32 of 2014	Marine Affairs
	Regulation of the Minister of Marine Affairs and Fisheries No. 8 of 2018	Procedures for Determining the Management Areas of Indigenous People and Coastal People in the Utilization of Space within Coastal Areas and Small Islands
	Regulation of the Minister of Home Affairs No. 52 of 2014	The Guidelines for Indigenous People Protection and Recognition
	Regulation of the Minister of Environment and Forestry No. 17 of 2020	The Guidelines for Recognition and Protection of Customary/Communal Use of Forest Areas and Resources within Customary Land Areas and/or within Designated Social Forestry Areas.
	Regulation of the Minister of Environment and Forestry No. 9 of 2021	Social Forestry Management. Articles 62-75 regulate state recognition of customary forests inside or outside protected areas. This includes scope and guidelines for seeking formal/legal recognition of customary forest areas.

² The definition of indigenous people refers to the definition of indigenous peoples in Law No. 1/2014. There are three categories of communities according to the Indonesian Coastal and Small Islands Management Law, i.e., (i) local communities, (ii) indigenous communities, and (iii) traditional communities. Local communities refer to groups of people who are bound by local values and practices, but do not rely solely on natural resources for their livelihoods. Meanwhile, customary law communities are defined as local communities that have ties to their ancestors and have lived in a certain place (coastal areas or small islands) for generations, as well as uphold and practice their own customary law and government. The definition and scope of customary law communities in article 33 of this law is the reason the Ministry of Marine Affairs and Fisheries prefers to refer to MHA (Masyarakat Hukum Adat) as customary communities rather than indigenous people. Meanwhile, traditional communities are slightly different from the previous two categories: traditional communities refer to traditional coastal communities and small islands in border areas. The intended traditional communities are fishing communities living in maritime border areas and have been recognized by the state as indigenous peoples, regardless of lineage or nationality. In the original text: "traditional fishing communities whose traditional activities are recognized in carrying out fishing activities or other legal activities in certain areas within archipelagic waters in accordance with international law of the sea." There are only two traditional coastal communities recognized by Indonesian law, i.e., the traditional community in Anambas, Riau Province Sea, and another in southern East Nusa Tenggara (based on the 1974 MOU BOX - traditional fishing under International Law of the Sea).

Topic	Regulation	Concerning
	Regulation of the Minister of Agrarian Affairs and Spatial Planning No. 18 of 2019	Procedures for Administration of Customary Land Community Units of Customary Law. Guidelines and steps for obtaining legal recognition of customary land and its inclusion in the land map of the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency of the Government of Indonesia.
Cultural Heritage	Law No. 5 of 1992 repealed by Law No. 11 of 2010	Items of Cultural Heritage
	Law No. 11 of 2010	Protection of Cultural Heritage
	Law No. 5 of 2017	Advancement of Culture
	Presidential Decree No. 78 of 2007	Ratification of the Convention on the Safeguarding of the Intangible Cultural Heritage
Stakeholder Engagement and Information Disclosure in the preparation of the ESIA for this project.	Law No. 14 of 2018	Transparency in Public Information, which guarantees citizens' rights to public policy decisions and encourages public participation in making those decisions.
	Law No. 7 of 1984	Enforcement of Convention on the Elimination of All Forms of Discrimination Against Women.
	Law No 1/2014 jo UU No 27/2007	Coastal Areas and Small Islands Management Plan
	Law No. 8 of 2016	Inclusion of Disabled People
	Regulation of the Minister of Environment No. 17 of 2012	Guidelines for Community Involvement in the Process of Environmental Impact Analysis (AMDAL) and Environmental Permits
	Regulation of the Minister of Environment No. 9 of 2010	Procedures for Complaints and Handling of Complaints due to Alleged Pollution and/or Environmental Damage
	Presidential Instruction No. 9 of 2000	Gender Mainstreaming in National Development (that emphasizes the participation of women in the development process)
	Minister of Home Affairs Regulation No. 67 of 2011	General Guidelines for Implementing Gender Mainstreaming
Private sector investment and financial intermediaries	Government Regulation No. 5 of 2021	Establishes a risk-based business licensing system in Indonesia, aimed at simplifying business operations and improving the investment climate. Risk-based business licensing and environmental approval integration (OSS-RBA), including business risk categorization, licensing requirements for fisheries, marine, renewable energy, waste management, and other blue economy activities potentially financed t under Window 3.
	Presidential Regulation No. 87 of	Master Plan for Disaster Management 2020-2044

Topic	Regulation	Concerning
Climate Risk and Related Disasters	2020	
	Minister of Home Affairs Regulation No.33 of 2006	General Guidelines for Disaster Mitigation
	Law No.24 of 2007	Disaster Management

3.2. Relevant GCF and CI policies

Numerous CF and CI policies and guidelines have been consulted during the development of the proposed project. Relevant policies and guidelines are presented below.

GCF Policies and Guidelines

- Environmental and Social Policy
- Indigenous People Policy
- Gender Policy and Action Plan
- Policy on Prohibited Practices
- Policy on the prevention and protection from sexual exploitation, sexual abuse, and sexual harassment
- Procedures and guidelines of the Independent Redress Mechanism

CI Policies and Guidelines

- GEF/GCF Environmental and Social Management Framework
- Crisis Management Plan
- Grievance Redress Mechanism
- Prohibited Practices

3.3. Environmental and Social Standards (ESS) of the CI GCF

This ESIA establishes the project's commitment to sustainable development through the application of a series of Environmental and Social Standards (ESS)³. The ESS establish requirements within the project relating to the identification and assessment of environmental and social risks and impacts associated with project activities. The application of this standard is expected to i) support the project in achieving good practices related to environmental and social sustainability; ii) assist the project Executing Entity in meeting national and international environmental and social obligations; iii) improve non- discrimination, transparency, participation, accountability and governance; and iv) enhance sustainable development outcomes from project activities through ongoing stakeholder engagement.

Each standard includes objectives that define environmental and social management to be achieved by each project Executing Entity. The standard also includes requirements that assist the project Executing Entity to achieve the objectives of this ESS in a manner appropriate to the nature, scale and risks of the project. **Table 2** presents the scope of application of the ESS for the Project. Specific provisions have been included in this ESIA to accommodate the relevant provisions in the following ESS, which are not and/or partially regulated under the laws and regulations of the Government of Indonesia.

³ Reference: The Global Environmental Facility (GCF)

Table 2. Scope of Application of Environmental and Social Standards of the GCF

Environmental and Social Standards	Applications in the Project
ESS 1 Environmental and Social Impact Assessment (ESIA)	ESS 1 sets out the responsibilities of the Government of Indonesia to assess, manage and monitor environmental and social risks and impacts associated with each stage of a CI GCF-supported project to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESS). The application of the provisions of this ESS in the project, including the related Environmental Health and Safety Guidelines (ESHGs) is intended to manage the risks and impacts of project activities and improve the environmental and social performance through a risk-based approach and results commensurate with the nature of the project and the scale of project risks and impacts. An environmental and social assessment, in the form of screening and scoping of potential risks and impacts will be carried out as part of site selection during project implementation. Such an assessment will inform decisions on risk and impact management actions, including the types of additional environmental and social instruments such as environmental and social management plans at the site level and the required monitoring and due diligence and corrective actions. High-risk activity and sub-activities will not be financed by this project. ESS 1 applies to investments supported by this project, including investments for works carried out by contract workers and community workers, as well as Associated Facilities (AF) that may be associated with the activities of this project, in case this becomes relevant to the project funded activities.
ESS 2 Protection of Natural Habitats and Biodiversity Conservation	ESS 2 aims to protect and conserve biodiversity and habitats. Any activities impacting critical habitat are ineligible for project funding. The Project will strengthen positive environmental impacts in the project's target area and increase biodiversity. It is noted that the existing MPA management plan includes the overall management aspects relating to the project's operation such as biophysical, socioeconomic as well as the biodiversity management considerations. Therefore, these management plans including the corresponding BMP-related activities, risks and impacts, will be reviewed and updated as a part of the project preparation. A biodiversity management framework will be prepared as a guide for possible intervention. The existing plans for natural habitats and biodiversity conservation (if existing) which are older than 5 years will be updated as necessary. As appropriate, the MPA management plan may also be used to undertake the project's risk screening and assessment considering the information on sensitive biodiversity areas. MPA management plan is expected to consist of the information of sensitive natural habitats (forests, rivers, coasts, coral reefs, wetlands, peatlands) or endangered species that could be negatively affected by the project. The MPA management plan will be incorporated into the village ecosystem management plan and/or technical plan document as applicable, including matters not limited to the ESMP at the project level, feasibility of the detailed engineering design of the project, and the community business plan as a reference for assessing areas with high conservation value. This document will be established prior to the commencement of activity and sub-activity/activities located in ecologically sensitive areas. It also aims to minimize impacts and restore biodiversity and ecosystems. The project will also prepare the overview of post construction reinstatement requirements as part of project work plan.
ESS 3 Resettlement and Physical and Economic Displacement	Land acquisition and involuntary resettlement and any project activities that require addressing the impacts of land acquisition and resettlement will not be financed by this project. Under ESS 3, resettlement is considered involuntary if the affected people or communities do not have the right to refuse land acquisition or restrictions on land use resulting in displacement. The project will seek to avoid involuntary resettlement and forced evictions for the purposes of project activities. Activities that require land will be prioritized using the government-owned land or land donated by the community/individual. This standard also applies to the issue of restrictions on access to natural resources and/or livelihoods that are temporary or permanent.

Environmental and Social Standards	Applications in the Project
<u>ESS 4</u> Indigenous Peoples	ESS 4 applies where Indigenous Peoples are present in, adjacent to, or have attachment to a Project area, regardless of formal legal recognition. No clearly defined coastal Indigenous Peoples target group was identified during the feasibility study or consultations undertaken during Project preparation. As final subproject sites have not yet been selected, Indigenous Peoples will be identified through site-level screening using the criteria and procedures set out in Annex 06(e), the Indigenous Peoples Framework. Where screening confirms the presence of Indigenous Peoples or identifies potential impacts on their rights, lands, territories, resources, livelihoods, cultural heritage, or customary governance, the subproject will prepare a site-specific Indigenous Peoples Plan. The Plan will set out culturally appropriate engagement, mitigation measures, benefit-sharing arrangements, grievance procedures, and monitoring requirements. Where required under ESS 4, Free, Prior and Informed Consent will be completed through the affected community's representative institutions and customary decision-making processes. The Indigenous Peoples Plan and any required FPIC process must be completed, disclosed, consulted upon, and approved before subproject approval and before the affected activity begins. Detailed identification, consultation, FPIC, documentation, monitoring, and grievance requirements are provided in Annex 06(e).
<u>ESS 5</u> Resource Efficiency and Pollution Prevention	ESS 5 aims to identify the occurrence of air, water and soil pollution, and consumption of limited resources that may threaten human beings, ecosystems and the environment at the local and global levels. The ESIA in this project is a guideline for the project to encourage sustainable use of resources, avoid adverse impacts on human health and the environment by minimizing pollution, minimizing long-term emissions of climate pollutants, and minimizing waste. The project is required to minimize waste generation in a manner that is safe for human health and the environment. This ESIA will serve as a guideline for the project to manage waste in accordance with regulations of the Government of Indonesia and GCF standards. The associated risks and mitigation measures will be identified as part of the implementation of the Resource Efficiency and Pollution Prevention Plan on the use of hazardous and toxic materials as regulated by the Government of Indonesia and products used do not contain active ingredients that are banned or restricted under applicable international treaties and agreements, or meet the criteria of carcinogenicity, mutagenicity, or reproductive toxicity as set forth by relevant international agencies. In addressing potential adverse project impacts on human health and the environment, the ESIA of this project serves as a guide for the project to consider associated factors, including existing (ambient) environmental conditions, existing and future land uses, proximity of the project to areas of importance to biodiversity and potential cumulative impacts.
<u>ESS 6</u> Cultural Heritage	ESS 6 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. ESS 6 establishes measures designed to protect both tangible and intangible cultural heritage throughout the project life cycle. Tangible cultural heritage may be present in an urban or rural setting, be above or below the ground or under water, and include natural and landscape features. Similarly, there is an intangible cultural heritage which includes practices, representations, expressions, knowledge, and skills. In order to safeguard these cultural heritage resources, a Cultural Heritage Management Plan, including a Chance Finds procedure is included in ESIA and will be included in EIAs and other ES instruments, if found relevant.
<u>ESS 7</u> Labour and Working Conditions	ESS 7 explains the importance of job creation and income improvement in efforts to reduce poverty and promote inclusive economic growth. The Government of Indonesia can promote good relations between workers and project proponents and increase the benefits of developing a project by treating project workers fairly and providing safe and healthy working conditions as outlined in the project labor management procedures. This project ESIA includes Labor Management Procedures (LMP) which are the main reference for project implementation to i) promote the implementation of occupational health and safety; ii) promote fair treatment, non-discrimination and equal opportunity for project workers; iii) protect project workers, including vulnerable workers such as women, people with disabilities, children of working age (in accordance with the relevant ESS 8) and migrant

Environmental and Social Standards	Applications in the Project
	workers; contract workers; community workers and workers from the main suppliers concerned; iv) prevent the use of all forms of forced labor and child labour; and v) support the principles of freedom of association.
<u>ESS 8</u> Community Health, Safety and Security	ESS 8 discusses health, safety and security risks and impacts on project-affected communities and the responsibility of the Government of Indonesia to avoid or minimize these risks and impacts, with particular attention to people who, due to their particular circumstances, are vulnerable. The project should consider the quality management system and safety of the proposed activities and services (i.e., monitoring of hazardous substance and materials, infrastructure safety, traffic safety, etc.), and emergency preparedness to anticipate and minimize risks and impacts that such services may have on community health and safety. In such circumstances, the project will also apply the concept of universal access, where technically and financially feasible. The potential risks and impacts on the health and safety of target communities will be assessed as part of risk screening and scoping at the activity and sub-activity level. Relevant mitigation measures should be included as part of: i) project design and activities (i.e., infrastructure design, equipment safety, site selection, exposure to infectious diseases or viruses such as COVID-19, etc.); ii) contractor ESMP where the risk relates to activities carried out by third party contractors. Restoration and conservation activities in high-risk locations, including in high seismic zones, and/or with extreme weather conditions will be carefully assessed and monitored. Where relevant, emergency preparedness, such as awareness raising, notification procedures, community evacuation, etc., to deal with emergency situation should be included as part of the relevant project planning. If the project includes new structures and/or buildings to be used by the community, the main considerations of safety, natural hazards, and the concept of universal access should be integrated, including the selection of building materials to be used. The potential for Sexual Exploitation and Violence/Harassment is also included as a project risk with prevention protocols provided in this document.
<u>ESS 9</u> Private Sector and Direct Investment and Financial Intermediaries	ESS 9 is instrumental in delineating the framework for environmental and social risk management, particularly within financial intermediary operations for initiatives such as those under Component 2. The standard mandates the development and implementation of a rigorous Environmental and Social Management System (ESMS) and management of potential environmental and social risks arising from the allocation of financing or sub-grants. Given the dynamic nature of Component 2 — where specific recipients and activities are to not be defined at appraisal — the application of ESS 9 is considered critical. The ESMS will be integrated with definitive screening protocols and risk management strategies, ensuring alignment with both the GCF's environmental and social safeguards and the prevailing legislative framework of Indonesia. This systematic approach is intended to uphold consistent environmental and social standards throughout the lifecycle of all sub-grants under component 2 and ensure sustainability of project outcomes.
<u>ESS 10</u> Climate Risk and Related Disasters	ESS 10 - Climate Risk and Related Disasters is applied to systematically assess, mitigate, and manage the potential environmental and social impacts resulting from climate change-related factors, such as extreme weather events, sea-level rise, and ocean acidification. This standard guides our project activities to enhance resilience, promote sustainable resource management, and safeguard ecosystems and communities in the face of climate-related challenges.

3.4. Gap Analysis Between the National Policy and The Environmental and Social Framework of the GCF

Indonesia has made continued progress in improving its country systems to address international good practices in environmental and social management. Despite rapid progress in the development of regulatory frameworks for environmental and social management, enforcement of rules and local capacities for impact assessment and management varies. Continuous capacity building is required, especially in aspects related to Occupational Health and Safety (OHS), community health and safety, resource management, pollution prevention, land acquisition, biodiversity management, management of access restrictions, and stakeholder involvement. Specific provisions where gaps to the applicable ESS were identified are presented in **Table 3**. This gap assessment also elaborates gap filling and related capacity strengthening measures based on the country system in the context of project activities.

In terms of the management of social risks and impacts, the Government of Indonesia has issued a set of laws and regulations related to the management of social impacts. Although the regulatory framework relating to environmental and social management is strong, there are major gaps in areas related to law enforcement and local capacity in impact assessment and management, as well as land acquisition and stakeholder engagement. The gaps identified between the relevant GoI laws and regulations and the applicable ESS are presented in **Table 3** below.

The table presents the gaps identified between the relevant laws and regulations of the GoI and the GCF's ESS requirements, and those relevant to the Project activities. The table also provides further analysis of how the environmental and social management of the activities of the Project will adopt additional measures to address these gaps.

With regard to project implementation, if there is a contradiction between the country's own system and the GCF's policies on Environmental and Social (E&S) Management, the higher regulation applies, meaning that the stricter regulation in avoiding or minimizing environmental and social impacts is the one that must be followed.

Table 3. Gap Analysis of GoI Regulations and CI-GCF's ESS Standards and Efforts to Reduce

ESS topics	Identified Gaps	Measures to Reduce
ESS 1 – Environmental and Social Impact Assessment In general, the relevant laws and regulations regarding the assessment of environmental and social risks and impacts in Indonesia are in line with ESS1. Minor gaps identified can be addressed directly in planning and implementation at the project level.		
Environmental and social assessment	Direct, indirect and cumulative impacts are assessed within the national regulatory framework. The assessment includes the linkages and interactions of significant impacts. However, an assessment of the potential impact of associated facilities was not established.	Environmental and social impact assessments must comply with the requirements of ESS1. Content guidance in environmental and social assessment documents acceptable to the GCF is provided in this ESIA. There are several additional points of assessment on project planning and implementation to meet GCF standards, one of which is identification of Associated Facilities. Relevant measures to address social risks are: i) adapted to the project design, ii) additional information in the environmental and social assessment study document; and iii) additional measures included as part of this ESIA include a Activity and sub-activity site-specific Environmental and Social Management Plan (ESMP), Indigenous Peoples Plan (IPP), Stakeholder Engagement Plan (SEP), mitigation and response to Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), and capacity building activities. In addition, there should be a requirement regarding gender and SEA/SH awareness raising and related Code of Conduct for the workforce of implementing agencies and service providers and/or their contractors prior to placement.
Project affected area	Lack of analysis of project affected areas, associated facilities, impacts and site selection analysis. Environmental approval regulations, which include AMDAL, UKL-UPL, and/or SPPL requirements, are not required to assess Associated Facilities.	ESS1 necessitates the project to intensively analyze project-affected areas and associated facilities, with a focus on understanding and mitigating impacts, despite the absence of construction activities. The project will employ detailed Environmental and Social Impact Assessments (ESIAs) to identify and address potential impacts on communities and the environment. In line with Indonesian environmental regulations such as AMDAL, UKL-UPL, and SPPL, the project will diligently assess any associated facilities, even if they do not directly require these environmental approvals. The project will adopt a rigorous site selection process, integrating environmental, social, and economic factors to ensure sustainable project implementation. This approach includes engaging local communities and stakeholders, understanding their perspectives, and incorporating their feedback into the decision-making process. To address the identified gap, the project will establish a robust monitoring system to ensure continuous evaluation and adaptation of strategies to mitigate potential environmental and social risks.
Environmental and	Follow-up, analysis and use of environmental monitoring data are	Covered in the site-specific Environmental and Social Assessment (ESMP)

social monitoring	incomplete for monitoring and evaluation activities as well as continuous improvement due to different implementation capacities, especially in handling and documenting complaints at the site level.	document outline acceptable to the Project. The Project Management Unit (PMU) will provide the Executing Entity with additional technical capacity support for environmental and social management. The PMU, led by a full-time Chief of Party based in KI, will be responsible for coordinating with all stakeholders, ensuring successful project implementation, and achieving the specified project funding proposal outcomes. This includes meeting the required quality standards within the specified time and budget constraints. The PMU will oversee the overall project management and planning, support daily activity implementation, coordinate with the central government and project partners, collaborate with the AE, and facilitate project implementation in two EEs. The PMU will also encompass full-time staff employed by KI for Project functions such as Project Monitoring and Evaluation, gender, and safeguards.
Capacity building and training	In the civil works package, capacity building requirements are required under the National Competitive Bidding (NCB) method for Contractors ESMP (C-ESMP), however, budget allocations for capacity building and training for implementation are insufficient.	For overall environmental and social management, the budget for institutional strengthening and capacity building is included in the Project Monitoring and Evaluation (M&E) systems managed by the PMU.

ESS topics	Identified Gaps	Measures to Reduce
ESS 2 – Protection of Natural Habitats and Biodiversity Conservation Government regulations on forestry and biodiversity conservation generally support ESS 2 to protect biodiversity. The main gap is that GoI regulations do not yet include requirements for assessing project impacts on natural and critical habitats.		
Classification, Significant Conversion Criteria and Degradation of Critical and Natural Habitat	This ESS requires different risk management approaches to habitats based on their sensitivity and value. The Project does not support projects that, in the Project view, involve significant conversion or degradation of critical habitats. Requirements for plan for natural habitats and biodiversity conservation are already in Indonesian Government law. However, the regulation does not specifically mention the protection of natural and critical habitats in accordance with ESS 2.	This ESIA provides an exclusion list and an environmental and social risk (E&S) checklist as a screening tool to identify protected areas and areas with high/environmentally sensitive biodiversity, including critical habitats of designated key species. In addition to the screening tool, the ESIA contains guidance for project to review and update the existing MPA management plan which includes the corresponding biodiversity management-related activities, risks and impacts. A plan for natural habitats and biodiversity conservation will be prepared as a guide for possible intervention. The existing plan for natural habitats and biodiversity conservation (if existing) which is older than 5 years will be updated as necessary.

ESS topics	Identified Gaps	Measures to Reduce
ESS 3 – Resettlement and Physical and Economic Displacement		

The prevailing laws and regulations in Indonesia have covered this main topic of ESS 5, however, several gaps were identified in terms of detailed explanation and setting of issues, especially those related to compensation and livelihood restoration of communities whose land tenure rights are not legally recognized.		
Land Acquisition and Asset Valuation	Applicable laws and regulations in Indonesia have covered several aspects in ESS 3, such as no gap for affected assets replacement values as independent appraisal team determines compensation that includes loss of physical and non-physical assets. Some gaps are identified in terms of compensations for squatters, livelihoods restoration and indirect impacts related to land acquisition. Compensation for the people who get benefit from the affected land such as squatters; illegal occupants, working farmers, renters are not regulated. There are also no requirements for the program to recover the livelihood for the affected people by the program.	The project will prioritize the use of government-owned land to the extent possible for MPA purpose and land owned by village beneficiaries for village level infrastructure. Resettlement Policy Framework (RPF) on precautionary level when government land is illegally occupied or additional land is needed that include guidance to prepare an abbreviated Resettlement Action Plan (RAP), entitlement matrix and compensation based on the regulations in Indonesia, while following the requirements in ESS 3, including provision mitigation measures for livelihood loss, Voluntary Land Donation Protocol (VLDP) and voluntary transaction protocol.
Voluntary land donation	There are no specific regulations governing voluntary land donations. According to the principle in ESS 3, compensation to a lost asset (or access to asset) must be provided. Compensation can be waived only if the procedure fulfils the Voluntary Land Donation Protocol (VLDP) in ESS 3, where the landowner agrees to grant their land, and declare that they do so without force and without requesting for any compensation for the lost asset. Written evidence of the agreement must be obtained.	RPF as part of the ESIA provides VLDP to ensure that there is no force in the grant, and the consequences will not disadvantage the donors. RPF also regulates direct sale that follows the principles in ESS 3. For publicly owned land or state-owned land, ESIA provides the due diligence process to ensure that the state-owned land used is in the “clean and clear” condition. This process will be properly documented.

ESS topics	Identified Gaps	Measures to Reduce
ESS 4 – Indigenous Peoples One of the main gaps between ESS 4 and laws and regulations of the Government of Indonesia relating to Indigenous Peoples is the requirement for formal recognition of Indigenous Peoples as a criterion for eligibility to be treated as Indigenous Peoples. In Coastal and Small islands context, Free, Prior and Informed Consent (FPIC) is not warranted as per the Ministerial Regulation on establishment of Marine Protected Areas. There are no specific requirements for social assessment and preparation of Indigenous Peoples Plans (IPPs) across sectoral laws.		
✓ Assessment and Consultation; ✓ Avoidance of adverse impacts; ✓ Mitigation and development benefits; ✓ Free, Informed and Prior Consent (FPIC)	The scope of criteria for the identification of Indigenous Peoples is land-based, governance and customary law that is binding, and therefore can exclude groups that do not meet these criteria. In addition, there are vulnerable communities who may not qualify under the GoI framework as Indigenous Peoples but meet the policy criteria under ESS 4. FPIC is not specifically regulated by existing laws/regulations. However, within the scope of establishment of marine protected areas, participatory process and a meaningful consultation with indigenous peoples are required. This absent of legal requirement for FPIC, e.g., for circumstances warranted such FPIC, was addressed in the Indigenous People Plan (IPP) in	The project will treat communities that have characteristics in as described in the IPF as Indigenous Peoples, regardless of their legal recognition. Identification of these groups based on the identification criteria as described in the IPF as part of the screening process during the implementation of this project. The Indigenous Peoples Plan (IPP) was developed as part of this ESIA as a guide for the process of screening, protecting, strengthening the (institutional) capacity and Indigenous Peoples, and promoting a meaningful participation of indigenous peoples, as well as implementation of FPIC in the event of good or adverse impacts as outlined in ESS 4 and further described in the IPF. The project does not anticipate lack of commitment by GOI in adopting FPIC yet recognizes the challenges of ensuring

	this ESMP.	meaningful and inclusive consultations. Project implementation will include social specialists/ consultants as well as a series of capacity building on community consultations and FPIC. Further, Grievance Redress Mechanism (GRM) will also include reporting from the target community and efforts to enable accessible and safe GRM.
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ESS topics	Identified Gaps	Measures to Reduce
ESS 5 – Resource Efficiency and Pollution Prevention In general, the Government of Indonesia’s environmental laws and regulations on pollution prevention and management cover hazardous and non-hazardous waste management, water quality and waste disposal, airflow management and emission standards. This regulation takes into account ambient conditions through engineering design and ESIA, and identifies pollution prevention measures. Improvements in sourcing efforts, use of raw materials, and efficient resource consumption can be implemented in this project.		
Resource efficiency	While the regulations cover a broad spectrum of pollution control and resource management, the integration and enforcement of these regulations into specific sectoral activities may need strengthening to ensure consistent application across different industries and regions.	The Project will implement a suite of measures to ensure the efficient use of energy and water resources. This will involve adopting conservation technologies, adhering to established pollution control and water quality standards, and ensuring continuous improvement through monitoring and reporting. The project’s resource efficiency initiatives will contribute to the national goals of sustainable development and adherence to international environmental best practices.

ESS topics	Identified Gaps	Measures to Reduce
ESS 6 – Cultural Heritage The protection of cultural heritage in Indonesia is rooted in historical precedents that date back to colonial times. Yet, contemporary legislations, while supportive, have notable gaps and are not completely in stride with global standards. There are challenges in heritage registration and management, as noted in Government Regulation No. 1 of 2022, which, despite its advancements, still faces issues like insufficient human resources and the necessity for further regulatory development to effectively preserve heritage		
Protection of cultural heritage both tangible and intangible as part of sustainable development, meaningful consultation and equitable benefit sharing	Indonesia's legislative framework for cultural heritage, presents certain gaps when benchmarked against global standards. Historical legislation rooted in the Dutch East Indies period has evolved, but current laws still possess loopholes that could potentially undermine the protection and management of cultural heritage. For instance, the existing provisions under Government Regulation No. 1 of 2022 mark progress in national heritage registration but highlight a deficiency in human resources and a call for further regulations that can fully encapsulate the essence and breadth of heritage preservation.	To address these gaps, the project will implement measures aimed at enhancing the protection and management of cultural heritage. This includes the development of a chance find procedure that aligns with global best practices and accommodates the nuances of Indonesia's rich cultural heritage. Furthermore, the project will facilitate training programs for stakeholders and construction workers to heighten awareness and establish competencies in cultural heritage protection. These measures are designed to fortify the regulatory framework, ensuring that it is robust, socially inclusive, and reflective of an international commitment to safeguard cultural assets for present and future generations.

ESS topics	Identified Gaps	Measures to Reduce
ESS 7 – Labor and Working Conditions Indonesia has ratified all core conventions on labor and working conditions of the ILO. While Indonesian laws and regulations align well with the requirements of ESS 7. Two primary issues that require attention within the scope of this environmental and social standard are forced labor and child labor in anchovy trawlers, as well as the occupational health and safety conditions on tuna/fish fishing vessels. These concerns have gained prominence, especially in the context of BEAM, due to their potential impacts on the well-being of workers in the fishing industry. Additionally, recent legislative changes, such as those introduced by Law No. 6/2023 on Job Creation, have modified provisions related to employment and work arrangements, including aspects like contractual arrangements and overtime hours.		
Labor Management Procedure	There is no special regulation to develop a labor management procedure for a smaller-scale project. Law No. 13/2003 concerning Manpower as amended and partially revoked by Law No. 6 of 2023 and Law No. 21/2007 on recruitment mechanism and eradication of human trafficking have regulated about the prohibition on the use of child labor and forced labor.	ESIA applies Labor Management Procedure (LMP) for project by covering information about work provision and procedure, work health and safety, non-discrimination policy and equal work opportunities, as well as code of conduct to prevent SEA/SH and GRM for project workers.
Avoiding the use of child labor and forced labor	There is no gap. Law No. 13/2003 concerning Manpower as amended and partially revoked by Law No. 6 of 2023 and Law No. 21/2007 about The Eradication of Human Trafficking have regulated about the prohibition on the use of child labor and forced labor.	ESIA applies Labor Management Procedure (LMP) to avoid the use of child labor and forced labor, while also incorporating the code of conduct to prevent child labor.
Grievance Mechanism	National regulations provide avenues for solving work-related issues. However, in practice, the implementation of complaint handling tends to vary and is not clearly defined, which limits its effectiveness.	The project will develop a Grievance Redress Mechanism (GRM) that is accessible to workers directly involved in the Project. For Contract Workers, employers will be required to develop GRMs that are safe and accessible to their workers, including sub-contractor workers. This procedure will be communicated to the workers as part of their induction program and regular meetings. All complaints filed will be investigated and resolved fairly and transparently. SEA/SH cases will be handled separately, and the specific mechanism of which has been developed based on this ESIA.
Terms and conditions of work	Indonesia's Omnibus Law No. 6 of 2023 brought several changes to the Manpower Law, particularly in aspects related to the reduction of rights in termination of employment, the procedure for notification of termination of employment which overrides the decision of the Manpower Court, additional working hours, and elimination of sectoral minimum wages to become regional minimum wages.	Project LMP includes relevant terms and conditions for project workers, including contract workers, main supplier workers and community workers to ensure compliance with ESS 7 where gaps are identified in the country's systems.
Community workers	Not covered by the Indonesian legal system.	Community workers will not be involved in the project.
ESS topics	Identified Gaps	Measures to Reduce

ESS 8 – Community Health, Safety, and security Potential risks and impacts as well as mitigation actions on community health and safety are assessed in the ESIA process and included in the ESIA document (AMDAL/UKL-UPL/SPPL). No major gaps were identified in the relevant laws and regulations.		
Design and safety of infrastructure and equipment	There is no requirement under national regulations to involve independent experts to conduct studies on the design, construction, operation, and decommissioning of high-risk structural elements.	The project will refer to existing regulations and guidelines, and the associated universal design requirements will be integrated into facilities intended for public and/or community use, including those that may be constructed with potential impacts on community access.

ESS topics	Identified Gaps	Measures to Reduce
ESS 9 – Private Sector Direct Investments and Financial Intermediaries ESS 9 Indonesia's regulation on financial intermediaries refers to OJK Regulation No. 51/POJK.03/2017 on the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies, which aligns with the principles of ESS 9. However, a key gap remains: lack of explicit obligation to implement Free, Prior, and Informed Consent (FPIC), limiting inclusivity and protection for affected communities, particularly women and Indigenous Peoples.		
Private Sector Direct Investments and Financial Intermediaries	Indonesia's regulatory framework for financial intermediaries refers to OJK regulation No. 51/POJK.03/2017 on Sustainable finance, which aligns with ESS 9 principles. However, there is no explicit regulatory requirement mandating the application of FPIC, it will affect communities such as women, indigenous people in FI-financed activities	The project will require the application of FPIC for all relevant financial-intermediary-financed activities under window 3. FPIC will be implemented at the earliest stages of investment preparation through transparent, inclusive, and cultural appropriate consultations, ensuring adequate time, accessible information and freedom from coercion.
	Stakeholder engagement and transparency remain inadequate, as Private Sector Direct Investment and financial intermediaries (FIs) remain limited. Affected communities are often not meaningfully consulted and environmental and social (E&S) risks are not adequately disclosed. Civil society participation in project appraisal and grievance mechanisms is weak, reducing accountability and oversight.	The FI-ESMF will include mandatory stakeholder engagement procedure, proportional disclosure of environmental and social (E&S) risks and establishing a robust and accessible grievance mechanism, the grievance mechanism will provide a safe, accountable channel for affected individuals or groups to raise concerns, report adverse impacts, and seek clarification and obtain remedy without fear of intimidation or retaliation. strengthening transparency and accountability in financial intermediary operations.

ESS topics	Identified Gaps	Measures to Reduce
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ESS 10 – Climate Risk and Related Disasters ESS 10 addresses climate-related impacts in project development, emphasizing adaptive measures for ecosystem protection and community resilience. It guides strategies to minimize vulnerabilities and maximize positive outcomes in the face of climate risk and related disasters.		
Species Abundance and Diversity	The ESMF recognizes a gap in the incorporation of climate-resilient practices within existing ecosystem management plans. This suggests a need for more specific strategies to address the impact of climate-related factors on species abundance and diversity.	The ESS 10 emphasizes the integration of climate-resilient practices into Plan for Natural Habitats and Biodiversity Conservation. This includes the implementation of biodiversity conservation initiatives aimed at protecting vulnerable species. Additionally, stringent regulations will be developed and enforced to minimize contamination and pollution, safeguarding the health of aquatic ecosystems.
Fisheries	In the fisheries sector, there's identified inadequacy in implementing climate-resilient fisheries management practices. This gap underscores the necessity for strategies that better consider changing climatic conditions, ensuring the sustainable production of fish.	Enhanced monitoring systems will be put in place to track and respond to changes in fish populations, promoting the long-term health of fisheries.
Coastal Ecosystems (Mangroves, Seagrasses, Coral Reefs)	The availability of comprehensive climate-adaptive measures for coastal zone management. This highlights the need for more robust approaches that can effectively address the diverse impacts of climate change on coastal ecosystems.	The ESS 10 advocates for the integration of climate-smart agricultural practices. This involves developing crop varieties resistant to drought and flooding, implementing water management strategies to address changing precipitation patterns, and enhancing pest control measures to mitigate the impact on crops and livestock.

4. Baseline: Environmental and Social Conditions

This chapter discusses the baseline of environmental and social conditions, the potential risks that arise from the proposed activities in the Project, as well as mitigation measures that refer to Indonesian laws and regulations and the GCF Environmental and Social Standards. Environmental and social risk identification also uses data collected and analyzed in the social assessment. The social baseline has been stated in Feasibility Study document, employs a desk review approach, utilizing a thorough analysis of existing literature and reports to gather relevant data.⁴

4.1. Environmental and Social Baseline

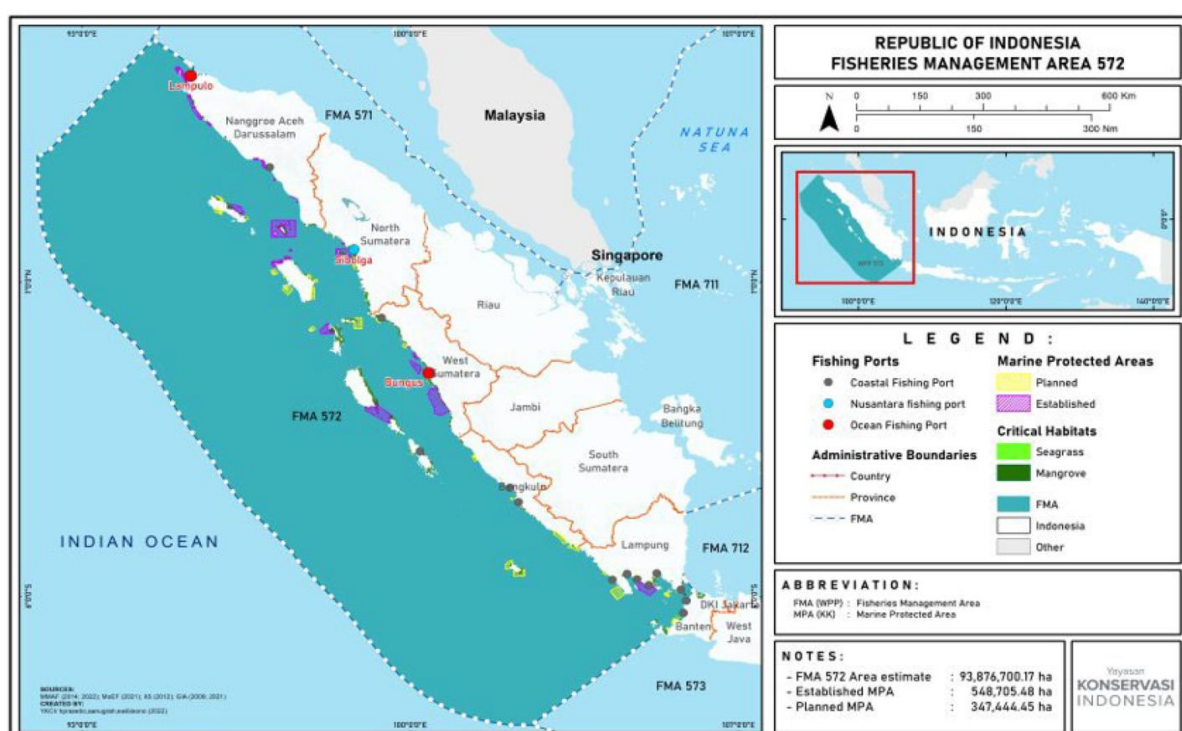
The BEAM Project responds to a gap in enabling conditions for blue investments and direct climate change interventions by introducing an integrated program for ocean protection and blue economy financing, known as the Blue Halo S sustainable protection-production model. This model specifically addresses climate-driven pressures that threaten the climate adaptation and mitigation potential of WPP 572's coastal communities, ecosystems, and financial sector. To overcome barriers and vulnerabilities, the Project employs a two-pronged approach.

Component 1 focuses on Creating the Enabling Environment for Scaling Investment in Protection and Production, support for technical assistance and capacity building will help government agencies make changes to the regulatory framework for private sector financing to support expansion and improved protection of formal marine protected areas and OECMs in order to strengthen the sustainability of fisheries and blue carbon protection. Meanwhile, under Component 2 BEAM Adaptation Grantees will deliver sustainable economic benefits to coastal communities, particularly women and vulnerable groups in WPP 572, and strengthen coastal climate resilience. BEAM Mitigation Grantees will deliver improvements in the protection and restoration of blue carbon. BEAM Investment Readiness interventions will build capacity and knowledge to direct innovative climate finance towards blue protection-production investments. Learning activities will provide support across the three grant windows to strengthen impact, improve efficiency and effectiveness, and identify replicable models for scaling blue economy investments.

The proposed project is expected to focus on Fishery Management Area (*Wilayah Pengelolaan Perikanan Negara Republik Indonesia*, "WPP") No. 572 an area within the Indonesian EEZ located to the west of Sumatra and adjacent to the East Indian Ocean encompassing 94,368,838 hectares which covers six provinces: Aceh, North Sumatra, West Sumatra, Bengkulu, Lampung, and Banten (see below).

⁴ Relevant data here refers to quantitative and qualitative information that can provide an overview of the prevailing social and environmental context, thereby enabling understanding of the project's potential impacts and the formulation of effective mitigation strategies.

Figure 1. Maps of WPP 572. Source: Ministry of Marine Affairs and Fisheries-Conservation Areas Map



WPP encompasses diverse ecosystem characteristics, including 48,311.14 hectares of mangroves, 168,399.69 hectares of seagrass meadows, and 125,738.88 hectares of coral reefs. The coral condition in the Pilot Area exhibits variability, exemplified by West Sumatra's 36,982.16 hectares of coral reefs. However, significant differences emerge among regencies: Pesisir Selatan Regency reports 84.33% coral damage, Padang Pariaman Regency records 45.90%, and Agam Regency notes 100% damage. In Bengkulu province, Bengkulu Utara Regency stands out with 73% of its coral area in great condition, while other regencies show 45-50% degradation, mirroring the situation in Banten province.

As of now, only 0.58% (548.705 Ha across 15 MPAs) of the total region has been designated as Marine Protected Areas (MPAs), with plans underway for an additional 347,444 hectares as new MPAs. The management of WPP 572 falls under the purview of Unit Pengelolaan Perikanan (UPP) WPP 572—a subunit of Lembaga Pengelolaan WPP. The UPP operates as a collaborative and coordinating platform for the sustainable management of fisheries in the WPP, actively formulating fishery management recommendations. The executive coordinator of UPP WPP 572 is the head of the Bungus Oceanic Fishing Port (Pelabuhan Perikanan Samudra Bungus).

Fisheries Management Area 572 (WPP 572) reveals a critical vulnerability to climate change in Indonesia. The nation ranks among the top third globally for susceptibility to climate-driven disasters and hosts the world's 5th largest coastal population, putting 49 million people at heightened risk of climate-related events⁵. The marine and coastal sectors, as identified by the Government of Indonesia (GOI), are projected to incur potential economic losses amounting to IDR 81.82 trillion (~USD 5.2 billion) by 2024 due to climate change impacts⁶.

⁵ Climate Risk Profile: Indonesia (2021): The World Bank Group and Asian Development Bank, p. 15

⁶ Ministry of National Development Planning/Bappenas. (2021a). Climate Resilience Development Policy 2020-20245 – Executive Summary. https://lcdi-indonesia.id/wp-content/uploads/2021/11/0_Executive-Summary.pdf

The interdependence of ecosystem degradation and ineffective sustainable fisheries management is evident in multiple studies. Climate change threatens fish populations, jeopardizing a vital source of income and contributing to national food security⁷⁸. The current baseline of fisheries protection and sustainable management investments indicates a significant decline in fish stocks from 2020 to 2050. Meanwhile, the establishment of effective Marine Protected Areas (MPAs), especially in WPP zones 714 and 715, is associated with greater fish stock volume and biodiversity⁹.

WPP 572's geographical positioning and environmental conditions significantly contribute to its susceptibility to a range of natural hazards. The tectonic plate boundary extending along Sumatra's western coast, stretching southward from Java to Nusa Tenggara, renders WPP 572 susceptible to powerful earthquake.¹⁰ Over the next 30 years, the region faces a high risk of extreme temperature and heat stress, with an expected increase of 199 extreme heat days per decade and a temperature rise of 0.88°C by 2050 under an extreme climate change scenario (RCP 8.5)¹¹. This location jeopardises the region's economic and environmental resilience against impending calamities, heightens food scarcity concerns, and leads to economic downturns due to the destruction of farmland and coastal habitats.

Sumatra's subduction zone heightens the likelihood of volcanic activity, exemplified by the 1883 Mount Krakatoa eruption. Such volcanic activities are capable of instigating land shifts and tsunamis. For instance, the Krakatoa eruption in 2018 spawned a tsunami and caused a dramatic 60.5% drop in fish production, plummeting from 41.35kg/month to 16.35kg/month¹². Concurrently, the project site is at a relatively low risk of extreme precipitation levels, but even this poses its own threats, with an additional 5 high precipitation days per decade projected, and a concerning decrease in average precipitation by 10% by 2050¹³. Moreover, climate variability phenomena can induce severe dry spells, escalating the threat of extended droughts. Specifically in WPP 572, drought risks involve endangering 48.5 million people, economic damages of 142.5 trillion rupiah, and environmental degradation over 2.28 million hectares.¹⁴

The population's adaptive capacity to these changes is limited, with around 34% of the people having low human development levels, making them highly vulnerable to climate impacts. In response, mitigation measures are being designed to reduce the risks or respond to consequences¹⁵. Around 8% of the population, who are highly dependent on natural resources, will be disproportionately impacted, necessitating the implementation of adaption and mitigation strategies to safeguard the community and ensure the project's objectives are met despite these challenges¹⁶.

Coastal erosion, the gradual wearing away of land by the ocean's relentless waves and currents, is prevalent along the coastlines. In WPP 572, the deterioration of mangrove ecosystems further

⁷ Blue Nature Alliance (2023) Indonesia '30x30' Marine Protected Areas fisheries cost benefit analysis. Presentation

⁸ Napitupulu, L. and Tanaya, S. (2022) 3 Ways How Fisheries are Essential for a Resilient Food System during Pandemic and Beyond. WRI. <https://wri-indonesia.org/en/insights/3-ways-how-fisheries-are-essential-resilient-food-system-during-pandemic-and-beyond#:~:text=Despite%20the%20fact%20that%20fish,to%20the%20consumption%20of%20carbohydrates.>

⁹ Blue Nature Alliance (2023) Indonesia '30x30' Marine Protected Areas fisheries cost benefit analysis

¹⁰ Yanti RP, Suharsono, Palupi IR, Hidayat W. 2017. Preventive Towards Earthquake's Disaster in West Sumatra Based on Geophysics Analysis. Jurnal Dialog Penanggulangan Bencana. 8 (1): 13-20.

¹¹ Gassert, F., E. Cornejo, and E. Nilson. 2021. "Making Climate Data Accessible: Methods for Producing NEX-GDDP and LOCA Downscaled Climate Indicators" Technical Note. Washington, DC: World Resources Institute. Available online at <https://doi.org/10.46830/wri.19.00117>.

¹² Riantini, M., Zakaria, W. A., Listiana, I., Ulfa, P. N., Mutolib, A., & Widyastuti, R. A. D. (2021). Impact of the Sunda Strait tsunami on fish production and environment in South Lampung Regency, Lampung. In IOP Conference Series: Earth and Environmental Science (Vol. 739, No. 1, p. 012021). IOP Publishing. DOI 10.1088/1755-1315/739/1/012021.

¹³ Araujo, D. S. A., Marra, F., Merow, C., & Nikolopoulos, E. I. (2022). Today's 100 year droughts in Australia may become the norm by the end of the century. Environmental Research Letters, 17(4), 044034. <https://doi.org/10.1088/1748-9326/ac58a>

¹⁴ The National Disaster Management Agency (BNPB). 2023. Indonesia's Disaster Risk: Understanding Systemic Risk in Indonesia. Jakarta (ID): BNPB Disaster Data, Information and Communication Centre.

¹⁵ Smits, J., & Permanyer, I. (2019). The Subnational Human Development Database. Scientific Data, 6(1), 190038. <https://doi.org/10.1038/sdata.2019.38>

¹⁶ Fedele, G., Donatti, C. I., Bornacelly, I., & Hole, D. G. (2021). Nature-dependent people: Mapping human direct use of nature for basic needs across the tropics. Global Environmental Change, 71, 102368. <https://doi.org/10.1016/j.gloenvcha.2021.102368>

intensifies this erosion. This phenomenon poses threats to approximately 529 thousand individuals and causes environmental damage across 3941 hectares.¹⁷ Although tropical cyclones are less frequent and impactful compared to other natural disasters in this area, they still pose significant threats. Notably, the western regions of Bengkulu and Lampung (Indian Ocean) witnessed cyclones such as Anggrek, Bakung, and Durga between 2008 and 2014. These cyclones brought severe winds (60-110 km/h) and towering waves (over 6 m), disrupting fishing activities due to the suspension of maritime operations.

Despite Indonesia's considerable blue carbon potential, WPP 572 faces formidable climate-driven challenges that hinder the development of blue economic sectors, including sustainable fisheries and tourism. Coastal communities, heavily reliant on fisheries and coastal ecosystems, struggle to adapt to climate change, exacerbating poverty rates and food insecurity. Ecosystem degradation, influenced by both climate and anthropogenic pressures, underscores the urgent need for intervention to protect and restore mangroves, seagrass beds, and coral reefs.

WPP 572, a government priority area for marine protection, stands out as one of Indonesia's most important fishing zones. It hosts rich, biodiverse marine ecosystems and accounts for the largest concentrations of high-volume catch areas in the country¹⁸. However, the overexploitation of key fishing species, particularly in the tuna export market, poses a significant threat to the fisheries sector¹⁹. Mangrove ecosystems in Mentawai and Nias islands act as a crucial defense against storm surges and tsunamis, making their destruction in WPP 572 a direct threat to coastal communities.

Seagrass beds, comprising 4.7% of Indonesia's total, play a key role in fisheries and storm surge mitigation. WPP 572 also boasts one of Indonesia's largest coral reef ecosystems, contributing to climate adaptation and fisheries replenishment. The emissions profile of WPP 572 is closely tied to climate-driven pressures, natural disasters, and anthropogenic activities, emphasizing the need for ecosystem restoration and sustainable marine resource management²⁰.

For more detailed information regarding the socio-economic conditions in WPP 572, please refer to Table 4. The table presents key socio-economic indicators for six Indonesian provinces, highlighting population trends, gender distribution, age demographics, literacy rates, household sizes, average incomes, poverty rates, GRDP, and employment statistics. This data reflects the diverse and dynamic nature of these regions, with significant implications for their economic and social development.

¹⁷ ibid

¹⁸ Wibowo, A., V Limmon, G., Nikijuluw, V. And Wibisono, E. (2023). Konektivitas Ekologis antara Kawasan Konservasi Perairan dengan Sumber Daya Perikanan di WPP 714 dan 715: Hasil Survei Perintisan. <https://static1.squarespace.com/static/6228f4a8d856144b5d0852b8/t/>

¹⁹ WRI Indonesia (2022) Trends in Marine Resources and Fisheries Management In Indonesia. https://wri-indonesia.org/sites/default/files/2022-12/Marine%20Trends%20Report_WRI%20format_v14.pdf

²⁰ Hot Water Rising the Impact of Climate Change on Indonesia's Fisheries and Coastal Communities, Ministry of Marine Affairs and Fisheries, World Bank (2023)

Table 4 Socio-Economic Indicators in WPP 572

Province	Population (2022; Trend)	Male Population	Female Population	Age Distribution (%; 15-64 years)	Literacy Rate (%)	Household Size	Avg. Household Income/month (2022; Trend; Rp)	Poverty Rate (2022; Trend)	GRDP (million Rp; 2022; Trend)	Formal Employment (%; Trend)
Aceh	5.4 million; Increasing	2.71 million	2.69 million	64%	99.62%	4.20	6.68 million; Increasing	14.75%; N/A	211,750,000; N/A	38.55%; Increasing
North Sumatra	14.19 million; Increasing	7.49 million	7.44 million	68.15%	99.57%	4.20	6.32 million; Increasing	8.42%; N/A	573,528,770; Increasing	40.93%; N/A
West Sumatra	5.64 million; N/A	2.84 million	2.80 million	68.15%	99.86%	4.20	8.43 million; Increasing	6.04%; N/A	285,380,000; Increasing	34.74%; N/A
Bengkulu	2.05 million; Increasing	1.05 million	1.00 million	69.14%	99.49%	4	7.29 million; Increasing	14.34%; N/A	49,916,061; Increasing	32.46%; Increasing
Lampung	9.17 million; Increasing	4.69 million	4.47 million	69%	99.62%	4.10	4.67 million; N/A	14.34%; N/A	257,534,190; N/A	28.49%; Increasing
Banten	12.2 million; Increasing	6.24 million	6.01 million	68.15%	99.62%	4.10	10.16 million; Increasing	6.16%; Decreasing	747,250,000; Increasing	52.04%; Increasing

In the intersecting coastal provinces of Aceh, North Sumatra, West Sumatra, Bengkulu, Lampung, and Banten, which lie along the WPP 572 trajectory, there exists a rich tapestry of social contexts that profoundly influence the lives of the inhabitants. This region is distinguished by its diverse socioeconomic and cultural landscapes, contributing significantly to the overall dynamics of the local communities.

Central to the economy and daily life in these provinces is the fishing industry, engaging approximately 406,684 fishers. Fishing, thus, stands as a pivotal economic activity, with the regional catches predominantly comprising both small and large pelagic species, such as neritic tuna, skipjack tuna, yellowfin tuna, and Spanish mackerel. This dependence on marine resources highlights the crucial role of the coastal ecosystem in supporting the livelihoods of these communities.

Demographically, a substantial portion of the population in these provinces falls within the 15-64 age bracket, accounting for 64% to 69.14% of the populace. This suggests a robust workforce, poised to drive economic growth. Gender distribution across these regions is relatively balanced, with minor regional disparities. Average household size, typically around 4.203 individuals, indicates a prevalent family structure in these coastal areas. Historically, local economies have been anchored in subsistence fishing and agriculture. However, recent years have seen a pivotal shift towards increased revenue from fish exports, presenting both opportunities and challenges. The fishery sector, in particular, faces adversities such as declining catches, often attributed to climatic changes. This situation underscores the necessity for sustainable practices and enhanced climate resilience in regional economic activities.

Educational attainment is relatively uniform across the region, but a concerning trend is the high dropout rate of girls from secondary education, often due to familial responsibilities or early pregnancies. Gender roles are distinctly demarcated, with men primarily engaged in offshore fishing and women in childcare, near-shore fishing, or gleaning. Both genders participate in subsistence agriculture, and women frequently manage micro-businesses and kiosks to support their families. These gender dynamics highlight the critical need for gender equality initiatives and the empowerment of women in these communities. Technological access, particularly to the internet, is limited, although cellular phone usage with adequate reception is common. This digital divide presents both challenges and opportunities for enhancing access to information, education, and market opportunities. Electricity provision is primarily managed by PLN (Perusahaan Listrik Milik Negara), ensuring basic infrastructure support. Linguistically, the local dialects and Bahasa Indonesia are widely spoken, with English proficiency observed among the more educated. COVID-19 pandemic prompted significant vaccination efforts, demonstrating the resilience and adaptability of the local health systems.

4.2. Indigenous People Framework

In Indonesia's legal framework, Indigenous Peoples, known as Masyarakat Adat are officially recognized as Masyarakat Hukum Adat, highlighting their distinct system of customary laws. This recognition affirms the vital role these customary laws play in Indonesia's legal landscape, protected within the country's regulatory framework, including the Constitution. According to the Indonesian Ocean Law No. 32 of 2014, Masyarakat Hukum Adat is defined as a community with a collective attachment to a specific territory grounded in ancestral ties; a deep, enduring relationship with the environment; a customary normative system and governance structure that regulates economic, political, social, and legal institutions. This emphasizes the importance of these communities' ancestral connection to land and resources, aligning with broader protections for Indonesia's cultural and ecological heritage.

According to the Indigenous Peoples Alliance of the Archipelago (Aliansi Masyarakat Adat Nusantara or AMAN), there is currently no established database of indigenous peoples within WPP 572. However, the Indigenous Territory Registration Agency (Badan Registrasi Wilayah Adat or BRWA) provided information around registered, verified and certified data of indigenous territories.

Based on BRWA's verified and certified data of indigenous territories, there are four indigenous territories in coastal, marine, and aquatic regions in Aceh province. These communities are Mukim Blang Mee, Mukim Glee Bruek, and Mukim Pulau Nasi in Aceh, as well as Enggano in Bengkulu.

Moreover, BRWA's registered data of indigenous territories in coastal areas shows in three provinces of WPP 572, including:

1. Aceh: Gampong Arongan, Gampong Lhok Buya, Gampong Panga Pucok, Gampong Panggong, Gampong Pasie Geulima, Gampong Pasie Timon, Gampong Ranto Sabon, Gampong Lambaro Neujib, Gampong Lambadeuk, and Gampong Lamageu.
2. West Sumatra: Tiop, Salappak, Tolou Laggo, Puro, Parak Batu, Matobe, Gotap, Saureinu, Goiso'oinan, and Rokot.
3. Bengkulu: Marga Sambat Sumber Harapan, Marga Sambat Muara Jaya, Marga Sambat Linau, Marga Sambat Air Long, Marga Sambat Benteng Harapan, and Serawi Pasar Selum.

On the BRWA's verified and certified data of indigenous territories; the Masyarakat Adat of Mukim Blang Mee, located along the west coast of Aceh, inhabit the villages of Lakuta Blangme, Teungoh Blangme, and Baroh Blangme. The Masyarakat Adat of Mukim Glee Bruek is also coastal area, located in the villages of Menasah Lhok, Pasi, and Cundien. Meanwhile, the Masyarakat Adat of Mukim Pulau Nasi resides on Pulau Nasi, an island situated to the northwest of Banda Aceh.

The Pawang Laot community is identified along the coastal regions of western and southern Aceh. This community practices unique cultural and customary marine traditions that are distinct to the region, reflecting a deep connection to marine resources and sustainable fishing practices. Their customs emphasize the importance of local wisdom in managing and preserving marine ecosystems, highlighting the cultural significance of marine life in Acehnese society (Tunnur, 2024).

Furthermore, the indigenous community in Nias is known as the Nias people (Suku Nias), who have a rich culture that encompasses traditions, language, and arts, along with a customary governance system that regulates social life and legal matters within their community. This governance reflects their unique cultural identity and plays a significant role in maintaining social order (Dachi, 2006).

Such an approach aligns with global best practices for safeguarding indigenous rights in development initiatives. Where Indigenous Peoples are identified within project areas, the project will take measures to promote their equitable access to and benefit from the BEAM Grant Facility. Such measures may include culturally appropriate outreach and information disclosure, targeted technical assistance, facilitation support during proposal development and application processes, and engagement approaches adapted to local languages, literacy levels, and customary decision-making systems. The project will also encourage the meaningful participation of Indigenous Peoples' representatives and customary institutions in consultation, planning, implementation, and monitoring processes. Any specific measures to address barriers to participation, enhance access to project benefits, and strengthen Indigenous Peoples' involvement in project governance arrangements will be further assessed and defined through site-specific Indigenous Peoples Plans (IPPs), once the relevant communities and project locations have been identified.

Identification criteria

In this project, people or communities are recognized as indigenous based on government endorsement, their self-identification as members of a distinct social and cultural group, and acknowledgment of this identity by others. These groups display a collective attachment to specific geographic habitats, ancestral territories, or areas used seasonally or traditionally, along with a connection to the natural resources within these areas. They uphold customary cultural, economic, social, or political systems that are distinct from those of the dominant society or culture. This includes

unique languages or dialects, often different from the country's or region's official language(s). Some of these languages or dialects may no longer be in active use due to challenges that have made their preservation difficult.

Free Prior Informed Consent (FPIC)

The Project will apply the Indigenous Peoples Framework in Annex 06(e) to identify Indigenous Peoples, assess impacts, support meaningful participation, prepare site-specific Indigenous Peoples Plans, and conduct FPIC where required.

The BEAM Project's use of FPIC aims to secure the informed and voluntary consent of indigenous communities in WPP 572, ensuring that their rights, cultural values, and interests are safeguarded throughout the BEAM Project's lifecycle. The FPIC process includes the following steps:

1. Preparation and stakeholder identification: Conduct mapping and validation to identify indigenous communities in the project area. Confirm indigenous status with local institutions like AMAN and ensure engagement with groups such as Mukim Blang Mee, Mukim Glee Bruek, Mukim Pulau Nasi, Pawang Laot in Aceh, Suku Nias, and Enggano in Bengkulu. This includes involving local facilitators and Information, Communication, and Education (IEC) translated into the local language.
2. Initial engagement and information disclosure through community meetings and information sharing by conducting preliminary meetings in each indigenous community to introduce the project and outline FPIC principles. Meetings will be accessible and gender-inclusive, encouraging participation from women, elders, and youth, and information sharing to provide clear details on project components, potential impacts, anticipated benefits, and Indigenous rights, including grievance mechanisms that use local dialects and trusted community members to convey information effectively.
3. Community reflection and internal deliberation: Allow sufficient time for indigenous communities to conduct internal discussions free from external pressure, honoring and respecting traditional decision-making processes. When relevant, facilitate intercommunity meetings to encourage the sharing of insights and collective concerns, fostering transparency and collaboration among Indigenous groups in adjacent project areas.
4. Consent documentation should involve formal records when consent is granted, using written agreements or recorded declarations that align with the community's preferences. If consent is withheld, reasons must be documented, and the decision respected. Recognizing FPIC as a dynamic process, establish clear intervals to revisit and reaffirm consent, especially if project conditions change or new impacts emerge.
5. Grievance mechanism: Konservasi Indonesia has established a Grievance Mechanism, providing a clear channel for stakeholders to raise concerns regarding the project. This mechanism ensures that all grievances are acknowledged, addressed promptly, and resolved transparently, reflecting Konservasi Indonesia's commitment to stakeholder engagement and accountability. Through this channel, stakeholders can openly communicate any issues or feedback, supporting ongoing dialogue and continuous improvement throughout the project lifecycle.
6. Documentation and reporting: Maintain comprehensive records of all FPIC engagement steps, including materials shared, attendance lists, meeting notes, and any formal consent documentation. Regularly include updates on FPIC progress and any challenges encountered in project monitoring reports to ensure transparency and accountability to stakeholders, supporting an open and responsible engagement process throughout the project lifecycle.
7. Compliance with FPIC standards: Ensure the FPIC process fully aligns with Conservation International Safeguard Standards (CISS) and global best practices, demonstrating a commitment to ethical engagement, transparency, and fair treatment of Indigenous Peoples.

This FPIC process will be applied across all project stages, from planning to implementation and monitoring.

4.3. Operational Capacity and Resources

The Project Management Unit (PMU), supported by Konservasi Indonesia's Environmental and Social Safeguards team, will be responsible for overseeing the implementation of the Indigenous Peoples Framework, including screening, stakeholder engagement, FPIC processes, preparation of site-specific Indigenous Peoples Plans (IPPs), grievance management, and monitoring of commitments related to Indigenous Peoples. Where Indigenous Peoples are present, the project may engage qualified social specialists, local facilitators, Indigenous Peoples representatives, and other technical experts as needed to support culturally appropriate consultations and implementation.

KI may engage qualified Indigenous Peoples organizations or specialists, local facilitators, technical expertise, indigenous representative including AMAN where appropriate, in accordance with Project needs and applicable procurement or partnership procedures.

Adequate resources for Indigenous Peoples engagement, FPIC implementation, preparation and implementation of IPPs, translation and disclosure of information, capacity building, grievance management, and participatory monitoring will be incorporated into subproject budgets and annual work plans, commensurate with the scale, complexity, and geographic scope of the activities. Consistent with ESS 4 and the Indigenous Peoples Framework, project proponents will be required to allocate sufficient financial and human resources to ensure meaningful participation of Indigenous Peoples throughout the project cycle. Participatory monitoring mechanisms involving Indigenous Peoples representatives will be established, where relevant, to support implementation oversight and adaptive management

4.4. Environmental and Social Risks, Impacts and Mitigation Plans

This section discusses the overall environmental and social risk assessment, mitigation measures, and specific references to appropriate environmental and social management instruments. Risk identification is prepared based on the potential location of activities ('inside' or 'outside' of the protected area), showing the associated potential environmental and social risks and impacts. These risks have been grouped thematically and categorized based on the type of support required, such as capacity building, technical assistance, and other forms of intervention. Adequate mitigation measures have been identified for all applicable Environmental and Social Standards (ESS), with particular attention to ESS9, under this ESS.9, the project will screen sub-projects to identify potential environmental and social risks and ensure appropriate mitigation measures are in place. More specifically, an environmental and social safeguards analysis, along with a sustainability, and impacts report must demonstrate that project does not violate the "do-no-harm" (DNH) principle from an environmental or social perspective. Project proposals shall also include a monitoring and evaluation plan with clearly define performance indicators to measure the extent to which the project, if approved, achieves its intended objectives.

Table 5. Typology of Environmental and social risks and impacts

Risks	Mitigation Measures	Related Parties	Reference Systems
Restrictions access to marine` resources on the conservation Zone (<i>Zona Inti</i>), which are more regulated due to conservation activities. As a note, Marine Protected Areas (MPAs) in Indonesian context with a multi-zoning approach, there is still the Utilization Zone, where small scale fishers are allowed to fish, this will affect access to marine resources.	• Implement the project design in developing a participatory decision-making process in MPA management plan and zoning plan such as consultative and participatory process, collaborative management, increased representation of vulnerable groups, stakeholder forums. This includes involvement of multi- stakeholders, including local communities and its vulnerable groups, in the review processes of zoning plan and management plan. • Implement the determination of Conservation areas • Areas that carry out the steps outlined in the ESMF, including conducting meaningful consultations, and must obtain local community consensus before conservation activities are carried out in the field. • Provision of Grievance Redress Mechanism that is accessible, inclusive and reliable for communities and interested parties.	• Local communities/ affected communities, including vulnerable groups (small scale fishers in coastal areas and small islands and sea nomads, and women engaged in informal blue economy sector). • Local government • Relevant ministries • Project management unit • Indigenous Peoples (where present)	• Integration the determination of Conservation Areas • Link to project design, through reviewing of Zoning plan and Management plan documents • Stakeholder Engagement Plan
Poor working conditions, especially for workers placed on the project site	• Requirements for adequate and safe working conditions, including the application of Infection Prevention and Control (IPC) measures in the context of infectious diseases or viruses such as COVID-19 or any other pandemic or epidemics Environmental, Social, Health and Safety (ESHS) Requirements. • Preparation of stand-alone or integrated OHS Management Plan(s) • Compliance with good practice on Workers Accommodation in case of setting up temporary labor camps • Monitoring and implementation of sanctions and/or corrective actions in the context of poor performance.	• Contractor/ third party • Field supervisor • Local Manpower • Project management unit	• Environmental and Social Code of Practice (ESCAP) • EE Worker Accommodation: Processes and Standards • Inclusion of ESHS requirements in project work plans and bid documents for third party providers (procurement documents).
Occupational Health and Safety (OHS) accidents, including exposure to natural disasters and infectious diseases or viruses such as COVID-19 or other pandemic or epidemic.	• Integrate OHS management into the project work plan, including provisions on capacity building, PPE, and related equipment for project workers, or prepare stand-alone OHS plan(s) for more complex works, commensurate with risks and impacts. • Develop requirement on monitoring, including supervisory consultant works for field activities.	• Contractor/ third party • Field supervisor • Local Manpower • Project management unit	• Infectious diseases or viruses such as COVID-19 Health Protocol on project site • Environmental and Social Incident Reporting Protocol • Regular OHS monitoring

	• Implement an Environmental and Social Incident Reporting protocol describing reporting, investigation mechanisms, and corrective actions. • Provide capacity building support, including expert mobilization, training, and supervision. • Implement COVID-19 or relevant pandemic or epidemic Infection Prevention and Control (IPC) measures. • Implement an emergency response plan (ERP) including awareness raising, public notification and evacuation procedures.		• Planned capacity building activities in OHS • Relevant ESHS requirements to be included in the project work plan and bid documents if the related work will be done by contractors/third parties • Integration of E&S aspects into the study and assessment development process, as well as technical design
Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) in the Workplace	• Adopt a Code of Conduct for the prevention of sexual harassment for all project workers, as well as related awareness and sensitivity training. KI as an EE already adheres to Conservation International's Code of Conduct, which covers SEAH. Additionally, it adheres to the Policy on the Prevention of SEAH and will follow the institutional "SEAH and Child Abuse Investigations Protocols". • All project staff will receive training on SEAH prevention, using the CI's SEAH online course when possible and tailored sessions to apply it to the Indonesian context. • Awareness raising among project staff around the possibility of reporting SEAH-related grievances through the AGM. • Flow-down of clauses associated with SEAH prevention and prohibitions in contracts and sub-grantee agreements.	• Contractor • Field supervisor • Project management unit • Sub-grantees • The staff leading Safeguards and GEDSI for this project will be responsible for implementing and monitoring these measures.	• SEA/SH prevention protocols, including raising awareness of sexual harassment issues; and all workers (whether directly hired by the EE or contractors) are required to sign • Code of Conduct inclusive of prevention of E.
SEAH associated to project activities (Sexual extortion during the open call for proposals for the grant-making mechanism, SEAH risks associated to supporting eco-tourism initiatives, contractors external to the communities installing clean energy technologies)	• Adopt a Code of Conduct for the prevention of sexual harassment for all project workers, as well as related awareness and sensitivity training. KI as an EE already adheres to Conservation International's Code of Conduct, which covers SEAH. Additionally, it adheres to the Policy on the Prevention of SEAH and will follow the institutional "SEAH and Child Abuse Investigations Protocols". All project staff will be provided with capacity-building on SEAH prevention, using the CI's SEAH online course when possible and tailored sessions for applying it to the Indonesian context. The content will also cover sexual extortion. In the case of the initiatives that will be funded through the granting mechanism, especially for the window on ecotourism, SEAH and GBV awareness raising will be provided to the local communities that will be engaged in such initiatives, together with	• All project staff • Contractors • Sub-grantees (especially those in sectors with higher risks associated with SEAH) • Local communities, particularly women from low-income HHs and children, and men occupying leadership positions. • The staff leading Safeguards and GEDSI for this project will be responsible for implementing and monitoring these measures.	• SEAH protocols and policies. • Contractual/grants flow-down requirements on the prevention of SEAH. • AGM Annex 06c for this project, which includes references to channels available to report SEAH cases: CI Ethics Hotline and GCF Independent Redress Mechanism. At: https://irm.greenclimate.fund/

	active dissemination and awareness of the AGM. The project's AGM and alternative channels, such as the GCF's Independent Redress Mechanism, will be disseminated throughout the call for proposals process in ways that are accessible to potential grantees. This includes clarification that SEAH-related grievances can be reported to the mechanism, and confidentiality will be guaranteed. The AGM will also be disseminated to end-beneficiary communities, and accessible channels for reporting grievances will be available. The staff in charge of managing the AGM will be trained in handling SEAH-related grievances following survivor-centered principles. The Safeguards Manager and GEDSI staff will ensure that the reference list to public services for SEAH and GBV survivors is up-to-date for all provinces prioritized. Flow-down of clauses associated with SEAH prevention and prohibitions in contracts and sub-grantee agreements. Promote the hiring of workers from local communities for the granting mechanism window, which is focused on making clean energy sources available to communities. A small emergency budget to respond to SEAH cases will be included in the project budget to guarantee a timely response to survivors, including, as appropriate, medical care, psychosocial support, legal support, community-driven protection measures, and reintegration, in case the available institutional services are insufficient. The response will follow survivor-centered institutional protocols.	Indigenous women, youth, and vulnerable members of Indigenous Peoples' communities (where present)	
Risk on child labor	Implement the Labor Management Procedure regarding the minimum age and employment terms, implement SEA/SH code of conduct included prohibiting to hiring children as construction workers.	- Local communities particularly women from low-income HH and children - Contractor - Field supervisor - Project management unit - Indigenous children and indigenous households (where present)	LMP
Environmental degradation risks to water and soil quality due to the field work, including restoration activities	- Implement the ESMP and ensure that water and soil quality management mitigation provisions are implemented throughout the various stages of the project and are monitored. - Integrate environmental management aspects into technical design and work plan. - Provide capacity building support, including consultant mobilization,	- Contractor - Field supervisor (Supervising Consultant) - Project management unit	- ESMP - ESCOPs - Environmental management plans integrated with the project work plans.

	training, and supervision. • Ensure that the project selects species that are in accordance with the initial biophysical/ecosystem (native sps) conditions so as not to disturb the habitat of animals in the ecosystem.		
Disturbance to biodiversity, introduction of invasive species	• Ensure that the project selects species that are in accordance with the initial biophysical/ecosystem (native sps) conditions so as not to disturb the habitat of animals in the ecosystem. • Conduct preconstruction surveys to inform the mitigation/management approach • Involve local experts and use local wisdom. • Identify and monitor invasive species throughout the project life cycle • Provide capacity building supports, including mobilization of experts, training, and supervision. • Integrate the overview of post construction reinstatement requirements to the project workplan.	• Project management unit • Contractor • Field supervisor • Local Health Service Office	• Biodiversity management, risk, impact assessment
Social exclusion and lack of a meaningful participation, especially among vulnerable groups	• Implement the project design that ensures to get inclusive village level process such as involving village facilitators, ensuring vulnerable communities as project beneficiaries, having an inclusive village meetings, conducting an inclusive economic assessment activity • Identify vulnerable groups once the location (village/sub-district) and sub-project activities have been confirmed. • Implement strategy for engagement activities for vulnerable groups outlined in Stakeholder Engagement plan (SEP). • The project includes provisions for outreach and facilitation to vulnerable groups, including provisions for safe spaces for women, small-scale fishers or traditional fisher, communities who depend on marine resources for their livelihoods fishers and women engaged in informal sector of the blue economy.	• Vulnerable people/ groups, such as small scale fishers/ traditional fishers in coastal and small islands (and sea nomads), and women engaged in informal sector of blue economy. • Community leaders or traditional leaders (elders/kings). and respected local leaders • Subnational government; local academicians • Specialist / consultant within the Project management unit • Indigenous peoples including indigenous women, youth and traditional leaders (where present)	• The Stakeholder Engagement Plan (SEP) Link to project design • FGRM • Inclusive channels to disclose project information
Lack of implementation capacity to comply with	• Conduct consultation and dissemination of information with the local communities, including vulnerable groups (small-scale fishers, women	• Local governments • Project management unit	• Environmental and social training plans included in the project work plan

good environmental and social practices	engaged in informal sector in blue economy) • Provide institutional capacity strengthening, including mobility of resources (e.g., technical experts), trainings and other capacity building activities.	• Indigenous Peoples' organizations and customary institutions (where present)	
Less inclusive capacity building	• Integrate gender sensitive and inclusive institutional and technical capacity building modules	• Project management unit • Contractor (if capacity building activities are outsourced to a third party) • Indigenous peoples (where presents)	• Capacity building activity plan

In the preceding analysis, we have delineated the typologies of risks associated with the Two-Component Project and Activity. The ensuing chapter will elucidate the methodologies employed for risk mitigation, delineate the management procedures, and address the implications of the identified risks. The project is strategically focused on the advancement of a sustainable production-protection model for the blue economy and designed to bolster local enterprises and community initiatives by fostering a transition towards sustainable activities while protecting the natural capital. In order to achieve this balance, the project provides exhaustive training, capacity building, and enabling support across sub-industries related to the Blue Economy and compliments these initiatives through the provision of essential equipment through grants.

One of lines of thematic focus is the transition and advancement of Ecotourism Development. It is designed to bolster local enterprises and community initiatives by fostering a transition towards sustainable eco-tourism activities. To this end, the project provides exhaustive training programs in various aspects of eco-tourism, including coral-reef diving and tour operations, and supports these initiatives through the provision of essential equipment, livelihood transition, training and up-front support.

Progressing to the Collaborative Management of Marine Protected Areas (MPAs), the project's objective is to fortify the efforts of both national and sub-national governance structures. It aims to facilitate the enlargement and efficient stewardship of MPAs. This facet is underscored by the allocation and distribution of requisite equipment to fortify the enforcement of regulatory measures on-site.

Transitioning to the next pillar, Sustainable and Diversified Fishing Livelihoods, the project endeavors to inaugurate community-centric economic activities. These initiatives are designed to circumvent the issue of fish spoilage, a prevalent challenge for fisher compelled to venture further offshore. The establishment of infrastructural solutions such as solar-powered cooling facilities and ice production units is central to this strategy. Moreover, it involves capacitating local communities with the knowledge and skills required to maintain these installations.

Furthermore, the Sustainable Waste Management Practices initiative is a collaborative enterprise with the private sector aimed at augmenting waste management protocols and monitoring mechanisms. This encompasses the development of waste management frameworks, education on sustainable practices, and the aggregation of data pertaining to marine pollution resulting from coastal waste discharge. The projects collectively strive to actualize a substantial enhancement in the management efficacy of Marine Protected Areas (MPAs). This is facilitated through the provision of funding for vital equipment, small-scale infrastructure, and the formulation of village waste collection and processing schemes. These initiatives are broad in scope, supporting various functions of MPA governance including oversight, education, public cognizance, and furthering overall economic advancement in facets such as electricity, sanitation, and local infrastructure. The stewardship and operation of these projects will be the responsibility of either the Village Government or BumDes, in line with the extent and continuous obligations related to service delivery and upkeep.

In the context of capital items and equipment, the project's endeavors will be restricted to infrastructure of a modest scale that remain beneath the threshold necessitating an AMDAL assessment. This includes the establishment and outfitting of data command centers on governmental terrain within fishing harbors, as detailed in the Project Operation Manual (POM). All equipment and small scale and individual infrastructure projects are predicated upon the formulation of a strategy for long-term operations and maintenance, which encompasses the necessary human resources. For activities anticipated to occur outside protected zones, the project will adhere to universal guidelines to mitigate environmental and social risks (as referenced in Table 6 of this chapter). In instances where

actions are executed within protected domains, there is an imperative for the implementation of intensified environmental and social scrutiny at the subproject echelon.

Table 6 - Environmental and Social Requirements for the Activities in the Protection Area

Subproject Activities Examples	Requirements
Procurement of relevant equipment (small patrol boats, survey equipment, surveillance equipment, safety-at-sea kits)	• Utilize local resources where possible • Prioritize the use of reused and recycled materials • Avoid activities that may cause damage to sensitive ecosystems, such as coral reefs • Prohibit the use of hazardous and toxic substances, including but not limited to asbestos • Ensure the sustainable use of timber, water, and energy; activities that entail excessive use of natural resources are not permitted • If activity finance through financing mechanism, it must pass environmental and social screening and comply with the applicable ESMF requirements.
Educational and awareness-raising initiatives (e.g., community workshops, training programs)	• Incorporate traditional knowledge and practices where relevant • Engage local communities in the planning and implementation phases • Ensure inclusivity and accessibility for all stakeholders, particularly marginalized and vulnerable groups • If activities supported through intermediate financing, stakeholder engagement and reporting requirement under ESMF must be followed.
Research and monitoring activities (e.g., biodiversity surveys, water quality testing)	• Adhere to best practice standards for environmental research • Ensure the protection of data and personal information of individuals involved in research activities • Conduct activities with minimal disturbance to the natural environment and local communities • Result should be documented and shared in line with the project ESMF and ESS requirements.
Capacity building for local management (e.g., training for effective area management, enforcement of regulations)	• Design training programs to enhance local capacities without imposing excessive burdens on resources • Promote gender equality and empower all community members, including women and youth. • Foster sustainable practices that contribute to the long-term management and conservation goals • The activities linked to SPV-support pipelines ensure alignment with ESMF and long-term sustainability objectives.
Subprojects implemented in protection areas through grants, blended finance	• Undergo environmental and social screening and must not fall under exclusion list • Comply to ESMF and financing mechanism • Environmental and Social Performance must be monitored throughout the lifecycle • Communities have access to Grievance Redress Mechanism (GRM)

5. Environmental and social impacts/risks of the proposed project

5.1. Scope of Work

For this project, a limited environmental and social impact assessment (ESIA) of activities related to the direct and indirect areas of influence of the project is required. This entails clearly identifying and addressing direct, indirect, cumulative, and potential residual impacts, ensuring adequate consultation and disclosure. In particular, the ESIA must ensure the following safeguards are in place to avoid adverse environmental and social risks and/or negative impacts from project activities (from ESIA/ESMP Terms of Reference):

- **Grievance Redress Mechanisms**
 - Assess the specific needs of project stakeholders and affected communities to provide and report on a culturally appropriate and accessible project-level grievance mechanism.
- **Protection of Natural Habitats**
 - Assess direct and indirect project-related impacts on biodiversity and ecosystems services.
 - Identify any significant cumulative and/or residual impacts.
 - Consider relevant threats to biodiversity and ecosystem services, focusing on habitat loss, degradation, fragmentation, alien invasive species, overexploitation, hydrological changes, nutrient loading, and pollution.
 - Evaluate the impact of proposed activities in the Marine Protected Area.
- **Involuntary Resettlement**
 - Analyse any proposed restrictions to the access, use, and control of natural resources on which people depend for their livelihoods.
 - Include documentation of the consultation process with affected communities.
 - Obtain documented consent as needed through an appropriate process framework to voluntarily restrict access to and use of natural resources from the affected communities.
- **Indigenous People and Coastal Communities**
 - Confirm the inclusion of Indigenous Peoples and coastal communities within the proposed project areas.
 - Consult on their effective participation in the project through environmental and social impact assessments.
 - Improve understanding of the local context and affected communities.
 - Provide capacity building to Indigenous groups and coastal communities as needed to ensure their effective participation.
 - Implement effective consultation processes with the affected Indigenous Peoples and communities to identify their views and obtain their free, prior, and informed consent (FPIC) for project activities affecting them.
- Ensure that decisions at the community level are representative of all community members, especially those historically left out of decision-making, such as indigenous women.
- **Pest Management**
 - Evaluate if the project requires the procurement of eligible pesticides and assess the nature and degree of associated risks, considering the proposed use and intended users.
- **Physical Cultural Resources**
 - Identify if any cultural resources are present in project areas.
 - Analyze feasible project alternatives including site selection and project design.
 - Recommend measures to ensure cultural resources are identified and that adverse effects on them are avoided.
- **Labour and Working Conditions**
 - Analyze the potential impacts of employing community members by the project.

- Include information on the standards for employment in Indonesia and any risks of safety issues.
- **Community Health, Safety, and Security**
 - Analyze potential risks of exposure of the community to health and safety risks and impacts as a result of proposed project activities.
 - The nature of the project is such that involuntary resettlement, pest management, physical cultural resources, and community health, safety, and security are unlikely to be directly affected. However, they might be indirectly affected through value chain linkages and interactions with cooperating government departments and their activities.

5.2. Assessment Criteria and Methods Used

The identification of potential impacts of the project was informed by issues and data gathered through stakeholder consultations and the evaluation of the natural environment within the proposed project's vicinity. This process adheres to Indonesian regulations, specifically the Regulation of the Minister of Environment and Forestry No. 17 of 2012, which outlines the Guidelines for Community Involvement in the Environmental Impact Analysis (AMDAL) and Environmental Permits process. The methods used for impact assessment align with these guidelines and emphasize the inclusion of community insights and traditional knowledge in the decision-making process. The assessment thoroughly investigates the potential positive and negative impacts, striving to prevent any harm to the ecosystem's health and the well-being of local populations.

In line with the national framework, the study employed internationally recognized standards, such as those from the International Organisation for Standardisation (ISO), to gauge the extent and significance of each potential impact. These standards help determine appropriate mitigation strategies for adverse effects and bolster beneficial outcomes, such as employment opportunities. The anticipated impacts of the project are systematically categorized as direct or indirect, and further classified by their duration (long-term or short-term) and frequency of occurrence, utilizing ISO ratings for a structured evaluation. The overarching aim is to balance developmental benefits against environmental and social costs, ensuring sustainable project outcomes that align with both local and international best practices.

6. Impacts and risks identified.

6.1. Predictive Assessment of Impacts

This section conducts a predictive assessment of the possible impacts of the individual and collective activities of the proposed project. It uses the project description, baseline environmental and social information and trends, and policy and experience from similar models to predict the likely outcomes of the proposed intervention measures. This assessment is structured around three key areas of intervention, namely:

- Improved enabling environment supports blue financing of blue economy protection and production
- Reduced loss in extent of blue carbon ecosystems in WPP 572
- Food security, livelihoods, and climate change resilience are improved for coastal communities in WPP 572

The impact assessment will be anchored on the activities proposed under each of these key areas of intervention, highlighting both possible positives and negatives.

Component 1: Strengthen Enabling Conditions				
Output 1.1: Development and deployment of evidence-based regulatory frameworks and knowledge products for ecosystem protection, fisheries sustainability, and innovative financing				
Activity	Sub-activities	Potential Positive Impact	Potential Negative Impact	Relevant Pathway and Impact (see section 8.2)
Activity 1.1.1 Enhance ecosystem protection and fisheries sustainability through policy reform and creation of innovative financing mechanisms. Activity 1.1.2. Improve the production and use of data on fisheries and ecosystems by governmental & non-governmental entities. Activity 1.1.3. Establish knowledge management and learning center for scaling and replication.	Sub-Activity 1.1.1.1 Provide technical assistance to provincial governments for effective implementation of national vision and policies Sub-activity 1.1.1.2 Support the development, gazettement, and management of new and existing MPAs and OECMs, including its alignment with the regional zoning plans (such as the Rencana Zonasi Kawasan Antar Wilayah (RZKAW) and Rencana Zonasi Wilayah Pesisir dan Pulau-Pulau Kecil (RZWP3K)) Sub-activity 1.1.1.3 Reinforce the current Fisheries Management Plan (Rencana Pengelolaan Perikanan – RPP), including its Fisheries Harvest Strategy at WPP 572 Sub-activity 1.1.1.4 Advance sustainable blue/green finance through the development of innovative financing mechanisms and the development of policies related to integrated protection–production and non-conventional funding resources Sub-activity 1.1.2.1 Support the Gol’s existing data collection initiatives to improve and utilize data on ecological and socioeconomics in MPAs and for areas for potential MPA expansion and OECMs Sub-activity 1.1.2.2 Gather data on the targeted fish commodities (biodiversity, volume, spatial distribution) to support sustainable fisheries management within WPP 572	• Increased biodiversity conservation, sustainable fisheries, and improved marine resource management. • Harmonization of national and local policies leading to more effective conservation efforts. • Increased funding for conservation efforts through innovative financing. • Strengthened legal framework supporting integrated protection and production. • Improved management of conservation grants leading to better resource allocation. • More sustainable fishery practices and stocks management. • Better managed zonation leading to protected biodiversity hotspots. • Building capacity and learning from grant implementation can lead to more effective future projects.	• Potential exclusion of local fisher from traditional fishing areas due to new MPA establishments. • Possible conflicts between stakeholders due to regulatory changes. • Dependence on external funding which may not be sustainable long-term. • Delays in implementation due to bureaucratic processes. • Potential mismanagement or corruption risks if oversight is inadequate. • Short-term reduction in catch for fisher due to new management practices. • Restrictions on land use for local communities leading to possible livelihood challenges.	• 1.1-1.5 • 3.1-.3.4

	Sub-activity 1.1.3.1 Design and develop a knowledge center to enhance project knowledge sharing, capacity building, and replication efforts Sub-activity 1.1.3.2 Collaborate with GoI (at the national, provincial, and local levels) and non-governmental agencies in amplifying, enhancing, and replicating lessons learned in other Fisheries Management Areas/WPPs through national and subnational awareness campaigns Sub-activity 1.1.3.3 Capture and disseminate learning reports from project implementation amongst project stakeholders and partners to inform refinement, replication and scaling up				
Component 2: Locally Led Climate Action + Investment Readiness					
Output 2.1: Locally-led climate adaptation projects are effectively implemented and monitored, resulting in enhanced climate resilience of vulnerable communities					
Output 2.2: Blue carbon and renewable energy projects are effectively implemented and monitored, resulting in reduced GHG emissions					
Output 2.3: Blue economy enterprises have improved access to finance and expand operations in WPP572					
Activity	Sub-activities	Potential Positive Impact	Potential Negative Impact	Relevant Pathway Impact	Impact and
Activity 2.1.1 Deploy grants for sustainable climate change adaptation in coastal communities	Sub-Activity 2.1.1.1 Manage grants for ecotourism enterprises for community development	• Selection of high-impact adaptation projects leading to increased climate resilience. • Direct financial support to adaptation initiatives. • Implementation of projects reducing carbon emissions and enhancing ecosystem services. • Financial support to mitigation projects leading to long-term environmental benefits. • Strengthening entities' ability to attract investment for	• Unintended exclusion of some vulnerable groups from benefiting from the grants. • Risk of funds not being used effectively if monitoring is insufficient. • Potential short-term economic burdens on local communities adapting to new practices. • Potential misalignment with local priorities and needs if community engagement is lacking.	• 2.1-2.4	
Activity 2.2.1 Deploy grants to improve ecosystems and achieve sustainable climate change mitigation impacts	Sub-Activity 2.1.1.2 Manage grants for collaborative MPA management				

Activity 2.3.1 Improve the Investment Readiness for the Blue Economy	Sub-Activity 2.1.1.3 Manage grants for sustainable and diversified fishing livelihoods (community-based economic activities). Sub-Activity 2.1.1.4 Manage grants for sustainable waste management. Sub-Activity 2.1.1.5 Establish and operate the adaptation and mitigation grant windows Sub-Activity 2.1.1.6 Provide technical assistance and support to adaptation grantees on cross-cutting subjects (including GEDSI and Safeguards) Sub-Activity 2.1.1.7 Monitor adaptation grant window performance Sub-Activity 2.2.1.1 Manage grants for high carbon ecosystem restoration Sub-Activity 2.2.1.2 Manage grants for small-scale renewable energy deployment/installation Sub-Activity 2.2.1.3 Provide technical assistance and support to mitigation grantees on cross-cutting subjects (including GEDSI and Safeguards) Sub-Activity 2.2.1.4 Monitor mitigation grant window performance	sustainable blue economy initiatives. • Increased financial flows into sustainable blue economy sectors. •	• Overemphasis on economic returns could lead to overlooking social or environmental considerations. • Risk of creating market dependencies or altering local economies in unsustainable ways. • Resource-intensive processes may detract from direct conservation activities. • Sexual extortion²¹ during the open call for proposals for the grant-making mechanism: Asking for unwanted sexual activity in exchange for a proposal of an MSME or organization to be considered or selected to be funded by the financial mechanisms put in place by the project. • SEAH risk increased by supporting MSMEs initiatives through the granting mechanism that increases eco-tourism in vulnerable coastal communities. This can be associated with the increase of national and international tourists arriving and staying at already vulnerable communities. • SEAH risk due to an increase in the influx of male workers and contractors who are external to the local communities.	
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²¹ Sexual extortion is understood in this context as “A form of sexual exploitation and extorted corruption where a person in a decision-making position or with authority abuses the position and power he/she has in order to extort an unwanted sexual activity from another person in exchange for the service, good, access to a resource which the former manages, leads, or makes decisions in relation thereto”. Definition as per the OSCE available at (see page 6): https://www.osce.org/files/f/documents/7/d/516081_0.pdf

	Sub-Activity 2.3.1.1 Provide technical assistance to BLU LPMUKP Sub-Activity 2.3.1.2. Develop action-oriented research papers on sustainable blue economy themes Sub-Activity 2.3.1.3. Monitor investment readiness intervention performance		• Risk of project staff experiencing sexual abuse or harassment by project staff from supervisors, colleagues, partners, contractors, or community members. • Risk misalignment with local needs if market narrative dominates community priorities. • Monitoring-intensive process may divert resources from direct conservation or community activities.	
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6.2. Impact Matrices

To appreciate the impact matrices, it is important to note the types of assessments done as well as the criteria and methods used in the assessment process. The impact matrices include assessments of status (i.e. is it positive or negative), significance of that impact, the consequence of the impact as well as its probability rate, and, finally, the overall significance. Table 6 lays out the system for considering impact status and confidence (in assessment) while Table 7 sets out the criteria used to determine impact consequence — where the significance of an impact is defined as a combination of the consequence of the impact occurring and the probability that the impact will occur. The combined score of these three criteria corresponds to a Consequence Rating as illustrated in Table 8. The overall significance is determined by considering consequence and probability using the rating system prescribed in Table 9.

Table 7 - Impact status and confidence classification.

Status of impact	
Indication whether the impact is adverse (negative) or beneficial(positive).	+ ve (positive – a ‘benefit’)
	– ve (negative – a ‘cost’)
Confidence of assessment	
The degree of confidence in predictions based on available information, consultant’s judgment and/or specialist knowledge.	Low
	Medium
	High

Table 8 - Criteria used to determine the consequence of the impact.

Rating	Definition of Rating	Score
A. Extent – the area over which the impact will be experienced		
None		0
Local	Confined to project or study area or part thereof (e.g. site)	1
Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic	2
Inter(national)	Nationally or beyond	3
B. Intensity – the magnitude of the impact in relation to the sensitivity of the receiving environment		
None		0
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered	1
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way	2
High	Site-specific and wider natural and/or social functions or processes are severely altered	3
C. Duration – the time frame for which the impact will be experienced		
None		0
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

Table 9 - Method used to determine the Consequence Score.

Combined Score (A+B+C)	0 – 2	3 – 4	5	6	7	8 – 9
Consequence Rating	Not significant	Very low	low	medium	High	Very high

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings ascribed below:

- **Insignificant:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity/development.

- **Very Low:** the potential impact is very small and should not have any meaningful influence on the decision regarding the proposed activity/development.
- **Low:** the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** the potential impact should influence the decision regarding the proposed activity/development.
- **High:** the potential impact will affect the decision regarding the proposed activity/development.
- **Very High:** The proposed activity should only be approved under special circumstances.
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Table 10 - Probability Classification.

Probability – the likelihood of the impact occurring	
Improbable	< 40% chance of occurring
Possible	40% - 70% chance of occurring
Probable	> 70% - 90% chance of occurring
Definite	> 90% chance of occurring

Impact Matrices

Pathway 1 Impact Matrix: *Improve management of marine protected areas and coastal ecosystems in Indonesia*

Identified impact	Direction		Consequence			Total consequence	Probability	Significance	
	+ve	-ve	Magnitude (severity)	Duration	Extent (spatial scale)			score	class
1.1 Enhanced biodiversity conservation	+ve		High	Long-term	Regional	8	Probable	7	High
1.2 Restricted access to marine resources for local fisher		-ve	Medium	Medium-term	Local	5	Possible	4	Medium
1.3 Improved water and soil quality from restoration activities	+ve		Medium	Long-term	Regional	7	Probable	6	Medium
1.4 Downstream impacts from technical assistance activities	+ve		Low	Short-term	Local	3	Possible	2	Low
1.5 Capacity building for environmental and social practices	+ve		High	Long-term	National	9	Probable	8	High

Pathway 2 Impact Matrix: *Increase investor confidence the blue economy, leading to more funding for businesses in WPP 572 and beyond.*

Identified impact	Direction		Consequence			Total consequence	Probability	Significance	
	+ve	-ve	Magnitude (severity)	Duration	Extent (spatial scale)			score	class
2.1 Increased funding for blue economy sectors	+ve		High	Long-term	National	9	Probable	8	High
2.2 Pressure on marine resources from increased economic activity		-ve	Medium	Medium-term	Regional	6	Possible	5	Medium
2.3 Improved livelihoods for coastal communities	+ve		High	Long-term	Local	8	Probable	7	High

2.4 Potential overfishing due to lack of regulation		-ve	Low	Short-term	National	5	Possible	3	Low
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Pathway 3 Impact Matrix: *Increase innovative financing instruments, such as blue bond and venture capital funds, for sustainable protection and production in Indonesia beyond the project period.*

Identified impact	Direction		Consequence			Total consequence	Probability	Significance	
	+ve	-ve	Magnitude (severity)	Duration	Extent (spatial scale)			score	class
3.1 Access to new forms of financing for sustainability projects	+ve		High	Long-term	National	9	Probable	8	High
3.2 Focus shift from traditional to innovative projects	+ve		Medium	Medium-term	National	6	Probable	5	Medium
3.3 Strengthening of financial resilience of conservation efforts	+ve		High	High	National	9	Probable	8	High
3.4 Risk of unsustainable investment practices		-ve	Low	Short-term	Regional	5	Improbable	1	Low

7. Environmental and Social Management Plan

The GCF Environment and Social Policy (2018) defines an Environmental and Social Management Plan (ESMP) as *“referring to a document that contains a list and description of measures that have been identified for avoiding adverse environmental and social impacts, including, where appropriate, transboundary risks and impacts, or minimising them to acceptable levels, or to mitigate and compensate them and usually the main output of the ESIA process”*. This management plan derives from the results of the Environmental and Social Impact assessments that predictively identified the positive and negative aspects of the proposed project:

The project has two components which are then divided into activities and sub-activities. A summary of the potential risks and mitigation measures is presented to provide an overview of the risks and how the core activities will inherently mitigate ~~some~~ of the risks. Other risks are reflected in a more detailed narrative in the respective management plans for the safeguards affected.

7.1. Environmental Management Plan

Environmental risks in the project's proposed activities arise mainly from the complex interplay between community practices, ecosystem health, and climate resilience. Recognizing Indonesia's rich biodiversity and the unique challenges faced by coastal and marine areas, the project prioritizes the strengthening of regulatory frameworks and the integration of innovative financial instruments to ensure sustainable management practices.

The EMP for this project will focus on enhancing policy and legal frameworks to support the harmonization of environmental management, stakeholder engagement, and data utilization for informed decision-making. Efforts will be made to align with Indonesia's national development goals and international environmental standards, reflecting a commitment to sustainable development and climate adaptation strategies.

The project acknowledges triggered ESS and the significance of the ESS9 (Private Sector Direct Investment and Financial Intermediaries). To address this, the EMP will incorporate a framework screening all subgrants under component 2 (Output 2.1 and Output 2.2). The framework will systematically assess ESS risks associated with each subgrant and outline clear response mechanisms for addressing any triggered ESS standards.

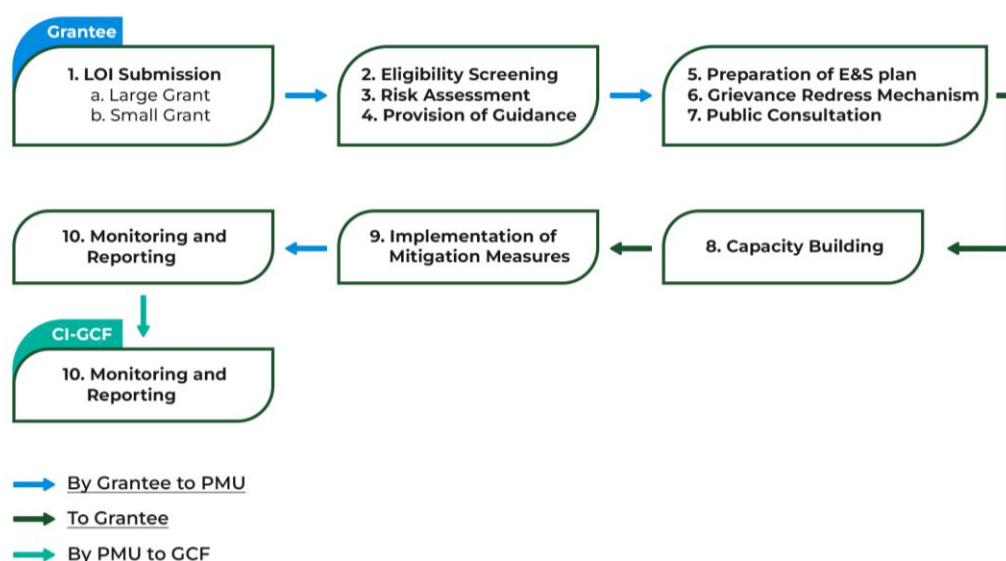


Figure 2 Environmental and social Process

Step 1: Through an open call for proposals, Grantees will be invited to apply for grants by submitting project concepts in the form of Letters of Inquiry (LOIs). Each LOI will include a description of the project approach, project location and dates of implementation, as well as responses to the safeguard questions. Before proceeding to technical review, all LOIs will be screened for eligibility by the PMU.

Step 2: During the screening step, LOIs will be reviewed against a set of eligibility criteria, which apply to the grantee organization, the location of the project and the types of activities being proposed. Based on the results of the screening, applications will either be rejected or proceed to the risk assessment step.

Step 3: All grant applications that pass the screening step will undergo a risk assessment. This will take place during the LOI technical review, to allow sufficient time for measures to be agreed upon and incorporated into project design.

Step 4: The PMU will determine which safeguard policies apply to the project. Safeguard Policies Environmental and Social Assessment, Gender Equality and Stakeholder Engagement apply to all projects; the other safeguard policies apply to some projects but not all. The PMU will then assign a risk category to each applicable safeguard policy, based on information provided in the LOI, supplemented if needed by communication with the applicant to clarify any points. The PMU will provide the grantee with information on the relevant safeguard policies, including the policies themselves, guidance materials, templates for the relevant environmental and social plans, and worked examples.

Step 5: Following the guidance provided by the PMU, the applicant will prepare the required environmental and social plans. Depending on Project Categories, environmental and social plans must be prepared as stand-alone documents. However, provided that the requirements of the relevant safeguard policies are met, several plans can be combined into a single document. The draft environmental and social plans will be reviewed by the PMU, and the final, approved versions will be publicly disclosed.

Step 6: Each grantee will be responsible for establishing a grievance redress mechanism that meets the minimum requirements of CI GCF ESMF Policy on the GRM.

Step 7: All grantees will be required to develop Stakeholder Engagement Plan of project-affected community including women, youth, elderly, indigenous people and other relevant stakeholders. Consultations with key stakeholders, beneficiaries and project-affected persons must be conducted systematically throughout the preparation and implementation phases of each funded project.

Step 8: Grantees are required to have sufficient institutional capacity to manage environmental and social risks. If the PMU concludes that a grantee has inadequate capacity, it may require capacity strengthening activities to be included as part of the project design.

Step 9: During implementation, the grantee will be responsible for compliance with the applicable safeguard policies, including implementation of all agreed measures in the final project proposal (which will form part of the grant agreement). These measures will be budgeted for and incorporated into the design of the project, as activities with related deliverables.

Step 10: During project preparation, each grantee will be required to define the steps it will take to monitor the implementation of the agreed mitigation measures. Grantee will also implement the agreed monitoring steps and report on them to the PMU. At project close, the grantee will be required to summarize the implementation of any measures required to comply with safeguard policies in its final completion and impact report. The PMU will have ultimate responsibility for monitoring compliance with the safeguard policies. The PMU will maintain a log of grievances. Personal identifiable information (names, email addresses, identification numbers, etc.) related to complainants will be stored in hard copy in a secure location, for confidentiality and to comply with data protection legislation. The PMU will report on compliance with the safeguard policies as part of its periodic reporting to the Donor.

The following table presents the components of the ESMP, aligning project component and corresponding potential risk and environmental mitigation measures.

Risk/Impact (based on chapter 6.1)	Mitigation Measures			Monitoring Info
	Avoidance	Minimization	Mitigation	
Component 1.				
Potential exclusion of local fisher from traditional fishing areas due to new MPA establishments.	Conduct stakeholder consultations and engagement sessions before finalizing the boundaries and regulations of new MPAs.	Implement temporary or seasonal closures within MPAs to allow for the recovery of marine resources while still permitting traditional fishing activities during certain periods.	Establish co-management arrangements for MPAs that involve local fisher and relevant stakeholders in decision-making, monitoring, and enforcement activities.	Freq: Gradually Before and During Project implementation. (Adjust with Project workplan timeline) Who: Project Implementer with support by PMU i.e. Safeguard Coordinator and Project Coordinator/Manager
Potential community resistance to regulatory changes due to improper FPIC processes. In community level: the communities may resist regulatory changes through protests, demonstrations, or mistrust to the project if the FPIC process is not properly conducted, particularly regarding benefit sharing, resource access, land tenure, or related issues.	Conduct a full and inclusive FPIC process during project planning. Engage all relevant groups—including women, Indigenous Peoples, youth, the elderly, and other marginalized communities—	Facilitate inclusive dialogue using local languages, visual tools, and clear presentations to explain the changes. Provide sufficient time and space for communities to ask questions, give feedback, and reach consensus	Establish and socialize a clear Grievance Redress Mechanism (GRM) to enable communities to raise concerns related to regulatory changes and the FPIC process. Ensure the GRM is accessible, culturally appropriate, and includes confidential reporting options to help prevent escalation.	

Risk/Impact (based on chapter 6.1)	Mitigation Measures			Monitoring Info
	Avoidance	Minimization	Mitigation	
	while ensuring transparency in communicating regulatory changes.			
Dependence on external funding which may not be sustainable long-term.	Conduct feasibility studies and financial planning exercises to assess the long-term sustainability of proposed projects or initiatives before committing to significant investments or expansions.	Establish contingency funds or reserve accounts to buffer against fluctuations in external funding availability or unexpected financial challenges, ensuring continuity of essential activities during periods of uncertainty.	Explore innovative financing mechanisms, such as impact investing, social enterprise models, or public-private partnerships, to attract long-term capital investments and diversify funding streams while aligning with project objectives.	
Delays in implementation due to bureaucratic processes.	Engage with relevant government agencies and regulatory bodies early in the planning stages to build relationships, clarify expectations, and secure necessary approvals or permits in a timely manner.	Develop detailed project timelines and milestones, taking into account potential bureaucratic delays and incorporating buffer periods to accommodate unforeseen challenges or administrative hurdles.	Monitor and track bureaucratic processes closely, using performance metrics and key performance indicators (KPIs) to identify inefficiencies, monitor progress, and advocate for improvements in administrative procedures and decision-making processes.	
Potential mismanagement or corruption risks if oversight is inadequate.	Implement stringent procurement and financial management procedures, including competitive bidding processes, transparent accounting systems, and regular audits, to minimize opportunities for mismanagement or corruption.	Provide training and capacity-building programs for staff and stakeholders involved in project management, procurement, and financial administration to enhance their awareness of corruption risks and equip them with tools and techniques to prevent, detect, and report suspicious activities.	Implement whistleblower protection policies and reporting mechanisms to encourage staff and stakeholders to come forward with concerns or allegations of mismanagement or corruption without fear of retaliation, ensuring prompt investigation and appropriate follow-up action.	
Short-term reduction in catch for fisher due to new management practices.	Implement pilot projects or phased implementation of new	Provide targeted support and assistance to affected fisher during the transition	Monitor catch levels, fishery dynamics, and socio-economic indicators closely to assess the impact of	

Risk/Impact (based on chapter 6.1)	Mitigation Measures			Monitoring Info
	Avoidance	Minimization	Mitigation	
	management practices to test their effectiveness, assess potential impacts on catch, and allow for adjustments based on feedback from stakeholders and monitoring results.	period, such as alternative income-generating opportunities, training in sustainable fishing techniques, or access to financial resources to cope with short-term income losses.	new management practices on fisher and their communities, identify emerging challenges or unintended consequences, and adjust management measures accordingly.	
Restrictions on land use for local communities leading to possible livelihood challenges.	Conduct land-use planning processes that prioritize the inclusion of local communities' needs, preferences, and customary land management practices to ensure that any restrictions are tailored to their socio-economic and cultural context.	Conduct socio-economic assessments and vulnerability analyses to identify communities most at risk of livelihood challenges due to land-use restrictions and develop targeted support programs or interventions to enhance their resilience and adaptive capacity.	Implement participatory monitoring and evaluation systems that involve local communities in assessing the impact of land-use restrictions on their livelihoods, collecting data on socio-economic indicators, and tracking changes in household well-being over time.	
Component 2.				
Unintended exclusion of some vulnerable groups from benefiting from the grants.	Conduct thorough assessments of the needs, priorities, and vulnerabilities of target beneficiary groups before designing grant programs to ensure inclusivity and equity in grant allocation and distribution.	Provide targeted capacity-building support, technical assistance, and mentoring services to help vulnerable groups develop competitive grant proposals, navigate the application process, and meet the necessary criteria to qualify for funding.	Monitor and evaluate the demographic profile of grant recipients and track the participation rates of vulnerable groups to identify any disparities or gaps in access to grants and take corrective action to address them.	Freq: Gradually Before and During Project implementation. (Adjust with Project workplan timeline) Who: Project Implementer with support by PMU i.e. Safeguard Coordinator and Project Coordinator/Manager
Risk of funds not being used effectively if monitoring is insufficient.	Establish robust monitoring and evaluation (M&E) frameworks at the outset of the project or grant program to track the utilization of funds, measure progress toward objectives, and assess the effectiveness of interventions.	Conduct regular site visits, field inspections, and spot checks to verify the accuracy and reliability of reported data, validate project activities, and identify any discrepancies or irregularities that may indicate misuse	Conduct periodic evaluations and independent audits of project activities, financial transactions, and performance outcomes to assess compliance with project objectives, donor requirements, and relevant regulations, identifying areas for improvement and	

Risk/Impact (based on chapter 6.1)	Mitigation Measures			Monitoring Info
	Avoidance	Minimization	Mitigation	
		or mismanagement of funds.	learning lessons for future projects.	
Potential short-term economic burdens on local communities adapting to new practices.	Conduct socio-economic assessments and livelihood analyses to anticipate potential economic impacts of new practices on local communities, identifying vulnerable groups and areas of concern before implementation.	Provide targeted financial support, subsidies, or incentives to affected individuals or households to offset any short-term economic losses or transition costs associated with adopting new practices, such as training expenses, equipment purchases, or income replacement schemes.	Strengthen local institutions, governance structures, and community networks to enhance their capacity to cope with and adapt to economic shocks, fostering resilience, self-reliance, and collective action among local communities facing short-term economic burdens.	
Potential misalignment with local priorities and needs if community engagement is lacking.	Establish formal mechanisms for ongoing dialogue and consultation with local stakeholders, including community meetings, focus group discussions, and participatory workshops, to solicit input, feedback, and consensus on project objectives, activities, and outcomes.	Provide capacity-building support, training, and resources to local stakeholders, including community leaders, representatives, and grassroots organizations, to enhance their capacity to participate meaningfully in decision-making processes, advocate for their interests, and mobilize resources to address priority issues.	Establish community monitoring and oversight mechanisms, such as community scorecards, citizen report cards, or community-based monitoring systems, to enable local communities to track project progress, hold implementers accountable, and advocate for their interests.	
Overemphasis on economic returns could lead to overlooking social or environmental considerations.	Establish multi-stakeholder advisory committees or expert panels to provide diverse perspectives and input on project design, implementation, and evaluation, ensuring that social and environmental considerations are given equal weight alongside economic objectives.	Develop clear guidelines, criteria, and performance standards for evaluating project success and effectiveness, incorporating social and environmental indicators alongside economic metrics to ensure a balanced assessment of project outcomes.	Conduct regular stakeholder consultations, feedback sessions, and participatory evaluations to solicit input from affected communities, civil society organizations, and other stakeholders on the social and environmental dimensions of project performance, identifying areas for improvement and corrective action.	
Risk of creating market dependencies or altering local	Diversify economic	Facilitate market linkages, access to	Monitor and evaluate the impact of project	

Risk/Impact (based on chapter 6.1)	Mitigation Measures			Monitoring Info
	Avoidance	Minimization	Mitigation	
economies in unsustainable ways.	opportunities and livelihood options to reduce reliance on a single market or sector, promoting resilience and sustainability in local economies and mitigating the risk of market dependence.	finance, and business development support for small-scale producers, entrepreneurs, and micro-enterprises, enabling them to access broader markets, diversify their products, and increase their competitiveness while maintaining sustainability.	activities on local markets, livelihoods, and economic systems over time, using indicators such as market share, income levels, employment rates, and poverty incidence to assess changes and identify potential risks or vulnerabilities.	
Resource-intensive processes may detract from direct conservation activities.	Prioritize the allocation of resources and investments towards direct conservation activities that have the highest impact on biodiversity conservation and ecosystem protection, avoiding unnecessary or excessive spending on administrative overhead or bureaucratic processes.	Provide training, capacity-building, and technical assistance to project staff and partners on efficient project management practices, budget management, and resource optimization strategies, empowering them to make informed decisions and maximize the value of available resources.	Enhance transparency, accountability, and stakeholder engagement in resource management and decision-making processes, ensuring that project priorities and resource allocations are aligned with community needs, conservation goals, and donor expectations.	

The EMP will be dynamic, adapting to the evolving context of environmental and social changes. It will emphasize proactive engagement with all stakeholders, particularly vulnerable coastal communities, to ensure that their voices are heard and their needs are met in a manner that is both environmentally sustainable and socially equitable.

KI, through the PMU, will oversee ESMP implementation. Subgrantees and service providers will apply the required mitigation measures and report progress to KI. Thus, subgrantees will submit ESMP progress reports every six months. KI will monitor compliance through reports, site visits, grievance and incident records, and review of site-specific safeguards instruments. Non-compliance will require corrective action, and serious incidents will be reported to CI-GCF. ESMP costs will be included in Project, contract, and subgrant budgets.

In line with Indonesia's legal framework, all environmental and social assessment instruments will be required to obtain a No Objection Letter (NOL) from relevant authorities before commencing any project activities. This will demonstrate compliance with national environmental regulations and the Social and Environmental Standards (SES) of funding entities.

The project will adopt a participatory approach to the development of management plans, ensuring that community input is integral to the creation of robust, responsive, and effective environmental strategies. The inclusion of local knowledge and practices will be critical to the success of the project's environmental management efforts.

The ESIA will be reviewed and updated periodically to reflect changes in environmental conditions, project activities, and stakeholder feedback. This living document will serve as a guide for sustainable project execution and a benchmark for environmental performance throughout the project lifecycle.

7.2. Labour and Working Conditions Risk Management plan

The project will adhere to the highest standards of labour and working conditions as per Indonesian Law and international best practices. This entails compliance with Indonesia's Manpower Law (*Undang-Undang Ketenagakerjaan*) No. 13 of 2003, which governs employment practices and workers' rights, as well as alignment with the International Labour Organization's (ILO) core conventions.

The following key procedures and practices will be implemented:

Recruitment and Workers' Rights

- All recruitment practices are fair and transparent, guided by principles of Diversity, Equity and Inclusion (DEI), ensuring equal opportunity and non-discrimination for all candidates.
- Workers are provided with a clear understanding of their rights and responsibilities, including terms and conditions of employment, through written contracts available in Bahasa Indonesia and English. The project respects and uphold the rights of workers to form and join trade unions and to engage in collective bargaining in accordance with Indonesian labour laws and relevant ILO conventions.

Occupational Health and Safety (OHS)

- OHS policy is developed and implemented to ensure the provision of a safe and healthy work environment.
- Regular risk assessments are conducted to identify potential hazards associated with project activities, especially those related to marine and coastal ecosystem management.
- Appropriate personal protective equipment (PPE) is provided to all employees, accompanied by mandatory training on safety procedures to ensure their proper use and promote a safe working environment.

Working Conditions and Terms of Employment

- Working hours, wages, and benefits will comply with national labour law and international labour standards, ensuring fair compensation for all workers.
- Workers regardless of employment status will have safe and confidential access to grievance mechanisms to voice concerns without fear of reprisal.
- Prohibits all forms of child labour, forced or bonded labour.
- Adopts zero-tolerance policy to sexual exploitation, abuse, and harassment (PSEAH) as well as PGBV in the workplace and within project-affected community.
- The project is committed to providing additional minimum benefits at minimum accordance with national labor laws, such as BPJS Kesehatan (health insurance), BPJS Ketenagakerjaan (employment insurance), BPJS Kecelakaan Kerja (Employment Injury Insurance), and other applicable benefits, and will strive to offer benefits beyond legal requirements to promote employee well-being.

Workers' Accommodation

- Should the project require the provision of workers' accommodation, it will be constructed and maintained according to national standards, ensuring adequate living conditions.
- Accommodation policies will respect the privacy and dignity of workers, promoting a safe and comfortable living environment.

Supply Chain Management

- The project will require all suppliers and contractors to adhere to the same labour and working conditions standards as the project itself.
- Supplier contracts will include clauses that require compliance with national labour laws and the project's labour management procedures.

Monitoring and Reporting

- Regular monitoring of labour and working conditions will be conducted to ensure ongoing compliance with the management plan.
- Reports on labour conditions will be prepared and submitted to the relevant authorities and stakeholders, including any incidents or accidents, as part of the project's commitment to transparency and continuous improvement.

Table 11 - Mitigation Measures to Enhance Decent Labor and Employment Standards

Project Outputs and Activities	Mitigation Measures to Enhance Decent Labour and Employment Standards			
	Activities	Targets		Timeline
Cross-Cutting	Liaise with Indonesian universities, institutions and relevant government ministries to assess the current state of labour practices in coastal and marine sectors, aiming to identify effective interventions.	Number of partnerships established and reports produced on labour practices	Establish at least 10 partnerships and produce 3 reports	Years 1, 3, 5
	Incorporate prohibitions of unlawful labour practices into all project-related agreements, training materials, and codes of conduct.	Implementation rate of decent labour clauses in agreements	100% of new agreements to include decent labour clauses	Year 1
	Introduce penalty clauses for non-compliance with employment standards in contracts, leveraging Indonesian legal expertise to enforce regulations.	Number of contracts with penalty clauses for non-compliance	All new contracts to have penalty clauses	Year 2
	Develop a human resources policy that simplifies the provisions of the Indonesian Employment Act and use policy documents for awareness-raising.	Completion and dissemination of a simplified HR policy document	HR policy document to be developed and shared	Year 2 and throughout project duration
	Monitor and document instances of non-compliance and review progress towards fair labour practices.	Number of non-compliance cases recorded and addressed	Record and address all cases of non-compliance	Continuous monitoring
	Explicitly prohibit sexual harassment and gender violence in all project activities, embedding this in training and a Code of conduct.	Training sessions conducted and a Code of Conduct implemented	Conduct 5 training sessions and implement a Code of conduct	Year 1-5
	Sensitize all stakeholders in the value chain to decent labour practices and the prohibition of exploitation.	Number of stakeholders trained on decent labour practices	Train 600 stakeholders by the end of project	Year 2 onwards
	Ensure project evaluations include an assessment of the prevalence of unethical labour practices and effective mitigation.	Prevalence rate of unlawful practices in project impact assessment reports.	Reduce unlawful practices by 100% by the end of the project	Midterm and End of Project

Process Framework for Involuntary Resettlement and Restriction of Access to Natural Resources Plan

The policy on involuntary resettlement for the project encompasses scenarios of both involuntary and voluntary resettlement, which include physical displacement, relocation, or loss of shelter. It also covers involuntary and voluntary restrictions of access to natural resources, which can result in the loss of traditional/sustainable livelihoods.

While the likelihood of project activities resulting in resettlement is low, it's paramount to be vigilant about preventing any unintended incentivization. Safeguarding against such possibilities ensures we remain aligned with CI-GCF guidelines and uphold our commitment to ethical and responsible practices.

In Indonesia, where community-based marine resource management is a cornerstone of coastal livelihoods, any restrictions or resettlement would require careful consideration of local customs and rights to resource access. For instance, traditional fishing communities in WPP 572, who depend on marine resources, may face changes in access due to the establishment of new Marine Protected Areas (MPAs) or shifts in marine spatial planning. To effectively manage decisions on restrictions of access for the purpose of marine conservation and sustainable fisheries management, a stakeholder mapping exercise will be conducted to grasp the spatial distribution of marine resources and the specific fishing practices in WPP 572. This will provide a detailed view of the stakeholders involved, their residential status, and their dependence on the resources, ensuring all voices are heard and considered in the planning process. Workshops and stakeholder engagement exercises will be facilitated to ensure inclusive decision-making and to negotiate access and use rights. Additionally, Indonesian legal provisions regarding communal rights to marine resources and traditional fishing grounds must be reviewed to ensure compatibility with international and national conservation goals.

The project will also consider the social and gender dynamics of the communities, acknowledging the roles of women and vulnerable groups in fisheries and marine resource management. Support from a scientific team, including gender experts and marine scientists, will ensure that the plans are both scientifically sound and socially just.

7.3. Indicative Community Health, Safety, and Security Management Plan

Community Health:

The project will prioritize community health by ensuring access to clean water and sanitation facilities, especially in areas where local infrastructure may be impacted by project activities. Organized health awareness campaigns will inform the communities about hygienic practices, with a focus on preventing waterborne diseases linked to changes in the coastal ecosystem. Collaborating with local healthcare providers, the project will support the enhancement of healthcare services to manage potential health risks associated with its implementation.

Safety Measures:

Safety protocols will be established to protect community members from potential hazards linked to project activities, such as the operation of machinery during data collection or capacity-building exercises. Conducting safety briefings for community members in areas of active project work. Providing safety gear for community members involved in project activities, especially those related to marine data collection and ecosystem monitoring.

Community Security:

To ensure that the project does not inadvertently increase security risks within the community, a proactive approach will be adopted to identify any potential threats. The project will operate in

partnership with local leaders and law enforcement agencies to preemptively address any security concerns that may emerge due to the presence of project activities. This will include:

- Collaborative efforts with local law enforcement to proactively monitor and address any potential illegal activities such as poaching, especially in the vicinity of newly established Marine Protected Areas (MPAs).
- Facilitation of conflict resolution training for community leaders, equipping them with the skills needed to peacefully resolve any disputes that may arise from resource access or changes in land use brought about by the project.
- Implementation of robust monitoring and evaluation systems to ensure the efficacy and adaptability of security measures, maintaining their alignment with the evolving needs and safety of the community.

This approach will be tailored to the specific security context of the project areas, taking into consideration the local socio-economic dynamics and ensuring that all measures are culturally and contextually appropriate.

Environmental Health:

Recognizing the close relationship between environmental health and community well-being, the project will undertake:

- The project will conduct supplementary environmental observations to identify shifts in water quality or pollution that might influence public health. These efforts will align with local governmental environmental checks to ensure rapid response to any ecological alterations linked to the project's operations
- Restoration activities to rehabilitate areas that may be impacted by project activities, with a focus on mangrove restoration, coral reef protection, and sustainable waste management practices.

Emergency Response:

The plan will also include an emergency response strategy that outlines procedures for dealing with incidents related to health, safety, or security. This will involve:

- Establishing an emergency contact system to quickly address incidents.
- Training for community members on emergency response, especially for scenarios like oil spills or extreme weather events linked to climate change.
- Drills and simulations to ensure preparedness for potential emergencies.
- A disaster risk management plan in place

7.4. Summary of main issues and mitigation measures in the context of environmental and social safeguards.

Issues and state of triggered of safeguards

Table 12 - Issues and state of triggered safeguards.

ESS Standard	Yes	No	TBD	Justification
1. Environmental & Social Impact Assessment (ESIA)	X			<i>ESS 1 applies to investments supported by this project, including investments for works carried out by contract workers and community workers, as well as Associated Facilities (AF) that may be associated with the activities of this project, in case this becomes relevant to the project funded activities</i>
2. Protection of Natural Habitats and Biodiversity Conservation	X			<i>Under Activities 1.1.1 and 2.2.1, the project plans to establish new MPAs, and restore seagrass, mangrove, and coral reef ecosystems in WPP 572.</i>

3. Resettlement and Physical and Economic Displacement	X			<i>The project is not proposing activities that may cause physical displacement. However, some activities under Activity 1.1.1 (Component 1) have the potential to cause economic displacement. These risks include potential exclusion of local fisher from traditional fishing areas due to new management plans for WPP 572, short-term reduction in catch for fisher due to new management practices, and restrictions on land use for local communities leading to possible livelihood challenges.</i>
4. Indigenous Peoples and Local Communities	X			<i>Some of the provinces in WPPNRI 572 have indigenous / traditional communities. Sumatra alone has 392 indigenous communities which makes the province the third largest in terms of concentration of indigenous communities.</i>
5. Resource Efficiency and Pollution Prevention			X	<i>The project does not propose activities related to the use of banned, restricted or prohibited substances, chemicals or hazardous materials. However, some activities under Component 2 have the potential to trigger this ESS Standard during implementation of the subprojects such as those with resource-intensive processes may detract from direct conservation activities. This is to be determined during the ESS screening process for subgrants.</i>
6. Cultural Heritage			X	<i>There are no planned activities at this time that would have an impact on cultural heritage. However, this ESS Standard could be triggered during implementation of the subprojects. This is to be determined during the ESS screening process for subgrants.</i>
7. Labour and Working Conditions			X	<i>The EE indicated that it has the necessary policies, procedures, systems and capabilities to meet the minimum requirements. However, this ESS Standard could be triggered during implementation of the subprojects. This is to be determined during the ESS screening process for subgrants.</i>
8. Community Health, Safety and Security			X	<i>CHSS risks have been identified and assessed as Low. However, this ESS Standard could be triggered during implementation of the subprojects. For example, there could be SEAH risk due to an increase in the influx of male workers and contractors who are external to the local communities. This is to be determined during the ESS screening process for subgrants.</i>
9. Private Sector Direct Investments and FIs	X			<i>Component 2 involves the implementation of a BEAM grant facility, an on-granting financial mechanism designed to fund marine ecosystem restoration, fisheries management, alternative livelihood support, and coastal waste management. This component will include an Investment Readiness interventions to increase access to finance for local MSMEs and develop knowledge products for blue economy actors</i>

10. Climate Risk and Related Disasters	X			<i>WPPNRI 572 is vulnerable to natural disasters, including high-magnitude earthquakes and tsunamis.</i>
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8. Key Social and Environmental Impacts and Feasibility Assessment of Related Mitigation Measures

Project Outputs	Social and Environmental Impacts	Mitigation measures included in project design	Feasibility, effectiveness and sustainability	Responsibility (Executing Entity)	Schedule
Output 1.1.: Development and deployment of evidence-based regulatory frameworks on ecosystem protection, fisheries sustainability, and innovative financing	Risk of policy and regulatory changes post-2024 elections impacting project priorities and alignment; Potential exclusion and marginalization of local communities; Risks from current legal and policy frameworks undermining capacity for agreement execution	Activity 1. 1.1 Enhance ecosystem protection and fisheries sustainability through policy reform and creation of innovative financing mechanisms	High feasibility with strategic relationships and continuous engagement; Medium feasibility due to inter-ministerial coordination; Training and collective understanding to build inclusivity	Enabling Conditions + direct grant support (Konservasi Indonesia)	Y1-Y6
Output 2.1: Vulnerable coastal communities design and implement locally appropriate climate adaptation interventions	Sectoral boundaries and time required for collaborative coordination of ecosystem restoration activities; Risk of marginalization due to historical power relations and sectoral silos	Activity 2.1.1 Deploy grants for sustainable climate change adaptation in coastal communities	Medium feasibility due to inter-ministerial coordination; High sustainability and inclusivity by integrating indigenous practices	Enabling Conditions + direct grant support	Y1-Y6
Output 2.2: Restoration of critical coastal ecosystems, protection of restored areas, and adoption of renewable energy technologies	Natural disasters impacting project implementation; Marginalization of vulnerable communities from project benefits; Inefficient use of financial resources due to sectoral silos	Activity 2.2.1 Deploy grants to improve ecosystems and achieve sustainable climate change mitigation impacts	Medium feasibility with established emergency protocols; High effectiveness with community-based approaches	On-Grant mechanism	Y1-Y6
Output 2.3: Blue economy enterprises increase investment and expand operations in WPP572	Skepticism from local communities based on unresolved complaints; Marginalization of vulnerable groups; Professionalization of roles potentially excluding indigenous herders	Activity 2.3.1 Deploy grants to stimulate and improve the investment readiness for the blue economy	Medium feasibility due to rebuilding trust; High effectiveness through inclusive plans and job creation	On-Grant mechanism	Y1-Y6

9. Project-level Grievance Redress Mechanism

The project-level Grievance Redress Mechanism (GRM) has been designed to facilitate the resolution of grievances promptly through an accessible, fair, transparent and constructive process. It is culturally appropriate and will be readily accessible, at no cost to the affected communities, and without retribution to the individuals, groups, or communities that raised issues or concerns. The PMU established an GRM framework to facilitate stakeholder access and enable effective monitoring to ensure accountability and transparency. Information on the GRM procedure will be disseminated to the EA, affected communities and public during project implementation.

The GRM responds to the local context, cultural and customary practices, and recognizes varying levels of vulnerability in the community. This starts with the socialization of the GRM, which will be implemented through differentiated approaches to ensure accessibility by the most vulnerable groups. Both formal and informal channels will be utilized, leveraging existing groups and mechanisms at the community-level as much as possible.

The key elements of the project-level GRM are designed to address and manage grievances related to the project's activities, ensuring that all concerns, including those related to Gender-Based Violence (GBV) and Sexual Exploitation, Abuse, and Harassment (SEAH), are managed with the utmost care and responsiveness, in line with the best practices and legal standards.

The scope of complaints or grievances

The Project grievance mechanism is specifically designed to address complaints and grievances relating to the activities of the project in as far as these are perceived by individuals and collectives as negatively affecting them — including indigenous peoples. Such complaints and grievances will also include project-related gender-based violence and Sexual exploitation, abuse and harassment (SEAH). Addressing these ensures that the project managers deal with issues before they escalate into serious conflicts or deepen negative impacts. However, communities' members often submit issues that are not directly related to the project activities because it is often not clear where to draw a line between what is or is not directly related to company activities. Therefore, it is important to acknowledge the complaint and explain why it is not connected to the project activities or personnel.

The project management team appoints an GRM Coordinator as the focal point responsible for managing complaints. The GRM Coordinator collaborates with the project focal point to classify the risk level of each incoming grievance. If a grievance falls under medium or high-risk categories, it will be escalated to the PMU GRM Committee for resolution. The resolution outcome will then be communicated by the GRM Coordinator to the project focal point. If the resolution requires adaptation to the local context, the project focal point will coordinate with community leaders to ensure effective implementation. The resolution will be monitored until completion and formally closed.

The GRM also ensures the confidentiality of the complainant upon request. All complaints received will be recorded in a dedicated database. Specifically, key implementing partners (KI) are responsible for recording grievances in the global grievance database.

Registering a Complaint

Complaints will be accepted verbally or in writing. If they are in writing, it is critically important that the receiving officer go through them orally with the complaint to ensure that the written form is interpreted accurately. If submitted orally, verification is also important so that the complainant is satisfied that the words represent an accurate capture of the complaint they are raising. Should it be required, interpretation/translation will be provided to overcome language barriers/limitations. Community members will be able to register a complaint through grievance channels.

Eligibility:

Complaints submitted through the grievance mechanism are subject to verification against established eligibility criteria to ensure their validity. These criteria include: (1) the complaint is submitted in good faith; (2) the subject of the complaint is directly related to the project's activities or impacts; (3) the complaint is submitted by an individual, group, or an authorized representative acting on behalf of those affected by the project; and (4) the complaint is submitted during the project implementation period or within two years following the project's completion.

If an anonymous grievance is received, GRM lead will screen the grievances for eligibility. The eligible anonymous grievances will be recorded and processed. However, if the anonymity of grievances hampers the efforts to resolve complaints, the case will not be processed due to the lack of contact information from the Affected Party

Only complaints that meet these eligibility criteria will be processed for further review and resolution.

The Complaint Procedure

In certain cases, particularly when a complaint is assessed as low risk, the project focal point may be able to resolve the issue promptly upon receipt. In such instances, the complainant will be provided with the necessary information or clarification to address the concern. Once the complainant confirms satisfaction with the resolution, the complaint will be formally documented and closed.

For complaints assessed as medium or high risk, the following procedure shall apply:

Step 1: Receive & Acknowledge Complaint

- Complaints are received by the project focal point through culturally appropriate and accessible channels (e.g., in-person, email, telephone, website or project focal point).
- The focal point verifies the eligibility and completeness of the complaint, including site checks if necessary, and confirms submission using the grievance form.
- Low-severity complaints are addressed and resolved immediately when possible; all complaints are recorded in the CI/KI Global Grievance Database.
- The project team assesses the complaint to determine its severity level (low, medium, or high risk).
- The field officer is notified of the complaint and may be tasked with collecting preliminary information related to the issue
- If the complaint is deemed high risk, the case is escalated to the Global Grievance Committee for further review and resolution.
- The complainant receives a formal acknowledgment of receipt, which outlines the next steps, estimated timelines, and the contact details of the assigned grievance officer.
The method of acknowledgment is tailored to the complainant's context, such as through a letter, phone call, or a copy of the grievance form.
- All acknowledgments—verbal or written—are documented in the Complaints Register for tracking and accountability.

Step 2: Evaluate, Assign Owner, and Investigate

- Strive to understand the complainant's perspective regarding the issue, including their expectations for resolution.
- Conduct a thorough investigation into the circumstances of the complaint, engaging with all relevant parties and stakeholders as needed.
- In complex or sensitive cases, it is recommended to separate the roles of complaint investigation and complainant liaison to avoid any real or perceived conflicts of interest.

The investigation should aim to determine the following:

- The factual basis and root cause of the complaint, with sensitivity to potential differences in the perception of facts.
- The complainant's key interests and concerns—what specific issue(s) have been raised?
- Any required protections or support the complainant may need to effectively engage in the grievance process.
- All steps of the investigation must be thoroughly documented, including records of meetings, communications, and decision-making processes.
- Based on findings, develop a provisional resolution proposal that is reasonable, proportionate to the nature of the grievance, and aligned with local cultural norms.
- Internally develop a range of potential resolution options, especially in cases where the proposed outcome may set a precedent or involve a policy-level decision.
- Re-engage with the complainant to seek a mutually acceptable resolution:
 - Clearly present the findings of the investigation and the proposed remedy.
 - Ensure that the engagement is a two-way dialogue, allowing the complainant to respond and express their views.
 - If the complainant disagrees with the proposed resolution, attempt further dialogue or collaborative problem-solving.
 - If consensus cannot be reached, escalate the grievance to the GRM Country-Level Committee and/or the CI Global Grievance Team for further review.
 - Any final agreement should be specific, time-bound, and formally acknowledged by both parties.
- The committee will prioritise complaints involving GBV and SEAH, ensuring these are fast-tracked and handled with confidentiality and sensitivity.
- Ensure that every step of the process, from investigation to closure, is properly recorded and stored in the grievance system documentation.

Step 3: Consult on and Implement Resolution

- Where applicable, include a monitoring plan for implementation of the resolution, particularly if the agreement is not self-executing.
- **Implement the agreed resolution.**
 - Develop and document a clear implementation plan, outlining specific actions, responsibilities, and timelines.
 - Ensure all actions taken are recorded in the Complaints Register and, where applicable, in the Global Grievance Database.
- **Strive to achieve a mutually satisfactory resolution** through open dialogue and constructive engagement with all parties involved
- If a resolution involves GBV or SEAH complaints, care will be taken to ensure the complainant's safety and wellbeing are paramount, and actions will align with legal and psychological best practices.

Step 4: Complaint Escalation

- If no progress is being made or if the complaint rejects the proposed solution, the committee may decide to escalate the complaint to GRM Committee. In such circumstances, the complainant will be updated on progress. The process of escalation will include:
 - Project Focal Point will log the disagreement with a proposed response;
 - Project Focal Point identifies and proposes alternative response(s); and
 - If alternative response(s) are also rejected, the complaint will be elevated to Step 5 below (Appeal).

Step 5: Close and Monitor

- After the complaint has been fully investigated, the resolution has been implemented and monitored, and no further action is deemed necessary to resolve the issue, the project management team will close the complaint.
- The Project Focal Point will ask the complainant to sign a statement to acknowledge resolution. Signing the statement does not preclude the complainant from raising the issue again or seeking other avenues for redress should the resolution not result in a permanent fix or the issue recurs.
- If the complainant does not agree with the resolution offered, the Project Focal Point will instruct the complainant to escalate the grievance through the Appeal mechanisms as described in Step 5 below. The complainant may choose to do so or close the complaint.
- The Project Focal Point may re-open the complaint if the complainant provides new information.
- The Project Focal Point may contact the complainant after closure to ensure no other problems have arisen.

Step 6: Appeal (optional if complainant is not satisfied)

- If the complainant is not satisfied with the proposed resolution or remedy, the project team will explore alternative recourse or appeal options to address the concern in a fair and transparent manner.
- Available options for recourse and appeal may include:
 - Referral to the Country-Level GRM Committee and/or the CI Global Grievance Team to review the investigation process and/or the adequacy of the proposed resolution.
 - Formation of a Complaint Review Committee, or escalation to a review panel comprising senior managers and/or representatives from both the project and the community, to evaluate whether further reasonable actions are warranted.
 - Engagement of a credible, mutually agreed-upon third party—such as village heads, respected local leaders, customary (Dusun) or traditional leaders, subdistrict officials, or relevant government institutions—to facilitate impartial dialogue or conduct an independent assessment and propose a fair resolution.
 - Establishment of a standing appeals committee, jointly formed with community representatives, to provide a sustainable and locally accepted mechanism for handling appeals.
- Lessons learned from the appeal or follow-up process should be documented and used to improve and refine the grievance handling system.
- Closure of the grievance occurs only after:
 - The agreed resolution has been fully implemented and verified.
 - The complainant has had an opportunity to provide feedback on both the process and the outcome.
 - The resolution is confirmed to be lawful, properly documented, and aligned with agreed procedures.
 - A version of the closure report is shared with the complainant.
- In cases where an agreement cannot be reached, it remains important to formally close the case by:
 - Documenting the final outcome and rationale.
 - Requesting the parties involved to provide an evaluation of the grievance process and its results.

Handling of GBV and SEAH Complaints

Complaints related to GBV and SEAH will be handled by specially trained personnel within the project management team. A dedicated, confidential channel will be established for such complaints,

ensuring anonymity and protection from retaliation. Survivors will be provided with clear information about the support available, including legal and psychological services. The project management commits to a survivor-centred approach, prioritising the safety, dignity, and wishes of the survivors throughout the process.

Indigenous People Customary Mechanisms

Where Indigenous Peoples are present, the project-level Grievance Redress Mechanism (GRM) will be implemented in coordination with the Indigenous Peoples Framework (IPF). Customary governance structures, traditional leaders, and community-based dispute resolution mechanisms may be utilized, where appropriate and acceptable to the affected Indigenous Peoples, as an initial step in resolving grievances. Where grievances cannot be resolved through customary mechanisms, they may be escalated through the project-level GRM for review and resolution. The grievance process will ensure culturally appropriate communication, accessibility, confidentiality, transparency, and inclusion of vulnerable groups. Access to customary grievance processes will not preclude access to the project-level GRM, Konservasi Indonesia's grievance mechanism, or the Green Climate Fund's Independent Redress Mechanism (GCF IRM), which remains available as an independent avenue for addressing project-related concerns.

Confidentiality, Anonymity and No Retaliation

The community grievance mechanism must encourage community members to openly exchange views and concerns about operations with the project. Confidentiality will always be observed to maintain confidence in the community grievance mechanism and ensure compliance with relevant laws. Complainants may wish to:

- ***Raise a concern in confidence.*** Details will not be disclosed when a complainant asks the Project management team to protect identity and will remain secure with those Project management team staff investigating the complaint. However, the situation may arise where it will not be possible to resolve the complaint without revealing identity (for example, when evidence needs to be presented in court). In this case, the Project management team will discuss with the complainant whether and how best to proceed.
- ***Raise a concern anonymously.*** Complainants raising a concern anonymously need to provide sufficient facts and data to enable the Project management team to look into the matter without assistance. The Project management team will make every effort to evaluate anonymous complaints; however, anonymity may make it more difficult to investigate, protect the position of the complainant, offer and implement resolution, and give feedback. CI's Ethics Point can be used anonymously.
- ***No Retaliation:*** The project enforces a strict 'No Retaliation' policy to ensure that individuals feel secure when raising concerns or reporting misconduct. Retaliation against anyone who, in good faith, reports a violation or participates in an investigation is unacceptable and will not be tolerated. Any form of intimidation, discrimination, or adverse consequence as a result of such engagement will result in disciplinary action, up to and including dismissal for those found responsible for retaliatory actions. The Project management team is responsible for communicating this policy to all stakeholders and ensuring its enforcement throughout the project lifecycle.

In addition to the Project-level GRM, complainants may seek resolution through external accountability mechanisms. Stakeholders may submit concerns related to the implementation of CI-supported activities through CI's Accountability and Grievance Mechanism and may report ethics-

related concerns, including fraud, corruption, misconduct, or other integrity issues, through CI EthicsPoint. Access CI's EthicsPoint Hotline at <https://secure.ethicspoint.com>.

Alternatively, the grievant may file a claim with the Director of Compliance (DOC), who is responsible for the CI Accountability and Grievance Mechanism and can be reached at: Director of Compliance, Conservation International, 2011 Crystal Drive, Suite 600, Arlington, VA 22202, USA.

For GCF projects, the grievant may also access the Independent Redress Mechanism (IRM). Available channels can be found at: <https://irm.greenclimate.fund/>

10. Stakeholder Engagement Plan

This project, Blue Halo S - Blue Ecosystem Adaptation Mechanism (BEAM), emphasizes continuous engagement with local stakeholders in the Indonesian marine and coastal areas, especially in WPP 572. Annual adaptive plans are developed in collaboration with these stakeholders, ensuring that Stakeholder Engagement Plans are integral to facilitating effective and inclusive participation in addressing environmental and climate change challenges. Such engagement is crucial for achieving the project's goals of enhancing blue economy financing, protecting marine ecosystems, and empowering communities to adapt to climate change impacts.

Broken by provinces in WPP 572, a detailed Stakeholder Engagement Plan will be developed by the Project Management Unit (PMU), and BEAM's implementation directors. Each plan will recognize and address gender inclusivity and the representation of indigenous communities, involving the following entities:

- Community leaders and representatives of their respective areas.
- Relevant district and local government officials.
- Local fisher associations and the areas where they operate.
- Civil-Society Organizations (CSOs) and Non-Governmental Organizations (NGOs) active in marine conservation.
- Any Local Blue Economy Development Project Managers.

The stakeholder engagement will focus on two key elements to facilitate mindset and behavioral change:

Development of a documentary showcasing successful blue economy initiatives, used for stakeholder engagement sessions. This will foster broader community involvement and buy-in, supplemented by arranged visits to areas where sustainable marine practices have positively impacted the ecosystem and local livelihoods.

Hiring process facilitators to evaluate legal and policy frameworks supportive of sustainable ocean management and community involvement. This assessment will lay the groundwork for participatory dialogues on policy and legal reforms while drafting initial stewardship agreements based on the Community Based Natural Resource Management model. Emphasis will be placed on negotiated transformation rather than imposing legal solutions, ensuring long-term sustainability and community ownership.

Local level engagement will include annual reporting at community assemblies to keep local stakeholders informed and involved. Additionally, environmental and social information about the BEAM project will be regularly disseminated to affected communities and the public. An information dissemination plan will be collaboratively developed with input from project staff, government

agencies, and local organizations in the project areas. This approach will be tailored to each area's unique geographical and socio-political context. Best practices and regional expertise will be shared by Konservasi Indonesia, with additional support from global and regional partners in sustainable marine management including GCF.

Table 13 - Summary of BEAM Engagement Plan

Local Level Stakeholder Group: Component 1, 2	Engagement Plan—Based on BEAM Objectives	Responsible Implementor/Organizer	Timing
Leadership/Authorities	Training and capacity-building workshops on sustainable marine management and blue finance facilitation.	Project Management Unit (PMU)	Ongoing throughout project lifecycle
Marine and Coastal Community Representatives	Collaborative development of local blue economy strategies and eco-friendly practices.	Local facilitators and project consultants in collaboration with community leaders	Annually for plan confirmation
Marine Protected Area (MPA) Managers and Local Fisher Fishery manager and the Fishery Management Unit (LPP-Lembaga Pengelola Perikanan 572)	Deployment of MPA management and sustainable fishing practices; community engagement sessions.	Area Managers and local MPA authorities	Biannually for strategy alignment
Coastal and Marine Ecosystem Workers	Workshops on ecosystem restoration and conservation aligned with BEAM's environmental goals.	Conservation specialists and facilitation team	As per project milestones
Graduate Monitors and Local Researchers	Training on data collection, monitoring, and reporting aligned with BEAM's information strategy.	Facilitation team and project research staff	At the onset of monitoring cycles
Respected Local leaders	Inclusion of specific leaders in community meetings and information sessions, emphasizing the ethical and moral aspects of marine conservation.	Local facilitators and project consultants in collaboration with respected local leader	Quarterly and as needed
Broader Community	Community meetings and information sessions for feedback on project implementation and conservation strategies.	Communication Managers in collaboration with local organizations and PMU	Quarterly and as needed

National Stakeholders	Engagement Plan—Integrated with BEAM Objectives	Implementer and Timing
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Project Steering Committee: Coordinating Ministry of Maritime Affairs and Investment Ministry of Marine Affairs and Fisheries (MMAF) Ministry of National Development Planning (Bappenas) Non-Government Organizations	The committee will oversee the integration and implementation of BEAM strategies across national platforms, ensuring alignment with the blue economy and sustainable fisheries management and will provide technical expertise and guidance to the EEs and ensuring coordination of the implementation of the project with government agencies.	Project Management Unit Year 1 – 5
National Development and Research Institutions; National Strategic Office	Development and dissemination of policy briefs and research studies tailored to the BEAM project's approach and objectives, particularly regarding adaptation strategies for marine ecosystems and blue finance mechanisms.	Project Management Unit Year 2-5
National NGOs and Research Institutions	Collaborative research and data sharing on marine biodiversity, ecosystem services, and climate resilience to inform BEAM strategies and activities.	Project Management Unit Year 2-5
Regional and Local Government Agencies	Training and workshops on BEAM's implementation strategies, focusing on local empowerment and sustainable marine practices.	Project Management Unit Year 2-5

Disclosure of ESMP and other Safeguard Instruments

Public disclosure procedures for environmental and social safeguard instruments for sub-projects shall be aligned with CI's Disclosure Policy and the Green Climate Fund's (GCF) Information Disclosure Policy and Environmental and Social Policy. For Category B sub-projects, the fit-for-purpose ESIA and ESMP shall be disclosed at least 30 calendar days prior to the approval decision. The safeguard documents shall be made available in English and in the relevant local language(s), where applicable. These documents shall be submitted to GCF and disclosed through electronic links on both the AE's and the GCF website, as well as through locally accessible channels and locations convenient to affected stakeholders. Disclosure shall be undertaken in accordance with the requirements of the GCF Information Disclosure Policy and Section 7.1 (Information Disclosure) of the GCF Environmental and Social Policy.

Appendix 1: Occupational Health and Safety Risk Assessment Tool

What are the hazards?	Who may be harmed and how?	What are you already doing?	What further action is necessary?	How will you put the assessment into action?			
Spot hazards by: • Walking around the workplace; • Asking workers what they think; • Checking safety instructions; • Contacting your supervisors <i>Don't forget long-term hazards</i>	Identify groups of people. Remember: • Some workers have particular needs; • People who may not be in the workplace all the time; • If you share your workplace think about how your work affects others; • Members of the public. <i>Say how the hazard could cause harm</i>	List what is already in place to reduce the likelihood of harm or make any harm less serious	You need to make sure that you have reduced risks "so far as is reasonably practicable". An easy way of doing this is to compare what you are already doing with best practice. If there is a difference, list what needs to be done	Remember to prioritise. Deal with those hazards that are high-risk and have serious consequences first.	Action by whom	Action by when	Done
Review your assessment to make sure you are still improving, or at least not sliding back If there is a significant change in your worksite, remember to check your risk assessment and where necessary, amend it			Review date:				
Assessment completed by:			Signature:				

Appendix 2: Environmental and Social Exclusion List²²

The following sub-projects or activities will be deemed ineligible for the Project, if they:

1. Contravene major international and regional conventions on environmental issues;
2. Propose to create or facilitate significant degradation and/or conversion of natural habitats of any type (forests, wetlands, grasslands, coastal/marine ecosystems, etc.) including those that are legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, recognized as protected by indigenous and local communities, or have significant negative socioeconomic and cultural impacts that cannot be cost effectively avoided, minimized, mitigated and/or offset;
3. Involve adverse impacts on critical natural habitats, including forests that are critical natural habitats, including from the procurement of natural resource commodities, except for adverse impacts on a limited scale that result from conservation actions that achieve a net gain of the biodiversity values associated with the critical natural habitat;
4. Propose to carry out unsustainable harvesting of natural resources, such as animals, plants, timber and/or non-timber forest products (NTFPs), or the establishment of forest plantations in critical natural habitats;
5. Propose the introduction of species that can potentially become invasive and harmful to the environment, unless there is a mitigation plan to avoid this from happening;
6. Involve involuntary resettlement, land acquisition, and/or the taking of shelter and other assets belonging to local communities or individuals; through coercion and/or undue influence;
7. Contravene major international and regional conventions on human rights, including rights specific to indigenous peoples;
8. Propose activities that result in the exploitation of and access to outsiders to the lands and territories of indigenous peoples in voluntary isolation and in initial contact;
9. Propose the use and/or procurement of materials deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international phase-outs or bans, such as:
 - a. ozone depleting substances, polychlorinated biphenyls (PCBs) and other specific, hazardous pharmaceuticals, pesticides/herbicides or chemicals;
 - b. wildlife or products regulated under the Convention on International Trade in Endangered Species or Wild Fauna and Flora (CITES);
10. Propose the use and/or procurement of pesticides and hazardous materials that are unlawful under national or international laws, the generation of wastes and effluents, and emissions of short- and long-lived climate pollutants;

²² The sub-projects shall also not engage in activities within the CI GCF exclusion list

11. Involves the removal, alteration or disturbance of any non-replicable or critical cultural heritage, or the use of any intangible cultural heritage without the Free, Prior and Informed Consent of the communities who it belongs to;
12. Include the use of forced labour, trafficking in persons, and child labour. Child labour includes both (i) labour below the minimum age of employment and (ii) any other work that may be hazardous, may interfere with the child's education, or may be harmful to the child's health or to the child's physical, mental, spiritual, moral, or social development; and
13. Involve the design and construction new dams or rehabilitation of existing dams or financing agriculture and water resource management infrastructure that are highly dependent on the performance of dams that potentially affect their performance.

Appendix 3: Resource Efficiency and Pollution Prevention Plan

An Environmental and Social Management Plan (ESMP) is prepared at the sub-project level to outline key measures required to manage the environmental and social aspects of the program. As part of risk management, the sub-project level ESMP will be used by the project Executing Entity and the basic project management plan to be implemented by that agency. The plan will be commensurate with the level of risk of the activity, and therefore, mitigation measures, as well as monitoring and supervision will be fully carried out with the level of development to be taken. The following template must be included in the tender document, if the works are transferred to third party contractors, including civil works contractors. The ESMP template is as follows.

Table 14 - ESMP Template

Project Activity	Risks and Impacts	Mitigation Measures	Monitoring Frequency	Responsible Party	Cost Allocation
<i>For example, the construction of a coral reef training/education building at a fish port</i>	<i>Work accidents, including exposure to risks due to natural disasters.</i>	<i>Provide appropriate personal protective equipment (masks, shoes, hats)</i>	<i>Every month during field activities</i>	<i>Village level supervisor</i>	
<i>And so on</i>					

This Resource Efficiency and Pollution Prevention Plan should be developed to manage the risks associated with project activities that may cause environmental and social risks. Resource Efficiency and Pollution Prevention Plan provides key references and specifications that inform the preparation of an Environmental and Social Management Plan (ESMP).

All work supported on the project must comply with Resource Efficiency and Pollution Prevention Plan and this will be specified in the contractor agreement. Resource Efficiency and Pollution Prevention Plan provides guidance for environmental and social risk management of work during Project implementation. Potential environmental and social impacts, mitigation measures, and responsibilities during the planning/design and construction stages are described. The outline of the Resource Efficiency and Pollution Prevention Plan guidelines is as follows:

- Environmental and social obligations of the Contractor
- Identification of possible environmental and social risks
- Mitigation and monitoring measures

For the small-scale and low risk and/or simple works, the Project will consider introducing a separate Environmental and Social Checklist, which will contain guidance for ES risk management in a simple form of issues and range of mitigation measures in yes/no format. Further information on content of ES Checklist.

How to Use

The following Resource provides key references and specifications informing preparation of KI acceptable for sub-projects involving physical works on site.

This Resource Efficiency and Pollution Prevention Plan should be included in tender documents and contracts to inform bidders of the guidelines used for environmental and social risk and impact management. The relevant specifications in the Resource Efficiency and Pollution Prevention Plan will be a contractual obligation for the contractor and enforceable by the project. This Resource Efficiency and Pollution Prevention Plan may be adjusted according to the scope of activities/project needs that are required according to the PMU approval.

Environmental and Social Obligation of the Contractor

- Compliance with all relevant legislative requirements in Indonesia.
- Construction materials such as stone, sand, aggregates and wood will only be sourced from legal sources (licensed mining and timber concessions) that implement an adequate environmental management plan acceptable to the Project.
- Implement project workforce management (OHS and community health safety) during the construction period in accordance with the ESIA by developing and implementing a separate or integrated OHS Management Plan, which will include management of labor camps, if relevant.
- Monitor the effectiveness of project implementation and take notes.
- If applicable, fulfill contractor's obligations under KI for environmental management and mitigation efforts.
- Report monitoring/implementation of KI (ESMP) records to the PMU office.
- Hire and train qualified staff to take on project responsibilities.
- Conduct gender outreach and awareness raising of gender behavior and respect for workers and security personnel who may be involved during project implementation; please see the **Annex 8** on Gender Action Plan.
- Implement a respectful relationship at work and around the project site, i.e., with local communities.
- Implement a complaint handling mechanism for workers (to capture, handle, prepare and report complaints).

Prohibition

See **Appendix 2: Environmental and Social Exclusion List**

Workers' Health and Safety

- The contractor will comply with all Indonesian regulations for workers exposed to the project.
- Measures should be taken to prevent inappropriate access to hazardous areas.
- The contractor shall ensure that qualified first aid is easily accessible throughout the site and can be provided at any time.
- Projects in remote locations should have written emergency procedures to deal with cases of serious trauma or illness to the point where patient care can be transferred to an appropriate medical facility.
- All staff will be provided with appropriate personal protective equipment (PPE), i.e., hard hats, masks, gloves and boots. Workers should not be exposed to a work environment with temperature, noise and vibration levels above the permissible limits without proper PPE.
- Provisions should be made to provide OHS training to all employees to ensure they are aware of the basic rules of working on site and about personal protection and preventing injury to fellow employees.

Through appropriate contract specification and monitoring, the contractor must ensure that service providers, as well as contract and subcontracted workers, are adequately trained prior to engagement.

- The contractor must ensure that heavy equipment and vehicles are properly maintained, and that operators are trained and licensed.
- The contractor must establish and implement an occupational health and safety monitoring program, which includes routine inspection of OHS implementation and testing of all safety features and hazard control measures, document compliance, monitoring and documenting of training activities, documentation of work injuries and near misses (the fact that happened, causes of accidents, and future precautions).

For details, please refer to chapter 7.2 Labour and Working Conditions Risk Management plan.

Waste Management

- The contractor is required to establish a site-specific waste management procedure that is in line with existing regulations of the Government of Indonesia and ESS 3.
- Establish and enforce daily site cleaning procedures, including maintenance of adequate storage, recycling and disposal facilities for garbage, solid waste, soil and construction debris.
- All non-recyclable solid waste must be transported by an approved or certified third party waste handler, dumped off site at an approved/licensed disposal site.
- Upon completion of the work, all construction-generated debris must be removed from the site and disposed of at the designated landfill site.
- Where possible, collection and temporary disposal of hazardous wastes should comply with requirements of the Government of Indonesia. Hazardous waste must be sent to a licensed third-party collector. Hazardous waste disposal records and manifests must be kept.

Local Workers Hired by Contractor

- The contractor must ensure that OHS requirements are implemented by local workers in accordance with the applicable standard.
- The contractor shall be responsible for ensuring that the work of local workers is carried out in accordance with applicable national regulations and CI-GCF standards on employment and work arrangements and conditions (working hours, contractual arrangements, and child labour). Please see chapter 10.2 Labour and Working Conditions Risk Management plan.

Appendix 4: Cultural Heritage Management Plan

Definition

Cultural heritage entails both tangible and intangible heritages. Tangible cultural heritage is an archaeological, historical, cultural, or remain material, structures, natural features or landscapes, or sites. Intangible cultural heritage includes practices, representations, traditional (ecological) knowledge and techniques/ ways of doing. This ESS6 on Cultural Heritage will be applied in the project that are likely to have risk or impact on cultural heritages. This includes a project with i) is located within a legally protected area or legally defined buffer zone, ii) is located in, or in the vicinity of, a recognized cultural heritage site, or is specifically designed to support the conservation, management, and use of cultural heritage. The requirements on cultural heritage as outlined in the ESS6 will be applied to intangible cultural heritage only if a physical component of a project will have a material impact on such cultural heritage or if a project intends to use such cultural heritage for commercial purposes that may occur under component 2. Therefore, the cultural heritage management plan is prepared by following ESS6 as a precaution that set out measures to protect cultural heritage throughout the project implementation.

Objectives

- To protect cultural resources from the adverse impacts of project activities and support their preservation.
- To address cultural heritage as an integral aspect of sustainable development
- To promote meaningful consultation with stakeholders regarding cultural heritage.
- To promote the equitable sharing of benefits from the use of cultural heritage for commercial use

Requirements

- The project will conduct a screening and assessment on the potential risks and impacts of the project activities on cultural heritage.
- The project will avoid impacts on cultural heritage as outlined in the exclusion list (annex 2: will cause, or have the potential to cause, permanent and/or significant damage to cultural property that cannot be replicated, irreplaceable cultural heritage, including sites that have archaeological (prehistoric), paleontological, historical, religious, and cultural values, as well as natural uniqueness). The project activities with such impacts are ineligible.
- The project will carry out, in accordance the Stakeholder Engagement Plan (SEP) document meaningful consultation to identify cultural heritage, assess the potential risks and impacts, and explore avoidance and mitigation options.
- If the proposed project will be located within a legally protected area or legally defined buffered zone, the project will: a) comply with local, national, regional or international cultural heritage regulations and the protected area management plan; b) consult the protected area management body, project-affected peoples, and other interested parties on the proposed project; and c) implement additional program, as appropriate, to promote or enhance the conservation aims of the protected area.
- A specific Chance Find Procedure will be applied if the subproject encountered tangible cultural heritage unexpectedly during project construction or operation. A chance find procedure is a project-specific procedure that will be followed if previously unknown cultural heritage is encountered during

project activities. This type of procedure generally includes a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; fence off the area of finds or sites to avoid further disturbance; conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of the Project and Indonesian law; and to train project personnel and project workers on chance find procedures.

- Where the project intends to use cultural heritage of project affected people for commercial purposes, the project will inform the affected parties i) their rights under national law; b) the scope of and nature of the commercial development and the potential impacts; and c) the potential consequences of such development and impacts.
- The project will not proceed with such commercial use of cultural heritage unless it a) carries out meaningful consultation with stakeholders, b) provides fair and equitable sharing of benefits from commercial use of heritage consistent with customs and traditions of the affected persons/communities, and c) identifies mitigation measures according to the mitigation hierarchy (e.g., avoid whenever possible, but if it's unavoidable, prepare and adopt mitigation measures lessen the negative impact).

Chance find procedure

If there is a discovery of archeological sites, historical sites, remains and/or objects, including graveyards and/or individual graves during excavation or construction, due to sub-project activities, the sub-project shall:

- Halt the construction activities in the area of the chance find.
- Delineate and fence the discovered site or area.
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the District/Provincial Department of Culture, or the local Institute of Archaeology, if available, can take over.
- Forbid any taking of the objects by the workers or other parties.
- Notify all subproject personnel of the finding and take preliminary precautions of protection.
- Record the chance find objects and the preliminary actions.
- Notify the responsible local authorities and the relevant Institute of Archaeology immediately (within 24 hours or less).
- Responsible local authorities should be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the local Institute of Archaeology. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage, including the aesthetic, historic, scientific or research, social and economic values.
- Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the subproject layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage.
- Implementation of the authority decision concerning the management of the findings shall be communicated in writing by relevant local authorities.
- The mitigation measures could include changing the subproject design/layout, protection, conservation, restoration, and/or preservation of the sites and/or objects.
- Construction work at the site can resume only after permission is given from the responsible local

authorities concerning safeguarding the heritage.

The subproject proponents are responsible for cooperating with the relevant local authorities to monitor all construction activities and ensure the adequate preservation actions already taken and hence the heritage sites protect.

Appendix 5. Disaster Risk Management Plan

Objective

The objective of the Disaster Risk Management (DRM) is to ensure that disaster risks affecting project activities within the WPPNRI 572 area are systematically identified, assessed, and managed throughout the project lifecycle. DRM shall be operationalized by conducting site-specific disaster risk analysis prior to the commencement of field activities and whenever project locations, designs, or hazard conditions change.

The DRM applies the Hazard, Risk, and Vulnerability Assessment (HRVA) approach to identify relevant hazards, exposure, vulnerability, and coping capacity related to earthquakes, tsunamis, volcanic eruptions, drought, coastal erosion, and extreme weather events. The results of this analysis are used to determine risk levels and to define appropriate mitigation, preparedness, and response measures.

All DRM findings shall be documented and integrated into the Disaster Risk Management Plan (DRMP) and the Environmental and Social Management Plan (ESMP), including clear mitigation actions, assignment of responsibilities, and emergency response arrangements. Through this process, the DRM aims to minimize risks to workers, beneficiaries, livelihoods, and ecosystems, and to support the safe and sustainable implementation of the Blue Ecosystem Adaptation Mechanism (BEAM) project.

Scope and application

Disaster Risk Management (DRM) is applicable to all project locations within the Wilayah Pengelolaan Perikanan Negara Republik Indonesia (WPPNRI) 572, which covers the western coastal areas of Sumatra and the Sunda Strait. This includes project sites located in Aceh, North Sumatra, West Sumatra, Bengkulu, Lampung, and Banten provinces, particularly coastal zones, small islands, and adjacent marine areas. DRM is implemented using a site-specific approach, whereby disaster risks are assessed and managed based on the hazard characteristics and vulnerability conditions of each project location. Locations identified as having moderate to high exposure to earthquakes, tsunamis, coastal erosion, volcanic activity, and extreme weather are subject to mandatory application of DRM procedures.

DRM applies throughout the entire project cycle, starting from the planning stage through implementation and adjustment phases. During the planning stage, DRM is used to inform site selection, activity design, scheduling, and implementation approaches by considering disaster risk factors before activities are approved. During the implementation stage, DRM ensures that field activities are carried out safely through the application of mitigation measures, preparedness actions, and emergency response procedures, including regular monitoring of hazard conditions and early warning information. DRM is also applied during project adjustments and sustainability phases, particularly when there are changes in project location, design, or hazard conditions, or following disaster events affecting the project area.

All project activities that have potential exposure to natural hazards are required to apply DRM. These include field-based activities in coastal and small island areas such as mangrove rehabilitation and ecosystem restoration, community-based activities conducted in disaster-prone locations, and the construction or use of small-scale project infrastructure in coastal areas. DRM also applies to activities involving field workers, implementing partners, and beneficiaries operating in locations with limited access or elevated disaster risks, as well as activities located in multi-hazard priority areas as identified in the Disaster Risk Management Plan. Activities that are purely administrative and conducted in office environments with no direct disaster exposure

may be exempted from detailed disaster risk analysis, but remain subject to general preparedness and emergency response procedures under the project.

Triggers for Disaster Risk Analysis

Disaster Risk Analysis (DRA) shall be mandatory prior to the commencement of field activities at new project locations, particularly in coastal areas, small islands, or other disaster-prone environments. DRA is also required during the planning stage for activities that involve coastal ecosystem rehabilitation, use or construction of small-scale infrastructure, community-based interventions in hazard-exposed areas, or deployment of workers in locations with limited access. In addition, DRA must be conducted when there are significant changes to project design, activity location, implementation methods, or scheduling that may increase exposure to disaster risks, including seasonal changes.

DRA shall be updated whenever a disaster event occurs or when there is an escalation of hazard conditions in or near the project area, such as significant earthquakes, tsunami warnings, increased volcanic activity, severe coastal erosion, or extreme weather events. Updates are also required when new hazard or risk information is issued by relevant authorities (e.g., BNPB, BPBD, BMKG), or when field monitoring indicates that existing mitigation measures are no longer adequate. These updates ensure that disaster risk mitigation, preparedness, and emergency response measures remain relevant and effectively integrated into the ESMP and DRMP throughout the project lifecycle.

Risk Management Plan

The Disaster Risk Management Plan (DRMP) operationalizes mitigation measures derived from the disaster risk assessment to guide the safe implementation of BEAM project activities. The plan specifies mitigation actions for each identified hazard and translates them into implementable measures through a risk management matrix and a risk barrier management matrix. These matrices define required actions, responsible parties, indicative budgets, potential implementation barriers, and measures to address those barriers. The DRMP applies to project beneficiaries including at-risk communities, fisherfolk and coastal communities, local and provincial government agencies, and BEAM field staff. By systematically assigning actions, resources, and responsibilities, the DRMP ensures that identified disaster risks are mitigated in a timely, coordinated, and accountable manner throughout project implementation.

Risk	Mitigation Action	Description of Mitigation Action	Mitigation Action-Implementing Agency	Responsibility of Implementing Agency	Budget for Mitigation Action (USD)
Tsunamis	Improve early warning system	Improving the early warning system to mitigate tsunamis necessitates integrating innovative technology, analysing data, involving communities, and fostering cooperation.	1. Provincial Regional Agency for Disaster Management (<i>Badan Penanggulangan Bencana Daerah/ BPBD</i>)	1. Provincial BPBD has a role in coordinating stakeholders to make all efforts to increase the mitigation rate and lower the risk.	315 thousand USD
	Add disaster curriculum in elementary school	Provide an evacuation route to a higher place when the tsunami occurred.	2. Meteorological, Climatological, and Geophysical Agency (<i>Badan Meteorologi, Klimatologi, dan Geofisika/BMKG</i>)	2. BMKG has a role in providing early warning facilities and disseminating tsunami potential information.	98 thousand USD

	• Socialise to the communities in the rural area how to determine the signs of tsunami	• Improving the disaster knowledge of the communities from a young age so they can easily determine the signs of a tsunami before it strikes, through various methods while taking local wisdom into consideration.	3. Fisheries and Maritime Agency (<i>Dinas Kelautan dan Perikanan/DKP</i>)	3. DKP has a role in determining priority zones to reduce the impact of tsunamis in the fisheries sector.	52 thousand USD
					59 thousand USD
					20 thousand USD
					361 thousand USD
Earthquakes	• Better awareness • Increase the disaster knowledge of the community • Provide open space to become the assembly point • Provide an assessment to building code and danger zone	• Raising awareness about the dangers of earthquakes is carried out by simply disseminating information. It is also proposed to empower individuals, communities, and governmental agencies as beneficiaries to take proactive steps in reducing their vulnerability by fostering a culture of earthquake preparedness through education, training, and collaborative efforts.	1. BMKG 2. Centre of Volcanology and Geological Hazard Mitigation (<i>Pusat Vulkanologi dan Mitigasi Bencana Geologi/PVMBG</i>) 3. Provincial BPBD 4. National Search and Rescue Agency (<i>Badan SAR Nasional/BASARNAS</i>) 5. Ministry of Public Works	1. BMKG has a role in distributing the earthquake information immediately after it occurred. 2. PVMBG has a role in researching priority zones and risk assessment. 3. Provincial BPBD has a role in coordinating stakeholders and to do all efforts to increase the mitigation rate and lower the risk of earthquakes. 4. BASARNAS has a big role in preparing the communities by giving them training and simulation. BASARNAS also has a role in terms of disaster response.	584 thousand USD
					44 thousand USD
					236 thousand USD
					978 thousand USD
					236 thousand USD
					919 thousand USD
Soil Movement in Coastal Areas	• Construction of coastal protection structures and cultivation of coral reefs and mangrove plants	Implementing coastal defence structures (grey protection) and nurturing natural ecosystems such as coral reefs and mangroves (green	1. Provincial BPBD	1. Provincial BPBD has a role in coordinating stakeholders and to do all efforts to increase the mitigation rate.	5.5 million USD

		protection) present a highly effective strategy for addressing soil movement in coastal areas.	2. Fisheries and marine agency (DKP) 3. Environmental agency (<i>Dinas Lingkungan Hidup</i>/DLH) 4. Ministry of Public Works (<i>Kementerian Pekerjaan Umum dan Perumahan Rakyat</i>/PUPR)	2. DKP has a role in determining coastal protection zones and building capacities of coastal communities 3. DLH has a role in maintaining the nature-based conservation effort in coastal areas to prevent bigger impacts from coastal erosion. 4. PUPR has a role in providing big infrastructure such as seawalls. Since coastal infrastructure also needs a bigger financial budget, the effort should be handled by the central government.	282 thousand USD
					1.2 million USD
					853 thousand USD
					15 million USD
					14 thousand USD
Volcanic eruption	- Assessment of danger zone for villages near the volcano - Provide evacuation route for communities when an eruption occurs - Construction of sabo dam to control the lava flow - Construction of shelters for the community in priority zones	Strategically locate and design refugee shelters for people in priority zones and promote community education and collaboration with relevant authorities.	1. PVMBG 2. BMKG 3. Provincial BPBD	1. PVMBG has a role in monitoring and disseminating volcanic activity information. 2. BMKG has a role in disseminating information about areas potentially impacted by the volcanic ashes. 3. Provincial BPBD has a role in coordinating stakeholders and to do all efforts to increase the mitigation rate and lower the risk.	478 thousand USD
					837 thousand USD
					125 thousand USD
					328 thousand USD
					61 thousand USD
					361 thousand USD

Risk Mitigation Action and Barriers of Implementation

Risk Mitigation Actions and Implementation Barriers are defined for each disaster type based on the results of the disaster risk assessment. This section operationalizes the identification of mitigation actions alongside potential barriers that may affect their implementation. For each mitigation action, the potential impact of implementation barriers and the likelihood of their occurrence are assessed using a standardized classification framework. The classification is informed by findings from Key Informant Interviews (KII) conducted with relevant provincial-level government agencies and is structured into five impact and likelihood categories. This approach enables systematic prioritization of mitigation actions, identification of institutional, technical, financial, or social constraints, and definition of practical measures to address barriers during project implementation.

Range	Barrier Impact Classification	Description
1	Very Low	- There are laws governing the mitigation progress - There is technology that supports and is easy to implement - There is excellent accessibility to support program implementation - The community already has good knowledge regarding disaster - The budget required is very cheap - There are adequate public facilities for evacuation facilities
2	Low	- There are laws governing the mitigation process - There is supporting technology, but implementation requires experts - There is good accessibility to support program implementation - The community already has good knowledge regarding disaster - The budget required is relatively cheap - There are adequate public facilities for evacuation facilities
3	Moderate	- There are laws governing the mitigation process, but implementation is lacking - Lack of supporting technology and still need experts - Accessibility to reach the location of program implementation is quite limited - The community only has basic knowledge related to disaster - The budget required is quite expensive - Evacuation support facilities are not routinely monitored and evaluated
4	High	- There are laws governing the mitigation process, but implementation is lacking - Lack of supporting technology and still need experts - Accessibility to reach the location of program implementation is quite difficult - The community does not have basic knowledge related to disaster - The budget required is quite expensive - There are only a few supporting facilities for disaster mitigation and evacuation
5	Very High	- There is no law governing the mitigation process - There is no technology that can be used for the mitigation process - Accessibility to reach the location of program implementation is very difficult - The community does not have basic knowledge related to disaster - The budget required is very expensive - There are no supporting facilities for disaster mitigation and evacuation

Roles and responsibilities

Disaster risks shall be managed through clear assignment of roles and responsibilities among project stakeholders.

Actor	Key Responsibilities
PMU	Overall coordination, validation of results, integration into ESMP
Safeguard Team	Facilitate analysis, ensure compliance with ESS 1 & ESS 8
Grantees/ Implementers	Conduct location-specific analysis and apply mitigation
Local Authorities	Provide hazard data, early warning, evacuation guidance
Communities	Provide local knowledge and participate in preparedness

Disaster Response Team

The implementation of the BEAM project requires entities that will act immediately when a disaster occurs. In the following table, there were listed several stakeholders that can act as a disaster response team to protect the safety of the BEAM partners and beneficiaries.

No.	BEAM Disaster Response Team	Executing Role
1.	National Disaster Management Agency (BNPB)	Coordinates disaster response and management at the central level, such as cross-province or if the disaster is declared a national disaster.
2.	Regional Disaster Management Agency (BPBD)	Coordinates disaster response, preparedness, and management at the provincial level.
3.	National Save and Rescue Unit (BASARNAS)	Execute immediate response in terms of rescuing victims when a disaster occurs.
4.	National Army (TNI) and Police (POLRI)	Execute immediate response in terms of rescuing victims, providing rescuing facilities, and distributing assistance when disaster occurs.
5.	Indonesia Red Cross (PMI)	Execute immediate response in terms of rescuing victims, first aid assistance, and providing access to health facilities. A community-based approach can also raise the awareness of the community.
6.	Local Leaders and Local Figures in Communities	Coordinate first aid and response efforts at household and community levels.
7.	National Planning Agency (BAPPENAS)	Coordinates disaster risk reduction management in mid and long-term planning at the national level
8.	Regional Planning Agency (BAPPEDA)	Coordinates disaster risk reduction management in mid and long-term planning at the regional and provincial level
9.	Environmental Agency	Coordinates and executes environmental risk reduction and respond to environmental damage, especially in land and mangrove areas after the disaster.
10.	Fisheries and Marine Agency	Coordinate and execute environmental risk reduction and conduct response to any damage, especially in coastal and marine ecosystems after the disaster.

Appendix 6. Voluntary Land Donation Protocol and Process Framework

This Protocol establishes the requirements that shall apply in the event that voluntary land donation is proposed under the BEAM Project. Land donation is unlikely to happen as part of the project, but procedures are included as a preventive measure in case there are any cases during implementation. The Protocol is intended to ensure that any voluntary land donation associated with Project activities is undertaken in a transparent manner, based on informed consent, and in accordance with the principles of voluntariness, fairness, and avoidance of adverse social and economic impacts. Any voluntary land donation shall be subject to the requirements set out below and documented in accordance with Project procedures.

Any voluntary land donation must satisfy the following conditions:

1. No coercion, pressure, or manipulation has occurred.
2. The donor understands their rights and the implications of the donation.
3. Refusal to donate will not affect participation in, or access to benefits from Project activities.
4. The donation is genuinely voluntary.
5. The donor is fully informed of the implications of the donation.
6. The donor may refuse to donate without penalty or loss of project benefits.
7. The donor possesses legal, customary, or otherwise recognized rights to the land.
8. The land is free from disputes or competing claims.
9. The donation does not result in physical displacement.
10. The donation does not significantly affect livelihoods, income, or food security.
11. Women and all relevant rights holders provide informed consent where applicable.

Before accepting any donation, the Project will verify:

Ownership or legitimate use of rights

Current land use and users.

Presence of encumbrances or disputes.

Potential livelihood impacts.

Potential impacts on vulnerable groups

Any proposal that would result in displacement, significant livelihood impacts, or unresolved disputes will not be accepted as voluntary land donation.

The process for voluntary land donation will follow the steps outlined below:

1. The Project will first assess whether the activity can be implemented using existing public land, existing facilities, or other suitable alternatives that do not require land donation.
2. The project will conduct consultation with the following key stakeholders: Landowners and users, community representatives, and relevant local authorities. The consultation process will provide information on the purpose of the activity, land requirements, potential impacts, and the donor's right to refuse.
3. The Project will verify and document that: a) No coercion, pressure, or manipulation has occurred; b) The donor understands their rights and the implications of the donation; and c) Refusal to donate will not affect participation in, or access to benefits from Project activities.

4. The project will maintain the following documents: land deed, proof of ownership, consent declaration form.
5. Approval: The donation must be reviewed and approved by the Project Safeguard Coordinator before implementation of any activity on the donated land.

Any concerns related to voluntary land donation may be submitted through the Project Grievance Redress Mechanism (GRM). Complaints may be submitted orally or in writing and may be submitted anonymously. All grievances will be reviewed to determine their relation to the Project and will be addressed in a timely manner. Complaints related to ownership, consent, coercion, boundary disputes, or livelihood impacts will be investigated and resolved before activities proceed on the affected land.

Process Framework for Voluntary Economic Displacement

To manage cases where voluntary restrictions on access to land, water or natural resources may result in economic impacts, the project will implement a structured Process Framework aligned with ESS3 requirements.

The Process Framework will be triggered whenever proposed sub-projects introduce restrictions that may affect the income, production systems or access to natural resources by participating households.

The framework operates through the following steps:

I. Screening and Identification

Prior to signing any agreement, the project will screen each intervention landscape to determine whether proposed restrictions may affect current land or resource use. This includes identification of affected individuals, types of restriction (e.g. exclusion from certain activities, marine area use limitations), and potential livelihood implications.

II. Participatory Impact Assessment

A participatory assessment will be conducted with the affected household or producer to evaluate the magnitude and type of economic impact. This will include analysis of current productive activities, dependence on restricted resources, and potential income loss or opportunity cost.

III. Definition of Livelihood Restoration Measures

Based on the assessment, the project will define tailored livelihood restoration measures proportional to the level of impact ensuring fairness and proportionality.

IV. Agreement Formalization

All measures will be clearly documented and agreed with affected stakeholders whenever potential economic displacement is identified.

V. Implementation and Monitoring

The project will monitor implementation of both restrictions and livelihood restoration measures. Monitoring will include periodic verification of:

- compliance with agreements
- delivery of compensation measures
- performance of alternative livelihood activities

VII. Corrective Actions

If monitoring identifies that livelihood restoration objectives are not being achieved, corrective measures will be implemented. These may include:

- adjustment of compensation mechanisms
- additional technical assistance
- modification of agreement terms
- temporary suspension or redesign of restrictions

These steps ensure that the Process Framework is not only a procedural tool, but an operational mechanism that guarantees voluntary restrictions do not result in unmitigated economic impacts.

The GRM will be available at all stages of the process to address concerns related to agreements, restrictions, compensation or livelihood impacts.